

EbA and Water Resources information IUCN_ORMACC

	Description of relevant activities	Key results	Description of lessons learned and good practices	Description of key challenges	Planned next steps (as appropriate)	Collaborating institutions
1. Adaptation planning addressing ecosystems and interrelated areas such as water resources	Implementation of seven transboundary EbA community- based plans in Panamá, Costa Rica, El Salvador (2), Honduras, Guatemala and Mexico – General info: http://bit.ly/2jeNESi	<p>Great community engagement during all planning and implementing process.</p> <p>Prioritization of biodiversity conservation actions such as:</p> <ul style="list-style-type: none"> the Agroforestry Fair (organized for the 3rd time) in the Sixaola transboundary basin - http://bit.ly/2ezbl4l <p>Or the</p> <ul style="list-style-type: none"> Community-based restoration of mangroves in Rio Paz, El Salvador. Promotion of agroforestry systems with rural communities of Panama, Costa Rica, El Salvador and Chiapas, México. <p>Prioritization of EbA water security actions such as:</p> <ul style="list-style-type: none"> Reforestation of river banks in the Sixaola river to prevent erosion during heavy rainy season and floods - http://bit.ly/2kj0kJr Implementation of soil conservation practices in steep slopes in the Volcano Tacana in Chiapas, Mexico. 	<p>1. Watershed management is frequently the answer for implementation of EbA in the field. Also it is an excellent scope of planning.</p> <p>2. There needs to be an integrative approach for implementing EbA measures, which attends also current development and environmental degradation needs of local communities.</p> <p>Engagement of communities is crucial</p> <p>A great effort and support is need on capacity building with communities to really design and implement Measures with a systemic approach.</p> <p>Exchanges of experiences and a key element in capacity building.</p>	<p>The explanation of EBA is always difficult.</p> <p>Inclusion of private big sector.</p>	<p>Case studies of each of the pilot sites experiences.</p> <p>Capacity building process with local communities and municipalities.</p>	<ul style="list-style-type: none"> IUCN, Fundación Hondureña de Desarrollo Vida, Unidad Ecológica Salvadoreña Comisión Trinacional Plan Trifinio Corredor Biológico Talamanca Caribe Funds from IKI-BMUB

<p>2. Monitoring and evaluating the implementation of ecosystem-based adaptation</p>	<p>Georeferenced Climate Change Projects Inventory for Central America and Chiapas (Mesoamerican region).</p> <p>This inventory allows the monitoring at the regional level of the number and topics of the adaptation projects and their emphasis on EbA.</p>	<p>Most of Climate Change projects in the region area focusing actions in Food Security mainly in the Pacific Coast of the Region. Water and Biodiversity Conservation are not main issues covered in these projects..</p>	<p>It is necessary to focus Climate Change adaptation actions to protect water resources, specially in highlands watershed recharge areas. The monitoring of benefits to the biodiversity area on the main gaps to evaluate the benefits of EbA actions.</p>	<p>To keep an updated inventory, since new projects are being approved and initiated every year.</p>	<p>The inventory will be launched On line</p> <p>Comparative analysis of the technical and geographic priorities and tendencies in Climate Changes projects.</p>	<ul style="list-style-type: none"> • IUCN, • Fundación Hondureña de Desarrollo Vida, • Unidad Ecológica Salvadoreña • Comisión Trinacional Plan Trifinio • Corredor Biológico Talamanca Caribe • Funds from IKI-BMUB
<p>3. Tools for assessing the benefits of mitigation and adaptation to enhancing resilience and emissions reductions that ecosystem-based adaptation provides</p>	<p>Development and testing of a methodology framework to monitor Food Security benefits of EbA actions in seven sites of Mesoamerica.</p>	<p>There is a knowledge gap in Mesoamerica, to understand the effect of the Local adaptation Plans. Most of the adaptation plans lack a M&E system in place.</p> <p>This methodology will be key to understand direct and indirect benefits on the short, mid and long term.</p> <p>This methodology is currently implemented in the pilot sites (Paz river, Sumpul river, Goascorán river (El Salvador and Honduras); Cahoaacán river and Coatán river (Mexico and Guatemala), and Sixaola river (Costa Rica and Panamá).</p>	<p>•Deep characterization and description of EbA measures makes the difference when....</p> <p>•Household level is key for food security understanding but without losing the community approach and microbasin approach.</p> <p>•Creating scientific evidence requires usually longer than project periods.</p> <p>•Among other activities implemented in the field by communities or supported by other programs, Additionality of EbA is hard to measure.</p>	<p>Design a participatory and at the same time, technically solid methodology to monitoring the benefits of EbA Actions.</p>	<p>The methodology will implemented in the pilot sites during 2017, and 2018.</p> <p>Achieve comparative results of the benefits.</p>	<ul style="list-style-type: none"> • IUCN, • Fundación Hondureña de Desarrollo Vida, • Unidad Ecológica Salvadoreña • Comisión Trinacional Plan Trifinio • Corredor Biológico Talamanca Caribe • Funds from IKI-BMUB

