

Funding Proposal: Building livelihood resilience to climate change in the upper basins of Guatemala's highlands



The project's overarching objective is to reduce the impacts of climate change on the hydrological cycle in target watersheds through improved land use practices. This will lead to improved water recharge and productivity and contribute to the population's and ecosystem's increased resilience to climate change.

Total project area is 146,500ha of which 22,500 will be directly restored. This area includes agroforestry with annual crops, silvopastoral systems, and agroforestry with permanent crops or forest plantations and protection areas. The selected areas are considered as water recharge areas. The number of direct beneficiaries is 132,000 people.

Result areas:

1. Integrated climate-sensitive watershed management adapted to the local context of the Highlands. Through: i) Improved local capacities for climate action and watershed management and ii) Government forestry and agroforestry incentives supporting water recharge and productivity;
2. Community-led implementation of climate actions in priority areas through funding from a grant mechanism
3. Improved multi-level and multi-stakeholder access to climate information that enhances agricultural and water management practices and programs. Main activities are i) Strengthened meteorological and hydrological information systems ii) Design and implement a participatory early warning system for agricultural practices and water management. iii) Capacity building for climate change information access, interpretation and sustainability.

Beneficiaries:

- National Forest Institute INAB
- Ministry of Environment and Natural Resources
- National Meteorological Authority INSIVUMEH
- Ministry of Agriculture and Livestock MAGA
- Local Municipalities
- Community based organizations and cooperatives
- National Protected Areas Council CONAP

OUTPUT 1. Integrated climate smart watershed management (GCF, GoG)

Under this output, a total of 50,000 people will be directly benefited by improved land use practices. A total of 12,500 hectares will be rehabilitated through EbA approaches and natural infrastructure interventions such as riparian forest restoration and conservation/rehabilitation of recharge areas; as well as soil conservation practices, terracing, erosion control and hybrid engineering.

The GoG through the National Institute of Forests (INAB) has two forest incentive programs in place called PROBOSQUE¹ and PINPEP² to promote forestry and agroforestry systems. In the past 6 years, INAB has invested over US\$20 million in the area of influence of this project and has formally committed at least US\$5 million to be invested in the project area during the life of the project. The project will scale up PROBOSQUE's innovative approach which considers the contribution of forests to water-related ecosystem services. Through the incorporation of EbA criteria into the incentive mechanism, climate impacts on forests and agroforestry systems will be reduced and the resiliency of livelihoods in targeted watersheds increased.

1 PROBOSQUE: Promotion for the establishment, recuperation, restoration, management, production and protection of forests in Guatemala. <http://ww2.oj.gob.gt/es/QueEsOJ/EstructuraOJ/UnidadesAdministrativas/CentroAnalisisDocumentacionJudicial/cds/CDs%20leyes/2015/pdfs/decretos/D02-2015.pdf>

2 PINPEP stands for Incentive Program for Small-scale forest and agroforestry tenants



OUTPUT 2. Grant facility for Community-led climate actions channeling funding to priority areas (GCF, KOICA)

Output 2 will provide community based organizations (CBOs) with direct access to funding for sustainable land use practices that reduce climate impacts on the hydrological cycle in target watersheds. Field actions financed with both GCF and KOICA funds will take into account cultural, economic and institutional aspects particular to the Guatemalan Highlands in their design and implementation. Affirmative gender actions will be incorporated within the grant facility by identifying female headed households and women's local organizations to be targeted as beneficiaries. The grant mechanism will be aligned with GCF investment criteria while addressing national and local priorities. At least additional 10,000 hectares will be restored under this output.

GCF resources will deliver a minimum of 17 grants supporting climate change adaptation actions with a maximum of US\$400,000 per grant, under a medium-size grant window. This scheme will foster efficiency and scale by working with second level CBOs with proven local capacities, and the ability to gather multiple producer associations. A second scheme financed with KOICA resources will deliver a minimum of 52 grants with a maximum of US\$50,000 per grant, under a small-size grant window, tackling inequity by reaching small-scale producer associations with more limited access to funding. The medium- and small-size grants are complimentary as they can both be applied across the different target areas of the project and promote the same type of sustainable land use practices.



OUTPUT 3. Climate related information provided to farmers and other target stakeholders for watershed management (GCF, KOICA)

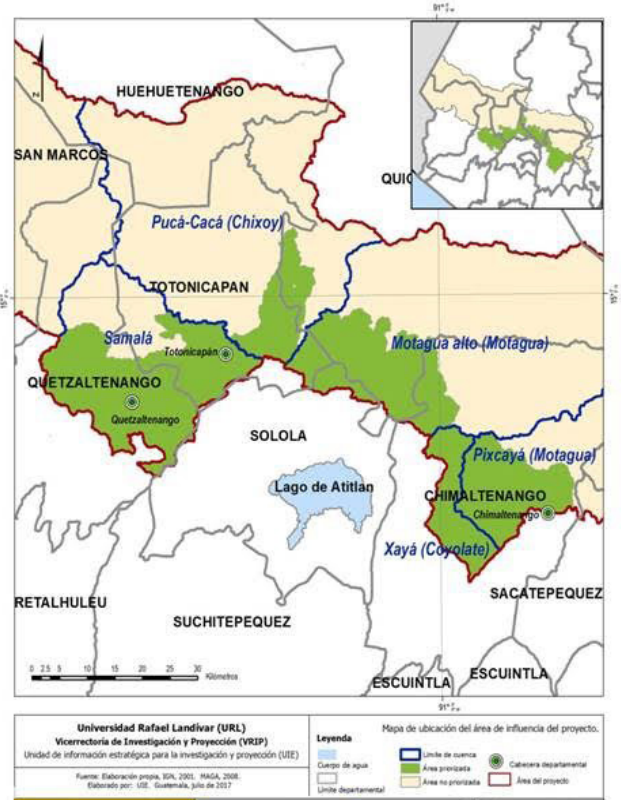
This output focuses on improving collection, interpretation and dissemination of reliable climate information for application to adapted agricultural, agroforestry and forestry practices by local producers as well as water resource management and restoration at landscape level. Under this activity additional 50,000 people will directly benefit from improved access to such information. Both resources from KOICA and from GCF are envisaged to achieve this output.

During the first phase of the project, GCF and KOICA resources will support the rehabilitation of the existing hydro-meteorological network in the project area under the coordination of the National Institute on Seismology, Volcanology, Meteorology and Hydrology (INSIVUMEH). While INSIVUMEH provides the institutional coordination, linkage to ongoing climate information initiatives and systems, and development of standards, the participation of the local organizations helps to ensure that climate-relevant information reaches local farmers and feeds back information so that policies are responsive to actual climate change and climate variability impacts.



A participatory early warning system will be developed for the Highlands, building on national early warning platforms on agriculture and food security³ in the prioritized territories, to inform local producers and watershed management structures, as well as develop customized ICT mechanisms and mobile platforms to support extension workers, municipal staff and community leaders to provide climate related information to the final user in a timely manner. Capacity building of relevant technical staff belonging to local NGOs and local government institutions will be key to ensure that operation and maintenance (O&M), data collection, interpretation, projections and forecasting activities continue during and after the lifespan of the project.

³ Famine early warning system network <http://www.fews.net/es/central-america-and-caribbean/guatemala>; MAGA crop and harvest forecasting: <http://web.maga.gob.gt/diplan/download/smc/2011/06.%20Boletin%20SMC%20-%20Noviembre%20-%2020211.pdf>; SESAN food and nutritional security Centinel Sites: <http://www.siisan.gob.gt/SitioCentinela>



Project Partners:

