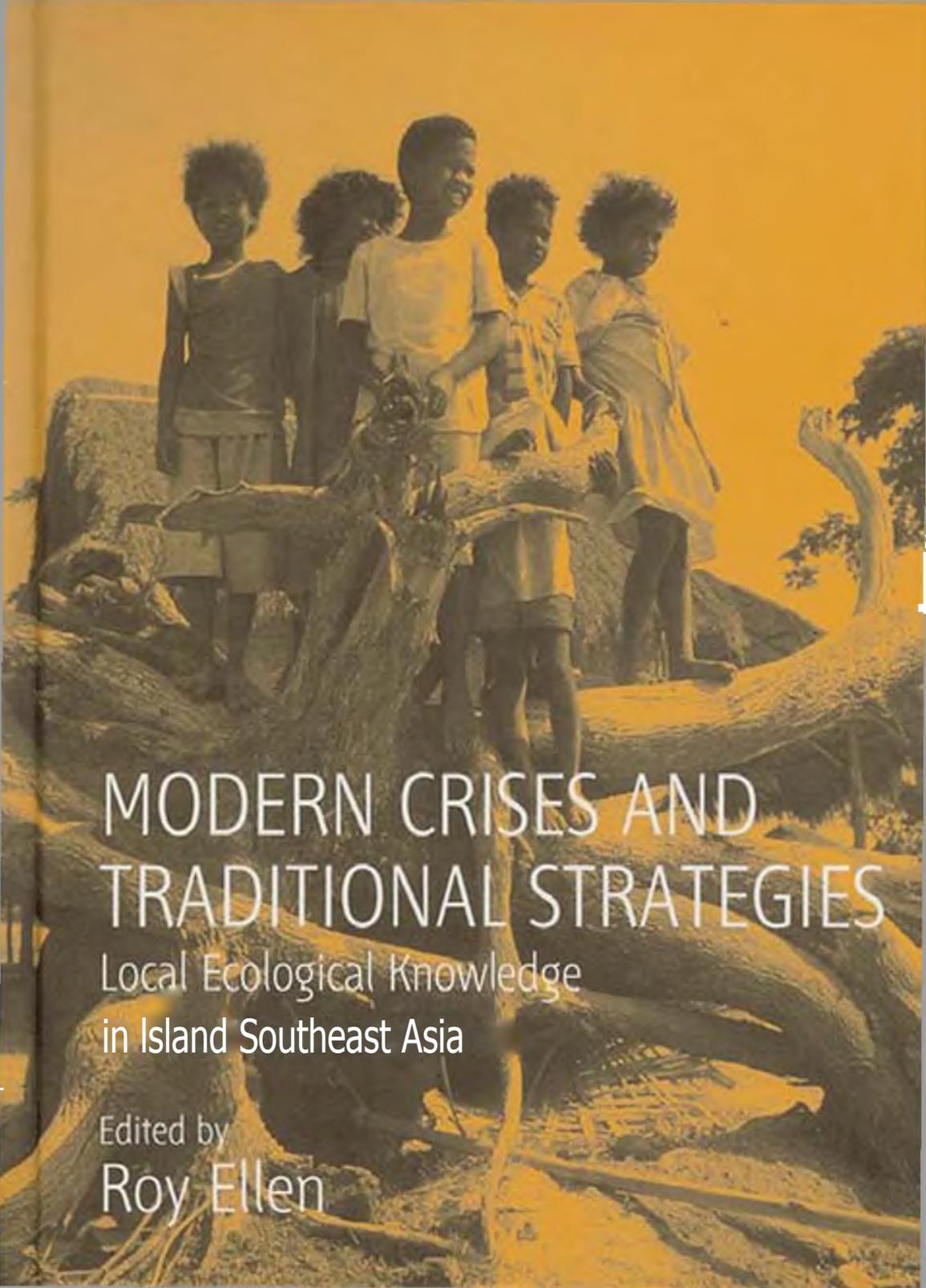


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MODERN CRISES AND
TRADITIONAL STRATEGIES

Local Ecological Knowledge
in Island Southeast Asia

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CHAPTER 8

Cycles of Politics and Cycles of Nature

Permanent Crisis in the Uplands of Palawan

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Introduction

The characteristics of contemporary Batak swiddens (short fallows, minimal maintenance, low yields, little crop diversity) are often perceived by government agencies and non-governmental organizations (NGOs) alike as inherited features of the indigenous farming system. These perceptions are based on misinformation and oversimplifications that have deep historical roots (Thrupp, Hecht and Browder 1997). Indeed, it is difficult to label current Batak swidden practices as 'customary' and distinctively 'indigenous', as the practices have adjusted over a long time to successive socio-political and environmental changes. Such adjustments and transformations accelerated after the fall of the Marcos dictatorship in the Philippines in 1986, and are currently taking place in the context of a complex political scenario that has arisen since then. As a result, rather than a well-defined Batak farming system that reflects the continuity of a unique cultural heritage, what we have is a multiplicity of opportunistic responses, open-ended processes and coping strategies aimed at ensuring everyday survival. My contention is that particular features of contemporary Batak swiddens have developed as micro-responses to government programmes, large-scale demographic pressures, ecological transformations and state policies. The latter, in turn, especially those dealing with forest conservation, have been detrimental to upland communities.

The way in which the Batak adapt and cope with state demands challenges the popular interpretation emphasizing coercion by the national government vis-a-vis resistance by upland dwellers. Certainly, we can no longer accept the idea that local processes of change are simply micro-level manifestations of national and international processes or the outcomes of top-down development programmes (see Bryant, Rigg and Stott 1993: 105; Alejo 2000). Rather, we must take into account the 'multiplicity of voices within development, even if some are more powerful than others' (Grillo 1997: 22; see also Preston 1994; Apthorpe and Gasper 1996). In short, we cannot talk of a 'grand politic' or of a 'hegemonic development discourse' (see Grillo 1997) shaping local events, without taking into account the fact that people's micro-responses are pivotal in shaping state programmes and 'attitudes', as well as in turning development policy and law into actual practices.

This chapter has several related objectives. In the first section, I provide some indication of Batak rice yields and subsistence strategies before the arrival of large numbers of migrants about forty-five years ago. These data are based on verbal accounts that I have recorded from Batak elders. The 1960s were the prelude to a new era of cultural transformations, which continued through the 1970s and led to major farming crises and the loss of both land and landraces. I begin by analysing chronologically a number of events that occurred between 1980 and 2005, and which have led to the collapse of a relatively stable society of foragers and farmers. The changing relations between forest availability, swidden size and fallow periods and the reasons why yields declined per unit of land and labour cannot be understood without seeing the larger picture and assessing the different factors, both external and internal, that have contributed to the transformation of the Batak swidden system into a costly, often unproductive and increasingly 'risky' enterprise. In the final section I examine how national and local politics have had (and continue to have) a crucial bearing on everything happening in and around Batak swiddens. As I shall attempt to demonstrate, the 'cycle of nature' (the seasonal changes taking place in the environment and people's cultural means of coping with them) impinges on and is often inseparable from the 'cycle of politics' (the recurrent ways in which the state manifests itself through its laws and programmes).

The Batak and the Early Crises

The People

The Batak are currently found scattered in the north-central portion of Palawan Island in the Philippines.¹ Eder (1987) estimates their population to have been about 600-700 individuals in 1900, while his complete cen-

sus in 1972 located only 272 with two Batak parents and 374 with one Batak parent (1987: 110). My provisional census in 2005 indicates that there are only 155 individuals with two Batak parents, a decline in the Batak 'core' population of almost 57 per cent within a period of thirty-three years. At the close of the nineteenth century, approximately twenty to fifty Batak families were associated with each of the nine river valleys that made up their territory (Eder 1987).

The present study concerns the Batak community living in the territorial jurisdiction of *barangay*² Tanabag in the north-central portion of the island, and now settled in the village of Kalakuasan. The community consists of twenty-eight families and an overall population of 126 members, of which only sixty-eight individuals have two Batak parents. Kalakuasan is located at about five kilometres from the national road connecting the northern municipalities to Puerto Princesa (the provincial capital city).

Eder, drawing on historical and early ethnographic accounts (Marche 1883; Miller 1905; Venturello 1907; Warren 1964), believes that, by the end of 1800, Batak had mainly a hunting and gathering economy, integrated with other peripheral activities, and 'a case can be made that rice may have been acquired by the Batak in the latter part of the nineteenth century' (Eder 1987: 46).³ Around 1910, during the early period of American control, the government of Palawan asked the Batak to create permanent settlements on the coastal plain. One of them was established near Sumurud (Warren 1964: 30-33) where the Filipino village of San Rafael is presently located (at about fifty-eight kilometres north of Puerto Princesa). In the 1920s the Batak began to participate more extensively in the monetized trade (Warren 1964). The 1930s signal an increase in the number of Cuyonon farmers settling on the main island to farm year-round (Conelly 1983; Eder and Fernandez 19%). Around 1930, Sumurud and other Batak settlements on the coast were declared by the Bureau of Non-Christian Tribes, under American administration, to be reserved for the Batak's exclusive use (see Eder 1987).

