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Helping Accelerate Poverty Reduction in Asia and the Pacific

COMMUNITY-BASED FLOOD RISK MANAGEMENT

An ADB technical assistance, approved in 2005, was aimed at assisting the Government of Cambodia, nongovernment organizations, and local leaders become better prepared for extreme flood events and to build capacity at the community-level for flood disaster prevention and mitigation.

Each year, monsoon rains and the grand Mekong River flood the plains of Cambodia, covering up to 65% of cultivated land. The floods have become a way of life to most rural Cambodians living and working on this land. They have developed coping mechanisms to live with inundation. In fact, many derive their livelihoods from the annual flooding.¹

However, the floods in 2000, 2001, and 2002 were more severe than normal and normal coping strategies were insufficient. Cambodia saw a sharp increase in loss of life because of drowning and illness and destruction of crops and livestock. This increased indebtedness and worsened poverty for those affected.²

In 2000, heavy floods destroyed more than 200,000 hectares of Cambodia's rice crop and killed 347 people, 80% of them children.³ In August 2002, about 1 million Cambodians were reported to have been affected by rising flood waters with more than 450,000 people having moved to higher ground.⁴

The rural poor who typically meet their subsistence needs through farming and fishing are the most frequently and severely affected by floods. This is often compounded because floods are frequently followed by droughts, which affect the same areas.

Initiatives in Disaster Risk Reduction

Government and civil society have initiated laudable programs on disaster risk prevention and mitigation, but these are still inadequate. The Cambodian government established the National Committee for Disaster Management (NCDM) in 1995. The NCDM is tasked with leading pre-disaster risk-reduction measures (prevention, preparedness, and mitigation) and coordinating emergency response during and after disasters. While the Government is strengthening and reorganizing the NCDM, it remains financially constrained, particularly at the provincial and district levels, and lacks full authority to perform coordination roles.⁵

Meanwhile, the Ministry of Water Resources and Meteorology (MOWRAM) is primarily responsible for managing floods and droughts, and for developing and managing irrigation and drainage projects. Government-funded flood management projects tend to concentrate on structural measures with scale beyond the capacity of individual communities to design and implement.⁶

Nongovernment organizations (NGOs) have implemented their own risk-reduction initiatives. However, NGO interventions tend to be dispersed, weakly coordinated with other similar initiatives, poorly funded, and without guarantee of long-term support. Moreover, their interventions have often lacked specific attention to designing approaches that are appropriate for women and children.

Developing a Community-Based Risk Reduction Strategy

A package of capacity building assistance was developed for vulnerable communities in the lower Mekong River basin provinces of Takeo, Svay Rieng, Prey Veng, and Kandal in Cambodia. TA 4574: Community Self-Reliance and Flood Risk Reduction,⁷ approved in April 2005, was prepared to assist the Government of Cambodia, NGOs, and local leaders become better prepared for extreme flood events and to build capacity at the community-level for flood disaster prevention and mitigation.

The technical assistance (TA) intends to identify flood-risk-reduction strategies and interventions (specifically for women and girls for whom the negative impacts of floods are particularly severe) and create mechanisms for increasing community self-reliance in the face of recurrent flood disasters, and implement pilot activities in selected villages for future replication on a broad scale.

The outcomes of the TA are expected to provide insights to Cambodia's national water resources strategy and flood management program.⁸

Disaster management interventions of several international and national NGOs in the four provinces covered by the TA were assessed so that lessons could be drawn. This assessment indicated that NGO initiatives could be categorized into four broad strategies: emergency preparedness, structural mitigation, social and organizational capacity building, and livelihoods. The following were critical findings emerging from the experiences of NGOs:

- During flood events, a large number of NGOs provide relief assistance to the affected communities;
- After the floods in 2000, several NGOs initiated small flood risk reduction, mitigation, and flood early warning projects, which have helped communities reduce their flood vulnerability;
- There are also projects on capacity building and training at the national, provincial, district, and local levels in flood risk reduction;
- A number of NGOs also engage in rehabilitating canals which assist communities in regulating flow of excess water;
- Some NGOs work to strengthen livelihoods as a key strategy to reduce vulnerability at the household level.

Building on assessments of the effectiveness of previous and current risk reduction initiatives of civil society organizations, a community-based disaster risk reduction (CBDRR) strategy was developed and finalized under the TA with inputs from various government and nongovernment agencies.⁹ The CBDRR strategy includes¹⁰:

- A community hazard, vulnerability, and needs assessment in the context of disasters;
- A proposed shared approach for ensuring community participation in disaster risk reduction (including ensuring full engagement with and participation of women);
- A menu of options for community-based disaster risk reduction (including activities addressing women's needs in disasters); and
- Integrating disaster risk reduction into community development planning processes.

Two NGOs, Church World Service and Chamroen Chiet Khmer, were selected for pilot implementation of the CBRR strategy in selected villages of Takeo and Svay Rieng provinces. In addition, capacity development initiatives on the CBDRR strategy were carried out for the two NGOs, the Provincial Department of Water Resources of the four provinces, and the provincial and district disaster management committees of the selected villages.

Managing Risks and Reducing the Vulnerability of the Rural Poor

Designing the CBDRR strategy generated interest especially among risk reduction and risk management institutions in

Cambodia. It provided a catalyst around which to seriously discuss and address local capacity development for disaster vulnerability interventions.

The TA is now gearing up to implement the CBDRR strategy locally. To complete the TA, a final TA workshop was held on 6 April 2007 in Phnom Penh where the TA findings and CBDRR strategy were discussed. The TA also provided an important starting point for developing investment programs for Cambodia, Lao People's Democratic Republic and Viet Nam under regional technical assistance (RETA) 2007: GMS Flood Management and Mitigation. The challenge will be to demonstrate the value of and to implement participatory flood risk management schemes that local communities at risk own.

Most importantly, the TA aims to demonstrate that the participatory approach reduces vulnerability among the rural poor and is appropriate to women and children. In addition, it hopes to show that reducing vulnerability to floods and droughts contributes directly to poverty reduction.

This TA will hopefully create a culture that promotes and enhances security against flood risk, with villages able to respond to unexpected emergencies both individually and collectively.

Endnotes

- ¹ Their beneficial impacts include rejuvenation of wetlands as breeding grounds for aquatic plants, fish and animals; enrichment of soil by river-borne sediments and nutrients; and replenishment of reservoirs and groundwater tables as reserves.
- ² TA 4574 Paper.
- ³ United Nations World Food Programme. 2001. 7 September.
- ⁴ RTE News and Current Affairs. 2002. 26 August
- ⁵ TA 4574 Paper
- ⁶ TA 4574 Paper
- ⁷ TA 4574: COmmunity Self-Reliance and Flood Risk Reduction. Executing Agency: The Ministry of Water Resources and Meteorology. TA amount \$500,000. TA approval date: 8 April 2005. Revised completion date: 20 April 2007.
- ⁸ TA 4574 complements the studies being carried out on flood proofing under RETA 6149-REG: Support for the Mekong River Commission Flood Management and Mitigation Program, in preparation for RETA (2007): GMS Flood Management and Mitigation.
- ⁹ A consultative workshop was organized on 21 August 2006 to receive feedback from various agencies working on disaster, risk reduction at the community level on the community-based disaster risk reduction strategy developed under TA 4574 Community Self Reliance and Flood Risk Reduction.
- ¹⁰ www.adpc.net/enewssep/index2.htm

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