



## **THE AMAS UPLANDS GEOTAGGED REPORT 'A brief summary of key findings'**

A report by CALG (Coalition against Land Grabbing) supported by Rainforest Rescue and Forest Peoples Programme (FPP)

First draft for limited circulation only

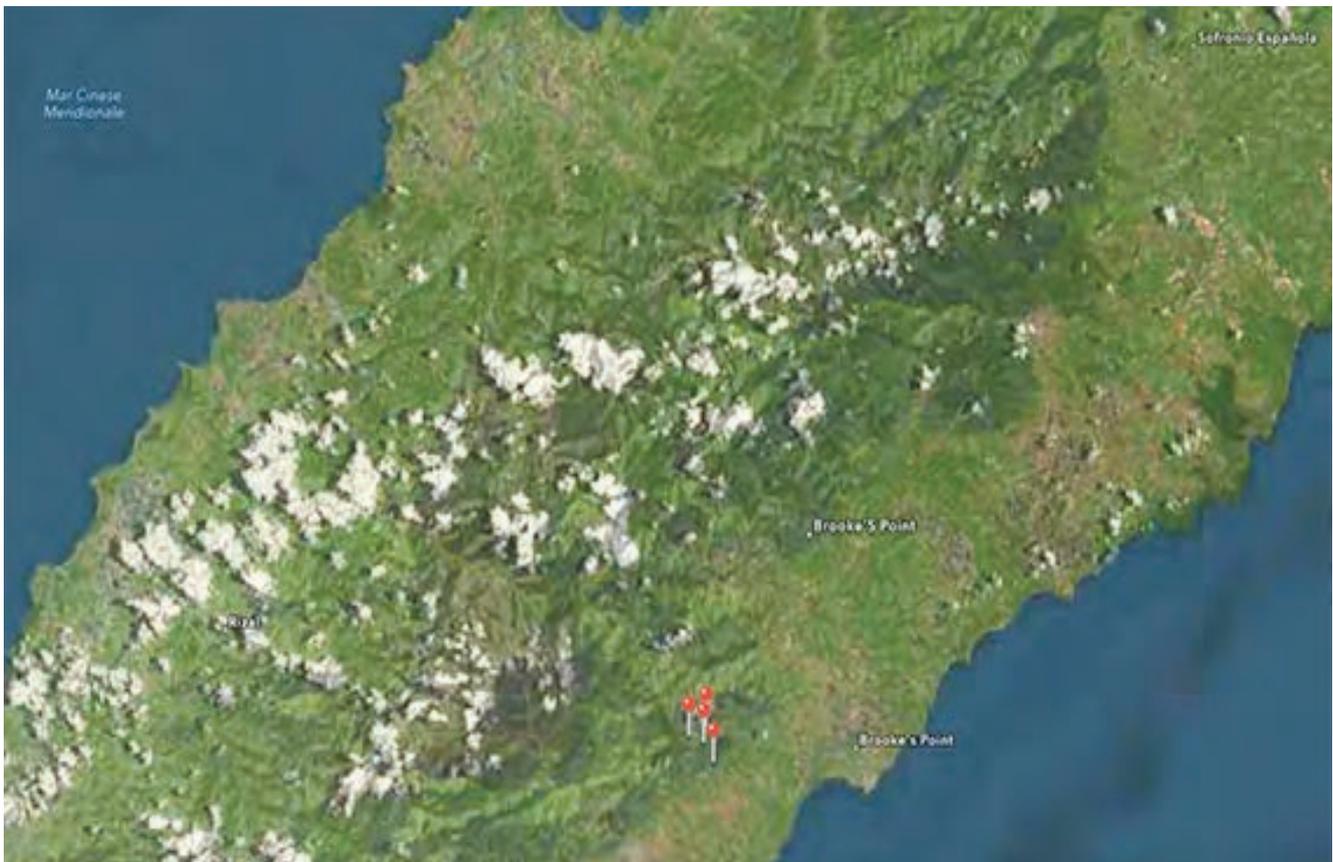


## THE AMAS UPLANDS GEOTAGGED REPORT 'A brief summary of key findings'

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### A. INTRODUCTION

Between 4-7 June 2015, a mission led by the Coalition Against Land Grabbing (CALG) travelled to Brooke's Point Municipality (Palawan) to carry out a preliminary field reconnaissance and audio-visual documentation of the areas utilized for shifting cultivation (*kaingin* or *uma*) by several Pala'wan communities scattered in six different locations (Magatot, Dengleg, Pawpanaw, Sambilagaw, Mälia, Limpa) found on the southern portions of the Maruyog mountain range. The area is also part of the Mount Mantalingahan Protected Landscape (Presidential Proclamation no. 1815) and, therefore, it is subject to the same level of protection of other key areas found within the MMPL. The pointed tip of the mountain range (Maruyog ridge) with its 1,024 meters above sea level represents the most spectacular landmark in Brooke's Point. It also features in the mythology of the local Pala'wan inhabitants.



Red dots on Google Earth map indicates the area visited by the CALG mission



Red dots showing the itinerary of the mission. Brooke's Point Municipal Proper on the right



Close-up of the CALG mission itinerary overlaid on Google Earth map. Left upper corner (Limpa), left right corner (Pawpanaw). Sitio Dengleg almost in the centre and Magatot below.

The Maruyog range is the ancestral territory of vulnerable indigenous Pala'wan communities who rely mainly on upland agriculture (production of upland rice and roots crops) for their survival. Small waterways within the range provide potable water for the various hamlets in the area.



Pala'wan hut in sitio Limpa

The staff of the Coalition against Land grabbing (CALG) were invited to the area by a close relative of the indigenous community of Magatot, and after informal and preliminary discussions had taken place amongst community members about the potential impact of the *kaingin* ban on their livelihood and culture. Local indigenous inhabitants had in fact been accused by the Municipal Government of clearing forest and watersheds for their *kaingin*

practices. As a result, allegedly, Mayor Feliciano had ordered local police to walk on these locations to apprehend and arrest the people involved in the clearing and burning of forest in upland areas and watersheds. Furthermore, according to various sources, Mayor Feliciano had proposed more radical solutions to 'the problem of *kaingin* such as the resettlement of indigenous upland communities to lowland areas, thus providing them with



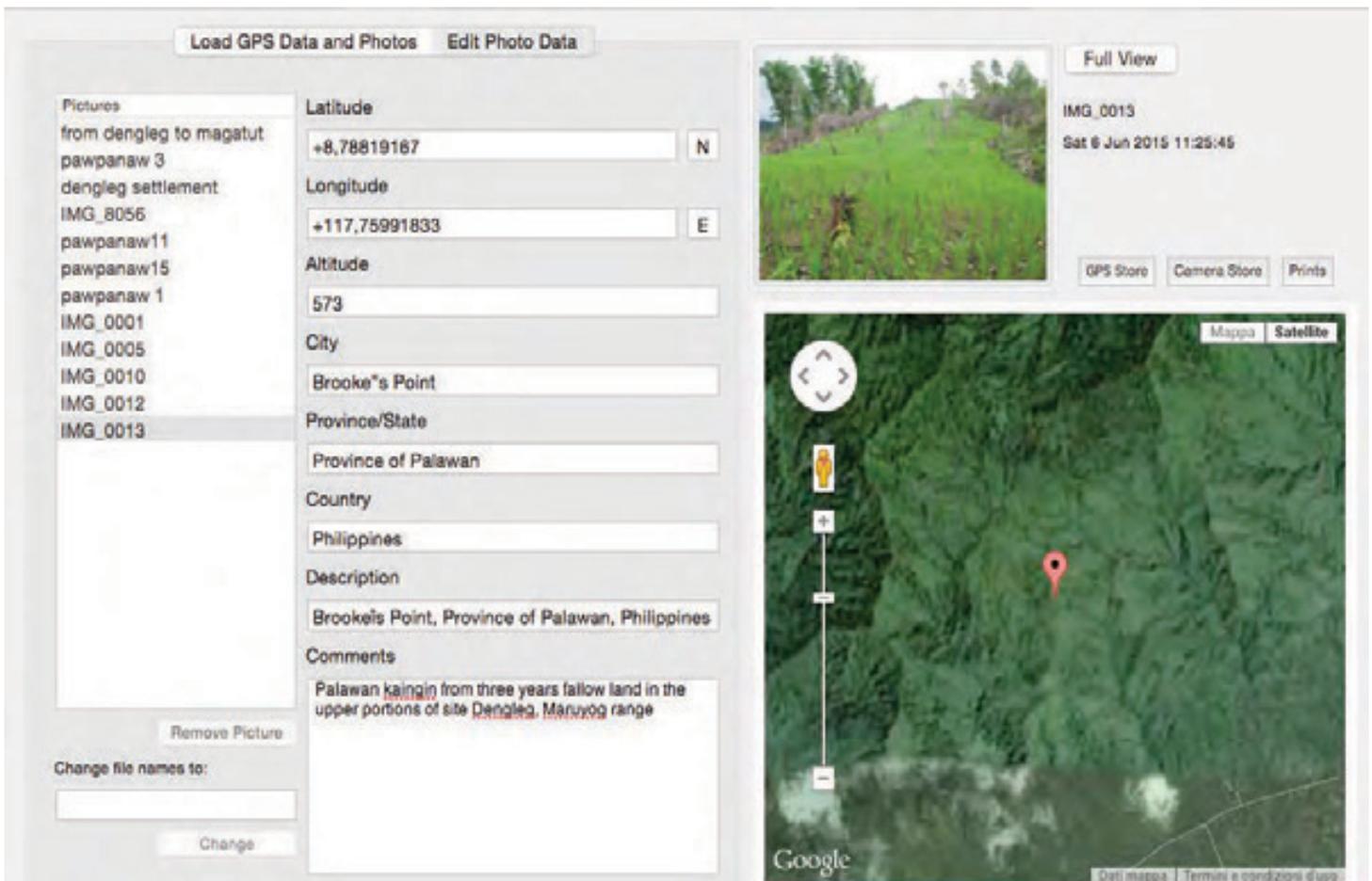
alternative sources of livelihood while facilitate their integration into the 'mainstream' society. Such news, further confirmed by the staff of the Municipal Environment and Natural Resource Office (MENRO), had created much apprehension and unrest amongst local communities. Due to the fear caused by the arrival of armed police to upland areas,

These children may face starvation if the municipal ordinance forbidding *kaingin* is enforced

several community members had already flown to more isolated locations of their territory, hiding for days in the forest before returning to their settlements.

The main scope of the CALG mission was to determine the truthfulness of accusations being raised by the Mayor's Office of Brooke's Point, as well as by MENRO, about the involvement of indigenous people in the clearing of virgin forest and watersheds in the Maruyog range and neighbouring locations. Such accusations have proven to be inaccurate.