1945-1960

During these years, the Tanabag Batak still used lowland areas extensively. The nearby coral reefs and mangroves provided additional sources of protein. According to elders, wild honey was collected and stored for several months to support them during seasonal food shortage. Interviews with Batak elders reveal that, in the past, resin was gathered from tree branches in the high canopy, or collected from the ground (Novellino 1999). The harvesting was carried out sporadically and, according to Batak, resin from the canopy was extracted at long intervals of time (approximately every three to four years). Domestic root crops and upland rice sustained the people during their commercial gathering.

Thus, in contrast to today, the Batak did not contract huge debts with middlemen and patrons.

Batak elders in Tanabag claim that in the 1950s their swiddens were highly productive. Swiddens were cleared from old fallow forest (*lumakad*) and yields were abundant and often lasted until the following harvesting season. Ubad, a Batak in his seventies, recalls that from twenty *Salop* or *ganta* (about 50 kg) of good seeds, one could harvest from fifty to seventy *cavan*, or an equivalent of 2,500 to 3,500 kilograms.⁴ This entails a fifty to seventy fold increase over the seeds planted. McDermott's (2000: 367) research amongst the Batak and Tagbanua of Sitio Kayasan indicates that, according to old-timers, typical 'harvests were forty or more times the volume of seeds'.

While these figures must be treated with caution, they clearly suggest that, before the massive entry of migrants in the 1960s, Batak yields might have been sufficiently high to ensure self-sufficiency for several months. Fields from old fallow forest produced few weeds and never developed into scrub and grassland. Interestingly, elders narrate that, in the 1950s, some of the newly arrived migrants had little to plant and, in order to acquire a sufficient amount of rice seeds, joined the Batak during the harvesting. What becomes evident from these accounts is that, by sharing their rice seeds with the newcomers, the Batak ensured the dispersal of traditional landraces. As I shall discuss later, the acquisition of local landraces by Filipino migrants has yielded favourable outcomes for the Batak. Particularly, it has contributed to the maintenance of genetic diversity at a time when the Batak, because of a government resettlement programme, were constrained from engaging in swidden farming.

It is only after the Second World War that migration of Filipino settlers into the Batak territory registers a significant increase. No road entered Tanabag until 1956 but, during the 1950s, the Filipino government revoked all the Batak reservation decrees, enabling Filipino migrants to settle on indigenous land (Eder 1987:61). In these years, there is an intensification of market demands for NTFPs (especially *Agathis* resin). Under instruction from migrant concessionaries, the Tanabag Batak acquire new lapping techniques.

1960-1980

In the early 1960s, the area of Sumurud was occupied by settlers and this led to major environmental changes. As a result, the Batak retreated into the interior, abandoning their lowland food zones and agricultural improvements. The Batak community of Sumurud split up into two groups. One group settled in Kalakuan (my field site) and another in nearby Magtibagen. These local groups became geographically closer to the new migrant settlements and thus more isolated from the other Batak groups.

As *barrios* and municipalities were established, legal concessions to extract forest resources (*Agathis* resin and rattan) were given to influential politicians. Unauthorized concessionaires also found their way into the forest business. In 1969, Batak and some Tagbanua communities were transferred by force to a resettlement site, where they were trained in wet-rice agricultural techniques and received education, as part of a programme launched by the PANAMIN (a government agency for the welfare of national minorities).

The PANAMIN resettlement programme continued through the early 1970s. During the time spent in the resettlement camp, the Batak were constrained from carrying out their traditional subsistence practices. Meanwhile, in their original villages, antique Chinese jars used in the making of rice wine (*tabad*), as well as old gongs, were stolen by outsiders. Because of this, the *tabad* ceremony was abandoned. It must be pointed out that, according to the Tanabag Batak, this was their most important post-harvest celebration involving the construction of a communal house, the gathering of relatives from other river valleys, musical accompaniment and specialized ritual knowledge. Most probably, this ceremony was acquired from the Tagbanua, a neighbouring indigenous group and, over the years, it was subject to considerable readjustments and syncretism to fit Batak narratives and pre-existing ritual practices.

During their stay at the PANAMIN camp, the community rice granaries were ravaged by pests and local landraces lost. Fortunately, the Batak regained most of them from neighbouring migrants. This episode is recalled by Ubad: 'When we lost our rice seeds because of the PANAMIN, we regained them from the migrants. The varieties we gave them in the 1950s came back to us in the 1970s. This is how we saved our local rice.' Interestingly enough, when the Batak talk about the failure of PANAMIN and their reasons for abandoning the resettlement site, they seldom discuss the impact that the project had on their cultural practices. Rather, they claim that the main reason for leaving the site was a reduction of free *supplayan* (the Batak corruption of the English supply). Because of PANAMIN the Batak were exposed for the first time to a 'dole-out system', and, since then, their assessment of government and non-government programmes has been informed by that very first experience of 'development'.

Throughout the late 1970s external demand for NTFPs grew exponentially and, during these years, Eder (1977a, 1977b, 1978) reports that Batak suffered hunger on a more frequent basis and were chronically undernourished. Moreover, the area between the lowland coastal zone and the present Batak settlement of Kalakuan had become heavily deforested by migrants and logging companies.⁵ This transformation of the landscape not only produced 'spatial disorientation' (Kirsch 2001: 249), but also dislocated memories of the past.

A Chronology of Modern Crises

In this section I provide a chronological assessment of Batak responses to modern crises from the 1980s to the present day. I focus particularly on the period 1996-2005, since these years have had the most dramatic impact on the Batak livelihood and cultural integrity. I first arrived in the Philippines in 1986 and since then have returned to Palawan eleven times, spending about seven years with the local indigenous communities. This has allowed me to witness some of the major crises taking place amongst the Tanabag Batak at first hand, as well as the political changes occurring during the administrations of Aquino, Ramos and Estrada, up to the current presidency of Gloria Macapagal-Harrovo

The 1980s: a General Overview

In 1983, the murder of Ninoy Aquino, Marcos's best-known political opponent, set off a wave of social protest culminating in the so-called 'People Power Revolution' of 1986. Nationwide, these years were characterized by a democratic revival leading to the proliferation of NGOs and people's organizations (POs). More importantly, there was a radical restructuring of the development paradigm and the discourse that accompanied it, reflecting a new humanistic consensus; NGOs were no longer seen as a threat to the elite and bureaucracies, but rather as organizations providing services, especially for the poorest sectors of society (Contreras 2000: 146), and became 'the missionaries of the new [neoliberal] era' (Tandon 1990: 182). International funding agencies had already withdrawn their support for NGO political activities (as during the Marcos dictatorship), and focused instead on socio-economic development, environmental protection and poverty alleviation (see Hilhorst 2003). In these years, the Batak became an ideal target for so-called integrated conservation-development projects (ICDPs), being seen as the epitome of a vanishing Filipino culture to be saved from imminent extinction.

The Tanabag Batak in the Early 1980s

Until the 1970s, contacts with lowlanders could have been interrupted for periods with no great consequences for the stability of the Tanabag Batak. The early 1980s register, instead, an increasing dependency on lowland Filipino society. In these years the gathering of *Agathis* resin, rattan and honey (all male activities) acquired a central role in people's livelihood, and the Batak became increasingly indebted to local middlemen. The participation of male Batak in the market economy had an impact on the complementarity of male and female roles, hitherto characterized by the ability to provide food, childcare responsibility and social recognition. In

turn, 'traditional' female productive activities (tending of swiddens, gathering of wild vegetables, molluscs, fish, etc.) began to lose status when compared with commercial marketing practices, in which only men made decisions (see Eder 1987; Novellino 1999).

In order to obtain cash to purchase basic commodities, the Tanabag Batak also worked as labourers in migrants' swiddens. Demand for wage labour was particularly high at the time when Batak engaged in their own farming activities. As Cadeliña (1985: 6) notes, the Batak 'have to carefully balance their time budget so that their own swidden fields are not neglected'.

In the early 1980s, despite the increasing contacts with outsiders, the Tanabag Batak still enjoyed strong social ties. Between July and October, when wild pig hunting is profitable, the sharing of meat among households is widely practised. All relatives living at a distance of a thirty minutes' walk receive a share of the hunt (Cadeliña 1985). Reciprocity networks are also activated during farming, through the amounts of food given out and received by household during harvest season. Cadeliña (1985: 78) suggests that, during harvesting time, a significant percentage of household rice yield went to other families, leaving only around 20 to 35 per cent of the total harvest for household consumption in the succeeding months. Taking into account the rice given and received, a household granary can supply enough rice for about two months. A sudden decline of stored rice is experienced around four months after harvest. The integration of traditional foraging and farming practices with commercial gathering, wage labour and other options represent the Batak response to gross caloric decline. This coping strategy has the ultimate effect of improving the absolute amount of food production, in terms of caloric output-input ratio but, on the other hand, it appears to be less efficient than traditional subsistence strategies, which included harvesting from other important food zones such as coral reefs and mangroves (see Cadeliña 1985: 119).

The mid- to late 1980s

In 1986 the Batak community was still demonstrating a high degree of social cohesion. They were located in the settlement of Tina, about six hours' walk from the closest Filipino settlement.

