

**BUREAU FOR DEMOCRACY, CONFLICT, AND HUMANITARIAN ASSISTANCE (DCHA)  
OFFICE OF U.S. FOREIGN DISASTER ASSISTANCE (OFDA)**

## **Zambezi River Basin Disaster Risk Reduction (DRR) Programs**

Approximately 32 million people live in the nearly 1.4 million square km Zambezi River basin, according to the International Federation of Red Cross and Red Crescent Societies (IFRC). The Zambezi, Africa's fourth largest river, flows more than 2,600 km from northwestern Zambia, through eastern Angola, along the borders of Namibia, Botswana, and Zimbabwe, and through Mozambique into the Indian Ocean. During periods of flooding, backflows from the Zambezi River impact communities living along the Shire River, a major tributary of



the Zambezi in Malawi. The residents of the river basin depend heavily on agriculture, while riverine community livelihoods focus on fishing. While the river provides support, above normal flooding can also adversely affect community livelihoods and increase the risk of waterborne diseases, particularly among vulnerable populations. Most recently in 2009, USAID/OFDA has responded to heavy flooding in the Zambezi River basin in areas of Angola and Namibia. The USAID/OFDA DRR programming described below aims to enhance disaster preparedness in the Zambezi River basin.

### **ZAMBEZI RIVER BASIN INITIATIVE**

USAID/OFDA is supporting a three-year initiative implemented by IFRC and a related program led by the U.N. World Meteorological Organization (WMO) to reduce flood vulnerability in the seven countries which encompass the Zambezi river basin – Angola, Botswana, Malawi, Mozambique, Namibia, Zambia, and Zimbabwe. IFRC will help vulnerable communities adapt to climate-related threats such as flooding through conservation-based farming techniques, soil conservation, water-harvesting techniques, and reforestation. IFRC will also build DRR and disaster management capacity in both riverine communities and local Red Cross branches.

### **ZAMBEZI RIVER FLOOD EARLY WARNING AND MITIGATION**

Complementing IFRC's efforts, the WMO, the U.S. Department of Commerce's National Oceanic and Atmospheric Administration (NOAA), the U.S. Geological Survey (USGS), and national meteorological and hydrological services and disaster management entities are supporting an initiative to assess flood early warning capacity in riparian countries and to formulate a consensus strategy. Focusing on basin-wide cooperation and an integrated approach to flood early warning, the activity will address the technical, institutional, and capacity-building issues related to developing flood preparedness and early warning systems. The strategy and IFRC programming will help link technology to communities, encouraging the development of a framework for a sustainable, integrated flood early warning and management in the Zambezi basin.

## **DEVELOPMENT OF ZAMBEZI RIVER BASIN ATLAS**

USAID/OFDA is supporting the development of an atlas of the Zambezi River basin, implemented by the Famine Early Warning Systems Network (FEWS NET) through USAID's Office of Food for Peace. The atlas will include Zambezi basin livelihood baseline data, maps, graphs, and a variety of food security-related analysis of the basin's livelihoods and coping strategies, including the effects of normal seasonal and above-average flooding along the river.

## **THE RIVER VALUE: CONVERTING RISK TO OPPORTUNITIES IN MOZAMBIQUE**

With USAID/OFDA funding, International Relief and Development (IRD) is working with flood-prone communities in the Chinde District of Mozambique to utilize opportunities created by the flooding. Chinde District is located at the mouth of the Zambezi River and is one of the areas of Mozambique most at risk of flooding, due to generally low-lying, riverine topography and a large number of inhabited islands. The two-year River Value program will work with local disaster risk management committees to increase production of staple post-flood crops and cash crops, increase access to clean water, and promote hygiene and sanitation. The local committees will manage the project activities, and with support from IRD will transition from a response-only focus to take responsibility for managing risks and guiding communities through accelerated post-flood recovery.

## **INCREASING RESILIENCE OF VULNERABLE COMMUNITIES IN MOZAMBIQUE**

USAID/OFDA is also supporting a two-year project implemented by the non-governmental organization World Vision to reduce the vulnerability of households and communities to recurrent climate and weather-induced disasters and increase resilience against poor harvests. Beginning in May 2009, the intervention is targeting 44,500 beneficiaries Zambezia, Tete, and Sofala provinces. The project will encourage community-level disaster preparedness and promote sustainable agricultural practices such as conservation agriculture in participating households.



*A road damaged by flooding impedes travel in Mopeia, in the Zambezi River basin in Mozambique (Photo by Tresja Denysenko, USAID).*

## **COMMUNITY-BASED DISASTER AND NATURAL RESOURCE MANAGEMENT IN ZAMBIA**

With USAID/OFDA funding, Concern is implementing a program to increase the capacity of local government and community structures to prevent, mitigate, and respond to the impacts of disasters in the Western Province of Zambia, benefiting approximately 125,000 individuals. Western Province includes nearly 13,000 square km of Zambezi River flood plain. The program will develop partnerships and creating linkages between civil society, traditional leadership, and government structures. The program, initiated in 2009, also helps to empower participating households protect rural household livelihood assets through community-based disaster management activities and improved household production.

## **USAID/OFDA DRR PROGRAMMING IN THE ZAMBEZI RIVER BASIN**

USAID/OFDA DRR programming in the Zambezi River basin aims to reduce the impact of recurrent floods on vulnerable populations through risk reduction interventions. USAID/OFDA supported programming includes flood preparedness and early warning systems, as well as income generation and livelihood diversification, to improve household resiliency and increase food security.