



**Technical Assistance:** Easily deployable water-filled flood barriers to stop damage from flooding and store water for use during droughts

**Location:** Rubira Hills, Musenyi area of Mpanda Commune in Bubanza, Burundi

**Solution:** Innovative flood defense system SLAMDAM

**UNEP CTCN grant:** USD 214,950



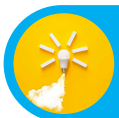
Farmer fills the SLAMDAM barriers with water to protect his crops from flooding © UNEP-CTCN

Areas of Burundi are exposed to both floods during the rainy season and droughts during the dry season, both worsened by climate change and destroying crops. To address this, SLAMDAM, a low-cost, climate-resilient, and easily replicable solution of rubber barriers was deployed.



## Objectives

- The primary objective is to pilot an innovative technology solution to prevent damage from flooding to protect crops, and store water to ensure water availability during droughts.
- The project also strengthens communities' ability to adapt to climate change and enhance their preparedness and resilience.



## Social Impact

- The project supported 600 direct beneficiaries, of which 300 were women, and 60 were youth.
- Beyond direct beneficiaries, the project also supported 24,400 indirect beneficiaries, of which 12,200 were women, and 4,880 were youth.
- The farmers, whose agricultural assets benefited, saw their revenues increase by \$150/month.



## Adaptation Impact

- **Enhanced Flood Prevention and Water Availability:** The deployment of the SLAMDAM barriers helps prevent flood damage and ensures water availability during droughts, which directly supports Burundi's adaptation efforts by mitigating the impacts of extreme weather events.
- **Enhanced Agricultural and Infrastructure Protection:** By preventing flood damage, the technology protected agriculture, infrastructure, and natural assets, contributing to food security and safeguarding livelihoods.
- **Improved Water Management:** Effective water management using SLAMDAMS contributes to increased agricultural production, which is aligned with adaptation goals by ensuring sustainable water use and improving resilience to water scarcity.



### Other Co-Benefits

- Improved resource efficiency.
- Creation of additional agri-business jobs.
- Decreased public health risk.



### Innovation & Technology

- SLAMDAM technology provides benefits of innovation through a dual purpose, both as a flood barrier and water storage system.
- It protects agricultural lands and allows for uninterrupted farming both during the wet and dry season.
- It ensures security of food production, and increases resilience of and income for farmers.



### Replication Potential

- This solution is conducive to easy replication due to its low-cost, straightforward design, and ease of use and maintenance.
- Its successful deployment in Burundi demonstrates its effectiveness in mitigating negative climate events and enhancing food and water security.
- It also demonstrated resource efficiency, as SLAMDAM addresses flood and drought risks alike through one integrated solution
- The solution can be replicated in other locations both in Burundi and beyond, where agriculture and other assets are exposed to flooding and droughts.



### Key Figures

- USD 214,950 project budget
- 25,000 people benefitted in total
- 13 events organized with 90% of participants reporting increased knowledge and capacity
- 10 adaptation related climate plans, strategies and laws supported by the project
- The project contributed to the following SDGs:

