

Region: Country:

East Asia and Pacific Vietnam



#### Focus Area: Risk Reduction

Structural and non-structural measures; land use planning, policies and regulation, infrastructure retrofitting, etc.

# **Building Resilient Communities in Vietnam**

#### **Overview**

Located in the tropical region of Southeast Asia, Vietnam is exposed to a wide variety of adverse natural events. The rural poor are particularly vulnerable to such events and, in the aftermath of a disaster, often find themselves further entrenched in the cycle of poverty. To help break this pattern, the World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR) are mainstreaming disaster risk management (DRM) in rural development by leveraging considerable global expertise and providing funding to the Government of Vietnam at national and local levels.

#### **Challenges**

In Vietnam, major storms, flood events, and other natural hazards result in annual economic losses equivalent to between 1 and 1.5 percent of the gross domestic product (GDP). Such disaster-related losses are likely to increase in the future as a result of the high concentration of the country's physical and human assets in particularly vulnerable areas, such as floodplains and coastal regions.

An estimated 70 percent of the Vietnamese population is exposed to risks from multiple hazards—especially in rural communities where livelihoods are threatened every year. The rural poor are not only more likely to reside in hazardous locations; they are also less able to cope with disaster events. They often live in sub-standard housing, have meager financial resources and are dependent on agriculture or other livelihoods that are highly threatened by adverse natural events. Coping mechanisms include resorting to high-interest loans, sending children to work or reducing expenditures for food and health care.

#### **Approach**

To lessen the negative impacts of disasters in rural communities, the World Bank and the GF-DRR are providing technical support and funding to the Government to implement its strategy of Community-Based Disaster Risk Management (CBDRM), a holistic approach to tackling the challenges of natural hazards:

First, CBDRM involves training communities to develop their own preparedness strategies and to integrate DRM into their local socio-economic development plans.

Second, by implementing new engineering standards, the CBDRM strategy improves the resilience of rural roads and irrigation infrastructure—both of which are lifelines for rural communities.

Third, the development of the Agricultural Risk Management Information System (ARMIS) enhances the livelihoods for poor households, by assisting farmers in improving productivity and enhancing resilience to droughts, floods, erosion, heat and water stress. ARMIS also helps farmers optimize their decisions in crop selection and management by providing information on pest control, disease treatments, nutrient management, water conservation, planting dates and cropping patterns.



## Highlights

Enhanced community protection through training programs that focus on incorporating preparedness strategies within community development plans.

Early warning evacuation system and community-scale mitigation measures through Safer Community Plans benefitting more than 210,000 villagers across 30 communities.

Structural risk reduction measures, including the construction of dams, reservoirs and evacuation bridges.

Resilient rural roads and irrigation infrastructure constructed with new engineering standards.

Improved farmer productivity and enhanced resilience through a new information technology system.

Increased citizen participation and project transparency through the introduction of innovative tools, including a cell-phone based project monitoring system and a management information system for farming.



#### **Results**

- The Government refined its approach to DRM by incorporating community-based initiatives.
- Given the successful outcome of the initial pilot implemented through the World Bank CB-DRM project, the Government is currently replicating the model in 6,000 additional communities through the National CBDRM Program (US\$500 million).
- The strategies implemented and the documents produced under the World Bank project have become part of Vietnam's National CBDRM Program.
- The Government developed the capacity to implement strategic structural investments for disaster mitigation. To date, it has completed Integrated National Disaster Risk Management Investment Plans for 12 provinces.
- Provincial agencies and communities now have the capability to plan for and respond to disasters. Thirty communities have implemented structural measures, including multi-purpose evacuation centers and drainage canals; as well as non-structural measures, such as Safer Community Plans and evacuation drills.



Since 2006, the World Bank has been involved in the process of implementing the National Disaster Risk Management Project with a concessional credit of US\$160 million. The CBDRM program is executed by the Ministry of Agriculture and Rural Development and the Ministry of Natural Resources and Environment. The project has benefitted from grants provided to the Government by GFDRR in the amount of US\$4.4 million. This funding was used to leverage a larger International Development Association (IDA)-funded disaster risk management credit of US\$150 million.

Partners include the United Nations Office for Disaster Risk Reduction (UNISDR), the United Nations Development Program (UNDP), the World Meteorological Organization (WMO), the Food and Agriculture Organization (FAO) and the Australian Agency for International Development (AusAID).

#### **Next Steps**

Considering the success of the project, the Government is implementing an additional US\$150 million of IDA financing for disaster risk management in rural areas which will reach more than two million rural residents. The project will support the improvement of real-time weather forecasting for rural villages and the expansion of the CBDRM program to more communities. In addition, the construction of flood and storm protection infrastructure will be prioritized for selected river basins.

The initiative is incorporating innovative features and information-management tools that promote transparency and accountability. It is also piloting citizen participation through the management-information system (MIS), which includes a cell phone-based project monitoring tool that allows progress reports and comparisons regarding the status of project implementation among communities.

#### **GLOSSARY**

Community-based Disaster Risk Management (CBDRM) is a well-established methodology for building local resilience that has its roots in effective practices developed over several decades of community-focused development and poverty-reduction programming. The methodology is a holistic approach to disaster risk management that recognizes the links between vulnerability, poverty and socio-economic development. The CBDRM approach seeks to understand and build on existing community coping and adaptation capacities. Under the project, the capacity building approaches of CBDRM are combined with structural risk reduction investments at community and provincial levels.

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"Communities' awareness and participation are critical for coping efficiently in the case of a disaster. It is important to empower them with the right information and tools to enhance their preparedness."

Nguyen Huu Phuc Director of the Disaster Management Centre Directorate of Water Resources Ministry of Agriculture and Rural Development Vietnam

### Lessons Learned

Participation of all stakeholders, including villagers, relevant government agencies at all levels and international partners was crucial to the general success of the program.

Use of new technology such as cell phone and web-based tools can be utilized in DRM projects to build an online participatory community-management system.

Linking physical investments with community DRM activities through geographic clustering provides for greater synergies and a more comprehensive approach.

