Policy Innovations and Effective Local Management of Forests in the Philippine Cordillera Region

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1. Introduction

With the passage of the Indigenous Peoples' Rights Act of 1997,[1] the tenurial rights of ancestral domains for indigenous peoples in the Philippines are now a legal reality (Leonen 1998). While it is necessary to recognize indigenous peoples' land rights to achieve sustainable forest management in the Cordillera Region of northern Luzon because of the importance of property rights to convey authority and shape incentives for the management of natural resources, as Meinzen-Dick and Knox (2001, 49) assert, this would not be sufficient. Since management technologies and practices affecting forests cover a larger spatial scale and a longer time horizon, security of tenure is important. However, collective action is also needed. Forests need to be protected from fire or encroachment, maintained through replanting, and monitored to prevent over-harvesting. For local users and communities to participate in these activities, they must be assured that the benefits will redound to them and their children, hence the importance of secure tenure. But although collective action is reinforced by property rights, more is required. Collective action prospers in an enabling environment that in part consists of policies that create legal standing for organizations at the community level which come into agreements with government agencies (see Meinzen-Dick and Knox 2001). The enabling environment for collective action will include local government support for user groups, and decision making processes of national level agencies that encourage and protect the community's right to manage natural resources.

This paper tackles some of the issues that have attended the long and winding process through which the Philippine government pursued, albeit reluctantly, a policy to decentralize natural resource management to indigenous cultural communities in pursuit of sustainable forest management in the Cordillera Region (see Rood and Casambre 1994, Rood 1995, Mendoza and Prill-Brett 2004). These issues

include the question of appropriate policies, the necessity of security of tenure, and the viability of collective action.

We first discuss how the government's decentralization policy for forest management beginning in the 1970s affected the Cordillera Region. We then turn our attention to how the indigenous property regimes influence local management of forest resources since an important consequence of indigenous land rights is the enabling of local collective action particularly for forest management. Because economic changes have steadily transformed local practices and customary norms, we also discuss what effects these changes may have on the exercise of local collective action. Finally, we assess the prospects for a co-management scheme for Cordillera forests as provided by the Joint Administrative Order No. 1 of 2008 (referred to as Joint AO)[2] of the Department of Environment and Natural Resources (DENR) and the National Commission on Indigenous Peoples (NCIP) issued on July 8, 2008. The Joint AO, the most recent policy innovation with regard to Cordillera forest management, expands the role of local users by recognizing indigenous forest practices as well as socio-political structures of the indigenous cultural communities in the management of forest resources.

The Cordillera is a mountainous region with 60 percent of the areas over 50 percent in slope. Thus less than 20 percent of land in the region is alienable. Government policy states that "the Cordillera is the watershed cradle of Northern Philippines and only developmental activities consistent with the preservation or conservation role of the region will be allowed and agricultural activities will be allowed provided they do not encroach on critical watersheds and forest reservations" (quoted in Rood 1994). Within this context, the sustainable management of forests in the Cordillera is a central concern.

The Cordillera Studies Center (CSC), the research arm of the University of the Philippines Baguio, has always had an interest in the study of resource use. In particular, the Center has looked at the effects of agricultural commercialization on highland communities (see Prill-Brett et al. 1994) through three cycles of agro-ecosystems (AES) research conducted in 1981-83, 1984-86, and 1987-89.[3] The CSC also pursued a research program on Population, Resources and Environment (PRE)[4] in 1986 (Phase 1) and 1989 (Phase 2), which covered upland and lowland communities to understand the effects of the dynamic interaction among population, resources and environment on the quality of life. Then, in 1992-94, the Center undertook a natural resources management research program on indigenous practices and state policy in the sustainable management of agricultural lands and forests in the Cordillera (referred to as NRMP 1). This was followed by a research program on ancestral domain and natural resource management in

Sagada, Mt. Province, Northern Philippines (referred to as NRMP 2[5]), conducted from 1997 to 2001.

This paper is an effort to synthesize the research findings, particularly those of NRMP 1[6] and NRMP 2[7], on local forest management. NRMP 1 can be said to have focused on national law and policies on land and resources and how these interacted with local practices in the sustainable management of resources. This is the 'policy' focus of the synthesis. On the other hand NRMP 2 enabled a better understanding of the dynamics of collective action at the community level. This provides the other focus of the synthesis. This synthesis provides the links among the concerns which motivated the different research projects. It enables a re-assessment of the research findings obtained over a decade of primary data collection through community studies. Overall, it hopes to enrich our understanding of the issues of sustainable forest management in the Cordillera.

2. Decentralization or Restitution?

The shift of the state's authority and responsibility for resource management to non-governmental bodies can take various forms. Meinzen-Dick and Knox (2001, 41-42) describe devolution as one of the forms in which a transfer of rights and responsibilities from the central or national government agency to local institutions can take place. The other forms are deconcentration, decentralization, and privatization. Deconcentration and decentralization transfer authority to lower levels of government while devolution and privatization transfer authority to non-governmental institutions. The former is called **vertical** subsidiarity, the latter **horizontal** subsidiarity. Both are expressions of the principle of subsidiarity which is to devolve decision making to the lowest appropriate level. In the categories of Larson (2004, 3) vertical subsidiarity takes the form of administrative or political decentralization where an official transfer of power takes place from the central government to lower levels in an administrative or political hierarchy, respectively.

Deconcentration is administrative decentralization of responsibility from the national department to its regional and provincial offices whereby the national office retains authority, and accountability is ultimately to the national government. Decentralization would make authority remain with government even when a stronger role is given to local government units which are seen as more accountable to the local communities. Both forms of decentralization have taken place for forest management in the country.

Devolution would involve the transfer of rights and responsibilities to user groups at the local level. Control by user

groups over forests would be more congruent with the practice of several Cordillera groups (see Corpuz-Diaz 1994, Cabalfin 2001, Cruz 2001, San Luis 2001) and this local control is what the Joint AO endeavors to recognize and promote. Privatization, which includes only the transfer of rights and responsibility to non-profit organizations and for-profit firms, is not an applicable alternative among Cordillera communities.

Decentralization in Forest Management

During the 1970s in response to dwindling forests, rural insurgency and national and international concern for deforestation rates, people-oriented forestry programs were undertaken in the country (O'Hara 2006, Lindayati 2000). The 1975 Forestry Reform Code marked this regulatory shift because for the first time, there were provisions to improve the security of tenure of occupants of public lands (Lindayati 2000, 5). The Forest Occupancy Management (FOM) launched in 1975 issued renewable land occupancy permits. The Communal Tree Farming (CTF) begun in 1978 was intended to establish tree farms or plantations through the cooperation of government, local communities and the private sector. Later the Family Approach to Reforestation (FAR) was added to establish tree plantations on public land based on short term contracts with participating families. All three programs aimed to involve local people in reforestation activities (O'Hara 2006, 255) and give eligible farmers limited tenurial security (Lindayati 2000, 6). It would take over two decades before the DENR confronted the other issue in forest management which is the grant of security of tenure to forest inhabitants and to indigenous peoples in particular.

In 1982, all three earlier programs were consolidated into the Integrated Social Forestry Program (ISFP). Through Certificates for Stewardship which were renewable after 25 years, individual farmers were given rights, together with training and technical assistance, to farm the forest land and undertake agro-forestry activities. In particular, farmers were encouraged to plant trees on at least 20 percent of occupied lands (Lindayati 2000, 6). Later, the Community Forest Management Agreement (CFMA) gave residents a long-term management contract for the utilization of natural forests. CFMAs were issued by the Community Forestry Program (CFP) created in 1987. A community-based forest management agreement (CBFMA) is a 25-year production-sharing arrangement entered into by a community and the government, to develop, utilize, manage and conserve a specific portion of forest land (IIRR, LGSP, SANREM CRSP/Southeast Asia 2001, 102).