The mission's GPS findings, outlined in this preliminary report, consist of selected geo-tagged (or GPS geo-referenced) photos showing the exact location of several *kaingin* areas either planted with crops or subject to fallow periods. In a photographic context, *geotagging* is the process of associating photos with specific geographic locations using GPS coordinates. This draft report only includes a synthesis of the mission's key findings and a limited selection of images and geotagged photos. Additional data will be compiled in a more comprehensive study to be finalized in the near future.



**A sample of geotagged photo showing the location of a *kaingin* in sitio Dengleg cleared from three years fallow vegetation. The red symbol on the right (bottom) shows the exact location on Google Earth map. In this, as in all *kaingin* fields visited, we found no evidence of secondary or primary forest been cleared or of watersheds being destroyed.**

## B. BACKGROUND INFORMATION

### b.1 The beginning of anti-kaingin campaign in Brooke's Point

Around the end of February a meeting was held at the Barangay hall of Amas (Municipality of Brooke's Point) and it was attended by Mayor Feliciano, staff of the Municipal and Environmental Natural Resource Office (MENRO), the barangay officials of Bgy. Amas and indigenous community representatives from various upland settlements. In the course of such meeting, Mayor Feliciano informed the indigenous participants that the use of fire in clearing vegetation was strictly prohibited and that such prohibition would have been enforced with vigour. After giving her statement the Mayor left the meeting and the indigenous people were given no chance of presenting their points of view, neither they were allowed to react to what Mayor Feliciano had told them. On the following days, the indigenous people – in spite of the Mayor's warning – decided to burn their fields, since the planting season had already begun. As a result, on March 30, 2015 six policemen in civilian clothes, allegedly under direct instruction of Mayor Feliciano, reached the community of Magatot, in the attempt of apprehending and arresting two of its members (Mr Benecio Buat and Migas Busut). In reality, all IPs in the area had infringed the Mayor's order, however only the two above-mentioned persons were directly incriminated because of the location of their *kaingin* on steeper slopes and their close proximity to the forest. The two mentioned persons were not present during the arrival of the police, who waited in Magatot village until 5pm before leaving the area.

On separate occasions, at least two other indigenous persons were apprehended and arrested by police personnel allegedly receiving direct order from Mayor Feliciano. One of the persons being apprehended from sitio Bulokanen (Bgy. Amas) told us that, after the police's warning of not burning their *kaingin*, they prevented themselves from cultivating their fields and, as a result, this year, they will yield no harvest and no crops on which to feed their families.

On 7 May, a forum on *kaingin* jointly organized by Non-Timber Forest Products – Exchange Programme (NTFP-EP) and NATRIPAL (United Tribes of Palawan) was held in sitio Mangkungan (Bgy. Amas) for the purpose of assessing the impact of a kaingin ban on local communities and to identify possible solutions aiming at safeguarding both the protection of the environment and indigenous people's livelihood. During the meeting the Municipal Indigenous Peoples Mandatory Representative (IPMR) Victor Colili, on the behalf of Mayor Feliciano, proposed the identification and delineation of the area to be subject to *kaingin*, and the formulation of guidelines on how to ensure the sustainability of *kaingin* farming. With reference to this, IPMR Victor Colili proposed that the Environmental Critical Area Network (ECAN) under the SEP law (Strategic Environmental Plan) might have been adopted to determine the altitude and the zone (multiple use zones) within which *kaingin* could be allowed. He also suggested that an altitude of about 300 meters above sea level might have provided the reference point for drawing *bärtas* (boundaries in Pala'wan language) and that the process of delineation would have been finalized by so called *panglima* (traditional chieftains).

As it appeared from the very beginning, the implementation of boundaries limiting *kaingin* to an altitude up and not above 300 meters altitude would have automatically excluded most of the areas that upland Pala'wan communities in the Maruyog range (as elsewhere

in the uplands) have traditionally managed through sustainable and rotational *kaingin*. Furthermore, the delineation of *bārtas* by ‘panglima’ from lowlands areas might have excluded the Pala’wan of the uplands from a decision process which, in fact, has direct bearing on the life and future. As a matter of fact, Pala’wan of the uplands were not duly consulted and properly represented during the *kaingin* forum in Amas. It must be pointed out that Pala’wan of the uplands do not rely on the contemporary ‘panglima system’ being recently revived by the Pala’wan of the lowlands but, traditionally, they relied on elders (*pagibuten, ukum, etc.*) whose advices were sought. However, these respected people had no power of coercion. More information on traditional decision processes amongst the Pala’wan is described below in this report.

Details of IMG\_0081.JPG



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**GPS (UTC) Time:** Jun 6, 2015 12:16:09 AM  
**Latitude:** 8,783713  
**Longitude:** 117,767252  
**Altitude:** 318 m  
**Address Line 1:**  
**Address Line 2:** Brooke's Point  
**Address Line 3:** Province of Palawan  
**Country:** Philippines

POI	Distance (m)	Category

Add Remove Move Up Move Down

Ok

**Magatot (see geotagged photo above) is the closest Pala’wan settlement to the lowlands that we visited during the mission and its location is already at an altitude of about 300 meters ASL. Any boundary to be set at this altitude will automatically curtail people’s access to their swiddens (*kaingin*) that are generally located much above 300 m. elevation.**

**b.2 Palawan: a province with a special status**

Because of its rich diversity of animal and plant species, the entire province of Palawan, in the Philippines, is the target of a land management plan under the Philippines Republic Act 7611, also known as the Strategic Environmental Plan (SEP). Due to its unique features, UNESCO declared Palawan as a biosphere reserve, and two of its sites as world

heritage sites (Tubbataha Reef Marine Park and Puerto-Princesa Subterranean River National Park).

A botanical survey determined 1,672 species of higher plants on the island, discovering an additional 153 species. These are distributed within a mosaic of vegetation types including mangrove forest, beach forest, karst forest, lake margin forest, semi-deciduous lowland forest, forest on ultramafic soil, middle altitude evergreen forest and montane forests (Hunting Technical Services Limited et al. 1985). Prehistoric migration of Bornean and Malaysian fauna is proven by the presence of the mouse deer, the scaly anteater, the slow porcupine, the flying squirrel, the mangoes, the bearcat, the clawless otter, the Malay civet, and by several other species. It has been estimated that at least 11 of the 25 non-flying mammal species indigenous to the Sundaic region are endemic to Palawan, in addition to 14 bird species (Diamond and Gilpin 1983; Heaney 1986). Overall, at least thirty-one animal species found in the province are single-island endemic, and two of them (the Palawan pheasant and two species of swallowtail butterflies) are listed in the International Union for Conservation of Nature Red Data Book (Collins and Morris 1985). The Philippine crocodile still survives in small numbers along the estuaries of the main rivers. Overall, Palawan hosts 7 declared protected areas, 11 important bird areas and is one of the 10 sites of the Alliance for Zero Extinction (AZE) in the Philippines. It also holds 17 terrestrial key biodiversity areas (KBA).

### **b.3 The Pala'wan indigenous people**

By and large Pala'wan perceive themselves as divided into two major groupings: the Pälawan of the uplands (*Pälawan ät bukid* or *Pälawan ät daja*), and the Pälawan of the lowlands (*Pälawan ät napan*) (Novellino 2002, cf. Revel 1990, Macdonald 1988). They have a heterogeneous mode of food procurement, mainly centred on swidden cultivation (sometimes referred to as slash-and-burn agriculture) integrated with hunting, gathering and commercial collection of non-timber forest products.

Nowadays, the more settled lowland Pala'wan have joined a market-oriented economy and, some of them, have completely shifted from swidden (*kaingin*) to irrigated rice cultivation, thus abandoning the complex beliefs and ritual practices associated with upland rice and with the management of swidden fields. They now engage in the cultivation of wet rice, coconut for commercial purposes and raise domestic animals such as cows, buffalos and pigs and, some of them, are fully integrated with the migrant Filipino peasants. Some Pala'wan communities inhabiting the hinterlands have customarily used coastal resources, during particular periods of the year, thus foraging on mangroves and coral reefs.

Members of the most isolated communities, instead, claim to have generally avoided direct contact with the coast except for sporadic visit to procure salt. As of now, upland communities are totally devoted to swidden cultivation and have a sophisticated knowledge of intercropping techniques. Also their ideological orientation, cultural values and worldviews (Macdonald 1988, Novellino 1999a, 2007b, 2011, Revel 1990) have been less exposed to change in comparison to their lowland counterpart. Over the past two decades, the upland Palawan communities have progressively lost access to coastal food-zones, which are now densely populated by migrants, thus representing an increasingly hostile place for them. Nevertheless, coastal villages are visited by the members of the upland communities, in order to sell non-timber forest products and obtain basic commodities, such as salt, sugar, tobacco, coffee, etc. The different livelihood conditions,

levels of acculturation and geographical locations of upland and lowland Pala'wan suggest that a municipal ordinance banning *kaingin* will not impact them in exactly the same way.

By and large, because of their involvement in the cash economy, capacity of accessing different food zones (coral-reefs, mangroves, low and mid altitude forests) and engagement in the domestication of farm animals (pigs, cows, buffaloes), lowland Pala'wan economy may end up being more resilient to the implementation of a ban on *kaingin*. In fact, some Pala'wan of the lowlands have already abandoned *kaingin* practices and do not rely on them for their survival. This is to say that if a "0 burning policy" will be implemented in Brooke's Point, the people most severely affected by it will be the vulnerable Pala'wan communities of the uplands. The survival of these communities is largely based on *kaingin* (swiddening) and the use of forest resources, and thus they will be more adversely affected by the prohibition on *kaingin*, as they have no alternative livelihood strategies on which to resort to. In fact, the members of these communities are not engaged in the commercial gathering of *almaciga* (*Agathis philippinensis*) resin and rattan like other upland communities in Amas such as those of sitios Kogonkogon and Samurong. Once their traditional *kaingin* areas became off-limits, the people will be faced with both cultural and physical extinction.

While coastal Pala'wan (Christianized, Islamized and those who are still practicing their traditional beliefs) can, at various levels, engage in face-to-face discussions - and even verbal confrontations with outsiders (e.g. mining corporations, government officials, etc.), the Pala'wan of the uplands are quite constrained in these kinds of interactions. The most obvious reason for this is their limited knowledge of Tagalog (Filipino national language) and lack of confidence and verbal skill to deal with legal and bureaucratic issues

#### **b.4 The area: key environmental features**

The side of the Maruyog mountain range facing the sea is characterized by a high concentration of areas subject to *kaingin* cultivation, some of these are also located on steep slopes. Most *kaingin* locations under cultivation are intermitted with areas under various patters of regeneration which, generally, do not exceed the four years fallow period.

The contiguity of plots under cultivation and fallow lands (*bānglay*) suggests that the area has been subjected to intense farming patters over a long period of time.



**Close contiguity of *kaingin* fields intermitted with fallow lands**

The presence of forest is limited to mountain tips, narrow valleys crossed by small streams and stony soils not suited for cultivation, as well as to sacred areas (*Iyen* or *lylien*) where tree cutting is forbidden. Overall, preliminary evidence indicates that the disappearance of primary and secondary forest from the area is not a recent phenomenon and must have occurred over a long period of time, until all primary forest was virtually converted into different types of landscapes which include a mosaic of fallow lands and small fruit trees orchards.



The presence of *manpalam* (*Mangifera* sp.), *nangka* (*Arthocarpus heterophyllus*) and other fruit trees of a large diameter in portion of the uplands, around and above 500 meters ASL indicate that such areas have been subject to cultivation of perennial crops over a long period of time.

A view of sacred forest (*Iyen*) in sitio Limpa

Of particular interest is the presence of well-developed old coconuts groves also at altitudes close to 600 meters above sea level such as around the settlement of Limpa (see geotagged photo below).

Load GPS Data and Photos
Edit Photo Data

**Pictures**

- from dengleg to magatut
- pawpanaw 3
- dengleg settlement
- IMG\_8056
- pawpanaw11
- pawpanaw15
- pawpanaw 1
- IMG\_0001
- IMG\_0005
- IMG\_0010
- IMG\_0012
- IMG\_0013
- IMG\_0017
- IMG\_0030
- IMG\_0033
- IMG\_0045
- IMG\_0049

Remove Picture

Change file names to:

Change

**Latitude**

+8,78938333 N

**Longitude**

+117,756205 E

**Altitude**

590

**City**

Brooke's Point

**Province/State**

Province of Palawan

**Country**

Philippines

**Description**

Brooke's Point, Province of Palawan, Philippines

**Comments**

Well developed coconuts in site Malia, Maruyog range

Full View



IMG\_0049  
Sat 6 Jun 2015 13:47:57

GPS Store Camera Store Prints



Google

*Kaingin* fields in upper locations such as Mälia, Limpa and Sambilagaw are those closest to forest and thus are likely to be more quickly colonized by timber species during the fallow period, in comparison to the downstream *kaingin* that are no longer surrounded by good standing forest (see photo below).



***Kaingin* in Sambilagaw near upland forest. This *kaingin*, like most of the others we visited, was cleared from a three years-old fallow land.**

The colonization of certain parts of the territory by *cogun* grass (*Imperata cylindrica*) indicates that increasingly short fallow periods have prevented the regeneration of soil nutrients thus leading to soil degradation. On the other hand, in other portion of the territory, plants re-growth in previously used *kaingin* land appears to be more satisfactory. The presence of species such as *tagbak* (*Amomum palawanense*), *agutay* (*Musa errans*), *buldong* (*Donax cannaeformis*), *biraw* (*Amomun* or *Alpinia* sp.) - generally perceived by Pala'wan as plants with high water content - indicates that the area is suited for upland rice cultivation. Unfortunately some of these areas (e.g. in the southern portions of Magatot) have been subject to the planting of gmelina (*Gmelina arborea*) by the Department of Environment and Natural Resources (DENR) and, thus, can no longer be used by Pala'wan for rotational *kaingin*.



Old *kaingin* being colonized by cogun grass (*Imperata cylindrica*) between Limpa and Dengleg



DENR promoted *Gmelina* plantation on the way to Magatot



### Pala'wan IP making 'tambo' brooms in Limpa

Other areas are also planted with tiger grass (*Thysanolaena maxima*) providing extra income to those households engaged in the making of 'tambo' brooms for the market. Swidden fields under regeneration, as well as patches of remaining forest, are an important source of plants for the local communities.



Plants used for artefact making such as *malaga* (*Wendlandia densiflora*), *gahid* (*Lygodium circinnatum*), *paratungän* (*Elaeis guinensis*) and many others can be easily spotted in the area, while groves of larger diameters bamboos such as *kawuajan* (*Bambusa blumeana*), *batong*, and small size bamboos such as *sumbiling* (*Schizostachyum lumampas*) are also present. Edible wild tubers such as *saruak* are found in *kaingin* fields. A large species of wild tuber, *kärut* (*Dioscorea hispida*) is also found in secondary vegetation under fallow. This tuber, before being eaten, requires the cutting in slides and subsequent soaking in water to eliminate the poisonous toxins. Wild roots crops represent an emergency source of carbohydrates and starch during the periods of food shortage preceding rice harvesting.

Freshly harvested *saruak* tuber

People recall that between 1978/1979 a rat infestation led to the loss of rice and other crops. As a result, to face food crisis, they had to rely on wild 'emergency food' such as *käräg* (wild gabi) [leaves and stems are eaten] and on the inner starch (*nātek*) of *batbat* (*Arenga undulatifolia*), a wild 'sago' palm. Fruits and seeds of forest trees also provide extra-food on seasonal basis. Local communities members also informed us that the seeds of pangi (*Pangium edule*), after being boiled, are eaten when no alternative food is available.

## C. MISSION KEY FINDINGS

### c.1 Farming practices and the 'sacredness' of rice

The conversion of forest (*talun*) into swiddens (*uma*) through slash-and-burn technology is certainly the most radical form of environmental modification of which the Pala'wan are capable. The forest is believed to be the domain of a large number of demons such as *sājtan* and *lānggam*, the latter being the caretakers of poisonous and 'biting' animals (*rāmu-rāmu*) (Novellino 1999a, 2007b).

Basically, there are six stages in the swidden cycle: underbrush cutting, felling the forest, burning the dead vegetation, planting or sowing the seeds, weeding the field and harvesting. Swiddens are burned in March, at the peak of the dry season, and planting begins in April. After a forest plot has been cleared, the dead vegetation is burned to produce fertiliser in the form of ashes. Harvesting takes place in mid-August and often continues through October. Before clearing a forest plot, the Pala'wan consult and appease various entities, and interpret omens in dreams. Certain signs are placed in the area chosen for the swidden, to determine whether the 'entities' inhabiting that particular portion of the forest are willing to vacate it. In the visited locations, informants told us that before starting underbrush clearing (*ririk*) the area targeted for *kaingin* is delimited at the four corners with sticks pointing towards the inner part of the area, while a '*dalan dalan*' (little trail) connecting the 4 corners is defined. This is done to inform other people about one's own intention to cultivate a certain area, as well to determine the presence of supernatural entities in that location. If the person receives no negative sign during dreams, then the area can be cleared.



A Pala'wan girl from Magatot holding *bangkoka*

Overall, Pala'wan name at least 20 varieties of *Colocasia esculenta* (cassava) 20 of *Ipomoea batatas* (sweet potatoes) 16 of *Dioscorea alata* (ubi), 15 of *Manihot esculenta* (cassava), five of *Zea mays* (maize) and more than 50 varieties of *Oryza sativa* (upland rice). Like all indigenous people in Palawan and through the Philippines, the indigenous residents of the Maruyog range practice shifting

cultivation with slash and burn technology. The cultivation of root crops in the area is well development with sweet potatoes (*sanglay*), cassava (*talok* o *belangäy*), *tälus* (taro) being cultivated in *kaingin* (uma). *Bangkoka* (*Alocasia* sp) is the most commonly cultivated crop and it is the primary item sold by community members in the weekly *tabuan* market. One 'latta' (large aluminium container) of this root crop is sold for about 40 pesos, the same applies to sweet potatoes. Bananas of the so-called *salba* variety are sold for 50 pesos for eight 'pileng' (bunches). Other common varieties of banana in the area include *arikundar* and *bunguran*. The people still plant and recognize several varieties of upland rice. Glutinous species are the most appreciated for their taste and texture and are cooked in bamboo tubes during agricultural-related rituals. Overall, the people claim that there has been a decline of traditional rice varieties. By and large, only one local variety of maize is cultivated in the area; other crops such as pineapple, sugar canes are also present. Various fruits trees are surrounding people's settlement with *nanka* and *mampalam* playing a dominant role.

A Pala'wan legend attributes the origin of rice and cultivated plants to a human sacrifice (cf. Revel 1990, Novellino 2007b). Each year, before planting rice, the people practice a number of ceremonies to call back the *kuruduwa* ('life force') of the child who was killed by his father in legendary times. Germination of rice seeds and the health of crops is said to depend on the action of the 'child's life force'. The first harvested rice, which has not yet reached maturity, is removed from the spike and dried in a *kawali* (allowed fry pan) over the fire. The small immature rice grains (*rinäk*), after being pounded inside the mortar (*läsang*), are placed inside a *nigu* (flat winnowed tray) together with farming gears and other tools such as *lading* (knight), *tukaw* (machete), *asaqan* (sharpening stone), *tigeb* (flat pointed knife for weeding), *galit* (harvesting knife) and then offered to God creator. This is to welcome the beginning of a new period of plenty (*biag tau*) and the end of the food-shortage period (*kairapan*), the latter is asked to leave the community and hide inside a pitugo (*Cycas circinnalis*).

After all harvested rice has been collected and stored inside the granary, the people will look at the moon to decide the right timing for initiating the *lutlut* ritual. Depending on the people expected at the *lutlut* ceremony, rice (the glutinous variety) is placed inside baskets and soaked in water for about 12 hours. The soaked rice is then inserted inside bamboo tubes with coconut milk and cooked slowly over the fire. At the same time, people make *minalmäl*, which consist of cooked rice wrapped inside leaves of *binuaq*, *gerangan*, *pitpit* with *purad* (substance to induce fermentation made of powdered rice, chilly, etc.) and left for 12 hours until it is fermented. Proper fermentation it is fostered by placing all rice wrapped in leaves inside a basket that is covered with a cloth (*kumot*). *Lutlut* and *minalmäl* rice will be served together, but a small portion of it will be used for thanksgiving to God creator. Today, in the locations visited by the mission, rice-related rituals involving the collective cooking of *lutlut* and *minalmäl* rice have been abandoned because, as it was explained us, the people cannot produce sufficient rice to feed visitors during the ritual. This is due to the fact that *kaingin* practices have been restrained, and because of the short fallow period given to land rice production has decreased, as well as the overall size of *kaingin* fields. This is another clear examples of how DENR and government policies have completely upset indigenous farming cycles and cultural practices.

## c.2 *Kaingin* practices and critical issues

Although the local Pala'wan communities have a profound knowledge of forest ecology, as well of sustainable *kaingin* practices, they have been forced over the years to increasingly reduce the fallow periods given to farmland to allow regeneration and the regaining of nutrients. Nowadays, most of the fields under regeneration (*bānglay*) are being cleared again for cultivation after only three years. In the past, rotation cycles between 7 to 15 years were common and such fallow periods allowed the land to recuperate most of its nutrients, before vegetation would be cleared again for another cultivation cycle. Because of the limited availability of land needed for *kaingin* rotation, the people have been forced to put in cultivation also portions of steep slopes which are vulnerable to soil erosion and loss of nutrients.



