



Technical Assistance: Designing nature-based solutions with focus on ethnicity and gender, to increase the resilience of rural mountain communities in protected natural areas affected by extreme weather events

Location: Montaña de Celaque National Park, Honduras

Solution: Nature-based solutions to promote resilience

UNEP CTCN grant: USD 228,479



Workshop on early warning systems and climate change vulnerabilities. © UNEP-CTCN

Rural mountain communities in the Montaña de Celaque National Park are highly vulnerable to climate change, particularly to extreme weather events like landslides. This project strengthens community resilience by co-designing an Adaptation Plan centered on nature-based solutions. The initiative incorporates gender and ethnic equity, aligns with indigenous knowledge, and includes capacity-building activities for local communities and institutions.



Objectives

- The primary objective is to improve the resilience of rural mountain communities to climate change by building capacity and implementing nature-based solutions (NBS).
- The project targets indigenous peoples (Lenca) and rural communities, providing them with tools, training, and resources to manage natural resources sustainably and reduce vulnerability to climate change.



Social Impact

- The project directly supports 20 beneficiaries from local communities (of which 10 are women, and 5 are youth) by enhancing their capacity to manage natural resources and reduce vulnerability to the impact of climate change.
- It also supports 874 indirect beneficiaries in the same communities (of which 437 are women and 218 are youth).



Adaptation Impact

- **Enhanced Ecosystem Resilience and Community Adaptation:** The project improves the resilience of ecosystems and communities by implementing NBS, such as sustainable agroforestry and soil stabilization techniques. These mitigate the impacts of extreme weather events, such as landslides and droughts, and promote sustainable land use.
- **Improved Livelihood Security:** By enhancing the capacity of local communities to manage natural resources, the project supports livelihood security and reduces vulnerability to the impacts of climate change.
- **Effective Risk Management:** The project integrates traditional ecological knowledge with modern risk assessment tools to develop effective early warning systems and disaster risk reduction strategies.



Other Co-Benefits

- Improved livelihood opportunities
- Conservation of cultural heritage
- Sustainable ecosystem management



Innovation & Technology

- **Traditional Ecological Knowledge:** Utilization of indigenous knowledge to manage natural resources sustainably and enhance resilience to the negative impact of climate change.
- **Community-Run Early Warning Systems:** Implementation of systems to provide timely information on climate risk and enable early action.
- **Sustainable Agroforestry Practices:** Adoption of agroforestry techniques to improve soil health, reduce erosion, and enhance agricultural productivity.
- **Climate Change Vulnerability Assessments:** Comprehensive assessments to identify and address the vulnerabilities of communities and ecosystems to climate change.



Replication Potential

- The project demonstrates a high potential for replication in other mountainous and indigenous regions facing similar climate-induced challenges.
- Successful practices and NBS developed through this project can be adapted and scaled up in other areas.



Key Figures

- USD 228,479 project budget
- 894 people benefitted in total
- 10 events organized for over 250 participants
- 7 events focused on climate technology RD&D
- The project contributed to the following SDGs:

