

The Ikalahan Ancestral Domain Proposed Forest Carbon Development

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BACKGROUND

- 2003: Ikalahan Ancestral Domain (IAD) area was selected as a pilot site by the World Agroforestry Centre's (Philippines) Rewarding the Upland Poor for Environmental Services (RUPES) project. The site's focus is carbon storage as the key environmental service and a case study for the development of a carbon sequestration payment mechanism.
- 2004-2006: The Kalahan Education Foundation (KEF) established two nurseries, conducted reforestation by planting about 40 ha and enrichment planting within the deforested sections of the domain.
- 2007: With technical assistance provided by the World Agroforestry Centre (Philippines) through the RUPES project, KEF prepared a project idea note (PIN) for the 900 ha area to find funding for the proposed forest carbon development.
- 2008: KEF signed a one-year agreement for consulting services with MUS. The agreement stipulated that KEF is developing a 900 ha carbon sequestration project in Kalahan and wishes to acquire Certified Emission Reductions (CERs) and other emission reductions from project.
- 2009: Preparation of the forest carbon project development (i.e. ground survey and delineation of parcels, formulating the project and land management activities).
- 2010: Conducted a Rapid Agro-Biodiversity Appraisal (RABA) and Rapid Carbon Stock Appraisal (RaCSA) to provide essential baseline information for the negotiation of carbon credits as well as for assessing the feasibility of other environmental services payments mechanisms other than carbon markets. Conducted training on implementing RABA and RaCSA for local communities. The main goal is to produce training material whereby the KEF would be trainers to other communities wanting to engage in agro-biodiversity and carbon markets.

PROJECT SITE DESCRIPTION The IAD covers 58 000 ha of mountainous areas in the provinces of Pangasinan, Nueva Ecija and Nueva Vizcaya in Northern Luzon, Philippines.

The *Ikalahan*, which literally means *people of the mossy upland forests or people of the broadleaf forest* is the tribal name of the indigenous people behind the proposed forest carbon development.

For centuries, the *Ikalahan* lived in the area where hunting, gathering of forest products and *swidden* farming were their means of survival, planting crops like sweet potato, ginger, *gabi*, cassava and other vegetables and terracing to plant upland rice.

They were considered squatters until they organized and gained tenure over the lands through a Memorandum of Agreement between the Kalahan Education Foundation (KEF) representing the *Ikalahan* and the government through the then Bureau of Forest Development. Nearly 15 000 ha of the Ancestral Domain Claim was designated as the Kalahan Reserve. The Certificate of Ancestral Domain Claim (CADC) was issued in 1999, and the Certificate of Ancestral Domain Title (CADT) was issued in 2005.

PROJECT OBJECTIVE To help KEF build capacity to enter the international carbon market either through the clean development mechanism, voluntary carbon markets and/or REDD +.

The project aims to use the carbon market funds to help rehabilitate the 900 ha of grassland area in the domain.

FOREST CARBON DEVELOPMENT STRATEGY

The project will deploy an agroforestation scheme: establishing forest tree plantations and agroforestry farms.

Forest tree plantations will be planted using only native species, mostly indigenous Dipterocarp, such as Tuai (*Bischofia javanica*), Alnus (*Alnus nepalensis*), Tanguile (*Shorea polysperma*) and others like Acacia (*Albizia saman*) as these are also favorable to wildlife. Fast-growing species that were introduced to the Philippines in the last 10 years will also be included to rapidly establish vegetative cover, especially in highly degraded areas.

Agroforestry farms will involve planting of fruit trees in existing upland farms which are typically planted with annual crops.

Table 3: Total Cost incurred so far in Project Development Operation

Activities Conducted	Budget (Php)	Fund source	Remarks
Site Identification			
Mapping of project site	70,000	World Agroforestry Centre-RUPES	Produce map of the proposed 900 ha
Delineation of parcels	44,000 650,000	KEF's own funds Philippines Association for Indigenous People (PAFID)	Actual delineation of 16 parcels of individual landholdings included in the project
Subtotal	764,000		
Community awareness			
Consultation	60,000	World Agroforestry Centre-RUPES	Facilitate farmer claimants/landholders agreement to join the project
Project planning	9,415	World Agroforestry Centre-RUPES	Facilitate project design
Subtotal	69,415		
Project Planning and Documentation			
Project idea note	117,745	World Agroforestry Centre-RUPES	Carbon baseline measurement and carbon sequestration potential estimation
Documentation	69,816	Others (not specified)	Facilitation and administration
Rapid Agro-biodiversity Appraisal and Rapid Carbon Stock Appraisal	489,500	World Agroforestry Centre-TULSEA	Conduct RABA and RaCSA
Subtotal	677,061		
Total =	Php 1,510,476	(cost incurred of the project operation as of 2009)	