Again, the use of very steep slopes for cultivation is not a key feature of Pala'wan traditional cultivation practices and, therefore, must be regarded as a community response to wrong and inadequate policies and government programmes that, in the past, have been heavily financed by the European Union. The latter invested 17 million Euros in the Palawan Tropical Forestry Protection Programme (PTFPP). PTFPP was a 7-year special project, which started in 1995 with the objective of assisting forest preservation in Palawan through catchment approach, with sustainable development strategy implemented by the communities. Nevertheless, many people on the island still complains that most of the money was used to pay disproportionately high salaries to foreign consultants, project directors/managers and government officials and that, ultimately,

**A *kaingin* on steep slopes in the lower Part of sitio Kapok (Bgy. Amas uplands)**

The project has left behind little tangible evidences of its success. In fact, amongst the communities that we visited the only positive sign left by PTFPP is the technology of making brooms, using 'tiger grass' (*Thysanolaena maxima*) locally known as '*parukpuk*' or tambo (in various Philippine languages). This grass is dried and then firmly tied to a rattan stick. This weed is planted and tendered by local communities for this particular purpose and can be interspaced with fruit trees and other perennial crops. *Walis tambo* (brooms reed) are locally made and sold in the market for 25 pesos each.

According to local indigenous community members, they have been forced to reduce the fallow period on *kaingin* land because of the constant and continuous pressure exercised on them by member of local government agencies and forest guards (*bantay gubat*). During the nineties, when the EU financed PTFPP was implemented, local communities were highly encouraged to refrain from their traditional *kaingin* practices and to pilot new

and alternative forms of livelihood. Furthermore, they were also requested not to open more *kaingin* in the forested hinterlands and to limit their traditional *kaingin* to the areas surrounding their settlements. Hence, in order to cope with government requests, people were somehow compelled to drastically reduce traditional fallow cycles and thus increase pressure on the forest surrounding their settlements. As a result, most of the available secondary forest surrounding indigenous settlements such as Mantalong, Bibigo, Kapok, Tabugan, Pawpanaw, Magatot, Dengleg, Sambilagaw, Mália and Limpa have become subject to more frequent patters of land cultivation and the *kaingin* plots became more contiguous to each other and increasingly distant from good standing forest. As a result, nowadays - differently from the past - fallow fields no longer regenerate into forest and sun-loving weeds such as *cogun* (*Imperata cylindrica*) often colonize *kaingin* land (especially in steep slopes) that have been subject to continuous and short rotation patters.

During the late 90s, the Department of Environment and Natural Resources (DENR) maximized its efforts to stop shifting cultivation practices in Palawan. Until now, several DENR officials share the idea that indigenous claims over land (as those provided through the implementation of the Indigenous Peoples' Rights Act of 1997) do not entail the right to cut trees, but only the right to protect them. The inherent ambiguity of DENR towards indigenous people is clearly visible in the notion of *dati kaingin* (litterally 'old swidden') that, from a DENR perspective, refers to plots of land without tree cover and that have been used repeatedly over the years. DENR officials in Palawan insist that present swiddens cannot be expanded, and that slash-and-burn farming is allowed only in *dati kaingin*. This

view is clearly reflected in the statement of a former DENR employee: "If the people are making *kaingin* in an area that is already *kaingin*, this is not prohibited. But if they have to cut more forest, even if this has been growing through fallow cycle, this is forbidden; unless the DENR issues them a permit to cut trees" (see Novellino 2007a).



**Kaingin of one year fallow land. Rice plants look frail and the growth of weeds is vigorous**

In other words, indigenous peoples in Palawan, such as the upland communities of Maruyog range, are being encouraged by DENR and MENRO to cultivate soils that have not yet regained their nutrients. As a result fertility is exhausted and *imperata cylindrica* begins to take over. It must be pointed out that, according to Pala'wan elders interviewed during the mission, *cogun* was not traditionally found in their uplands. Furthermore they also claim that *kaingin* were often surrounded by forest and this facilitated the regeneration of local endemic tree species during the fallow cycle.

### c.2.a The use of fire in *kaingin*

Our local indigenous collaborators complains that staff of MENRO has asked them to practice *kaingin* without burning the death vegetation. Such indications reveal the complete lack of knowledge that staff of concerned government agencies have about *kaingin* and forest ecology in general. The use of fire, in fact, is an essential component of *kaingin* for two reasons: **1)** it clears the area to be planted to allow the cultivation of crops; **2)** it reduced the death vegetation into ashes, which provide the nutrients needed to ensure a healthy harvest.

Since a large portion of the mineral nutrients in the ecosystem are stored in the vegetation rather than the soil during a fallow, clearing and burning appear to be the only way to prepare the land for cultivation and incorporate into the soil the nutrients that have accumulated in the vegetation. The rapid mineralization of organic matter and additions of ash after clearing and burning provide a sharp increase of available nutrients to the first crop planted (Sanchez 1976) with exchangeable calcium, magnesium and potassium being added to the soil.

The anthropogenic influence on the composition of old forest has been well documented (e.g. Fairhead and Leach 1998). And yet, both DENR and local environmentalists in Palawan seem to have a very limited understanding of how fire and fallow periods contribute to the creation of highly diverse and biologically valuable ecosystems thriving plant and animal species that could not survive in ‘natural’ forest (see Margalef 1968; Brosius 1981; Rai 1982). Cadeliña has argued that one adaptive function of indigenous fallow forest is to produce “food resources that never grow in other zones...Plant species are highly diverse ranging from shrubs and bushy type trees in most recently fallowed fields to hardwood ones largely below one or two feet in diameter in areas fallowed for several years” (1985: 30). These findings have been corroborated by additional evidence being provided by researchers such as Dressler (2005, 2014), Dressler and Pulhin (2010), McDermott (1994), Novellino (2007a, 2014).

Nowadays, as it was clearly observed during the mission, the amount of ashes produced during the burning process is not sufficient to provide the adequate amount of nutrients to ensure a healthy crop (upland rice, maize, etc.). Furthermore, areas that are subject to short fallow cycles produce more weeds and the labour input needed to weed these fields increases proportionally. During the mission we noted that trees with a diameter of about 80 cm. above are often left standing in the *kaingin*, for the fear that the elimination of these could trigger the response of forest guards. As the photos below show only some of the branches of these trees are cut to avoid that the canopy would shade the planted rice. Because such trees are not cut, as it would customarily occur in traditional *kaingin*, fewer ashes are produced and this, in turn, negatively affect the production of rice and other crops.

Only major case of fire escape was spotted during the mission, while some minor cases of fire burning vegetation at the margins of cleared *kaingin* were also noted. In all cases the areas that were unintentionally hit by the fire did not include portions of old forest. Such events occur only sporadically, as Pala’wan indigenous people customarily take precautions to prevent fire from escaping.



People leave larger diameter trees in the *kaingin* rather than burning them for the fear of being apprehended by DENR and MENRO foresters. As result less ashes are produced and cultivated soils lack sufficient nutrients.



A case of fire escaping from *kaingin* (right) with moderate damage to forest. Such events, however, occur very rarely.

In response to the limited available land to be put under fallow cycles, some Pala'wan from the Maruyog range have resorted to temporarily transfer to other municipalities (e.g. Sofronio Espanola) where they can open *kaingin* areas with the help of relatives living in the area. This strategy allows them to wait at least three/four years before re-cultivating their fields in their original locations, thus preventing the damage that continuous cultivation, with no fallow cycle, would cause to fragile forest soil. However, in one instance, we found evidence of a field being cultivated only after a two years fallow period. Rice plants looked stunted and frail because of the combined effect of drought, in addition to nitrogen and phosphorous deficiency. We were told that the person cultivating this plot of land had no other alternatives: he had no land available for rotation and no close relatives in other municipalities.

It is interesting to point out that reforestation by DENR, under the so-called National Greening Program (NGP) have further affected the sustainability of indigenous *kaingin* practices in the area. Local people from Magatot guided us to *bānglay* areas traditionally used for rotational *kaingin*, which have been reforested with *gmelina* trees (*Gmelina arborea*) several years ago. According to them, at the start, DENR assured them that *gmelina* would have been planted only in areas colonized by *cogun* (*Imperata cylindrica*), thus they were disappointed when they found out that the reforestation program had expanded to areas that are customarily used by the people for their *kaingin* practices. Reforestation under NGP is surely questionable for two specific reasons: **1)** it further reduces the areas available for rotational *kaingin* thus forcing the people to drastically shorten fallow cycles to the extent that some *kaingin* locations became colonized by *cogun*; **2)** it often requires under-brush clearing before *gmelina* seedlings are planted. In so doing young specimen of valuable timber and other endemic species are eliminated to be substitute instead by imported and less valuable species (*gmelina*). We also found out that local indigenous communities have no clear understanding of the nature of the agreements that they entered with DENR. They claim to have received daily allowances for the initial planting of *gmelina* seedlings but they are not sure on whether and when they will be able to harvest them and get some profit. Moreover the people have no clear understanding of the percentage (if any) to be given to DENR after the sale harvesting of *gmelina* timber. As of now, mature *gmelina* trees are standing on former indigenous *kaingin* land, and people appear to receive no benefits from such trees while, in contrast, they have already felt the adverse impact caused by the overlapping of *gmelina* plantations with their former *kaingin* fields.

### c.3 No evidence of forest clearing

The mission visited six locations within the Maruyog range within Amas barangay proper, and particularly these areas where, allegedly, clearing of watersheds had occurred during the present *kaingin* season. Overall, we took GPS coordinates and photographs of more than 40 *kaingin* locations mostly planted with upland rice and other crops and/or under various stages of regeneration (one to four years fallows). We also took close-up photos of other *kaingin* plots that could be easily spotted from a distance. Overall, we found no evidence of any *kaingin* fire destroying portions of secondary and primary forest in such areas. On the contrary our findings show that all *kaingin* fields in the area have been cleared from regrowth vegetation ranging between 3 to 4 years.



Surely forest clearing for *kaingin* did occur sometimes in the past but, after initial opening of natural forest, these areas have been farmed sustainably over a long period of time. Only more recently (particularly in the eighties) local communities have been forced somehow to put

**The majority of the *kaingin* we visited are from 3 years fallow land**

their fallow lands under more intense patterns of cultivation, being pressured by DENR to do so. Nevertheless, in the visited locations, we found no evidence of forest burning during the present 2015 *kaingin* season, neither we found remains of large tree stumps inside fallow fields which, indeed, would suggest that elimination and burning of large trees have occurred in earlier years and previous *kaingin* seasons. In addition to this, it must be pointed out that a cursory identification of common weeds and other plants found in fallow *kaingin* lands indicates that such species include plants that typically grow in fields that are subject to moderately short fallow periods. To conclude, no secondary and primary forest was cut in the visited locations and therefore, accusation by Municipal Government of watershed clearing and destruction of forest by indigenous people through fire have not confirmed by our findings.

