

# UP-SCALING COMMUNITY RESILIENCE THROUGH ECOSYSTEM-BASED DISASTER RISK REDUCTION



Fig.1:Map of the Project Sites

# **Project overview**

Project location: Northern Uganda

# Ecosystems under restoration/protection: Aswa Catchment, specifically in:

- Middle Moroto secondary sub catchment (Otuke and Alebtong districts)
- Upper Agago secondary sub catchment (Abim and Agago districts)
- Upper Pager Matidi secondary sub catchment (Kotido district)

**Key risks being addressed:** Frequent and prolonged droughts in upstream areas; floods in midstream areas;

# Project period: May 2019- June 2022

#### **Project objectives:**

- Overall objective: Strengthened resilience to drought and flooding of 160,000 vulnerable women and men in 5 districts of Eastern Aswa Catchment in northern Uganda;
- Specific objective: Scaling up Integrated Risk Management (IRM) and inclusive risk governance through improved catchment-based water resources management that is risk-informed, gender- and ecosystem-sensitive.

## Project budget: USD 1,054,472

Over 10 years the present value of net benefits is 16.5
 Million USD, including reduced property damage,
 income losses, carbon capture & sequestration
 (UMass-Amherst, 2022)

## **Project Results**



#### **Capacity Building**

- 81 Community Based Organisations (CBOs) trained on Integrated Risk Management (IRM), which combines ecosystem restoration with risk reduction activities.
- 6 Micro-catchment management committees operational and implementing micro-catchment management plans for drought and flood management;
- 60 Village Saving Loan Association (VSLA) groups trained on group governance and ecoenterprises;
- 33 Aswa Catchment management committee members trained on IRM for drought and flood risk reduction;
- 4 district governments have been trained in IRM to integrate climate change indicators and Eco-DRR in their plans and budgets.



# **Advocacy with Government**

- Promoting the integration of climate change through awareness raising sessions in Otuke district local government, contributing to the Nationally Determined Contribution;
- Supporting CSOs and local community participation in planning and tracking implementation of environment actions with local government, including enforcement of community by-laws;
- Influencing review of national guidelines on micro- water catchment planning to integrate IRM with Ministry of Water and Environment for replication nationally.



#### Field implementation for resilience-building

- 109,388 beneficiaries reached of which 50% are women.
- 29,586 hectares (ha) of land successfully restored and protected around targeted microcatchments including central forest reserves and private land.



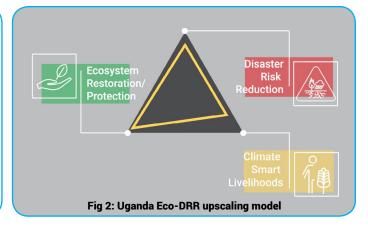
# **Livelihoods strengthened**

- 470 beehives established to improve the resilience of beekeepers and contribute to protection of 8,000 ha ecosystem in Abim, Agago, Otuke, and Alebtong. Est. revenue: 90,000 USD/year
- 8 shea-nut press and grinder machines established with VSLA groups in Otuke, Agago and Alebtong. Est revenue: 2,057 USD/year
- 3 Solar driven small scale irrigation pumps, 10 treadle irrigation pumps and 10 bucket irrigation kits established in Otuke, Alebtong and Agago.
- 6 boreholes rehabilitated and 364 HH have access to water through a sub-surface dam in Kotido.
- 2 green houses established in Kotido to support commercial horticulture.
- 6 Improved Pasture demonstration/ multiplication sites (12 ha) in Kotido.

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

- · Ecosystem Restoration/Protection
- Disaster Risk Reduction
- · Climate Smart Livelihoods

In Uganda, there is a greater emphasis on Ecosystem Restoration and Protection through the micro-catchment restoration and establishment of guidelines for improved drought and flood management (Figure 2).



Eco-DRR upscaling model: Establishment of micro-water catchment committees and national guidelines for improved drought and flood management



#### **Ecosystem Restoration/Protection**

- Community-based micro-catchment planning empowers communities including women groups to identify ecosystem
  degradation issues, engage in restoration and protection of different ecosystem types and to realize community aspirations.
- Local communities are empowered to engage with local government for the resourcing and implementation of these plans, the local government annual plans and budgets.



#### **Climate Smart Livelihoods**

- Eco-enterprise promotion (apiary value chain, shea nut processing, small-scale irrigation technologies and green house for horticulture) through model farmers/champions.
- Farmer Managed Advisory hubs for provision of authentic local technologies, seeds, skills, and knowledge in cooperation with Agricultural Research Institutes and Private Sector.



#### Disaster Risk reduction

- Disseminate early warning and early action information on flooding and drought forecasts to farmers with the Ugandan Meteorological Authority.
- Integration of indigenous and scientific knowledge for improved forecasting, promoting local networks through VSLA that strengthen community social safety nets.

**Key Implementing partners:** CARE Uganda, Wetlands International Eastern Africa, Facilitation for Peace and Development (FAPAD), Facilitation for Innovative Actions and Sustainable development (FINASP) CARITAS Lira and CARITAS Kotido, National Forestry Authority (NFA), Ngetta Zonal Agricultural Research Institute (ZARDI).



Fig 3: Apiary promoted as an Eco-enterprise, Farmers in Abim district setting up their beehives



Fig 4: Farmer Managed Natural Regeneration of indigenous tree species implemented by farmers in Otuke Districts