<p>Virtual platform Centro Clima, information on adaptation and mitigation to climate change www.centroclima.org</p> <p>Centro Clima is a regional climate information system of Central America and the Dominican Republic, its objective is to provide information to different sectors such as meteorological institutes, academies, private companies and users in general to take adaptation measures against climate change</p>	<p>Has become the most important repository of climate information in the region</p> <p>Two innovative APPs were developed:</p> <ul style="list-style-type: none"> • "Coffee cloud" that provides climate and disease information to coffee producers. (http://www.centroclima.org/coffee-cloud/) • "Climate fishing" which provides information on climate change and adaptation measures for the fishing sector in the region. (http://centroclima.org/climapesca/) <p><u>Note:</u> Applications will be on the google store platform from July 2017</p>	<p>It demonstrated the importance of the joint work of different sectors of the economy (agriculture and fisheries) on climate change issues</p> <p>The Central American region is one of the most vulnerable in the world to the negative effects of climate change</p> <p>Climate information is essential to make correct decisions in different sectors of the economy</p>	<p>A sustainable business model to run Centro Clima in the long term</p>	<p>Centro Clima, will be owned by the Regional Committee on Hydraulic Resources, a regional body specialized in the fields of meteorology and climate, hydrology and water and hydraulic resources.</p>	<p>The Regional Climate Change Program, funded by USAID, is led by CATIE, IUCN and DAI</p> <p>Regional Committee for Water Resources</p> <p>Meteorological institutes of Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama and Dominican Republic.</p> <p>Regional Coffee Quality Program</p> <p>Coffee Institutes of Guatemala, Costa Rica and Nicaragua</p> <p>Central America Fisheries and Aquaculture Organization</p>
<p>Measurement of the impact on ecosystem service provision of landscape restoration with Natural Capital Project's InVEST software and FAO's EX-ACT tool.</p>	<p>In El Salvador and Costa Rica the impact of restoration activities on water yield, sediment delivery ratio and nutrient delivery ratio (nitrogen and phosphorus) has been measured.</p> <p>Maps were created to show high and low impact areas for each restoration activity and each ecosystem service, and for multiple ecosystem services.</p> <p>Carbon balance of restoration activities was calculated in El</p>	<p>1. Key areas for intervention within an EbA approach have been identified.</p> <p>2. Intervention areas with the highest impact have been identified according to key beneficiaries (hydroelectricity production, catchment using surface water for drinking water, and households without access to treated water.</p> <p>3. All restoration activities, even when considering agricultural emissions from livestock and fertilizer application, have a negative carbon balance (decreased emissions</p>	<p>Find or create maps that show climate change predictions (specifically rainfall and temperature), according to different scenarios.</p> <p>Access data on drinking water catchments, water quality and hydroelectricity production.</p>	<p>Model climate change impact on ecosystem service provision according to different climate change scenarios.</p> <p>Analyze impact of ecosystem service provision of landscape restoration in Honduras.</p> <p>Analyze the allocation of landscape restoration financing to optimize impact on the provision of ecosystem services with Natural Capital Project's RIOS software.</p>	<p>MARN El Salvador</p> <p>MINAE Costa Rica</p> <p>MAG El Salvador</p> <p>MAG Costa Rica</p>

		Salvador and Costa Rica	and/or increased sequestration)			
	Economic analysis of landscape restoration actions that improve climate change mitigation and improve resilience to climate change.	Financial and economic cost-benefit analyses for agroforestry and forestry related landscape restoration actions have been carried out in El Salvador, Costa Rica and Guatemala,	<p>1. A wide range of landscape restoration actions are profitable, especially those related to agroforestry and silvopastoral systems.</p> <p>2. Although most interventions are profitable, high implementation costs cannot be faced by landholders/farmers alone.</p>	Model financial and economic impact for a wide range of crops considering climate change scenarios (data availability is often limited to coffee, staple grains, and cacao)	Carry out economic analysis of landscape restoration in Honduras.	<p>MARN El Salvador</p> <p>MINAE Costa Rica</p> <p>MAG El Salvador</p> <p>MAG Costa Rica</p>

Other capacity building activities:

EbA during discussions and sessions of Climate Change Congresses in Mesoamerica: <http://bit.ly/2e2Cz6l>

Sessions during the IUCN-WCC Hawaii: <http://bit.ly/2hbkabo>

Binational Dialogue on Local Water Governance and Natural Based Solutions: <http://bit.ly/2jeX28l>