#### **c.4 The notion of 'bärtas'**

The opinion of local communities members was sought to determine whether they would be amenable to the idea of having their traditional territory being demarcated according to 'bärtas' (boundaries), which would delimitate the areas not to be subject to *kaingin*. All informants interviewed told us that the practice of delineating large parts of a given territory with 'bärtas' is not part of traditional Pala'wan customary practices (*adat*). We have been told by our indigenous collaborators that, traditionally, selected portions of a given territory would be subject to various degrees of restraint and limitation in relation to two major reasons: **1)** the presence of *bawäg* (or *balatik* in Tagalog). These are spring traps set for wild pigs which release a pointed spear that kills the game animal on the spot, but could also inflict severe damage to humans unintentionally triggering the device; **2)** the presence of particular powerful beings (*taw kawas*) dwelling in certain portions of the forest that, therefore should not be cleared for any reason. Such areas are considered 'sacred places' for the Pala'wan and are named by them as *lyen* or *lililyen*.

All people interviewed have expressed their strong disapproval to top-down interventions aiming at demarcating their traditional territories with boundaries (*bärtas*). The local upland Pala'wan claim that they have no intention- nor it is part of their culture - to clean watersheds areas for *kaingin*, since these areas are also essential for their survival.

Furthermore, the people sustain that several locations in mountainous areas are characterized by unfertile soil that is not suited for *kaingin* and that upland agriculture is, therefore, only limited to selected locations. Pala'wan, in fact, rely on plant indicators to determine if particular soils are suitable for rice cultivation.



**Maman Pisieng from Limpa. One of our main Informants on *bärtas***

The setting out of boundaries (*bärtas*) around 300 meters ASL would automatically alienate local communities from the use of their traditional *kaingin* areas. Most Pala'wan settlements, in fact, and their upland farms are generally located at higher elevations.

### **c.5 Decision making process and the absence of leaders in Pala'wan culture**

All people in the communities that we visited confirmed that they do not rely on the so called '*panglima system*', with reference to their own decision-making processes. They claim that contemporary *panglima* of the lowlands are not the persons that they would generally consult for important decisions dealing with land, resources and other issues. Elders in Magatot and Limpa told us that, traditionally, each village in the upland or group of neighbouring settlements, would consult the so called '*pagibuten*' (a respected elder) in case of important decisions related to the infringement of customary laws such as '*sumbang*' (sexual relationship between consanguineous/incest), the settling of marriage cases, 'wife stealing', etc.

Overall, all Pala'wan we interviewed stressed that the decision making process of the people living in the uplands is not subdue nor has any bearing with the decision making processes on which the so-called '*panglima*' of the lowlands rely. Clearly, as of now, the Pala'wan of the uplands have been largely excluded from the processes of empowerment that has recently led to the appointment of Indigenous Peoples' Mandatory Representatives (IPMRs). The voices and grievances of the more isolated Pala'wan upland communities have not been featured yet in the IPMRs agenda which, indeed, continue to be led by the Pala'wan of the lowlands.

Mission members were stricken upon discovering that, until now, even in Pala'wan communities that are only at one hour walking distance from the lowlands (e.g. in barangay Amas) the people have never heard about the existence of the IPRA law

(Indigenous Peoples Rights Act), nor they have any idea on how to appeal to this powerful peace of legislation for the protection of their legitimate rights to culture, land and resources.

As of now, a deep gap exists between the involvement of IPMRs and *panglima* in the local political arena and the increasing sense of disempowerment and feeling of marginalization experienced by upland Pala'wan communities whose complains, fears and concerns continue to be unheard and left unattended. Very sadly, the appointment of an indigenous representative (Artiso Mandawa) as Municipal Councillor in the Committee on Environment of the *Sanngguniang bayan* of Brooke's Point has not brought the changes that indigenous people were expecting and, as of now, he has remained silence on important issues such as the proposed municipal ordinance against *kaingin*.

This gap between Pala'wan of the Lowlands and Pala'wan of the Uplands can be better addressed by shedding some light on the role and meaning of 'leadership' in Pala'wan culture, while moving away from new concepts and definitions (such as 'royal blood lines') being coined and appealed to by contemporary *panglima* of the lowlands to legitimize their roles as 'true leaders'.



**A *bitsara* in Magatot involving CALG officials and local community members**

In Pala'wan egalitarian society, although the personal will of the individual is highly acknowledged and respected, the overall tendency is to reaching unanimous decisions (*tahyun*) that are agreeable to all. Such decisions are generally taken on family level or between a few households linked by strong kinship ties. Overall, in Pala'wan society, there are no leaders holding power of coercion over community members. We are mainly dealing with a society that has actually not 'leaders' (in the western sense of the word) but rather senior legal advisers (*memimitsara*, *ukum*) and elderly persons (*megurang*) on which community members rely for solving disputes and for other reasons such as changing 'village' locations, exploiting communal natural resources, etc. (MacDonald 2009).

Palawan customary law (*adat*) aims at solving conflicts not through the imposition of sanctions (although these may be applied under particular circumstances) or coercive measures, but much more by smoothening up tensions through the engagement of all parties involved in open discussions, until a common solution is reached and agreed upon - but never through the 'raising of hands' as in some sort of electoral process based on majority-based consensus.

Overall, the general feeling after an important decision is made is that the latter had been collectively crafted by the community as a whole, although the role of those individuals known for their skilful talks (*memimitsara*) is, of course, recognized. Important discussions or public hearings (*bitsara*) were carried out through the assistance of the *ukum/memimitsara*, and such litigations lead to agreements (*isun*), recommendations (*usyat*) or even to a fine (*beteng*) (cf. Macdonald 2009).

As it was clearly explained to us by the leaders of Mgatot and Limpa, another term used to refer to a person of prestige at the community level is *pagibuten*, the term means he who is followed (from – *ibut* - follow, in the sense of listen to, pay attention to, respect) (MacDonald/SIL online resource) and, again, such figure does not hold political power.

Terms improperly used as 'indigenous translations' for the word 'leader' are '*panglima*' and sometimes '*datu*'. "Both terms have hierarchical connotations and refer to a Malay-Islamic State tradition, alien to the strictly egalitarian Palawan society" (MacDonald/SIL online resource). A old Pala'wan legend narrates that when the 'Surutan' (Sultan) arrived in Palawan, he tried to identify who was the leader of the Pala'wan and finally he was told that about the existence of a '*pagibuten it ginsan*' (an elder highly respected by all). When the Surutan met the '*pagibuten it ginsan*' he then named him as '*panglima*' and asked him to become his main contact person and 'appointee' to manage the affairs of the 'Sultanate' in the newly discovered land of Palawan. This legend further suggest that the term '*panglima*' and the functions attributed to it by the Sultan are not part of the traditional Pala'wan culture repertoire.

All these considerations are essential to understand that any decisions regarding the territory of the upland Pala'wan cannot be the solely placed under the agenda and decision making processes of the so-called '*panglima*' of the lowlands nor of the IPMRs, but should rather take into full account the perspectives and specific expectations of the Pala'wan of the uplands.

### c.5.1 Recommendation for the Municipal IPMR

The Municipal IPMR and IPMRs in each barangay should play a fundamental role in **a)** increasing preparedness of the Pala'wan of the uplands to express their rights, visions and priorities – especially when confronted with conservation/development interventions and other policies (e.g. the *kaingin* ban) initiated by a third party; **b)** improving linkages and coordination between *panglima* and IPMRs in the lowlands and the isolated communities of the uplands; **c)** broadening understanding on the part of local authorities about the very unique cultural values and traditional livelihoods of the Pala'wan of the uplands with particular attention to the role played by the latter in the management of watersheds and vital ecosystems; **d)** facilitating the acquisition of information and increasing the awareness of the Pala'wan of the uplands with respect to the IPRA law and on how this could be used to safeguard their land and culture, **e)** ensuring that the voices and perspectives of the Pala'wan of the uplands will be duly taking into account and fully included in the political agenda of the IPMRs; **f)** prioritizing the municipal funds available for IPMR activities to support some of the most immediate needs faced by the Pala'wan of the uplands.



**The grievances and problems faced by the Pala'wan of the Uplands should be placed at the top of IPMRs agenda**

#### D. LEGAL ISSUES RELATED TO THE IMPACT OF ANTI-KAINGIN POLICIES ON LOCAL INDIGENOUS COMMUNITIES

In the Philippines, slash-and-burn cultivation is prohibited according to the Forest Act no. 1148 of 1904, and the Revised Forestry Code (Presidential Decree no. 705 of 1975). Since 1994, a ban against shifting cultivation has been enforced by the City Government of Puerto Princesa (Palawan). Due to the prohibition of felling trees, several native communities have resorted to clearing areas consisting mainly of shrubby bushes and weeds. Such areas have not yet completed the fallow period and are likely to degrade into barren grasslands, especially when re-utilised for agriculture. The ban has had detrimental repercussions on genetic diversity of cultivated plants, causing the loss of several rice landraces. To compensate for the loss of agriculture, communities have been forced to overexploit commercially valuable non-timber forest products to an unprecedented level and this, in turn, has had negative repercussions on forest. The negative impact of the “0 Burn Policy” implemented by former PPC Mayor, Edward Hagedor, should serve as a warning to the Mayor of Brooke’s Point as well as to the Mayors of other municipalities to learn from previous experiences and not to repeat the same mistakes that other ‘short-sighted’ political leaders have already made.

It must be pointed out that indigenous traditional practices within the MMPL, including *kaingin*, are recognized and respected. This was further confirmed by the staff of Conservation International (Palawan Branch) who told us that the purpose of the MMPL is, in fact, to both safeguard the natural environment and respect the livelihood of local indigenous communities that have been living the area since time immemorial. This also entails that the implementation of a ban forbidding indigenous people to carry out their farming practices in the uplands of Brooke’s Point would further contradict the main tenets and guiding principles of MMPL.

The implementation of a ‘0 Burning Policy’ in Brooke’s Point (which draws no distinction between the destructive *kaingin* practices of Filipino migrants and the centuries old sustainable upland farming practices of indigenous communities) is in violation of Sec. 36 (Chapter VI) of the IPRA law (R.A. 8371) “*recognizing the right of ICCs/IPs to a sustainable agro- technological development*” and in contradiction with Sec. 34 mandating that “*ICCs/IPs are entitled to the recognition of the full ownership and control and protection of their cultural and intellectual rights*” such as “*the right to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other **genetic resources, seeds, including derivatives of these resources.... knowledge of the properties of fauna and flora...***” etc; The imposition of the ‘*bawal sa kaingin*’ (prohibition on shifting cultivation) would also violate other rights stated in the Indigenous Peoples Rights Act of 1997 and specifically the: 1) *Rights of Ownership* (Chapter III, Sec. 7, item a); 2) *Rights to Religious, Cultural Sites and Ceremonies* (Chapter VI, Section 33); 3) *Right to Develop Lands and Natural Resources*. (Chapter III, Sec. 7, item b); 4) the *Rights to Ancestral Lands* (Chapter III, Sec. 8); 5) *the Right to Determine and Decide Priorities for Development* (Chap. IV, Sec. 17), etc;

The implementation of a ban on *kaingin* to be extended to indigenous communities would further contravenes the provisions contained in well know conventions [e.g. *The Convention on Biological Diversity* (CBD)] signed and ratified by the National Government. A key standard on indigenous peoples established under the conventions is set in article

8(j) mandating that Each Contracting Party shall, as far as possible and as appropriate: ***“Respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices”***.

