

mind, for developing countries subject to significant impacts of climate change, it is essential to adapt to the effects of climate change in order to achieve sustainable development without forfeiting the benefits of development. In particular, to protect the lives of people living in poverty, it is necessary to implement “adaptation measures” covering such areas as food security, disaster prevention and assuring stable access to water supplies. Climate change is intimately correlated to a host of problems faced by developing countries and it can be said that climate change countermeasures constitute the essence of development. JICA adheres to a policy of simultaneously promoting climate change countermeasures and development. This includes the provision of infrastructures giving consideration to natural disaster measures in cities situated along the coastal areas of Asia as well as providing support in the agricultural sector keeping in mind such climate changes as temperature and precipitation changes.

Because these approaches to climate change differ from development processes in developed countries in the past, it will be necessary to create new ways of development.

Response to the Global Environment

—Conservation of Biodiversity

Along with responses to climate change, another global environmental issue is biodiversity, which is facing severe circumstances. Today, the balance of our rich ecosystem consisting

of 1.6 million plant and animal species, including humans, living together on our planet, is said to be crumbling. The world of living organisms has no national borders and the world must cooperate to address biodiversity issues in the same manner as with climate change countermeasures. To attain harmony between the natural environment and human activities, JICA is taking a comprehensive approach to improving the living standards of people living in poverty, achieving a balance between conservation and use of natural resources and enhancing the capacity of governments and citizens.

Peacebuilding

The conclusion of the East-West Cold War gave rise to hopes for the realization of more stable and peaceful societies. Instead, from the 1990s as well, there was an expansion of violent conflicts, including an increase in the number of domestic conflicts, and numerous civilians are caught in the midst of such conflicts. In preventing the outbreak and recurrence of conflicts as well as to solve them and firmly establish peace, there are limits to relying only on military solutions as well as on such political methods as preventive diplomacy, arms control and mediation. This is also a major reason why the role of development assistance is being emphasized in supporting peacebuilding to solve the principal factors underlying strife, namely the problems of wealth disparities and unequal opportunities.

Case Study

Turning Rural Electrification into CDM Projects in Least Developed Countries (LDC)

Bhutan and Zambia: Rural Electrification

The Clean Development Mechanism (CDM) is one of the Kyoto Mechanisms prescribed under the Kyoto Protocol. With the involvement of developed countries for which greenhouse gas emissions ceilings have been established, projects for reducing greenhouse gas emissions are carried out in developing countries and credits are issued based on the amount of emission reductions achieved by these projects. Developing countries can then obtain valuable funds by selling these credits. At present, although there are over 2,000 CDM projects registered under the United Nations, CDM projects in upper-middle-income countries such as China, Brazil and Mexico account for three quarters of these projects, with almost none of these projects undertaken in the LDCs.

In response, JICA has proposed the promotion of electrification as CDM projects in regions without electricity in LDCs with the aim of alleviating poverty. Bhutan and Zambia have expressed interest in such a scheme and both countries, with the cooperation of JICA, convened seminars at the Conference of the

Parties held in Copenhagen in December 2009.

Bhutan has traditionally focused on generating hydropower, a renewable energy source. At the seminar, that country's deputy environment minister made an appeal for “supplying hydropower to remote areas without electricity to reduce the use of heating oil and firewood and cut CO₂ emissions while improving people's living and alleviating poverty.”

The Zambian seminar was attended by



Zambian minister gives a speech at a side event during the United Nation's Climate Change Convention (COP15) in December 2009.

that country's tourism, environment and natural resources minister as well as the top management of Zambian Electricity Supply Corporation, and Zambia pledged it will work to register a rural electrification initiative as a United Nations CDM project.

To encourage initiatives for undertaking rural electrification as CDM projects, JICA will support efforts to facilitate trading in emission rights that includes the creation of an exchange for carbon credits.



Transporting a transformer up a mountain road (Bhutan rural electrification)