By the 1990s the impetus for decentralization of forest management did not only come from the DENR, it also came from the passage of the

Local Government Code (LGC) or Republic Act No. 7160 of 1991. Through the LGC, political decentralization in the Philippines was supposed to have taken place because the Code transferred substantial powers, functions and responsibilities from the national government to local government units (LGUs). The delivery of various aspects of basic services that used to be the responsibility of the national government was now devolved to the LGUs. Among these are community-based forestry, projects on agricultural extension and on-site research, and tourism facilities.

Manasan (2001) described the transfer of functions under the LGC as substantial not only in terms of the sheer number of functions but more so in terms of number of personnel transferred. The dramatic exception to this was the devolution of environment and natural resources (ENR) management. Take the first indicator of the ratio of devolved personnel to pre-1991 devolution. The value for DENR was the lowest at 4.2 percent. This is really miniscule when compared to that of the Department of Agriculture (DA) at 59.6 percent, the Department of Budget and Management (DBM) at 46.7 percent, the Department of Health (DOH) at 61.3 percent, the Department of Social Welfare and Development (DSWD) at 59.7 percent and other Executive Offices at 13.1 percent (see Table 1 of Manasan 2002, 36). A second indicator is the ratio of the devolved budget to pre-1991 budget for ENR management. The value for DENR was only 8.6 percent. All other agencies had double digit percentages with DA at 20.2 percent, DBM at 37.1 percent, DOH at 38.5 percent, DSWD at 65.6 percent (see Table 2 of Manasan 2002, 36). In Manasan's reading of the Code, there was a transfer of responsibility over community-based forest and watershed projects to Local Government Units (LGUs), but the Code allowed the DENR to retain supervision and control over the same projects. Thus, Manasan concluded that "local autonomy in ENR management is at best limited and at worst ambiguous" (2002, 42).

In 1991, DENR issued Administrative Order 24 which provided

> … the shift in logging from old growth or virgin forest to second or residual forest and **prohibited** logging on virgin forests… and **also** on areas with **slope of 50% and above, areas above 1,000 meters in elevation** (emphasis provided), within 20 meters of either side of a stream bank, wilderness areas, proclaimed watershed reservation, in areas identified with historical values and other areas proclaimed for ecological and environmental protection (Tacloy 2000, 29).

Beginning January 1991 timber harvesting was prohibited over much of the Cordillera region where land has slope of 50% and above and areas are above 1,000 meters in elevation.

The formal shift in forest policy from resource extraction and export in favor of community-based forest management (CBFM) only took place in the mid-1990s. This shift was institutionalized by the issuance in 1995 of Executive Order No. 263 by President Fidel Ramos. The Executive Order adopted CBFM as the national strategy in managing the country's forest resources (La Viña n.d., 3). Thus, in 1995, all previous community forestry initiatives were put under the Community-Based Forest Management (CBFM) program of the DENR. The CBFM focused on organizing communities and providing alternative livelihood strategies so that the pressure would be taken off the natural forest. Under this program, utilization rights for wood products were granted (O'Hara 2006, 256).

One could argue that when the economic returns from the utilization of timber became unattractive for the state, the national government became more than willing to surrender its management of forest resources to local communities. The motive for the decentralization policy for forest management in the 1990s was not so much the wisdom of involving local communities in forest management as it was the loss in the incentive for the national government to keep control of the forests and its resources.

Lindayati (2000, 7) notes that indigenous groups generally did not apply to the people-oriented forestry programs described earlier because they believed this would only legitimize government claim over the area. This observation finds empirical support in the findings reported by NRMP 1. Communities in Benguet and the Mountain Province were not major sites for community forestry initiatives like the ISFP which was introduced in the early 1980s (see Bautista 1994). Among the six community research sites of NRMP 1, only Barangay Ambassador in the municipality of Tublay, Benguet and Barangay Suyo in Sagada, Mountain Province reported that ISFP activities were undertaken in the 1980s. In fact, no participants of this program could be located during the period of field research in 1992-1993. Bautista (1994) concluded that community contact with DENR programs and personnel was minimal. However, people were aware of certain DENR programs. For example, based on a 1993 survey determining people's awareness of DENR activities (see Bautista 1994), people knew more about the program of contract reforestation than about ISFP.