These principles are further listed in the *UN Declaration on the Rights of Indigenous Peoples* (especially articles 1, 12, 20, 27 and 30) adopted and signed by the Philippine government on September 14, 2007. In the UNDD it is stated that *“indigenous people have the right to determine and develop priorities and strategies for the development or use of their lands, territories and other resources, including the right to require the states obtain their free and informed consent prior to the approval of any project affecting their lands, territories and other resources, particularly in connection with the development, utilization or exploitation of miner, water or other resources”*.

Moreover, the endorsement of a ban on *kaingin* in areas inhabited by traditional indigenous communities would also contradict other conventions that the Philippine Government has ratified such as **1) *The Convention concerning the Protection of the World Cultural and Natural Heritage*** and; **2) *The Convention for the Safeguarding of the Intangible Cultural Heritage***. It would further contradict the principles and motivations that led UNESCO to declare Palawan a “Man and Biosphere Reserve”.

Furthermore, the prohibition on *kaingin* on traditional upland territories managed by indigenous people, and the possible relocation of the latter is in contradiction with the *Revised IUCN Protected Area Category System*, since it would jeopardize the integrity between ecological, biological, cultural and scenic values in the Municipality of Brooke’s Point.

It must be pointed out that the Global Consortium on Indigenous (ICCA) over the past years have invested much efforts in lobbying for the global recognition of the importance of indigenous peoples’ and local community conservation practices to achieving global conservation goals and targets. The ICCA Consortium is an international association dedicated to promoting the appropriate recognition of and support to ICCAs (Indigenous Peoples’ and Community Conserved Territories and Areas) in the local, national and global arena. It is comprised of members, which include indigenous people organizations (IPOs), community-based organizations (CBOs) and civil society organizations working with IPs/LCs, and honorary members, who are individuals with relevant concerns and expertise relating to ICCAs.

Drawing lessons from numerous successful examples and the experience of problems around the world, the ICCA Consortium works to support understanding and appropriate practices in the integration of conservation, sustainable livelihoods and the respect of human and indigenous peoples’ rights. In this respect, the ICCA Consortium has recently written a letter to the Governor of Palawan requesting that efforts to protect the watersheds and primary forest should respect the rights of indigenous peoples to govern and manage their ancestral domains and conserved territories (ICCAs) and to plant and eat their own crops in sustainable *kaingin*.

### d.1 Direct and expected consequences of a ‘0 Burning Policy’ on *kaingin* on the indigenous Pala’wan communities of Brooke’s Point Municipality

The most tangible consequence of a prohibition on *kaingin* in Brooke’s Point, as well as in other Municipalities of Palawan, can be outlined as it follows:

- a) Increasing rather than decreasing pressure on the forest. In fact, to compensate for the loss of agricultural products, indigenous peoples would be forced to over-exploit their own NTFP resources (e.g., the resin of *agathis* trees, rattan, and honey); More NTFPs would be collected to be sold to purchase imported rice;
- b) Indigenous peoples being forced to clear areas covered with bushes and wild grasses for their *kaingin* rather than secondary forest or long fallow lands containing medium size diameter trees. As a result, such lands, not being subject to sufficiently long fallow periods, would rapidly lose their nutrients and fertility. In such areas, which are likely to be colonized by *Imperata cylindrica* (*cogun*), forest will never grow back;
- c) Indigenous peoples losing autonomy in food production while becoming more dependent on wage labour and thus subject to low wages and patterns of exploitation by migrant lowlanders.
- d) the collapse of upland agricultural production, which entails that people will have no more root crops to sell in the local market;
- e) Irreversible genetic erosion of traditional varieties of rice and other crops typically planted in *kaingin*;
- f) Indigenous people being unable to transmit their wisdom and knowledge about *kaingin* practices to future generations. Disintegration of indigenous identity and worldviews which are strongly based on upland rice and the making of *uma* (*kaingin*);

## E. CONCLUSIONS

In Palawan, the banning of swidden cultivation (*bawal sa kaingin*) is overwhelmingly accepted by environmentalists such as those of ELAC (Environmental Legal Assistance Center) and PNNI (Palawan NGO Network, Inc.). As a result, indigenous peoples have had difficulties in identifying reliable partners within the NGO circle on which they could count, especially when their customary rights to *kaingin* are curtailed. Surely, ecological equilibrium in Palawan, as elsewhere in the Philippines, cannot be restored by banning indigenous swidden practices while excluding from the conservation discourse those processes that have led to environmental degradation, such as commercial logging, mining and uncontrolled migration. So far, short-sighted approaches to forest conservation (Novellino 2000), such as the ban on *kaingin* implemented in Puerto Princesa City, have only produced questionable outcomes for both genetic diversity of cultivars, and the survival of local communities.

Perhaps, what would be most needed is government recognition of the differences between indigenous and migrant's practices of shifting cultivation. Until now, such differences have been ignored by decision makers. Moreover, the law that forbids shifting cultivations nationwide (Forest Act no. 1148 of 1904, Revised Forestry Code - Presidential Decree no. 705 of 1975) is applied to both indigenous and non-indigenous people. Perhaps, a positive move forwards would be the issuance of a DENR Administrative Order clarifying the conditions under which indigenous communities may be exempt from the prohibition on shifting cultivation. The order should spell out the distinction between 'degraded areas' (those that are unlikely to revert into forest) and indigenous fallow fields. This entails that indigenous communities should be allowed to use their swidden fields rotationally. Clearly, this is just the opposite of what the DENR foresters are doing: they warn indigenous people not to expand their swiddens and, instead, encourage them to cultivate these continuously until all nutrients are nearly exhausted.

This report suggests that law should move away from coercion and punishment of upland swiddners towards a legislation that provide incentives to indigenous cultivators (such as those of the Amas uplands), to make their swiddens more productive and sustainable. This law should be paralleled by serious efforts to offer technical, credit institutional and other support services, in order to increase and stabilize indigenous farming outputs rather than attempting to stabilizing indigenous people in the lowlands, as it has been proposed by the Mayor of Brooke's Point. In places where *kaingin* practices have become irreversibly unsustainable, specific strategies/alternatives should be developed in close coordination with the client communities, rather than imposing top-down technical solutions.

Another major challenge is to document and evaluate Pala'wan and indigenous upland farming strategies through an integrated and interactive long-term process of research and development. This process should identify best farming practices and understand them in the context in which they are used. Unfortunately, the type of development that is now setting the trend in Palawan is not moving towards these objectives.

It will still require detailed scientific research and much detailed studies to determine where and to what extent the conditions for optimal long fallows are still present in the uplands of Brooke's Point, and anywhere else in Palawan. Such studies require adequate planning, a long-term commitment, and sufficient funding. Unless such in-depth investigations are carried out, *kaingin* will continue to be demonized while indigenous upland dwellers might be subject to unjust harassment and unfair treatment

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### **Acknowledgements**

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## Appendix 1.

### **An account by an informant from sitio Bulokanad (Bgy. Amas) about the arrest of her husband and father, being accused of burning forest for *kaingin***

After burning our *kaingin* (uma), we left the area at around 4:00 pm and we started to dig out some cassava to be cooked for our meal. While peeling the cassava, two policemen arrived to our hut. They were accompanied by a certain Norving Robio. My husband was the first to approach them but the policemen immediately handcuffed him. My father tried to intervene and talked to them but he was also handcuffed. My father asked the policemen to give him a little time to wear his shirt but the policemen did not allow him to do so and then both him and my husband were dragged and brought to the police station in Brooke's Point.

I followed them the next morning and brought the clothes for my father. When I arrived at the police station I saw them cleaning the ground and arranging some logs at the police station. One woman approached me and asked if we really burned our *kaingin*, and I responded in an affirmative way. The woman said to me "Naku kawawa kayo kasi arson ang kaso nyo" or "Your situation is so pitiful because your case is 'arson' (damaging property through fire)". I answered the woman "Why arson, we only burned our *kaingin*?"

Then I talked to the policemen and asked them why my husband and my father were handcuffed in spite of the fact they did not steal nor they killed anybody. One policeman answered back "You have no right to ask explanations". The police added: "I am asking you if you still have other *kaingin* because, if you do, you should refrain from burning them". Then my father said: "we have no other sources of income, how are we going to feed our children, I am the one supporting the family and what will happen to us if we are forbidden from planting our crops". Then the policeman replied, "you are not allowed to give further explanations. We are telling you to refrain from making *kaingin* because it is forbidden".

The policemen said that the reason why my husband and my father were arrested it's because our *uma* (*kaingin*) is near the watersheds, but – in reality – the site where we made *kaingin* is *Labuq*, and it is not part of the forested watersheds. Then fear suddenly overcame me and I begged the policemen to release my husband and my father because they did not cut and burn the forest, but only small trees growing in *bānglay* (fallow land).

I also asked policemen who did order the arrest of my husband and my father and one policeman replied: "this order came from Mayor Feliciano. If she did not ask us to act on this we would have not arrested your father and husband".

Then, in the afternoon (around 5pm.), the police contacted Mayor Feliciano. After that my husband and my father were finally released.

Our farming plots are now empty; we did not plant anything on them for the fear of being arrested. We will have nothing to harvest this year, nothing on which to feed our family. My father is trying to work as a laborer in the lowlands just to get some money for us and for our children to survive. My heart still cries when I recall this story and what has happened to my family.

## Appendix 2. Selected samples of geotagged photographs of *kaingin* fields in the uplands of Bgy. Amas: a selection

In addition to our own visual appraisals/inspection of both *kaingin* fields (*uma*) and fallow land (*bānglay*), the GPS coordinates of such areas overlaid on Google Earth map further confirm that no secondary or primary forest was cleared during the present *kaingin* season and that no portion of the watersheds were converted into agricultural fields. Dark green areas in the Google Earth map indicate the presence of good standing forest. Lighter green areas are those indicating the presence of land under various stages of cultivation and fallow periods.