In 1987, a logging company reached the upstream settlements of Tina and continued to move further into the interior.⁶ The ancestral territory of the Tanabag Batak was by then criss-crossed by logging roads. In the locations of Kapuyan, Kapisan and Maniksik the Agathis trees on which Batak depended for the gathering of commercial resin were felled. As a result, the Batak lost most of their extractive reserves closer to the coast, and were forced to harvest resin in the far interior. Energy costs of transporting resin

to the coast and of transporting exchanged food commodities back to the village increased to an unprecedented level (Novellino 1997, 1999). To cope with this new crisis, the Batak managed to enter into informal agreements with the logging company truck drivers to ensure the transportation of resin, from the hauling point in Tina to the coast. By the late 1980s information and technological transfer between the Batak and the migrants had proceeded in two ways. For instance, Batak had acquired from the latter the techniques for constructing muzzle-loading guns, and explosive devices for catching wild pigs (see McDermott 2000: 114). As a result, the bow-and-arrow complex was replaced entirely. On the other hand, migrants had learned Batak techniques for harvesting resin and wild honey, and, more importantly, had access to the secret paths leading to remote extractive reserves where *Agathis* trees were still abundant (Novellino 1999, 2003c). Overall, Batak pathways no longer offered a safe retreat into the interior but became the means by which outsiders penetrated the uplands. As the old pathways were being 'discovered', Batak continued to open new ones to access untapped forest resources in the more isolated fringes of their territory.

Batak Swiddens in the 1980s

The Tanabag Batak farming and mobility patterns that I observed in 1986/87 were similar to those described by Cadeliña in 1981/82. Between January and March, during the dry season, the people camped along the river edges (a practice locally known as *da-us*). During this period, women devoted much time to hook-and-line fishing, while men set up traps for river eels, and most community members participated in *lu'gu* practices (stunning fish with the poisonous *magarrawa'* vine). At the beginning of March, the people performed the *lambay* ceremony, before moving again to their swidden locations to plant rice until the arrival of the first rain in April.⁷

Soil samples taken by Cadeliña (1985: 25) from Batak unfarmed forest in the hilltops, slopes and valleys indicate that, in 1981, Batak swiddens cut from secondary forest were successfully regaining their natural fertility after a period of seven to eighteen years on average. Fields were cultivated for one year only. Cadeliña's descriptions confirm my own observation in 1987, according to which Batak rice fields were intercropped with various cultivars, some of which become productive after rice harvest. *Colocasia esculenta*, *Dioscorea* spp., cassava (*Manihot esculenta*) and various cucurbits were planted in the swiddens. *Colocasia*, *Dioscorea* and *kalabasa* (*Cucurbita maxima*), as well as *tuya* (*Zingiber officinale*), would thrive particularly well at the base of stumps, dead logs and fallen tree branches, where soil has a good moisture content and is rich in ashes. Root crops were either planted after undergrowth clearing, before

burning the field (a practice locally known as *pagara'*) or after the burning of the dead vegetation (a technique called *padalug*). Cassava was planted around the margins of the field and in the swiddens, about twenty days after rice planting. Maize and upland rice were planted almost at the same time, the former maturing in about three months. Poaceae such as *Andropogon sorghum* and *Sorghum vulgare* were planted concurrently with rice, forming individual patches across the agricultural field or broken lines around its edges. *Setaria italica* (Italian millet) was sown at least one week before rice. Beans and squash were harvested in the month of November until March. A few sugar canes (*Saccharum officinarum*) were planted at the edge of the rice field or around the swidden house. Sweet potatoes were usually planted in the centre of the rice field or, most commonly, were introduced into the swidden after re-clearing it in October. This practice is locally known as *dab-dab*. It must be pointed out that *dab-dab* is particularly successful in those areas cut from virgin or old fallow forest, which are less susceptible to weeds. Therefore, after planting, sweet potatoes require minimal maintenance. These tubers are also harvested in December, when tree cutting begins, and represent an essential caloric intake when men are busy cutting trees for the next planting season (see Cadeliña 1985: 69). Coconut palms, bananas, fruit trees such as papaya, leguminous plants such as *Cajanus cajan*, and *Capsicum frutescens* were also grown in suitable locations inside or around the field, or in the immediate vicinity of the swidden house.

In the mid-1980s, a considerable diversity of traditional rice landraces and other crops could be found in people's swiddens. At that time, about eleven varieties of sweet potatoes, nine of *C. esculenta*, seven of cassava and of domestic *Dioscorea*, three types of maize and two types of millet and sorghum could be found in the community. In addition to this, the people still planted at least nine different aromatic plants used by women for personal beautification, most of these belonging to the Lamiaceae family.

Cadeliña's findings indicate that, in the early 1980s, a well-maintained Batak field of about one hectare could produce a yield comparable to that proposed in the green revolution with its high technological input requirements (1985:125). Cadeliña estimated that, by pooling labour from relatives, a household, on the average, could clear around one-third of a hectare for a swidden plot, and that a one-hectare Batak swidden, under various levels of maintenance, produced around 3,900 kilograms of husked rice. A field with excellent maintenance (weeds completely removed) produced almost 5,000 kilograms, while a moderately maintained one (between 30 to 50 per cent of the field weeded) produced around 4,000 kilograms. A very poorly maintained field (below 30 per cent of the field weeded) made around 2,000 kilograms.⁸ Also, Cadeliña pointed out that one of the critical factors for a high yield was a careful

weeding schedule, since the stages of growth of local rice landraces are rather short (between 110 and 120 days).

Batak swidden practices in the 1980s were still characterized by an intensive exchange of labour and resources. Cadeliña observed that swiddens were never planted simultaneously and therefore were not harvested at the same time, making reciprocal food sharing pragmatically meaningful. While some households waited for their rice plants to mature, the harvesting households provided those still waiting with a much needed rice supply until their rice had been harvested. 'Planting at different times seems to constitute a technological response to their anticipated cyclical caloric stress and to the stress they have just been through' (Cadeliña 1985: 79). In conclusion, Cadeliña (1985: 32) found that 'under their present swidden system, there is no fear of forest disintegration if outside pressures are kept to the minimum'.

The 1990s: a General Overview

The 1990s were the years of government measures for environmental protection and path-breaking legislation to safeguard indigenous rights to land and resources (Novellino 1999, 2000a, 2000b, in press). The notoriety of politicians who were no stranger to legging was now attached to green principles. Environmentalists, policymakers and even many businessmen all claimed to embrace the 'sustainable development' paradigm (Bello 2004). Ironically, this is exactly the time when Batak experienced the worse food shortage in living memory, high infant mortality, increasing demographic decline and great uncertainty.

When Fidel Ramos took over the presidency in 1992, the new goal of the Department of Environment and Natural Resources (DENR) was to reforest 600,000 hectares in five years. What, however, is not clear is how much of the target areas consisted of indigenous swiddens under fallow. There were no data on this, mainly because the matter was of no interest to government agencies or to NGOs and, certainly, it was absolutely irrelevant to financing institutions. In the same years, the replacement of shifting cultivation with alternative livelihood practices became one of the cornerstones of DENR community forestry programmes. On 15 January 1993, the DENR enacted Special Order No. 25 for the creation of a task force responsible for identifying, delineating and recognizing ancestral lands and domain claims. Subsequently, the Indigenous Peoples' Rights Act (IPRA) was passed by the Congress of the Philippines (1997) with the primary objective of recognizing, protecting and promoting the rights of indigenous cultural communities.⁹

In 1998 Estrada was elected president, powerful businessmen, including loggers, supporting his electoral campaign. Once in office, Estrada repaid them by issuing timber licences and contracts. The appointment of

Antonio Cerilles (a well-known logging tycoon) as DENR secretary led to the freezing of all Community Ancestral Domain Claim (CADC) applications under IPRA, including that submitted by the Tanabag Batak.

The Batak Encounter with the NGOs

The early 1990s signalled the first encounter between the Tanabag Batak and Haribon-Palawan, a local NGO. Between 1991 and 1992 the P-BIRD (Palawan-Batak Integrated Rural Development) was implemented in Tanabag. One of the project's goals was to promote food self-sufficiency by maximizing crop production through the implementation of backyard communal gardening an irrigation system, pilot wet-rice plots and sloping agricultural techniques. Community members were organized into groups to build contour lines, but not all participants contributed with the same amount of labour. People took part in the project on the condition that they would be compensated with a daily allowance of rice. The Batak complain that rice provisions were insufficient, and that the time invested in terracing did not allow them to accomplish their traditional swidden farming. Furthermore, there was no clear agreement on who would be in charge of the maintenance of the future terraces or how yields would be divided amongst households. At the end, the Batak decided to quit, and the contour lines were never completed.

More Threats to Batak Swiddens

In 1994, a ban against shifting cultivation was enforced by the city government of Puerto Princesa (Palawan).¹⁰ Soon, the prohibition placed an insupportable burden on the forest. In fact, to compensate for the loss of agricultural products, indigenous peoples were forced to over-extract their own resources (e.g. *Agathis* tree resin, rattan and honey). While rice yields dropped to an unprecedented level, rice consumption increased. In fact, the Tanabag Batak needed more rice now, to support them during their gathering expeditions for NTFPs. Due to the prohibition, slashing and clearing activities were mainly limited to those areas covered with bushes and wild grasses. As a result, weed growth became vigorous. During the years following the ban, several local landraces of upland rice disappeared. Also the production of root crops decreased dramatically.