Even if the country's land laws designated the national government as the authority over forest resources with the collective choice rights of management and exclusion, such rights were not effectively discharged particularly against the exercise of local residents of access and withdrawal from forest reserves and/or national parks. Members of Cordillera communities did not appear insecure over the absence of land titles to farm and forest lands which they utilized. Respondents to the community surveys conducted by NRMP 1 in 1991 overwhelmingly

stated that they thought it unlikely that the government would get their lands and enforce the policy of treating these lands as forest reserves. They were confident that such would not happen since they had "tax-declared" these lands and they took care of them (Rood 1995, 9). These research findings lend credence to the assertion that the state management of forests in the Cordillera region is a myth. The national government, through its departments/ministries and their regional and provincial offices, was unable to exclude other users and claimants of forest resources in the Cordillera.[8] There is no centralized forest management scheme to decentralize.

Recognizing Ancestral Land Rights

Effective forest management in the Cordillera did not really hinge on decentralization to the local level as the previous discussion showed. Instead, what was necessary was an incentive for local users to manage forest resources. Such an incentive would arise if the indigenous property rights systems were recognized by the state. Thus, there was a more fundamental need to respond to the clamor of local communities for the state to recognize indigenous peoples' land rights. Was it not in fact a grave error in government policy to declare the Central Cordillera and other mountain regions as public land or forest reserves and national parks? Was it not simple-minded to expect that these areas would not be utilized by local communities which have resided in these territories long before the Philippine national government could claim to have existed? In other words, as many advocates passionately argued, the more pressing issue regarding forest management was not decentralization but restitution—"the restitution of the role of community management previously appropriated by the State" (Ngaido and Kirk 2001, 163). Restitution required that government recognize the rights of indigenous cultural communities to their land and its resources.

On January 15, 1993, the government commenced the process to grant recognition to ancestral land rights when DENR issued Administrative Order No. 2 on Rules and Regulations for the Identification and Recognition of Ancestral Land and Domain Claims. DAO 2, as it was referred to,

> … was a policy to preserve and maintain the integrity of ancestral domains and ensure recognition of the customs and traditions of the indigenous cultural communities… [and] to identify and delineate ancestral domain and land claims, certify them as such, and formulate strategies for effective management.

DAO 2 was viewed as an achievement resolving decades of policy conflicts in relation to land use and control (NRMP 2 Research Proposal 1996, 2-3).

A certificate was issued for an ancestral domain claim[9] or a CADC, which is distinct from a certificate of ancestral land[10] claim or CALC. Both ancestral domain and ancestral land rights are established through customary law, defined by DAO 2 as a "body of rules, usages, customs, practices traditionally observed, accepted and recognized by the indigenous cultural communities." By 2000, the DENR had issued 59 CALCs—five in Benguet, 52 in Ifugao, and one each for Kalinga and Mt. Province. A total of 24 CADCs in five provinces of the Cordillera had been awarded by 2000 (see Table 1).

When the Philippine Congress passed the Indigenous Peoples' Rights Act (IPRA) of 1997 or Republic Act 8371, the responsibility and task of recognizing indigenous peoples' land rights which commenced with DAO 2 of the DENR was transferred to the newly created National Commission on Indigenous Peoples (NCIP). Section 38 of the Republic Act states that

> ... to carry out the policies herein set forth, there shall be created a National Commission on Indigenous Cultural Communities (ICCs) or Indigenous Peoples (IPs)–NCIP - which shall be the primary government agency responsible for the formulation and implementation of policies, plans and programs to promote and protect the rights and well-being of the ICCs/IPs and the recognition of their ancestral domains as well as their rights thereto.

