

IPSI Case Study Summary Sheet

Basic Information

Title of case study			
Tree Microrefugia and Community-based Conservation in Tropandean Mountainscapes: A Bio-Cultural Approach for Heritage Management of “El Collay” Protected Forest in Southeastern Ecuador			
Submitting IPSI member organization(s)			
Neotropical Montology Collaboratory, Department of Geography, University of Georgia			
Other contributing organization(s) <i>(IPSI members and/or non-members)</i>			
Author(s) and affiliation(s)			
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Format of case study <i>(manuscript or audiovisual)</i>	Manuscript	Language	English
Keywords			
Microrefugia, Community-based Conservation, <i>Ayni, Minga</i> , Tropical Andes, El Collay			
Date of submission <i>(or update, if this is an update of an existing case study)</i>	19 February 2018		
Web link <i>(of the case study or lead organization if available for more information)</i>			

Geographical Information

Country <i>(where site(s) or activities described in the case study are located – can be multiple, or even “global”)</i>									
Ecuador									
Location(s) <i>(within the country or countries – leave blank if specific location(s) cannot be identified)</i>									
Azuay and Morona Santiago Provinces									
Longitude/latitude or Google Maps link <i>(if location is identified)</i>									
https://www.google.com/maps/@-2.7924889,-78.4914278,9z									
Ecosystem(s)									
Forest	x	Grassland		Agricultural		In-land water		Coastal	
Dryland		Mountain	x	Urban/peri-urban		Other (Please specify)			
Socioeconomic and environmental characteristics of the area									
The ‘El Collay’ Commonwealth of southeastern Ecuador comprises six autonomous, decentralized governments that have formally agreed to collaborate in the maintenance of rural livelihoods for food sovereignty and security. Spanning both highland and lowland communities, the strategy includes the conservation of the community protected forest of ‘El Collay’ in addition to OECMs.									
Description of human-nature interactions in the area									
Through the use of fire and grazing, the original montane tropical cloud forests have been modified into the socio-ecological production landscapes (SEPLs) of today. In so doing, the bioengineers of antiquity created “hybrid” systems. But with the importation of post-colonial exotic species, many systems have been transformed into “novel” ecosystems, i.e. if abandoned, they would not revert to a natural state through ecological succession.									

Contents

Status <i>(“ongoing” or “completed”)</i>	Completed	Period <i>(MM/YY to MM/YY)</i>	
Rationale <i>(why activities or policies described, or information shared in the case study are needed)</i>			

Forest clearance and vastly increased fire activity induced by human actions throughout the Holocene probably caused large areas to transform from Andean forest to the grassland páramo of the northern Andean highlands. Nevertheless, the ancient history of the area is still uncertain, and its future remains a mystery.
<i>Objectives (goals of activities or policies described, or of producing the case study)</i>
The 'El Collay' biocultural territorial planning initiative aims to provide a secure cultural and financial basis for future biodiversity conservation. Ensuring the cultural revival of indigenous practices and a comprehensive modeling scenario whereby ethnotourism, ecotourism and agrotourism could secure consistent, communitarian revenue flow to help maintain the larger 'El Collay' Protected Forest's long-term refuge condition in an exemplary Socio-Ecological System of the production mountainscape.
<i>Activities and/or practices employed</i>
An interdisciplinary group of scientists and conservation practitioners are experimenting with new approaches of political ecology and critical biogeography, to add the SES component to the development of management strategies for 'El Collay'. Key strategies include using Payment for Environmental Services and Complex Adaptive Systems methodologies to ensure protection of the existing reserve.
<i>Results</i>
The new designation effectively protects the longest conservation corridor along the Andean flanks and serves to integrate management efforts across this vast landscape. The renewed focus on biodiversity has also added many new species records for the region, including newly discovered endemic amphibians.
<i>Lessons learned (factors in success or failure, challenges and opportunities)</i>
While biodiversity conservation is the main goal of the 'El Collay' Protected Forest, a renewed emphasis on cultural ecosystem services is needed to connect the lifescape of 'El Collay' with the needed protection of these species amidst climate change.
<i>Key messages</i>
To secure the long-term goal, aside from the signed commitment from the local GADs, civil society and community groups need to be energized and funded. Likewise, we still need to work to mobilize international resources and secure matching grants or endowment funds that would allow the maintenance of 'El Collay' Protected Forest for perpetuity.
<i>Relationship to other IPSI activities (if the case study is related to any other IPSI collaborative activities, case studies, etc.)</i>
This case study originally appeared in the Satoyama Initiative Thematic Review v. 4.
<i>Funding (any relevant information about funding of activities or projects described in the case study)</i>
We are grateful for the support received by the VULPES (Project ID: ANR-15-MASC-0003) and the University of Georgia OIE-OVPR GRCC program. We also thank the Montology Initiative of the Latin American and Caribbean Studies Institute (LACSI) with the grant NRC-Title VI-(ED/NRC/P015A140046).

Contributions to Global Agendas

CBD Aichi Biodiversity Targets (<https://www.cbd.int/sp/targets/>)

The table below shows based on the self-evaluation by author(s). ● and ■ indicates the "direct" or "indirect" contributions to the CBD's Aichi Biodiversity Targets respectively to which the work described in this case study contributes to.

Strategic Goal A				Strategic Goal B					
■	■		■					■	
									
Strategic Goal C			Strategic Goal D			Strategic Goal E			
■	■	■	■	■		■	■	■	■
									

UN Sustainable Development Goals (SDGs) (<https://sustainabledevelopment.un.org/sdgs>)

The table below shows based on the self-evaluation by author(s). ● and ■ indicates the “direct” or “indirect” contributions to the SDGs respectively to which the work described in this case study contributes to.

	■	■					■	
1 NO POVERTY 	2 ZERO HUNGER 	3 GOOD HEALTH AND WELL-BEING 	4 QUALITY EDUCATION 	5 GENDER EQUALITY 	6 CLEAN WATER AND SANITATION 	7 AFFORDABLE AND CLEAN ENERGY 	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 
	■	■	■		■			
10 REDUCED INEQUALITIES 	11 SUSTAINABLE CITIES AND COMMUNITIES 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	13 CLIMATE ACTION 	14 LIFE BELOW WATER 	15 LIFE ON LAND 	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	17 PARTNERSHIPS FOR THE GOALS 	