ICDPs: Paddy Rice Again

In 1994, the Haribon-Palawan made a second attempt to implement an integrated conservation-development project amongst the Tanabag Batak. This was financed through the technical assistance of the World

Conservation Union (IUCN). In 1995, the Batak were encouraged to develop two hectares of lowland rice. However, according to community members, the soil lacked sufficient water retention, and was inadequate for paddy cultivation. Paddy rice development and improvement of *kaingin* (swidden agriculture) were not included in the initial project proposal, but were nevertheless implemented. In 1997, the consultant in charge of the technical evaluation wrote: 'some of these activities (paddy rice development) were not requested by the beneficiaries but were strongly suggested by the project. It is not surprising that the introduction of the two paddy rice plots failed.' This was also 'because the technology is not appropriate to the Batak (motor pumps ... use of fertilizers and pesticides, use of oxen, etc.)' (Bech 1997: 13).

It is depressing to recognize that the approach of project proponents in the 1990s was not much different from that of PANAMIN during the 1970s. In the Haribon/IUCN Final Project Report, we learn that one of the project's objectives was to 'shift from *kaingin* to sustainable upland agriculture' and to 'plant rattan, bamboo, and other native and exotic tree species in and near village settlements and shifting cultivation fallows' (Haribon-Palawan and IUCN 1996: 23). There are several problems with this approach, which does nothing but rehearse what the DENR had done for years. In fact, the reforestation of indigenous fallow fields forced local communities either to open up more forest land or to clear areas of shrubby bushes and weeds, which will automatically degrade into barren grasslands.

El Niño

An El Niño event ravaged Palawan island between March 1998 and December/January 1999, affecting the Batak in a multitude of ways: (1) cassava plants grew in height but produced small tubers or none at all; (2) upland rice production dropped dramatically; (3) wild trees and banana bore little or no fruit; hence also the population of game animals (e.g. boars and monkeys) was affected; and (4) pollen-producing vines and trees did not bear flowers, and honey production collapsed. Because of starvation, Batak body resistance to disease was low, and gastro-enteritis decimated the infant population.

While agricultural production continued to decline, the production of *Agathis* resin increased. I am told that, during El Niño, indigenous gatherers were able to harvest more resin because of dry weather conditions. In fact, resin production decreased during the wet season, when the rain diluted and washed away the exudate from tree trunks. The dry weather also enhanced the collection of rattan canes. According to the Batak, tree trunks and vines were less slippery, and could be climbed more easily to reach the terminal part of the rattan palms.

La Niña

La Niña immediately followed El Niño, and its impact was felt until late April 1999. Together with *Agathis* resin, rattan gathering also became problematic. Because of rain, the gatherers were unable to dry rattan lengths. The latter were damaged by fungus and thus could not be marketed. Moreover, according to Batak, the flood washed away the most common species of edible river shells and fish, and this had an impact on household diet.

During the same period Palawan was hit by windstorms, which damaged cassava and banana plants. The transition from El Niño to La Niña was characterized by the outbreak of intestinal diseases and influenza. Because of the endless rain, the people succeeded in burning only some portions of their swiddens and the planting schedule was delayed for a month. Root crops such as *ubi* (*Dioscorea alata*) and *amias* (*C. esculenta*) became rotten in the ground. Because of starvation, most of the upland rice fields were harvested prematurely to make *tanck*. *Tanck* is a way of processing the unripe newly harvested rice (*bagung' paray*). The *paray* (rice in the husk) is first boiled, placed on a rattan mat, and then dried under the sun. This traditional way of processing immature rice seeds is a way of obtaining immediate relief against hunger, but it also reduces the potential productivity of rice fields, since immature weigh less than mature seeds.

Reduced Mobility: Cassava Continues to Decline

Around 1997/98, the Batak were persuaded by the local government to come down from their upland location and move closer to the coast, in the location of Kalakuanan (less than 1.5 hours' walk from the seashore). In Kalakuanan, Batak attempts to engage in domestic home gardening were frustrated by the presence of stray pigs owned by a Filipino neighbour. The construction of fences is labour-intensive, and the Batak had insufficient time and resources to invest in this activity. Being unable to plant root crops, some Batak decided to raise piglets instead. According to a verbal agreement with the piglets' owners (a Filipino migrant), the Batak would be entitled to receive one piglet when the animals had given birth. Ultimately, because the Batak had insufficient fodder, they were also forced to leave their pigs to roam around. As a result, no one dared plant cassava in Kalakuanan.

Rice Ceremonies under Threat

In the late 1990s the Batak *lambay* ceremony began to be exploited by the local government. In March 1998 Batak families were asked by the authorities to join the Puerto Princesa city festival, and to perform traditional

dances for tourists and visitors. The festivity coincided with the beginning of the blooming of the *Banebegan* (*Pterocymbium tinctorium*) flowers. This was the time when the Batak were beginning ritual activities in connection with the *lambay*. The latter is an annual event involving shamans and the whole community in prayers for a successful honey season and an abundant rice harvest. Because of the pressing requests from the city government, Batak were forced to neglect their own ceremonial activities to attend the city festival. When the Batak returned to their community they had no food for the *lambay*. Ultimately, they were left with no alternative but to request the mayor's assistance. This is how Pekto (a Batak in his mid-forties) described the situation: "Today the rice we eat at the *lambay* comes from the city government. Before we had enough rice from our fields. We were hunting during the two weeks preceding the ceremony, to ensure that we had sufficient meat. Today, we are asked by the government to dance for the tourists. So we cannot make good plans for our *lambay*'

'Slash or Not to Slash': the Notion of Dati Kaingin and the Populist View'

In the late 1990s the discourse on indigenous land rights became totally merged with and indivisible from that of biodiversity conservation. Environmental organizations tended to support indigenous claims over their ancestral lands because they perceived it as a means of achieving environmental protection. However, as the DENR argued, indigenous claims over land did not entail the right to cut trees, but only the right to protect them.

The inherent ambiguity of DENR towards indigenous people was clearly visible in the notion of *dati kaingin* (literally 'old swidden'), which, from a DENR perspective, referred to swiddens without tree cover and that had been used repeatedly over the years. DENR officials in Palawan insisted that present swiddens could not be expanded, and that slash-and-bum farming was allowed only in *dati kaingin*. This view was confirmed by 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.'

Interestingly enough, the NGOs' take on this was not much different. Thus, for Attorney Robert Chan of ELAC (Environmental Legal Assistance Center).

We embrace the populist view. This is in line with the DENR view that *kaingin* will be allowed only in those areas that are not classified as forest (not even secondary forest). In short to make *kaingin* in secondary forest is not

allowed. The populist view of conservation is one that allows tribal people to have their rights but not totally or, at least, not in the way they would like to. From our point of view burning eradicates everything, be it old growth or secondary growth.

Of course, indigenous views on these matters were diametrically opposed to those of the NGOs and DENR. For Elisio, a Batak in his forties:

The coastal forest is forever gone. The migrants have substituted forest trees with other plants (cashew, mango, etc.). But for us, this is not a good idea. When we make a swidden, we like the forest to grow back, because we depend on it. If you walk in our fields under fallow (*lumun*) you'll see a lot of plants. The foresters call them weeds. In reality, many of these 'weeds' are the seedlings of wild trees. As you can see, the forest is growing back.

The anthropogenic influence on the composition of old forest has been well documented (e.g. Fairhead and Leach 1998). And yet local environmentalists in Palawan seemed to have limited understanding of how fire and fallow periods contribute to the creation of highly diverse and biologically valuable ecosystems with 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 Batak 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 inventories conducted in Palawan by McDermott (1994).

Batak Swiddens in the 1990s

Around the late 1990s, several members of the Tanabag Batak complained that their fields were now *maniwang* (thin), in the sense of being infertile, with poor yields and some fields producing less than 400 kilograms per hectare. I did not measure the amount of rice harvested in each field and therefore I am unable to provide an accurate estimate of the average rice yield during these years. I rely, instead, on the data collected by Melanie McDermott (2000) in the neighbouring community of Kayasan. This settlement can be reached in about eight to ten hours walking southwards from the Tanabag river valley, and it is inhabited by a mixed population of Batak and Tagbanua, who have also been affected by the city government ban on shifting cultivation. In Kayasan, McDermott has calculated an average rice yield of the order of 615 kilograms per hectare, equivalent to an eighteenfold increase over the seed planted (2000: 367). This is significantly lower than estimates provided by elders in both Kayasan and Tanabag, who claim that typical harvests, before the massive arrival of

migrants in the early 1960s, were forty to sixty or more times the volume of seed. This suggests that between the 1960s and 1990s indigenous rice yields have dropped by at least 50 per cent, and probably more.

Ubad (the oldest Batak in Tanabag) remembers that fields were once left to fallow for fifteen to eighteen years. 'Today, because of government restrictions, the people clear their swiddens again after three to five years, when trees have not even reached the size of a leg. When you burn them, few ashes are produced - not enough to make your rice healthy'. A similar situation was observed by McDermott (2000: 357) during the late 1990s in Kayasan. She observed eight indigenous farmers making swiddens in fallows that were only two or three years old.