Load GPS Data and Photos
Edit Photo Data

Pictures

- from dengleg to magatut
- pawpanaw 3
- dengleg settlement
- IMG\_8056
- pawpanaw11
- pawpanaw15
- pawpanaw 1
- IMG\_0001
- IMG\_0005

Remove Picture

Change file names to:

Change

Latitude

 N

Longitude

 E

Altitude

City

Province/State

Country

Description

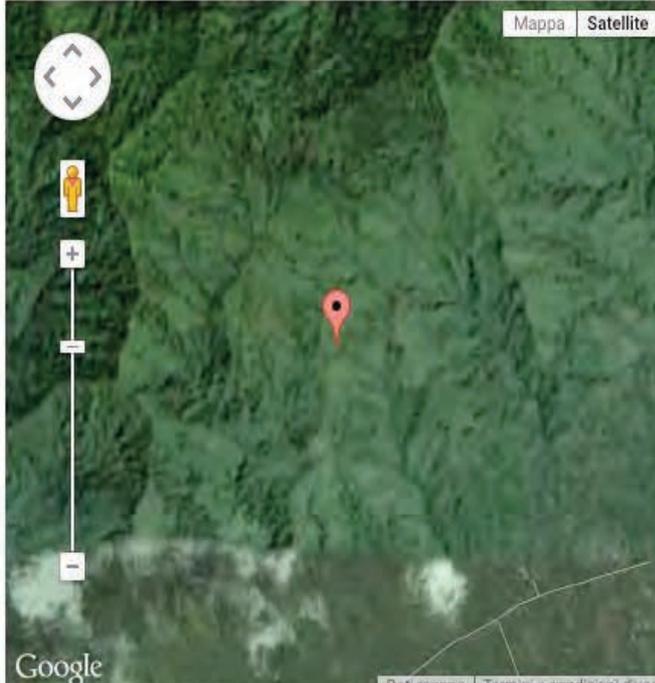
Comments



Full View

IMG\_0005

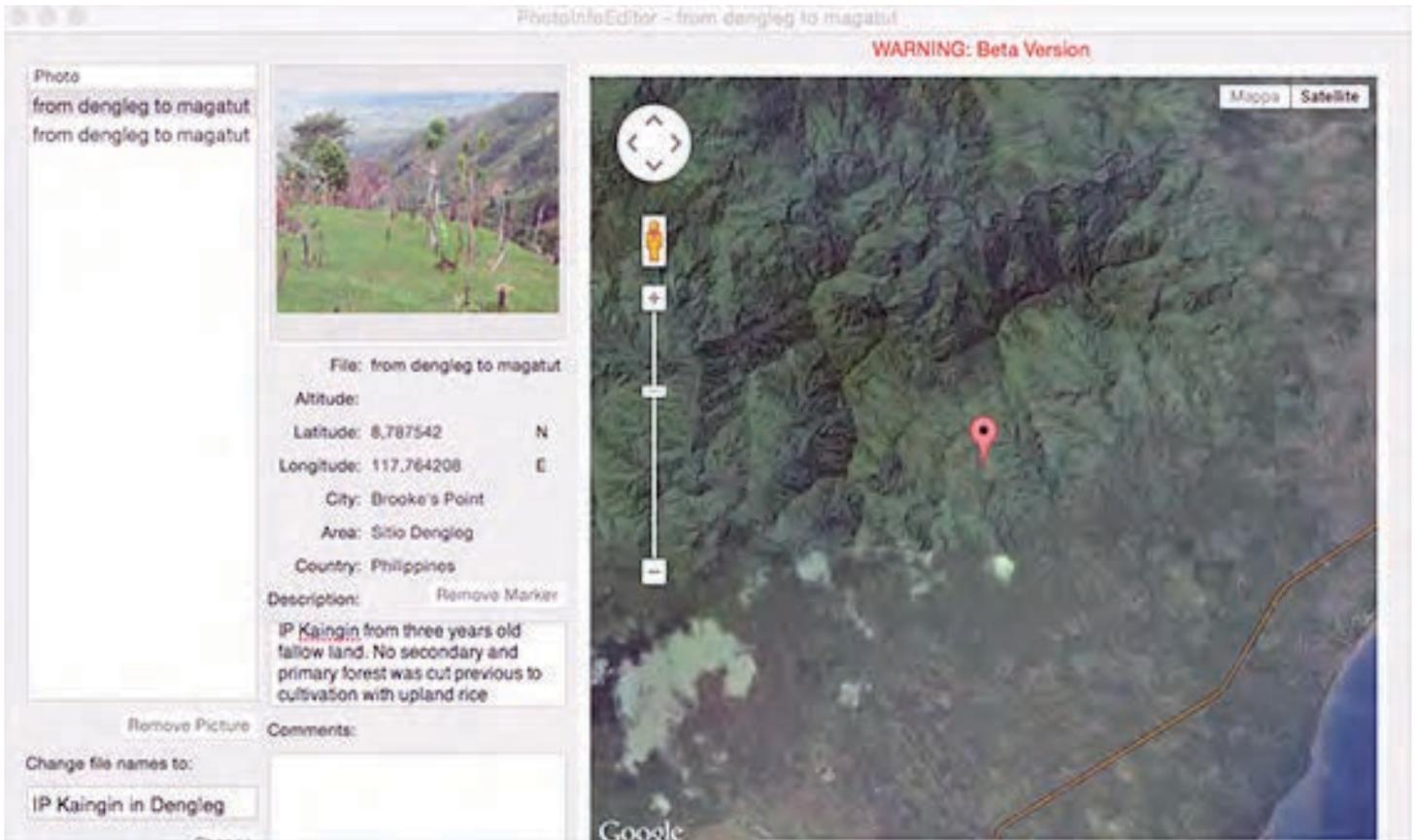
Sat 6 Jun 2015 11:20:25



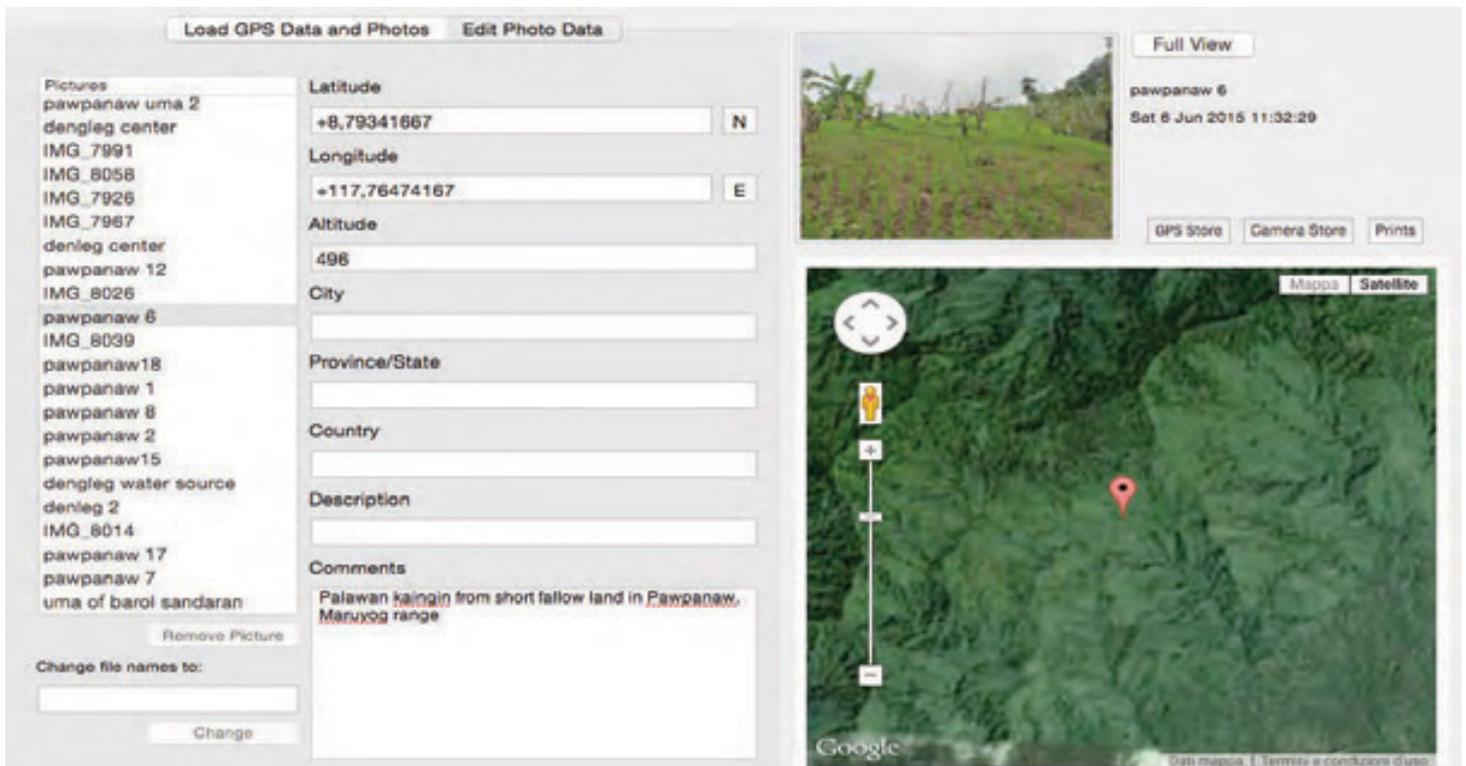
Google

[Dati mappa](#) | [Termini e condizioni d'uso](#)

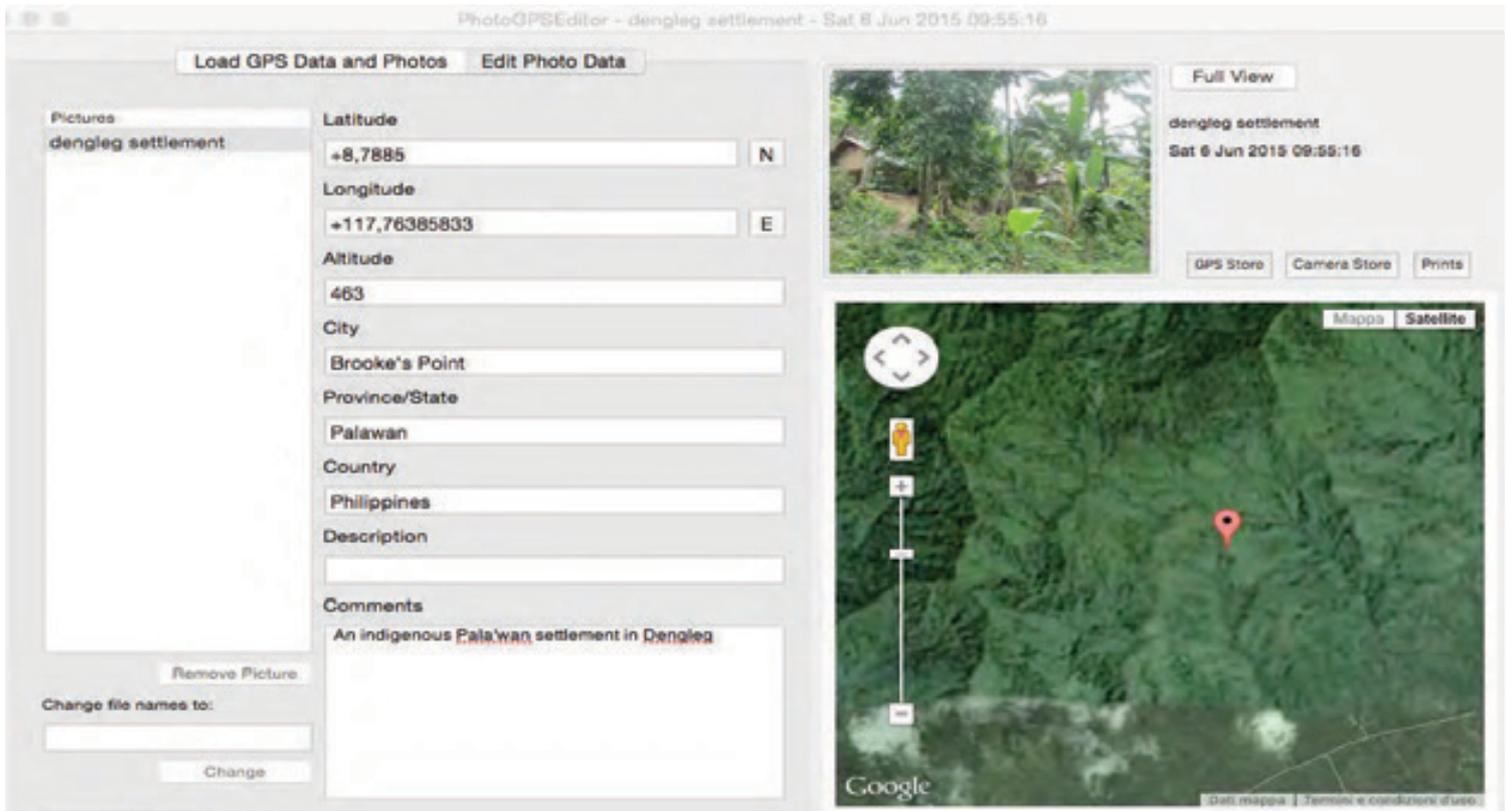
**Upland rice intercropped with maize in upper Dengleg at about 580 meters ASL**



