Banao Watershed, Kalinga

Address: Abra and Kalinga

Description: The Balbalasang-Balbalan National Park and Banao watershed area in the Northern Cordillera is proof positive of the inherent capacity of indigenous communities in natural resource protection and management. Through the Banao tribe's "lapat" tradition, the area continues to maintain one of the most extensive tracts of old growth forest in the country.

Status: On-going

Site Profile Summary

Ecosystem Types	Lowland to Mossy Forests
Protection Status	National Park (RA No. 6463, s. 1972)
Area	1,338 hectares
Geographical Profile	- The Balbalan-Malibcong area is generally characterized by rugged to mountainous topography, with elevation that ranges from 167 masl to 2,439 masl (1,303 masl on average). - These municipalities are also endowed with rich mineral resources, which include iron, sulfur magnetite, nickel, gold, copper, and silver. - The area's natural physical features offer great prospects for eco-tourism. - BBNP is considered as one of the Important Bird Areas (IBAs), one of the Conservation Priority Areas (CPAS), and recently as one of the 128 Key Biodiversity Areas (KBAs) of the Philippines. Still, it remains one of the least biologically explored portions of the Central Cordillera.

Flora	- This site falls within the northern Central Cordillera region, which features one of the most extensive tracts of old-growth forest remaining in the country. - BBNP has a very high floral biodiversity value, featuring a number of endemics and threatened species. (A significant number of threatened species of flora are exclusive to Northern Luzon, specifically Cordillera Administrative Region.) - At least 105 Philippine endemics (including 37 island endemics) are found in BBNP. - Eighteen (18) species that were recorded during the field survey are listed under either on the Philippine Red List (DAO 2007-01) or on the IUCN Red List of Threatened Species (2010). - The most interesting species is one that was discovered during the Rapid Site Assessment (RSA) conducted in the Kalinga project site – the *Rafflesia banaoana,* the sixth species of *Rafflesia* recorded in Luzon.
Fauna	- 65 vertebrate species were recorded during an RSA at Mt. Panogaan in Brgy. Balbalasang, Balbalan, Kalinga. Of this total, 14 are mammals, 50 birds, and one amphibian. Also out of this number, 34 (52.31%) are endemic species. - Nine species found in the site – four mammals and five birds – can be considered of importance to conservation (i.e. listed as threatened in varying degrees). - The mammals are the Golden-crowned flying fox (*Acerodon jubatus*), the Philippine warty pig (*Sus philippensis*), the Luzon Water Redstart (*Rhyacornis bicolor*), and the Philippine brown deer (*Cervus mariannus*). - The birds are the Ashy Ground-thrush (*Zoothera cinerea*), Luzon Bleeding-heart (*Gallicolumba luzonica*), the Montane Racquet-tail (*Prioniturus montanus*) and the Rufous Hornbill (*Buceros hydrocorax*).
Indigenous Peoples	- Banao Watershed is being claimed as the ancestral domain of the Banao tribe in consonance with the Indigenous Peoples' Rights Act (IPRA) or RA 8371. Territorial boundaries are shared with the Gubang, Mabaka, Binongan, and Masadiit tribes, a co-existence reinforced by the traditional system of *Bodong* (peace pact). Another indigenous system that is helping maintain the integrity of the site's natural resources is *lapat*, by subjecting the gathering of any type of forest resource (not only pertaining to flora and fauna, but also the minerals, springs, and rivers) to the approval of the entire tribal community.
Livelihood Sources	Agroforestry, mining (mercury amalgamation), wildlife hunting (for food, medicinal, and decorative uses), animal raising

Threats

- Land degradation, particularly erosion and sedimentation
- Upland farming, including *kaingin* practices, as well as cattle pasture.
- Tree-cutting for lumber and other purposes such as firewood for hunters, trappers, and gatherers who spend nights out in the forest.
- The physical make-up of the watershed makes it prone to landslides, which threatens not only biodiversity, but also community infrastructure such as the mini-hydro power plant.
- Pollutants resulting from chemical-based farming, emerging industrial and mining activities, deforestation/land degradation, domestic and municipal waste, as well as naturally occurring events such as river sedimentation, landslides, and climate change effects.
- The growing population is threatening to cause further encroachment of forest lands for agricultural use to support production for subsistence and livelihood requirements.
- While this is a non-issue at present, the protected area status of BBNP and the ongoing CADT application may cause a potential conflict in the future in terms of who will have the ultimate

responsibility of protecting and managing the area.

FPE-funded Projects and Initiatives

Project	Grant Type, Strategy	Duration	Implementing Partners
Indigenous Community Conserved Areas (ICCA) of Banaos in Malibcong, Abra	Large, Sites	2016	- Concerned Citizens of Abra for Good Government (CCAGG) & Malibcong Banao Bodong Federation, Inc.
Support to Banao Ancestral Watershed	Large, Sites	2008-2009	- Concerned Citizens of Abra for Good Government (CCAGG)
A Shift Towards Area-specific Intervention Through Strategic Planning for the FPE Priority Site in Banao	Medium, Proactive	2007	- FPE
Balbalasang-Balbalan National Park and Banao Watershed Rapid Site Assessment (RSA)	Large, Research	2007	- Resources, Environment, and Economics Center for Studies, Inc. (REECS)
Banao Watershed Community-Based Resource Management Project	Large, Site-focused	2004-2007	- Concerned Citizens of Abra for Good Government (CCAGG)
Malanas-Balbalasang Watershed Development Plan and CBRM Formulation	Large, Sites	2002-2003	- Sibol ng Agham at Teknolohiya (SIBAT)
Mt. Balbalasang Northern Sierra Madre Cordillera Region - Rapid Site Assessment	Medium, Research	2000	- Haribon Foundation
Preliminary Site Assessment of FPE Priority Sites for 1995	Large, Sites	1995	- Ateneo Center for Social Policy - Environmental Education Network

Key Outcomes

- Helped clarify and re-establish protected area and ancestral domain boundaries for the Banao tribe.
- The 2007 RSA project rectified previous site assessments and helped establish a standardized method for data collection, compilation, and analysis of 19 out of 22 site-focused projects funded by FPE. The results generated by this project were intended for use in inventory and profiling, baseline monitoring, project development, and as a basis for formulating the Area Development and Management Plan (ADMP) of the FPE-funded sites.
- Revived and reinforced the practice and promotion of the traditional *lapat* system of natural resource management.
- Promoted the use of the watershed perspective in natural resource management planning.
- Awareness- and capacity-building for leadership training among the affected upland communities for systematic, effective, and sustainable community-based resource and livelihood management

initiatives. Biodiversity monitoring tools and methods were also introduced among local partners.
- Assisted LGU and PO leaders in writing proposals, accessing external resources, and crafting area-specific and organizationally responsive operational plans for natural resource management.
- Established new and strengthened existing local partnerships toward effective IP-LGU governance systems.
- Raised awareness on critical environmental threats such as mining concerns and other excessive resource extraction activities within the local territory.
- Provided assistance and intervention among small-scale miners to promote and recommend cleaner and more sustainable technologies for their livelihood.

Reference

- *Resources, Environment, and Economics Center for Studies, Inc. 2011. Physical and geo-political characteristics, air, water and soil quality, biological resources, socio-cultural and economic conditions, and institutional and management arrangements/governance of the Balbalasang-Balbalan National Park Banao Watershed*