Overall, it would appear that increasing Batak involvement in the cash economy and continuous dealings with government authorities and with other external agents had badly affected their internal cohesion and solidarity networks. Compared with the mid-1980s, reciprocal labour exchange in rice planting and harvesting was now confined to a more limited pool of close kin and rarely involved the whole network of relatives and fellow villagers. The decline of collective harvesting and planting was also justified by the poor yields limiting the quantity of harvested rice that a household could give and receive in exchange for labour. This situation was quite different from that described by Cadeliña (1985: 79) in the early 1980s when harvesting households provided those who were waiting with much needed rice until their turn came. At that time, rice exchanges constituted a Batak coping mechanism for cyclical food fluctuations. Today, these exchanges occur less frequently and are on a very small scale. As a result, compared with the 1980s, the people face more severe caloric stress, especially during the pre-harvest season.

Because old fallow forest (*lumakad*) was rarely cut, the practice of *dab-dab* (the planting of root crops in re-cleared swidden after rice harvest) was also adversely affected. This was because short-fallow fields are too poor to sustain a healthy second crop. Unsuccessful *dab-dab* practices also contributed to the progressive loss of local varieties of sweet potatoes. Also *C. esculenta* is now rarely planted, because it does not grow well in short-fallow land.

Another reason for the collapse of root-crop production must be attributed to the Batak switch towards a more sedentary existence. Because of government demands, Batak occupation of upland huts generally lasts only until October, when rice harvesting is completed. After that, root crops are left unguarded and thus they become vulnerable to the attacks of wild pigs. Compared with the mid-1980s, cassava production in the 1990s was very low, and could no longer support people during the hungry months. Batak had little incentive to develop root-crop cultivation in the interior (because of wild pigs), as well as around their permanent settlement (because of stray pigs). Since root-crop production was shrinking,

Batak favoured only those varieties that gave the highest yields in the shortest possible time. Root-crop cultivation was now focused on the *madali* (fast) varieties of cassava (e.g. *dulaw* and *samar*) and sweet potatoes (e.g. *cuarcula dias tatlo buwan* and *camote luzun*). As a result, the old *mabuhai* (long-duration) varieties were planted less frequently or replaced with improved ones.

The New Century: a General Overview

Events since the year 2000 indicate that devolution and the socio-economic development advocated during the 1990s have not brought the expected changes. Evidence shows that decentralization of central state functions has taken place in the absence of a receptive and genuinely reformist periphery. According to Donna-Zapa Gasgonia, a leading environmental lawyer, devolution has not succeeded because the central government has only devolved mandates and responsibilities to local government units (LGUs) but not the financial and technical resources to fulfil them. As a result, important decisions are left in the hands of local government agencies, whose staff are badly trained. In the spirit of devolution, the Tanabag Batak have been asked to settle down closer to the coast for the purpose of building a better interaction with the local authorities. However, as we have seen, this has added further stress to their livelihood practices. Too often, the people are requested to take part in official meetings and seminars in the capital city, but have no budget to cover travel costs and to support families during their absence.

The implementation of innovative legislation from which the Batak could benefit has also been blocked by vested interests in Congress and politicians who are unwilling to shift towards a development policy geared towards the interest of the poor (see Vitug 2000). Not only are Batak disempowered by a bad implementation of the law, it is the law itself that is weakened by those agencies responsible for its implementation. This is exactly the case with the National Commission on Indigenous Peoples (NCIP), i.e. the national body mandated to implement IPRA (the Indigenous Peoples' Rights Act). Often, NGOs in Palawan have accused the NCIP of being a tool for protecting the interests of politicians and private enterprises rather than those of the indigenous peoples.

Late in 2000, President Estrada's mandate was interrupted by his impeachment, followed by massive popular protest. He stepped down in January 2001 and was replaced by Gloria Macapagal-Harroyo. But these events seem to have had little impact on indigenous and environmental issues. Indeed, Macapagal-Harroyo reaffirmed a commitment to trade liberalization under the auspices of the World Trade Organization (WTO), the Association of Southeast Asia Nations (ASEAN) and the Asia-Pacific Economic Cooperation (APEC). Furthermore, she fully

supported the mining industry and the establishment of a hydrogen sulphide production plant and limestone quarrying operations by Rio Tuba Nickel Mining Corporation (RTNMC)¹¹ in the southern tip of Palawan. This is having disastrous consequences for the coastal environment and for the livelihood and health of local farmers and fishermen. Recently, Ms Arroyo has fought for political survival amid accusations that she rigged the May 2004 presidential election.

'Foundation Day': a New Interference in the Batak Swidden Cycle

By the year 2000, monetization and the breakdown of traditional reciprocity had reached such an extent that it was virtually impossible to see a Batak sharing wild pig meat with his neighbours. Meat was sold to the coastal restaurant, as well as to fellow villagers. Overall, the years 2000-3 have been characterized by social disorientation, decreasing reliance on community leaders and shamans and the growth of household-based responses to crisis. The deterioration of Batak social fabric is matched by increasing disenchantment with legislation, the state and the work of NGOs.

Decreasing mobility is also coupled by an intensification of government control over community affairs. An instance of this is the so-called 'Foundation Day', a village-based celebration lasting three days. The *barangay* authorities expect the Batak to provide free labour (construction of benches and shade shelters), resources (rice, meat, etc.) and other amenities to entertain guests from neighbouring villages. This entails several days spent in preparatory activities, at a time when households are completing the planting of their rice fields. According to the Batak, the customary deadline for planting rice is determined by the alignment and position of three star groups: *Murupuru* (the Pleiades), *Se'ang it baluy* (the stars at the back of Taurus's head with Aldebaran as the star of highest magnitude) and *Balatik* (the belt of Orion). Because of the Foundation Day, some households are unable to accomplish the planting on time. The Batak claim that, if rice is planted after the disappearance of *Murupuru* from the sky, yields will be poor.

Batak Responses to Unpredictable Weather Patterns

In 2000, due to excessive rain, Batak were able to burn only small portions of their swiddens. In May, the continuous heat did serious damage to the young rice plants. The final outcome was crop failure. To cope with the new food crisis, the Batak utilized, for the first time, alternative livelihood strategies such as the collection and sale of small trees to be used in charcoal-making (ten pieces for 100 pesos, less than US\$2). Some Batak also became skilful in charcoal-making, and were able to market their product

to Filipino lowlanders. In the same year, gravel for the expansion and paving of the northern stretch of the national road was being extracted from Tanabag river. The Batak were opposed to mining operations and apprehensive about the consequences that these may have. On the other hand, they were willing to take advantage of the working opportunities offered by the company, such as guarding bulldozers at night.

In the early 2000s, the drastic reduction of agricultural production, the sudden collapse of copra prices in the national and international market and the economic uncertainties following the Asian financial crisis forced the non-indigenous population to increase collection of NTFPs. Between 2001 and 2002 an increasing number of illegal gatherers entered the area managed by the Tanabag Batak under a Community Based Forest Management Agreement (CBFMA).¹² The Batak complained about destructive tapping techniques employed by Filipino gatherers, which involved cuts exceeding the thickness of the bark, which resulted in destruction of the cambium and a halt in tree growth (Callo 1995; Novellino 1999), and exposed the tree to attacks from termites and fungi. Due to unsustainable tapping regimes many *Agathis* trees became unproductive and died. As a result, the most important source of Batak cash income (*Agathis* resin) was depleted. All this was happening at a time when agricultural production had collapsed after years of city government prohibition on swidden cultivation.

In the year 2004-5 the pressure on resin extraction by non-indigenous gatherers decreased. Probably, this was due to the rising of new job opportunities at the *barangay* level, such as the construction of a new telephone line, contracts for road maintenance, etc. Thus, in the absence of strong competition over *Agathis* trees, Batak were able to restore more sustainable tapping regimes, and resin production registered an increase.

Insurgency and the Abandonment of Swiddens

State attempts to crush communist guerrilla activity in Palawan is another example of how political events continued to impact on Batak subsistence strategies. In 2001-2, the Batak were requested by the military to refrain from visiting their upland fields planted with root crops. The military feared that Batak presence in the hinterland might encourage members of the Maoist New Peoples' Army (NPA) to establish their camps in the forest and to collect from Batak the so-called 'revolutionary taxes' (a tribute in cash or kind). Batak food shortage was exacerbated by other restrictions imposed by the military. For instance, the people were not allowed to keep or construct home-made rifles used for hunting wild pigs. The military also feared that guerrillas might recruit community members to purchase rice for them. As a result, Batak were forbidden to buy rice in a quantity exceeding their daily needs. This entailed Batak having to take

more frequent trips to the coast, thus switching their time and energy to non-productive activity. Again, in November 2003, the Batak uplands became the target of military operations and subsistence activity was curtailed for two months.

Farming Innovations and the Acquisition of Tagad

During critical periods of food shortage, the Batak activate alternative livelihood strategies that are part of a 'covert repertoire' of memorized options. For decades, Batak have been receptive to new technologies introduced by migrants, e.g. charcoal-making and *tagad* (planting sticks with a flat metal blades). Such technologies have not been used by everyone, but only by some individuals at particular times. Only very recently have more Batak made use of this 'stored knowledge'. For instance, they claim that the flat metal blade of the *tagad* facilitates the planting process and may ensure better harvesting outcomes, because: (1) it produces only thin cuts rather than circular holes (like the traditional dibble stick), preventing birds from digging the seeds out; (2) after placing the seeds in the cut there is no need to cover the hole with soil; and (3) it is lighter and more manageable than the heavy Batak dibble stick, allowing even children to use it.