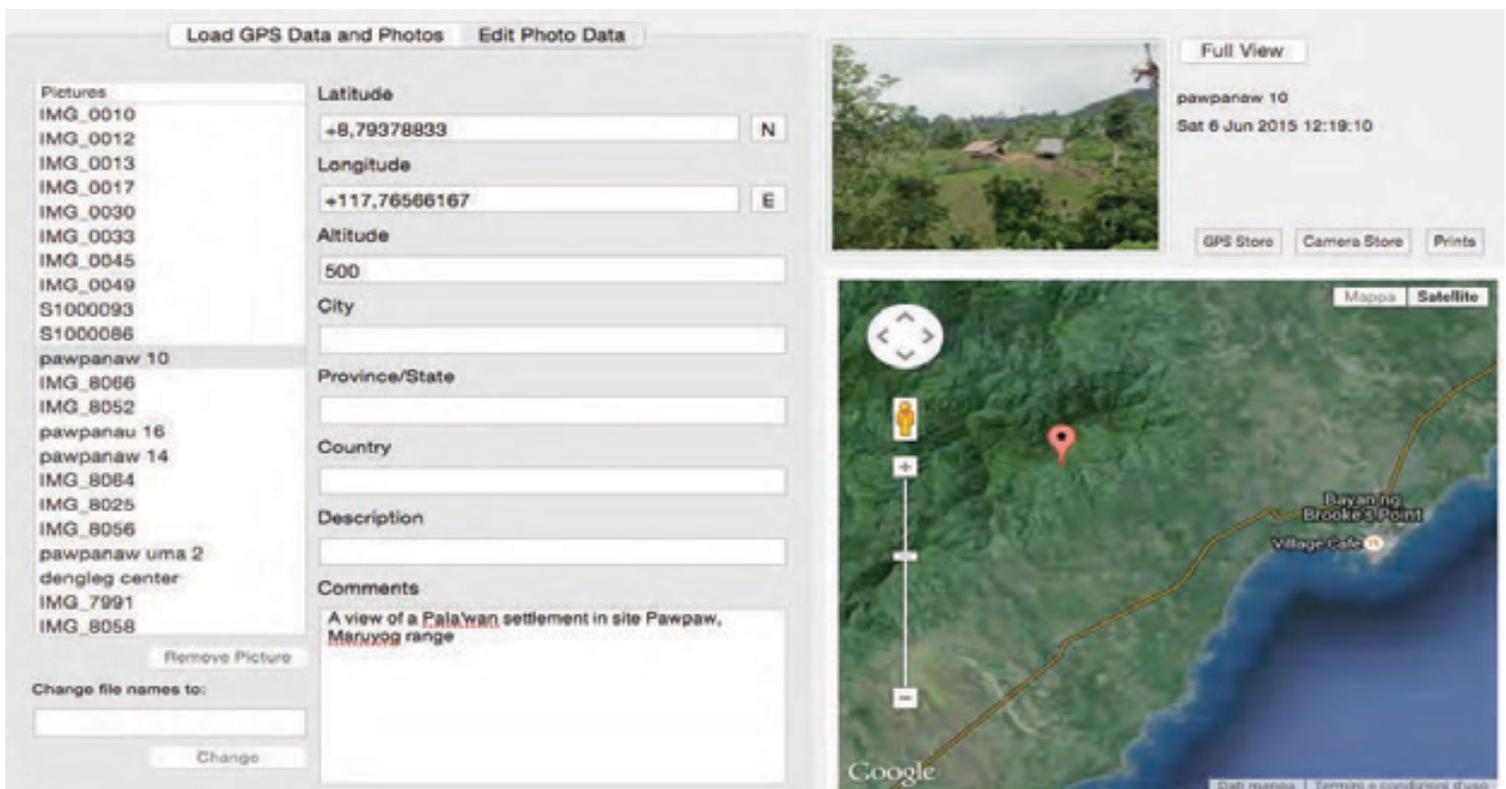
**Kaingin field from three years fallow land in upper Magatot**



**Kaingin from short fallow land in Pawpanaw at about 490 meters ASL**



A Pala'wan settlement in Dengleg area at around 460 meters ASL. Note fruit trees orchards and banana surrounding the huts.



A Pala'wan settlement in sitio Pawpanaw at about 500 meters ASL

Load GPS Data and Photos Edit Photo Data

Pictures  
 pawpanaw 14  
 pawpanaw15  
 IMG\_8064  
 IMG\_7991  
 dengleg center  
 IMG\_8052  
 IMG\_8025  
 pawpanaw11  
 IMG\_7926  
 pawpanaw 3  
 pawpanaw uma  
 pawpanaw 2  
 IMG\_8039  
 IMG\_8056  
 pawpanaw 18  
 IMG\_8066  
 dengleg center  
 pawpanaw 10  
 pawpanaw 6  
 IMG\_7920  
 IMG\_7918  
 IMG\_0084

Remove Picture

Change file names to:

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Latitude  
 +8,78371333 N

Longitude  
 +117,76725167 E

Altitude  
 318

City  
 Brooke's Point

Province/State  
 Province of Palawan

Country  
 Philippines

Description  
 Brooke's Point, Province of Palawan, Philippines

Comments  
 Palawan women cooking rice in site Magatot

Full View

IMG\_0084  
 Sat 6 Jun 2015 07:12:05

GPS Store Camera Store Prints

Mapa Satellite

Mount Mantaling

Bayan ng Brooke's Point

Google

Dati mappa Termini e condizioni d'uso

Magatot settlement at about 300 meters ASL

Load GPS Data and Photos Edit Photo Data

Pictures  
 from dengleg to magatut  
 pawpanaw 3  
 dengleg settlement  
 IMG\_8056  
 pawpanaw11  
 pawpanaw15  
 pawpanaw 1  
 IMG\_0001  
 IMG\_0005  
 IMG\_0010  
 IMG\_0012  
 IMG\_0013  
 IMG\_0017  
 IMG\_0030  
 IMG\_0033

Remove Picture

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Longitude  
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Altitude  
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City  
 Brooke's Point

Province/State  
 Province of Palawan

Country  
 Philippines

Description  
 Brooke's Point, Province of Palawan, Philippines

Comments  
 Malia settlement in Maruyog range

Full View

IMG\_0033  
 Sat 6 Jun 2015 12:12:33

GPS Store Camera Store Prints

Mapa Satellite

Mount Mantaling

Bayan ng Brooke's Point

Google

Dati mappa Termini e condizioni d'uso

A Pala'wan settlement in Limpa at about 590 meters ASL

Load GPS Data and Photos Edit Photo Data

Pictures

- from dengleg to magatut
- pawpanaw 3
- dengleg settlement
- IMG\_8056
- pawpanaw11
- pawpanaw15
- pawpanaw 1
- IMG\_0001
- IMG\_0005
- IMG\_0010

Remove Picture

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Longitude: +117,76026333 E

Altitude: 595

City: Brooke's Point

Province/State: Province of Palawan

Country: Philippines

Description: Brooke's Point, Province of Palawan, Philippines

Comments: Pala'wan kaingin from three years fallow land, one the way between sitio Dengleg and sitio Malia

Full View

IMG\_0010

Sat 6 Jun 2015 11:22:59

GPS Store Camera Store Prints



**A kaingin from a three years fallow land between Dengleg and Limpa**

Load GPS Data and Photos Edit Photo Data

Pictures

- IMG\_8058
- dengleg center
- IMG\_8058
- denleg 2
- pawpanaw 12
- pawpanaw 10
- IMG\_0103
- IMG\_0084
- pawpanaw 6
- denleg center
- IMG\_8039
- uma of barol sandaran
- IMG\_8056
- S1000086
- pawpanaw uma
- denleg 2
- pawpanaw 6
- pawpanaw uma
- IMG\_8052
- pawpanaw 17
- IMG\_0075 copia
- IMG\_0073 copia

Remove Picture

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Longitude: +117,76782 E

Altitude: 645

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Province/State: Province of Palawan

Country: Philippines

Description: Brooke's Point, Province of Palawan, Philippines

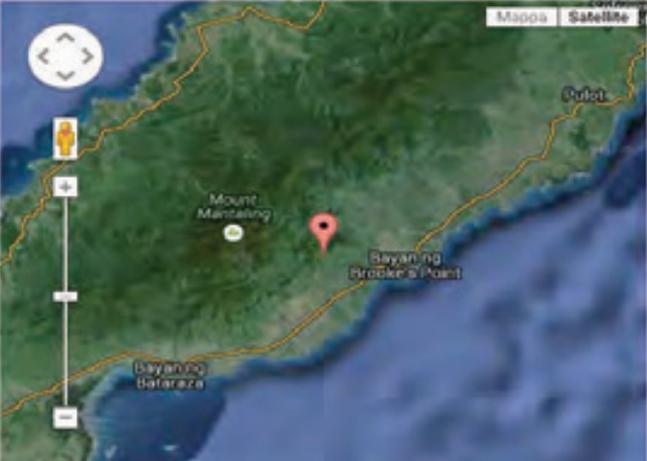
Comments:

Full View

IMG\_0073 copia

Sat 6 Jun 2015 15:59:14

GPS Store Camera Store Prints



**A kaingin from short fallow land in Sambilagaw**



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