

**Implementing Integrated Land, Water and Wastewater Management in  
Caribbean Small Island Developing States (IWECO) (ID 4932)**

*Addressing Problem of Land Degradation and Ecosystem Degradation in the Upper Reaches of  
the Soufriere Watershed in Saint Lucia*

**1) Overview of the project**

The Integrating Water, Land and Wastewater Management in Caribbean Small Island Developing States (GEF-IWECO) Project is a multi-focal, regional project that builds upon the work of IWCAM, to address water, land and biodiversity resource management as well as climate change in ten participating countries, namely Antigua & Barbuda, Cuba, Dominican Republic, Jamaica, Saint Kitts & Nevis, Saint Lucia, Saint Vincent & the Grenadines, Grenada and Barbados. Overall objectives of this regional project are 1) implementation of an integrated approach to water, land and ecosystems services management, supported by policy, institutional and legislative reforms; 2) implementation of effective appropriate technologies to accelerate contribution to global targets on access to safe and reliable water supplies and improved sanitation; and 3) contributing to improved ecosystem functioning in the Caribbean.

In Saint Lucia, the project focuses on land stabilization collaborating with small scale farmers in the upper reaches of the Soufriere Watershed, and development of alternative livelihoods such as organic farming, sustainable forest management and production of biodiversity friendly goods and services for small scale farmers utilizing land around the watershed. Soufriere is known as the tourism “Mecca” of St. Lucia and its receiving waters support important marine based tourism as well as fishing which in recent times has been on the decline. Although this is an area rich in biodiversity and the site of the Pitons World Heritage Site, the town of Soufriere and the surrounding communities are among the most economically vulnerable in Saint Lucia.

The root causes of environmental degradation in the wider watershed are largely attributed to deteriorating economic conditions. These deteriorating economic conditions have contributed to unsustainable practices which have contributed significantly to an increase in erosion in the upper watershed and an increasing incidence of flooding and the resultant poor water quality of the receiving waters of the Soufriere River.

Reforestation initiatives, such as under the IWECO Saint Lucia intervention, are important and welcome as part of post-Hurricane Tomas recovery efforts. The IWECO Saint Lucia intervention entitled “Mitigating the poor biophysical conditions in the Soufriere Watershed, which have impacted on sustainable livelihoods of the population” also recognizes the need to address livelihood issues in tandem with conservation. It is introducing innovative solutions for erosion control, agricultural nonpoint source mitigation, land stabilization and runoff/flood control to degraded sites located within the Fond St. Jacques / Migny area in the upper reaches of the Soufriere watershed.

**2) Role of GEF funding**

The overall IWECO project is funded to the tune of **\$20,722,572** t from GEF together with **\$68,017,191** of cash and in-kind co-financing from UN Environment, UNDP, Climate Investment Funds, Coca Cola, Sandals, The Caribbean Natural Resources Institute and others. It is implemented through UN Environment and UNDP. This multi focal area project access GEF funding from different focal areas namely International Waters, Biodiversity, Land Degradation, Climate Change and Sustainable Forest Management with interventions in 9 participating countries. The project in Saint Lucia is focusing on land degradation and international water.

### **3) Features of the project**

The Saint Lucia IWECO intervention is targeting Innovative, climate-change resilient approaches to Sustainable Land Management, Integrated Water Resources Management, Integrated Coastal Zone management, Sustainable forest management and enhanced management and maintenance of ecosystem services within the Soufriere Watershed.

#### **Collaboration among different sectors of the government:**

As it relates to the wider Soufriere watershed, the project lead by the Forestry Department of the Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Cooperatives and supported by the Department of Sustainable Development in the Ministry of Education, Innovation Gender Relations and Sustainable Development. The project is collaborating with entities such as the St. Lucia Solid Waste Management Authority (SMMA), the St. Lucia Hotel and Tourism Association (SLHTA) and private sector entities involved in waste recycling to raise awareness and change attitudes with respect to the impact of poor liquid and solid waste disposal on the very fragile but of high economic value, ecosystems that comprise the watershed.

#### **Scaling up & Lessons learned:**

This project builds on yet another success of the GEF “On Integrating Watershed and Coastal Areas Management in the Small Island Developing States of the Caribbean (IWCAM)” project as increased understanding and appreciation of watershed management for improved water quality was viewed as a critical achievement of the IWCAM Saint Lucia demonstration project. The Trust for the Management of Rivers a community-based organisation which was established under IWCAM is one of the local resources to be drawn upon in the IWECO awareness raising activities. The UNDP Small Grants Project also provides support in building capacity of stakeholders and other community members toward the development of livelihood projects.

### **4) Lessons learned from previous project**

The approach that the project adopted is highly participatory and involving community in planning and implementation of the project, building on one of the notable successes of the St. Lucia’s GEF IWCAM Demonstration project. This enhanced the ability of project management to address community priorities by focusing on the critical needs of the communities with respect to water quality and reliability, land degradation, and landscape restoration; and facilitating stakeholder participation by using local knowledge and skills.

St. Lucia’s IWECO intervention involves at least 150 farmers, agricultural and forestry extension officers and community representatives. It entails on-the-ground interventions to restore landscape; thus, reducing the scale of land degradation and soil erosion. The interventions is undertaken in a phased manner such that the farmers are able to sustain their livelihoods. Where this is not possible with respect to existing productions, the project seeks to introduce alternatives farming and sustainable forest management, production and promotion of biodiversity friendly goods and services. So far, they identified the sustainable management of non-timber forest products, ecotourism, establishment of a fly nursery, cut flowers and agouti farming as possibilities. The intervention is supporting the development of a protocol for scientific research with respect to land degradation, international water, land restoration and socioeconomic indicators in support of the project objectives.