In this context we should note that traditional Batak rice planting is carried out by groups of men and women working together synchronously. Men strike the soil with the dibble stick, pointed at one end, and women place the seeds into the holes, covering these with a thin layer of soil, using the right or left foot. But why, if the Batak have known about the advantages of the *tagad* for many years, has this technology only become widespread since 2000? The answer must be found in the decline of larger Batak reciprocal labour parties at rice planting time, and of collective activity in general, leading to more individual and family-based approaches to farming. Today, Batak try to economize as much as possible on labour input and thus rely more on the manpower of their own household. Therefore, a technology such as *tagad* is useful. Batak acknowledge that their traditional planting method¹³ requires more labour per unit of output than the new *tagad* technology. For Lalay (Katibu's wife): 'With *tagad*, I can plant rice on my own, especially when my husband is busy collecting resin in the mountains. Sometimes, I hand the *tagad* to my daughters, and tell them: it's your turn now. So we can accomplish the work on our own and much quicker.'

Cashew and the Notion of 'Ownership'

As we have seen, new farming strategies are emerging among the Batak that allow both women and men to work more autonomously and to

rely less on reciprocal labour exchange. Also cropping regimes are subject to much more change and, recently, a few households have introduced cashew trees in certain portions of their swiddens. This seems to occur more frequently during election time, when larger fields are opened from old fallow forest, and thus more land becomes available. However, some Batak fear that, after elections, these fields might be placed under government surveillance through the implementation of reforestation projects. Because of this, some households have decided to intersperse cashew with rice, as a way of establishing evidence of landownership.

Some of the households I interviewed claimed that their decision to plant cashew was mainly dictated by: (1) its being a low-risk crop, whose seeds are not eaten by wild pigs; (2) the low requirement of capital and labour; and (3) its growth on poor soils.

It should be pointed out that cashew flowers are particularly vulnerable to rain, and, often, this has been the cause of crop failure amongst the neighbouring migrant communities. Furthermore, in other regions of the Philippines, cashew plantations on slopes have shown low water infiltration rates and little capacity to accumulate soil organic matter, thus contributing to soil erosion.

Swidden Farming and the Election Cycle

Batak swiddens in the 2000s do not seem to differ in size and yields from those of the late 1990s; they are labour-intensive and give low returns. My provisional assessment of Batak upland rice productivity in Tanabag during the year 2004 suggests an average yield between seventeen- and nineteenfold increase over the seeds planted.

Again, a year after the 2004 election, government anti-shifting cultivation measures were enforced with vigour. In some indigenous communities, the *Bantay Gubat* (the implementing arm of the city mayor's *anti-kaingin* policy) ordered community members to refrain from cutting trees with a diameter lower than 4 cm. On 5 June 2005, a Tagbanua member of the Kalakuasan community was apprehended for 'over-cutting', but the case was dismissed through the intercession of the *barangay* captain. In late July, rice plants in the vicinity of Kalakuasan looked stunted and frail because of the combined effect of limited rain and nitrogen and phosphorus deficiency. Many Batak expected a harvest delay of at least one month and a crop failure of up to 70 per cent. In comparison, the rice fields in the interior experienced a better growth. According to Batak this is due to the presence of moisture from the air that condenses on rice plants during the night, thus mitigating the effect of drought.

As the population becomes more sedentary and the feeding pressure concentrates on fewer areas, at least two families have expressed an

interest in acquiring ploughs and buffaloes to prepare fields. Though ploughing was long resisted by Batak, some are now becoming familiar with its potential benefits: enhancement of root growth, ability to reduce weeds and to allow a second crop (e.g. mung bean or peanuts), control of runoff and evaporation. Some households are even planning to break the soil in areas packed with well-developed grass for the purpose of planting maize and vegetables, but they do not have the equipment to pursue these goals. More importantly, the land around the settlement is limited and of poor quality; as a result, most community members are clearing swiddens further in the interior. Only twelve families continue to reside and cultivate land in the immediate vicinity of Kalakuasan. However, most families will still keep a house in the permanent settlement in order to comply with the local government demands. I was told that from the ripening of rice (July) up to the end of the harvest season (late October) several families will spend considerable time in their swiddens, returning to the permanent settlement after the harvesting is complete. What we have is a residence pattern where each household, depending on the availability of labour, will move back and forth between Kalakuasan and the upland locations to take care of the domestic pigs that have been left behind and, at the same time, to guard their swiddens against birds and wild pigs. Of course, disadvantaged household (with very young or no children) will be unable to sustain this pattern. Indeed, agricultural decision making varies from household to household, and is subject to continuous changes. For instance, for the two years following election, some families rely mainly on soils that have not regained their nutrients, and thus are quickly colonized by shrubs¹⁴ and weeds of dominant species such as *agunuy* (*Chromolaena odorata*), *muyumuyu* (*Lantana camara*) and *karangian* (*Trema orientalis*). In the location of Maysaray, portions of *kugun* (*Imperata cylindrica*) land are being cleared, and new methods to suppress this grass are being tested by Batak. One technique has already proved successful; it consists of the combined planting of cassava and banana (the latter planted for two consecutive years) in a plot colonized by *Imperata*. I was told that, during the growth of cassava and banana, the *kugun* must be cut constantly, 'to weaken' it. By the time cassava is harvested, banana leaves are large enough to produce shade that hampers *Imperata* growth. In the third year, several households take advantage of the local election¹⁵ to convert old-fallow forest into swiddens. Households with a favourable composition distribute their unmarried children in different locations, in order to open as many fields as they can. This serves to minimize the drastic decline of rice yields, especially during the two years following the election.

Discussion and Conclusion

In the previous section, through a chronology of changes and crises from the 1950s to the present day, I have argued that declining yields per unit of land and labour are amongst the basic features of contemporary Batak swidden practices. This trend has reinforced public misconceptions about indigenous shifting cultivators in Palawan. Furthermore, I have attempted to show that a complex set of events and circumstances, rather than Batak 'ignorance', have led to the present upland farming crisis. Such events include demographic pressures, loss of important ecological food zones, the drop in seasonal movements, competition over resources, indebtedness, government restrictions of forest use and lack of political will to uphold indigenous peoples' rights. The Batak involvement in the cash economy has also led to the destabilization of culturally imposed limits on material wealth, thus affecting internal community cohesion. Moreover, top-down technical approaches to stabilizing shifting cultivation, imposition of imported participatory logics and various other forms of external interference have further contributed to the breakdown of Batak social support and mobility patterns. My description of Batak agricultural transformations does not provide much hope for a positive turn of events. Indeed, the overall picture is gloomy. What appears as inevitable is that Batak traditional practices will continue to undergo radical changes, the outcomes of which cannot be easily predicted. Nowadays, the people are ever more concerned about increasing the number of pigs, increasing the cultivation of permanent and semi-permanent tree crops (especially coconut, cashew and banana) and optimizing the household labour force. Overall, they are adopting short- and long-term livelihood alternatives to compensate for agricultural decline, as well as a number of techniques and strategies giving the highest results per unit of labour input. Interestingly, the trend displays some elements of the transition from shifting to sedentary upland agriculture, as well as an orientation towards household-level agricultural specialization. In Palawan, a few cases indicate that such a transition has occurred with a certain degree of success, but not without environmental cost.¹⁷

It is unlikely that the Batak will replicate the kind of technological innovation that has accompanied agricultural change among some non-indigenous farmers in Palawan. This is mainly because agricultural intensification in the uplands requires greater labour intensity and increased use of various subsidies to the production process (e.g. fertilizers and pesticides) as well as marketing skill and the ability to withstand competition from producers in other communities. The socio-economic deprivation and caloric stress that the Batak are presently facing, in addition to their cultural disorientation, make it impossible for the people to manage such changes successfully. First, Batak are already fully enmeshed in the NTFP

trade (especially resin and rattan) through which they obtain most of their rice supply. A typical Batak household, where men are most of the time busy in commercial gathering, are generally unable to mobilize sufficient labour internally to ensure successful gardening. On the other hand, although occasional tree cropping is increasing, the deferred character of its returns does not make it a viable and appealing option to most people. Furthermore, Batak households lack the necessary capital to purchase production inputs and to sustain themselves until sales begin. More importantly, they also lack the knowledge of changing market conditions and of commercial gardening technology. The latter would also be incompatible with the people's present mobility patterns. Overall, Batak are not willing to give up the cultivation of traditional upland rice and, in fact, old and new landraces are being acquired yearly from relatives, neighbouring communities and even migrants. In 2004, at least thirty-three rice varieties were being cultivated by the Tanabag Batak, with each family planting between four and eighteen varieties.

This chapter has indicated that in recent years changes have become so complex and diversified as to constrain Batak ability to cope with them successfully. In particular the 'democratic climate' that opened up with the Aquino administration in 1986 signalled an intensification of crisis, which only worsened subsistence conditions for the Batak descending to a historic low point during the later 1990s.