Table 1: Land-cover types and Land-use change within the IAD

Land-cover type	1989		2001		Land-use change (ha)	Description
	Proportion (%)	Area (ha)	Proportion (%)	Area (ha)		
Forests	19	4289	22	4794	505	Area characterized by more or less dense and extensive natural tree cover usually consisting of stands varying in species composition, diameter distribution, total basal area age class, which had been exploited (partly logged). This excludes industrial tree plantations.
Secondary forests	3	657	4	876	219	Forest or woodland area, which has re-grown after being deforested but trees are closely spaced with more undergrowth.
Old growth pine	7	1437	11	2384	946	Characterized by an area dominated by <i>Pinus sp</i>
Pine (re-growths)	18	4070	15	3352	-718	<i>Pinus spp</i> regeneration
Agriculture	9	2053	5	1062	-991	Area dominated by maize, potato, sweet potato and ginger
Rice field	4	901	5	1095	193	Includes irrigated and non-irrigated rice
Fallow	1	297	1	238	-59	Former cultivation area left to regenerate
Grassland	21	4725	20	4392	-334	Area dominated by grasses
Settlement	2	441	0	92	-349	Area characterized by community occupancy (e.g. houses/buildings)

PROJECT DEVELOPMENT APPROACH

Forest carbon development will use a community-based approach.

Technical Arrangements

The main proponent is the KEF and the direct implementers are the *Ikalahan-Kalaguya* indigenous people in the area, who are mostly members of KEF, but also non-KEF members with their own farms.

During consultation meetings conducted by KEF with municipality officials, IAD cluster officers, land claimants in the forest carbon development project area and other interested community members, it was unanimously decided that participants/landholders will do the planting (the labor costs) as their contribution. KEF will provide the planting materials that are available in their nursery. Those wanting to plant fruit trees have to produce their own planting materials.

Of the proposed 900 ha, about 112.27 ha consisting of 16 parcels covering six municipalities were delineated. Of this, 44.31 ha is located outside the IAD. There are 18 individual landholders/claimants of the parcels involved, including the KEF as a communal landholder of three parcels. As of 2009, 89.79 ha were already planted with Tuai, Alnus and Rain Tree, Benguet Pine and Santol Bakes. The estimated cost is Php 19 000 per ha (~USD 420 calculated at Php 46 to USD 1). This is excluding in-kind labour provided by the landholders/claimants. Planting was temporarily stopped due to unavailability of planting materials.

Generally, prerequisite to a successful payment scheme to the direct beneficiaries is the presence of a reliable institution that can operate as an intermediary for the environmental products and services. As project proponent for this forest carbon development endeavor and in order to tap the carbon market and other PES, KEF needs a partner. Currently, KEF is dependent on the technical guidance and assistance provided by the World Agroforestry Centre (Philippines) through its RUPES project.

Socio-economic Arrangements

Table 2: Proposed benefit sharing

Stakeholders	Share (%)	Remarks
KEF	20	For overall management and supervision
Municipality	10	Municipality-level management and coordination
Cluster	10	Field management and supervision
Claimants	60	Main implementers in the field
Total	100	

KEY AREAS OF CONCERN

Site development

- Fulfilling the 'additionality' condition could be a challenge if we continue to register the project under CDM A/R.
- Need to agree on the land management design for agroforestry that the landholders deem economically viable.

Resource use/mobilization

- Defining the management structure, including identification of key actors in the KEF and what are their specific roles and functions.
- Soliciting financial and in-kind support from various stakeholders for the pre-project phase and implementation. Currently, KEF has no buyer who is willing to provide upfront costs for the project.

Socio-economic management

- Assessing the potential economic benefits that can be derived from the project.
- Exploring other environmental services payments schemes as incentives for the participants.

Environmental services management

- Measuring the other environmental services that can be provided other than carbon sequestration and storage.