

# Community-Based Adaptation FAST FACTS

**JAMAICA** 

Glengoffe climate change adaptation

**Grantee:** Glengoffe Community Development Committee Benevolent Society (GCDC)

Type of organization: CBO
Number of participants: 500

**Location:** Glengoffe, St. Catherine

CBA Contribution: USD42,000

Project Partners: Environmental Foundation of Jamaica, (USD 9,000) Ministry of Agriculture (Rural Agricultural Development Agency and Forestry Departments) USD 7,741, Development Commission, University of the West Indies Biotech Centre (USD3,860), Social Development Commission (1,500) Member of Parliament (2,022)

**Co-financing** Community (in kind \$15,000 USD)

Project Dates: April 2010-April 2012

### **BACKGROUND**

The Community-Based Adaptation Programme (CBA) is a five-year United Nations Development Programme (UNDP) global initiative funded by the Global Environmental Facility (GEF) within the Small Grants Programme (SGP) delivery mechanism. The UN Volunteers partners with UNDP and GEF/SGP to enhance community mobilization, recognize volunteers' contribution and ensure inclusive participation around the project, as well as to facilitate capacity building of partner NGOs and CBOs. In addition, funding is provided by the Government of Japan, the Government of Switzerland, and AusAlD. The CBA's goal is to strengthen the resiliency of communities to address climate change impacts.

This CBA project, "Glengoffe climate change adaptation" seeks to alleviate the damage to local agriculture and infrastructure resulting from climate change-induced extreme

droughts and severe weather events. Jamaica, an

island nation of the Greater Antilles in the Caribbean Sea, is the third most populous Anglophone country in the Americas with a population approaching 2.8 million people. The project site, Glengoffe, covers twenty square miles of the hilly terrain in Northeast St. Catherine. Glengoffe consists of fourteen small communities making up approximately 5,000 people. Many residents commute to their work in nearby Kingston, Stony Hill, Linstead and Spanish Town. The area is also home of artists such as craftsmen and straw platters who make and sell their items for income. While much of the population is engaged in part-time agricultural activities, there is about 300 full time farmers who depend solely on the land for their livelihoods. As a result of unfavorable climate events and unsustainable land management practices, the community is beginning to see the negative impact on their agricultural production. Thus, the population is becoming increasingly vulnerable to climate change risks.



Deforested slopes in a coffee-growing region in Jamaica's Blue Mountains. Hills in these areas are particularly prone to erosion and landslides due to intense rainfall events and hurricanes, which are projected to increase with climate.

## **CLIMATE CHANGE RISKS**

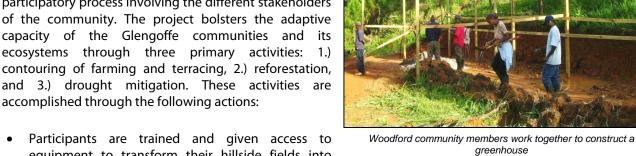
Long term climate change predictions for Jamaica forecast a reduction in mean annual precipitation and an increase in annual temperature. While rainfall will become less frequent, they will occur in more intense downpours, resulting in high frequency and magnitude of droughts and floods. Predictions also suggest an increase in the number of hot days and a decrease in the number of cool nights resulting in heat stress on crops, an increased need for irrigation, and increased outbreaks of diseases and pests. Changes in wind patterns and increased storm activity have further damaging effects on agriculture as topsoil is washed away and farmland is degraded. Increase in intensity of tropical cyclones have devastating impacts on deforested hillsides and erodes

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tons of sediment depositing some into the country's watershed. Under these circumstances, there are more frequent landslides which devastate rural infrastructure, ruin farmland and threaten people's property and live.

# PROJECT DESCRIPTION AND ADAPTATION **MEASURES**

This CBA project aims to reduce the risks of landslides and flooding from heavy precipitation, as well as the adverse effects of extreme drought in Glengoffe's areas. It has been developed by GCDCBS through a participatory process involving the different stakeholders of the community. The project bolsters the adaptive capacity of the Glengoffe communities and its ecosystems through three primary activities: 1.) contouring of farming and terracing, 2.) reforestation, and 3.) drought mitigation. These activities are



- equipment to transform their hillside fields into organized and well-drained contoured land and terraces;
- Participants are provided with a variety of fruit, spice, and lumber trees that they plant in buffer zones with the aim of protecting the integrity of the terrain, and to provide shade for vegetable crops;
- Participants will be trained in alternative techniques to reduce crop loss from unseasonable heat, and will be provided with instruction on designing irrigation systems.

By managing the land and strategically reforesting certain sections with trees, the project will help farmers increase their yields while providing them with alternative source of income.

#### FOCUS ON...

#### Global environmental benefit

By contouring and terracing hillside farms and reinforcing them with trees, the project will produce long-term growing zones which would maintain soil integrity. Good drainage and forested buffer zones will lessen the susceptibility to landslides and will reduce the soil run-off during heavy rains. Keeping sedimentation out of the rivers will protect their delicate ecosystems and also keep it from ending up in the ocean and choking the coral reefs. In addition, more fruit and flowering trees means more birds, bees, and other pollinating animals in the ecosystem.

## Community ownership and sustainability

The community of Glengoffe has played an essential role during the development of the project. During its implementation, all the labor will be provided by participants, especially women and young farmers, who will pledge certain numbers of hours which can be converted as in-king financing

#### **Policy influence**

As it emerges from the CBA Jamaica Country Programme Strategy, lessons learned from the implementation of the project will be scaled up at the national level, and will provide opportunities for incorporation into national adaptation and planning policies.

For more information about CBA or CBA projects visit: www.undp-adaptation.org/project/cba Further information, lessons learned, and experiences gathered from climate change adaptation activities globally can be found at the Adaptation Learning Mechanism: www.adaptationlearning.net