Why have the 1990s and the early 2000s been exceptionally difficult for the Batak? The answer must be sought in a concatenation of events that include both socio-political and more obvious natural causes, (e.g. El Niño). I have summarized the latter in the preceding part of this chapter, and finally intend to look more closely at certain political dynamics and their modes of operating. To give a lead into the discussion, I shall first recall what Contreras (2000: 147) has written with reference to the rise of post-Marcos discourses and politics. He argues that, in the past two decades, what the Philippines has witnessed is an 'ideological rearrangement' that has turned former outright opposition into differences of opinion, and former protesters (human rights organizations) into partners (NGOs). I would add that, as a result of this, the friendly notions of 'participation', 'people's empowerment' and 'sustainable development' have become part of a common vocabulary used and abused by both state and the society. The state needs the NGOs to support forest protection policies and the NGOs need government legitimacy and approval to be able to carry out their programmes.

In Palawan, local government and NGOs have promoted a common discourse that is apparently liberating but which, in fact, offers few opportunities to indigenous communities for upholding their traditional ecological knowledge. The new discourse proposes that 'ecological sustainability' and the protection of biodiversity can be attained if upland

communities work hand in hand with the local government and the NGOs to assert the value of preserving both their culture and the environment. One of the envisaged outcomes of this collaboration is the implementation of stable forms of agriculture and other suitable livelihood alternatives to replace swidden cultivation.

Devolution, enacted through the 1991 Local Government Code, was thought to provide the ideal framework within which these goals could be achieved. In reality, devolution has exposed the Batak to a kind of high-profile 'participation' that they have no ability to cope with. They have found themselves involved in a new discourse of 'civil participation' that has brought only more consultation, more interactions with external agencies, more duties than rights and, ultimately, increasing surveillance of their swidden cultivation practices. In turn, their understanding of state dynamics continues to be confined to the assessment of benefits that they can get from those in power. A 'good politician' is generally remembered for his ability to give, and this is largely measured in relation to food and goods. A politician refraining from giving commodities in exchange for votes is not viewed as morally upright, but rather as excessively frugal or, worse, ungenerous and unworthy.

Batak perceptions of politicians are clearly reflected in Pekto's words:

Politicians are like a big tree, below which the people sit. We are the nutrients. Without us the tree could not survive. Every three years (election time) the tree bears its fruits; when the fruits are mature they fall down and we collect them. The fruits come in the form of rice donations in exchange for votes. The politicians give us a reward for the nutrients we have given to the 'tree'. Now, they pretend it is okay to make swidden cultivation. But after the election they will forbid it again.

In Palawan, local government units (LGUs) are aware that a discrepancy exists between the mandate of the national law (e.g. forbidding shifting cultivation) and the conditions for its implementation (practicalities and feasibility). As is well known, law implementation seldom depends on its statutory and inflexible character, but rather on the ambiguities that it generates, and on the extent to which it can be exploited, manipulated and stretched to accommodate the expectations of different stakeholders. On the whole, laws and rules emanating from different sources are conflicting and overlapping. As Vitug (2000: 24) points out, in the Philippines policies tend to change with each new leader and different leaders emphasize different programmes. 'Hence leadership takes precedence over the system.' This entails that, while strict implementation of laws is commanded from above (the national government), diversions and exceptions to the rules are tolerated from below (provincial, municipal and *barangay* governments).

Overall (differently from their national counterparts), local politicians are more interested in encouraging flexibility in the implementation of

policies, rather than coercion. This is because flexibility allows them to manipulate legislation in a way that suits them best. They often appeal to devolution to legitimize their own 'interpretation' of the law. And yet 'flexibility' is not separated from the 'power of coercion'. The latter, to be exercised (or paraded), requires that indigenous people and rural peasants be kept in a state of latent illegality. In turn, the state, if it so wishes, can create avenues and opportunities for the so-called 'unauthorized users of public land' to revert into 'legal citizens', to pursue their slash-and-burn practices without being apprehended, and even to be praised for their ecological wisdom.

Every three years, during the provincial and municipal elections, politicians tend not to enforce restrictions on shifting cultivation. In this way, they hope to maximize votes from their upland constituents. Some members of local communities, such as that of Kalakuanan, take advantage of this opportunity to increase the size of their swiddens, and even to clear patches of old-growth forest. Instead, during the two consecutive years preceding the election, they clear lands where only small-diameter trees and shrub vegetation are found.

If, during elections, more old growth is converted into swiddens, this is not because politicians fail to implement the law. Rather, they want to show their indigenous constituents that they have the power to divert the law, as long as they receive electoral loyalty. Given this, to be resilient, Batak farming knowledge and practices must be structurally modified in a form of 'dependency' to state demands and political contingencies. These adjustments are problematic because the discrepancy between the official requirements and the actual implementation of national laws blurs the distinction of what is legal and what is not. To gain access to their natural resources, the Batak have learned new strategies to exploit this vagueness (as well as government institutional weakness, clientship and administrative inefficiency). On the one hand, these strategies tend to counter domination by central authorities, but - unavoidably - they also foster government malfunctioning and a state of permanent crisis in the uplands.

Therefore, one should not be surprised that, during the last local elections of 2004, Batak, and the majority of the indigenous people in the municipality of Puerto Princesa, continued to support Mayor Edward Hagedorn, in spite of the fact that he was the mastermind behind the city ordinance against shifting cultivation. A Batak in his thirties told me:

Yes, Hagedorn is the maker of the law against *kaingin* [swidden farming] but we know him and he knows us, he visited our village and gave us rice during the electoral campaign. If I vote for another candidate what difference will it make? Politicians are all the same, they only make promises, but after the election they quickly forget them.

Batak are aware that they can only choose from a limited pool of politicians speaking the same language. Thus, their rational choice is to select a

candidate community members are familiar with, someone that has already given them material assistance and from whom they hope to receive additional support, especially during periods of food shortage. We are dealing therefore, with a well-established pattern of patronage at all levels of the society, which finds its most vivid expression in the electoral cycle. With reference to this, Walden Bello (2004: 2) has argued that:

the beauty of the system is that by periodically engaging the people in an exercise to choose among different members of the elite, elections make voters active participants in legitimising the social and economic status quo. Thus has emerged the great Philippine paradox: an extremely lively play of electoral politics unfolding above an immobile class structure that is one of the worst in Asia.

In the Philippine cycle of elections, powerful families, powerful political oligarchies, powerful companies succeed in paralysing the legal procedures that could guarantee the protection of the weakest in society. Thus private interests persist to the detriment of millions of Filipinos (Bernas 1992: 4).

While the Batak have learned how to establish relationships with politicians, their ability to understand the intricacies of legislation remains limited. As a result, NGOs have come into the picture to assist communities with the operational structure of law implementation. However, in some cases, community leaders bypass NGO mediation and, instead, prefer to enter into personalized relationships with influential politicians. Today, it is a common practice for the leaders of the Tanabag Batak to walk straight into the city mayor's office to request rice, money and commodities and also to seek exemption from the ban on *kaingin*. Because these requests are, in part, fulfilled, the Batak feel that some politicians are more accountable than NGOs. Politicians act as patrons towards village leaders, who tend to capitalize on their knowledge of local politics to gain as many benefits as they can for their communities and for themselves. Of course, these interactions are prone to high-level manipulation. For instance, during election time, the promise of '*libre kaingin*' (unrestrained swidden practices) is the incentive that is usually dangled by politicians in front of the indigenous communities. As a result, every three years, more old forest is converted into swiddens that, in most cases, will no longer undergo a long fallow rotation. This is because government interventions, over the years, have already altered the sustainability of indigenous agricultural systems, to the extent that it has become increasingly difficult for the Batak to replicate their traditional ecological knowledge.

My argument has, I think, come full circle. In the absence of a credible and committed political class, devolution, 'popular participation' and those liberating ideologies that were meant to uplift the most marginal sectors of society have contributed, instead, to further disempower them. We

have good reason to believe that in the 1970s, at the height of the Marcos regime, the Batak were much better off and were still able to carry out most of their swidden practices undisturbed. And yet it was in 1975, during Marcos's time, that the state prohibition on slash-and-burn cultivation was reinstated through Presidential Decree No. 705. And it was in 1976 that one-third of the total land area of Palawan was given to timber concessions (Connelly 19%). And it was also in the 1970s that the infamous PANAMIN project was implemented. Nevertheless, in Marcos's day the state had limited capacity to control remote communities, partially because (differently from today) it could not obtain the collaboration of non-governmental and people's organizations. The latter, instead, were rather perceived as enemies of the state and, in many instances, were banned and suppressed. Furthermore, the Batak were too geographically marginal and politically insignificant to be paid attention to. More importantly, northern Palawan was not an insurgency spot, and thus there were no attempts on the part of the state to control the people through militarization.

It was only in the late 1980s that Batak fully emerged from their 'political isolation' and, particularly in the 1990s, they began to interact 'freely' with government and non-government agencies. As Foucault (1982: 221) puts it, not only is freedom the precondition for power, but 'power is exercised only over free subjects and only insofar as they are free'. In the 1990s, through devolution, government programmes and NGO projects, the Batak were no longer displaced outside the boundaries of the state. Rather they became recipients of external assistance and were invited to 'participate' in meetings and seminars, and to settle down closer to the coast. Thus they become 'locatable and 'being locatable, local peoples are those who can be observed, reached and manipulated as and when required' (Asad 1993: 9).

