

# UPSCALING COMMUNITY RESILIENCE THROUGH ECOSYSTEM-BASED DISASTER RISK REDUCTION



Fig.1:Map of the Project Sites

## Project overview

**Project location:** Haiti

**Ecosystems under restoration/protection in the South district of Haiti:**

- Chardonnières, Les Anglais, and Tiburon

**Key risks being addressed:** Flooding, landslides and food insecurity

**Project period:** May 2019 – June 2022

**Project objectives:**

- **Overall objective:** The community of Chardonnières (70,000), arrondissement is more resilient to disasters (also related to climate change) due to the adoption of demonstrated best practices by farmers and landowners in the locality.
- **Specific objective:** Strengthened integrated risk management and inclusive risk governance by supporting development and scaling up of Eco-DRR actions and citizen-based monitoring of disaster and climate resilient policies and practices and mainstreaming youth engagement and gender considerations.

**Project budget:** 889,108 USD

- Over 10 years the present value of net benefits is 5.4 million USD, including reduced property damage, income losses, carbon capture and pollution reduction (UMass-Amherst, 2022).

## Project Results



### Capacity Building

- 15 Community-based Organisations established and actively engaged in ecosystem restoration and good agriculture practices including crop production and prevention of soil erosion.
- 6 women groups trained and engaged in vegetable gardening for livelihood strengthening.
- 6 Red Cross committees involved in Eco-DRR actions and disaster preparedness.
- 3 Civil Protection Local Committees trained in emergency management and establishing a coordination centre for emergencies.
- 3 local builders groups trained on building Eco-DRR infrastructures and maintenance.
- 2 Community-based Organisations trained and engaged in beekeeping.



### Advocacy with Government

- Local authorities of 6 different sections actively participated in programme activities through training and implementation of community Vulnerability and Capacity Assessments.
- Community Commitment Charter for the Protection of the Environment – Community owned document which describes the process of an informal agreement with the objective to protect the restored land into private farmers land, followed by long-term protection of the restored land and its endorsement by local authorities.
- 1 Red Cross Youth Committee presented and advocated its Eco-DRR action plan to the Mayor Office of Tiburon.
- Advocacy with the Haitian Red Cross, to include and replicate the Eco-DRR training methodology into J'adapte programme and other relevant HRC training materials, increase the Youth Red Cross Committees actions related to Eco-DRR as common practise and include the vision of the Eco-DRR approach into the current 5 years Haitian Red Cross strategic planning document.



### Field implementation for resilience-building

- 9,211 beneficiaries reached of which 37 percent are women.
- 10 community-based seedlings nurseries established and managed by communities. Each have a capacity of 3,000 to 10,000 seedlings.
- 29 hectares (ha) of degraded mountain land restored with native tree species through the reinforcement of agroforestry systems and woodlots.
- Creation of natural zones for additional protection by landowners and communities.
- 56 earthen walls constructed and 27 retaining walls built to reduce erosion, mitigate flood and landslide hazards. These were combined with vegetation such as: pineapple and bamboo to strengthen the structures and provide livelihoods benefits.
- 8 vegetable model gardens (jaden lakou) were established with women groups to practice new techniques and showcase results

Each Eco-DRR project has developed a replicable model for upscaling community resilience through three core components of Eco-DRR:

- Disaster Risk Reduction
- Ecosystem Restoration/Protection
- Climate Smart Livelihood

In Haiti, there is a greater emphasis on ecosystem restoration and climate smart livelihoods by combining slopes restoration and watersheds protection with staple crops cultivation to address chronic food insecurity.

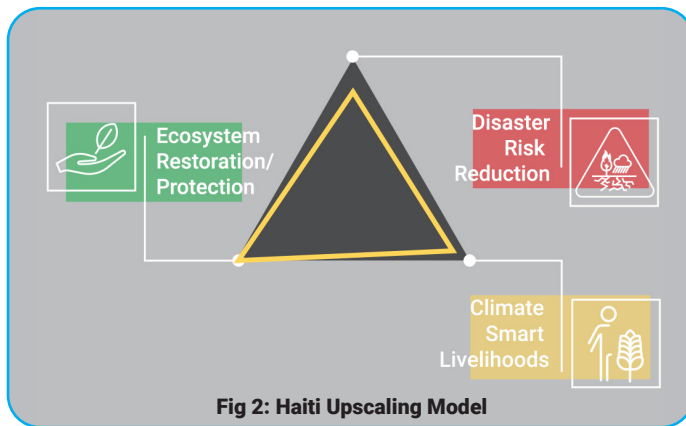


Fig 2: Haiti Upscaling Model

**Eco-DRR upscaling model: Addressing flood, landslide and food insecurity risks through risk mapping, slope and watershed restoration and livelihoods diversification by upscaling Eco-DRR into humanitarian programmes of Red Cross Societies in Haiti.**



**Ecosystem Restoration/Protection:**

- Implemented digital risk assessment and mapping initiative with local authorities and civil society organisations to prioritize watersheds for restoration measures.
- Engaged and mobilized local community members for restoring and protecting degraded slopes and watersheds with native tree and fruit species.



**Climate Smart Livelihoods**

- Engaged CBOs to strengthen the link between poverty alleviation and environmental conservation by restoring land with valuable trees and food crops for livelihoods support.
- Catalyzed leadership and interest in re-greening landscapes for lasting change, rather than paying farmers to restore their own lands.



**Disaster Risk Reduction**

- Involved Red Cross volunteers and local authorities such as Civil Protection in trainings, implementation and the dissemination of community contingency plans at the local and regional level.
- Constructed hybrid earthen and retaining walls in combination with vegetation to prevent soil erosion and mitigate flood and landslide risks, while promoting livelihoods.

**Key implementing partners:** The Netherlands Red Cross, Haitian Red Cross, the local and regional government authorities



Fig 3: Agricultural technician on the training of seeds collection

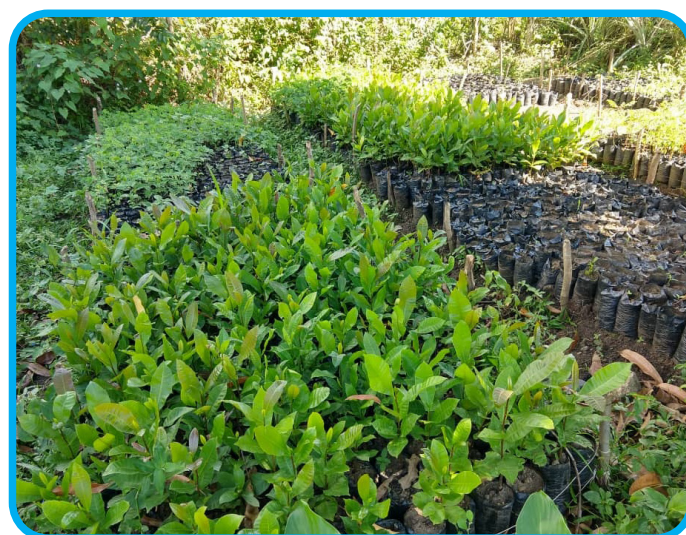


Fig 4: Cassia seedlings growing in the community nursery

