



GLOBAL CLIMATE CHANGE

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USAID has obligated over \$4 million in support of Nepalese climate change objectives in just two years and has leveraged approximately \$25 million of private sector investment in three hydropower projects. With continued USAID support, including financial, technical, and programmatic, energy efficiency will further be improved and greenhouse gas emissions mitigated.

Background. Nepal is a landlocked country between India and China with some of the most rugged topography on earth. Despite enormous hydropower potential, Nepal is currently one of the most electricity-starved nations in the world. Only about 17% of the population has access to electricity, and Nepal is barely able to meet its existing peak demand of 525 megawatts. Developing Nepal's hydropower potential could meet the growing demand for electricity in homes, agriculture, industry, health, and education while replacing the unsustainable and environmentally degrading use of biofuels. There is great potential to produce enough clean energy to meet the needs of neighboring countries, which will both provide returns on capital investments in hydropower infrastructure in the form of foreign exchange earnings and reduce the polluting sources of energy generation in the importing countries.

Sector-Specific Climate Change Activities. Recognizing these facts, USAID/Nepal has strategically created climate-friendly environment and energy programs that encourage forest restoration and increase Nepal's capacity to develop small- and medium-scale hydropower resources in an environmentally and socially sound manner. To this end, USAID/Nepal is providing technical assistance and training activities aimed at improving the policy and regulatory environment that will attract private sector investment in hydropower. These activities are concomitantly intended to strengthen local capability to conduct social and environmental impact assessments with increased public participation and involvement.

Through lessons learned from earlier capacity-building interventions in the renewable energy sector, USAID/Nepal realized the importance of looking beyond Nepal's borders and facilitating energy exports to neighboring India. USAID's assistance in the form of technical assistance facilitated the government's approval of a new hydropower policy to address many of the private sector concerns regarding royalties, regulation, and export issues. USAID conducted a workshop with key government and private sector stakeholders to review the existing policy and discuss constraints to development. The results of the workshop were a set of recommendations to adopt a new policy, which was advanced through subsequent dialogue with the government. The new policy has opened the way for such energy export projects as the West Seti Project, a 750-megawatt project of the Australian Snowy Mountain Engineering Company to export energy to India. The project is located in a district in Nepal's far west, one of the most neglected parts of the

USAID's partners in climate change activities in Nepal include*:

- The Department of Electricity Development (DOED)
- International Resource Group Ltd. (IRG)
- Nepal's Ministry of Water Resources
- United States Energy Association (USEA)
- Winrock International

* Because partners change as new activities arise, this list of partners is not comprehensive.

country. In addition to economic development benefits for Nepal, this project (a \$1.2 billion investment) will help reduce India's greenhouse gas (GHG) emissions and dependence on carbon-intensive coal for power. Such cross-border initiatives are also the aim of USAID's South Asia Regional Initiative for Energy Cooperation and Development (SARI/Energy), which encourages regional cooperation and trade in clean energy. Thus SARI/Energy activities complement USAID/Nepal's activities in the energy and environment sector.

In an effort to further assist the Nepalese government in boosting private sector investment in hydropower, USAID is implementing the following technical assistance and training activities:

- Assistance to encourage reform and restructuring in state-owned utilities
- Study tours to Indian states to learn from successful experiences in structure reforms
- Creation of energy partnerships between Nepal government regulators and U.S. regulatory bodies to share ideas and review firsthand results of energy sector reforms
- Partnerships to expose U.S. private business to opportunities in the energy sector of Nepal and the region

In addition, USAID, in collaboration with Winrock International, is supporting the development of small hydropower projects (1 to 10 megawatts). In this program, domestic entrepreneurs will learn how to develop feasibility studies and secure financing from local banks for small hydropower project development. Winrock International will also work on two other activities in Nepal. The first, in association with local financial institutions, will form a "Clean Energy and Infrastructure Development Bank," which will provide long-term financing for small hydropower projects. The second will enhance the capacity of local village-level cooperatives to organize effective distribution systems to expand electricity services to rural areas.

To ensure that these private sector-driven economic activities accrue benefits equitably across society and are environmentally sustainable, USAID encourages broad stakeholder participation in the hydropower development process. Technical assistance and training are given to enhance capacity to conduct better social and environment impact analyses, thereby providing improved mitigating solutions in implementing hydropower projects. Furthermore, developing hydropower will replace other sources of energy in industrial and urban areas, thus reducing carbon dioxide and other GHGs for a cleaner environment.

For more information on Nepal, visit USAID/Nepal's Mission Web site at:

- <http://www.usaid.gov/np/>