Those who do not grasp the connection between the cycles of politics and those of nature will continue to blame indigenous communities for the dramatic changes occurring in the landscape, for the expansion of bush land and for the progressive decline of forest cover. However, the link between government policies and what goes on in the environment is, for the Batak, a rather obvious and recurrent experience. In order to comply with the government demands for permanent cultivation, some community members are converting their swiddens (or portions of it) into agroforestry. In this way, they hope to counter the harassments from *Bantay Gubat*. However, those fields planted with tree crops, because of poor tending and no pruning are unlikely to generate significant extra income. In the meantime, Batak will continue to clear forest plots (old fallows and secondary forest) for upland rice, in less accessible locations, and the election cycle provides them with the opportunity to do so. One possible scenario can be envisaged: since forest is not increasing, the conversion of some swiddens into permanent orchards may reduce the

number of fallow fields under rotation, and this may lead to further decrease in the length of fallow periods, which may lead to further decline in yields, and so on in a vicious circle of escalating resource degradation. The more precious topsoil and vegetative cover are lost, the more local environmental organizations will be supportive of government measures against shifting cultivation. The more such measures are enforced, the more Batak will cultivate soils that have not regained their nutrients, and hence they will have to devote more time in controlling weeds and pests. The consequences, once again, are all too predictable and tragic: more areas will lose the capacity to support forest, local landraces will continue to decline, malnutrition will worsen and pressure on NTFPs will increase exponentially.

It is a rather nice irony that the expansion of degraded fallow land gives now opportunity to external agencies for engaging in tree-enrichment planting and other conservation measures. In a similar vein, declining food production and diminishing biodiversity provide additional incentives to international organizations for financing more of the same. It is no secret that much of the international aid money for the conservation of Palawan has already been spent in vain for projects that have failed to respond to the uplands crisis.¹⁷

Is There a Way Out of the Crisis?

It will require detailed scientific studies to determine whether the conditions for optimal long fallows are still present anywhere in Palawan. And yet such studies are difficult to carry out and require a long-term commitment. Part of the problem lies in the evolving demography and in the economic changes taking place within lowland peasant societies. In recent years, urbanization rates in Palawan have been high. Therefore it would be a mistake to take for granted that, in the near future, the rural population of Puerto Princesa municipality will colonize additional portions of the Batak upland territory by opening more swiddens in the interior. Indeed, the young Filipino generations of the coastal settlements do not find shifting cultivation an appealing option, regarding it as a backward practice, a failure to progress. Conversely, the majority of young people aim at educational attainments and, often, they look for off-farm employment opportunities in the capital city. On the other hand, Batak continue to be anchored to their land, while experiencing a dramatic demographic decline. We may speculate that, compared with other neighbouring indigenous communities, the Tanabag Batak would still enjoy a favourable land ratio in the coming decades. This, however, could not entail that they turn back the clock to fully sustainable swidden agriculture and replicate the farming regime they had in the 1950s. Too many socio-political contingencies and environmental changes have occurred

since then. Remarkably, some Batak are still able to recover fertility in fallowed sites but to do so, they have to cut old fallow forest 'illegally', facing the risk of being apprehended and fined.

Perhaps what is most needed is government recognition of the differences between indigenous and migrants' practices of shifting cultivation. Until now, decision-makers have ignored such differences. Through appropriate legal means the government should provide more space for indigenous communities to use their swiddens rotationally instead of imposing top-down technical solutions. This further entails that 'degraded areas' (those that are unlikely to revert to forest) should no longer be equated with indigenous fallow fields. It is my contention that laws should move away from coercion towards a legislation that provides incentives to indigenous cultivators to make their swidden practices 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. In places where swidden practices have become irreversibly unsustainable, specific strategies should be developed in close coordination with the client communities rather than forcing them to cultivate their swiddens continuously, as government foresters often suggest. Another major challenge is to document and evaluate upland farming strategies through an integrated and interactive long-term process of research and development. This process should identify indigenous best farming practices, understanding them and the contexts in which they are used. Sadly, the type of development that is setting the trend in Palawan is not moving towards these objectives, nor is there any indication that it will.

If so, is there a way out of the present upland crisis? It might seem odd to raise this question in a context where the nation, as a whole, is facing enduring socio-political stagnation, which finds its causes in the ever-growing imbalances between societal influence and state power (Bernas 1992), and thus in the failure of the state to control elite factions and to harness them and their resources for development (Bello 2004: 286). Suffice it is to say that the goals of equitable and sustainable development, indigenous people's empowerment and grass-roots participation are not compatible with the narrow economic interests of the political elite or with the doctrine of technocrats. This may sound all too obvious, but sometimes the obvious can teach us a lesson.

Notes

1. Palawan is the fifth largest Island in the Philippines and has the highest percentage of forest cover in the archipelago, between 38 per cent and 44 per cent of the island surface (see Serna 1990; Kummer 1992).

2. A *barangay* is the smallest administrative unit under a municipality, which is governed by an elected captain and council.
3. Batak traditional ecological knowledge and their accounts of the antiquity of their swidden practices run counter to Eder's hypothesis. In fact, Batak have a very complex and detailed mythology dealing with rice and elaborate swidden rituals. Numerous legends trace the origin of rice back to people's remote past. They name and recognize about seventy-two landraces of upland rice, of which forty-four are said to be *dati* (old) and *tunay* (original) to the area, twenty-one are considered relatively new and at least seven have been acquired very recently. Moreover, the Batak have a complex nomenclature related to the different stages of rice growth, rice types and morphology, as well as an elaborate classification of soil areas and types (see Novellino 2003c).
4. According to local informants one *cavan* of unhusked rice weights approximately 50 kg and the conversion rate for *salop* or *ganta* (the measure used for rice seeds) is 2.5 kg.
5. In 1978, around 1,000 square kilometres of primary forest nationwide were estimated to have been logged, paving the way for the landless migrants. During the same period, around 380,000 families are said to have engaged in *kaingin* (shifting cultivation) countrywide, occupying at least 23,000 square kilometres of forest and critical watershed areas (Myers 1980: 96).
6. At that time, I assisted the Tanabag Batak in writing a petition against this logging firm. The document was submitted to the DENR and to the Office of the President. A few months later, a DENR investigation sent to the area established that the logging company had operated outside the boundaries of its concession and hence its licence was revoked.
7. I was told that the *lambay* ceremony was not originally from Tanabag and, traditionally, it was practised only by the northern Batak groups. Most probably, it was introduced in Tanabag around thirty years ago by the shaman Padaw, who had married and lived there for many years.
8. Reported yields of swidden elsewhere in the Philippines run as high as 2,300 kg/ha (Conklin 1957). Connelly (1983), after an assessment of numerous studies, proposes that the average productivity of traditional long-fallow shifting cultivation in southeast Asia is 1,600 kg/ha. In comparison to such findings, Cadelina's data on Batak rice productivity may support an over-estimation.
9. Note that shifting cultivation is not perceived by the government as compatible with the responsibilities of the indigenous peoples in their ancestral domain. According to the IPRA law (sec. 9 of chapter 3) such responsibilities include the preservation, restoration and maintenance of a balanced ecology in the ancestral domain through the protection of flora, fauna, watershed areas and other reserves, as well as participation in the reforestation of denuded areas. For an extended treatment of the ancestral domain legislation, see Novellino (2000b), available at <http://www.fao.org/Docu-p/x7069t/x7069t06.htm>
10. Lately, the ban has been partially lifted in favour of 'regulated burning', the definition and interpretation of which remain ambiguous.
11. The Palawan Council for Sustainable Development (PCSD) endorsed the plan of the Rio Tuba Nickel Mining Corporation (KTN.MC), while the DENR provided the environmental assessment (EA) clearance. PCSD is a unique government body formed by Republic Act No. 7611 with a mandate for the protection of the environment within the province. In reality, indigenous interests are not represented within the council, whose members continue to entertain several new applications for mining.

12. In April 2001, through Grant No. MG59 from the Biodiversity Support Program, I assisted the Tanabag Batak in the implementation of several initiatives to stop the entry of illegal gatherers in the CBFMA area. The trail leading to Kalakunsan was fenced with wire, and a main gate was constructed.
13. In April 2004 I witnessed the planting of a large swidden by groups composed of at least eight men and about five women. Women and men were working in separate groups, and each individual had his/her own *tagad*.
14. The situation represents a common trend, but there are individual variations and exceptions to the rule. For instance, also during non-election time, some households, in spite of government prohibitions, still opened old-fallow forest in remote locations, where they could not be easily reached by foresters. On the other hand, newly married couples, especially those with a pregnant wife, lacked labour and resources to invest in cutting secondary forest, and opted for the clearing of bush land. The poor health of a family member, or old age, may also force a household to clear areas in the immediate vicinity of Kalakuasan, where soils are generally poorer. In short, the impact of policy on farming practices varied according to households' individual decisions and contingencies. Often, the latter are unpredictable and cannot be easily accounted for.
15. Local elections (municipal and provincial), as well as the elections for district representatives of the lower house, are held every three years. The presidential elections are held every six years.
16. In the case of Cuyonin farmers of San Jose (Puerto Princesa municipality) such costs included the disappearance of the last stands of tropical forest in that area, depletion of water sources and the massive use of commercial fertilizer, with deleterious effects on the soil (see Eder 2000).
17. One of these top-down projects was the Palawan Tropical Forestry Protection Programme (PTFPP), funded by the European Commission and operating since 1995. I have visited several PTFPP sites and found no evidence of success.

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