

Global Environment

Aiming at a Safe Living Environment and a Balance between the Environment and Development



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

Natural Environment Conservation

Excessive exploitation and large-scale land use changes have led to the rapid destruction of natural environment worldwide. Those include deforestation, reduction in wetland, deterioration of coastal ecosystems, soil degradation and the extinction of species.

JICA provides cooperation in the following three areas, with the aim of facilitating harmony between human activities and the natural environment, while contributing particularly toward achieving the Sustainable Development Goals (SDGs) 13, 14, and 15.

1. Climate Change Measures through Sustainable Forestry Management

Forests have the function of providing stable supplies of water and timber, conserving the fertility of soil while absorbing and accumulating greenhouse gas (GHG), i.e. CO₂, and mitigating natural disasters such as floods and landslides. Recognizing the importance of such multiple functions of forests, JICA is engaged in REDD+ (Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries).

2. Resilience Enhancement and Livelihood Improvement through the Sustainable Use of Natural Resources

JICA supports communities in the Sahel and the Horn of Africa with the sustainable use of natural resources and livelihood improvement activities in order to enhance their resilience to climate change by combating desertification.

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

In protected areas and surrounding buffer zones, JICA is providing various forms of support for the conservation of biodiversity: formulation of management plans, implementation of surveys and monitoring, capacity building of persons concerned, introduction of ecotourism, and environmental education.

Environmental Management

Many developing countries are facing more serious environmental problems associated with urbanization. These problems often give rise to health hazards and other menaces that threaten human security. The priority given to economic development frequently results in environmental pollution control being left behind. In many cases, its complexity and multilayered nature of environmental problems defy short-term solutions. Taking these factors into consideration, the SDGs include goals in the environmental management sector.

JICA places special emphasis on precluding pollution and focuses its resources on capacity development for organizations and individuals engaged in environmental management, in cooperation with such stakeholders as local governments, private sectors, universities, and multilateral donors when appropriate [→ see the Case Studies on pages 43 and 63].

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

As the waste problem is closely associated with the level of national economic development, JICA's assistance accommodates different levels of development of individual partner countries, covering everything from improving public health and sanitation or reducing environmental stress to establishing a sound material-cycle society.

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

JICA offers integrated assistance in developing sewerage and building the capacity to operate and maintain its system, water-environment management primarily in urban areas, and addressing air pollution. Through these and other activities, JICA accurately assesses the situation on the ground and, based on such assessments, assists policy, regulatory and institutional development, the construction of facilities, and capacity building for organizations and individuals.

Water Resources

Water supports human life not only as drinking water and domestic water but also as a vital resource for food production and economic activity. It is estimated, however, that as of 2015, over 2.9 billion people lack access to adequate water. Competition over water resources will likely intensify. In this light, the SDGs include Goal 6, a goal to "ensure availability and

sustainable management of water and sanitation for all."

Japan now boasts water service coverage of practically 100%. It is also one of the most efficient nations in the world in terms of



Cambodia: A water tower managed by Siem Reap Water Supply Authority under the Project on Capacity Building for Water Supply System [photo by Kenshiro Imamura]

water use. On the other hand, Japan depends on imports for much of its food consumption. This means Japan is relying on water in other countries, including developing countries, in terms of the water necessary to produce such products. This makes Japan responsible for taking part in solving the water resources problems of developing countries.

One of the strengths of Japan's water supply system is its stable and safe water supply made possible with an integrated catchment-to-consumer approach. JICA capitalizes on this particular strength as well as its past achievements and case studies to support safe water supply in developing countries. In the process, JICA works with Japanese local governments, which are the water service providers in Japan [→ see the Case Study on page 22]. JICA also assists in developing scientific information on water resources and strengthening the capacity to formulate and implement plans needed for water resources management.

Disaster Risk Reduction

Developing countries are especially vulnerable to natural disasters. For this reason, 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 country to untangle itself from the downward spiral of disaster and poverty.

The Sendai Framework for Disaster Risk Reduction 2015–2030, adopted in 2015, sets out investment in disaster risk reduction (DRR) and Build Back Better, among others, as the priorities for action, which Japan called for based on its experience. Some of the 17 Goals of the SDGs embrace the perspective of DRR, reflecting the fact that the international community has recognized DRR as a development challenge.

JICA respects this framework. Accordingly, JICA attaches importance to investment in DRR. To encourage necessary investment, JICA helps to strengthen national DRR agencies. JICA

also promotes the mainstreaming of DRR in every development project. If a disaster occurs in a developing country, JICA will assist that country in building a society that is more disaster-resilient than before.

1. Disaster Risk Reduction Measures for Sustainable Development

In order to reduce casualties and property damage by natural disasters, JICA provides the best mix of structural and nonstructural measures and incorporates disaster prevention and mitigation measures in all development projects.

2. Strengthening of DRR Governance

JICA assists partner countries in strengthening their DRR governance. Specific assistance to this end focuses on strengthening institutional DRR capabilities through the development of DRR plans and standards as well as on reinforcing organizations and human resources responsible for DRR.

3. Accurate Assessment of Risks and the Promotion of Public Understanding

JICA assists both in assessing disaster risks in the process of DRR planning and in promoting public understanding of such risks. JICA also supports DRR by local governments, schools, and communities.

4. Speedy and Effective Preparedness and Response

JICA assists in (1) improving forecasting and warning capabilities and (2) developing evacuation and response systems. JICA also dispatches Japan Disaster Relief (JDR) teams to disaster-affected areas [→ see the Case Study on page 59]

5. Build Back Better and Seamless Support

Based on the concept of Build Back Better, JICA's post-disaster assistance focuses on the rehabilitation of infrastructure, the improvement of regulatory and institutional arrangements, and the restoration of livelihoods. JICA also pursues seamless cooperation that covers different phases, from response to recovery and reconstruction [→ see the Case Study on page 27].

Sri Lanka: Project for Formulation of Western Province Solid Waste Management Master Plan

A Project Formulated Following the Dispatch of a JDR Team to the Site of a Garbage Mound Collapse



The JDR team investigating the site of the garbage mound collapse

On April 14, 2017, a 50-m-tall garbage mound collapsed at the Meethotamulla landfill in the city of Colombo, causing many casualties. As requested by the Sri Lankan government, JICA dispatched a JDR expert team to the site on April 19. The expert team consisted of experts from the Ministry of Foreign Affairs; the Ministry of Land, Infrastructure, Transport and Tourism; and the Ministry of the Environment, as well as from JICA.

Many developing country cities are experiencing similar accidents resulting from landfill mismanagement amid population growth and economic development. The expert team provided various suggestions

aimed at preventing additional casualties and managing waste appropriately. They included gas ventilation, drainage control, and slope protection.

The continued use of the landfill beyond its capacity was behind the April 2017 incident. In other words, the incident stemmed from haphazard landfill management in the absence of overall planning. To address this root cause, the Sri Lankan government asked Japan for cooperation in formulating a master plan on solid waste management in the Western Province, which includes the city of Colombo. With the adoption of this project, JICA has recently begun to design the cooperation framework.