One of the powers and functions of the NCIP is to issue the Certificate of Ancestral Domain Title (CADT and/or the Certificate of Ancestral Land Title (CALT) under Section 44 (e). The communities which were awarded CADCs were given the right to apply for a certificate of ancestral domain title under Section 52 (a) of the IPRA and further clarified through Administrative Order 2 of 2002 issued by the NCIP. While the CADC required the drawing up of the Ancestral Domain Management Plan (ADMP), the CADT required the drawing up of the Ancestral Domain Sustainable Development and Protection Plan (ADSDPP). The first Certificate of Ancestral Domain Title which was given to Bakun, Benguet on July 20, 2002 resulted from the conversion of the CADC issued to Bakun on March 13, 1998 by the DENR following DAO 2 of 1993.

That the passage of the IPRA is a milestone in legislation promoting the rights and welfare of indigenous peoples is something few will debate. However, it is worthwhile to keep in mind the observation of Leonen (1998) that

Municipality	CADC No.	Ethnolinguistic group	Area in hectares	Date awarded
ABRA			85,350	
Malibcong	035	Gubang, Mabaca, & Banao	30,579	3/04/96
Boliney	147	Balactoc, Belwang, & Masadiit	28,425	5/26/98
Sallapadan	148	Masadiit & Banao	11,245	5/26/98
Bucloc	149	Masadiit	5,000	5/26/98
Daguioman	174	Banao	10,100	6/03/98
APAYAO			100,680	
Kabugao	077	Isneg	83,900	3/12/97
Katablagan, Conner	078	Isneg	16,780	3/12/97
BENGUET			150,720	
Kabayan	037	Ibaloi. Kalanguya, & Kankana-ey	27,252	3/04/96
Kibungan	071	Kankana-ey	26,353	12/24/96
Buguias	072	Kalanguya & Kankana-ey	18,185	12/24/96
Lusod, Ambasa	087	Ibaloi	1,479	7/15/97
Domolpos	088	Towak & Kalanguya	5,159	7/15/97
Bakun	120	Bago & Kankana-ey	29,346	3/13/98
Bokod	150	Ibaloi. Karao, Kalanguya	42,946	6/03/98
Atok		Ibaloi	16,709	Target completion: 1998
IFUGAO			48,206	
Tinoc	036	Kalanguya	27,767	3/04/96
Kiangan	046	Kiangan	20,419	5/02/96
KALINGA			118,767	
Tanudan	030	Kalinga	40,762	2/12/96
Tinglayan	128	Kalinga	22,975	6/05/98
Balbalan	116	Kalinga	55,030	2/02/97
MT. PROVINCE			74,643	
Sagada	038	Kankana-ey	8,698	3/04/96
Besao	039	Kankana-ey	17,361	3/15/96
Tadian	040	Kankana-ey	14,258	3/15/96
Barlig	041	Balangao & Kadaclan	34,325	3/15/96
CAR			578,366	

Table 1. Distribution of CADCs issued by DENR for the Cordillera Region by 2000. **Source:** Philippine Economic-Environmental and Natural Resources Accounting. Data Bulletin on Land and Soils (Preliminary), 2000, pp. 64-65.

> Since Indigenous People's concerns have been closely linked with well-funded ecological concerns, it is no wonder therefore that there has been an unfortunate prevailing view that their rights should be recognized only because they would be better ecological managers (p. 31).
>
> The recognition of indigenous peoples' rights is an aspect of human rights advocacy more than simply an environmental concern. The provisions (of the IPRA) clearly reflect how much the environmental agenda has taken over the need to correct historical and social injustices (p. 33).

Although this paper focuses on the importance of recognizing the right of indigenous peoples to their ancestral domain and ancestral lands as fundamental to security of tenure which provides the incentives for communities to engage in local collective action necessary for sustainable forest management, we agree with Leonen that the recognition of indigenous peoples' rights is more importantly about restitution. The state, through IPRA, returns to local communities of the Cordillera a right which was taken away from them by state land laws.

3. The *Ili*[11] and Indigenous Property Regimes

DAO 2 was the policy context when NRMP 2 was undertaken by the Cordillera Studies Center. Using techniques of participatory action research, the project worked with three of the nine *ilis* of Sagada. These were Fidelisan, Demang, and Ankileng from the northern, central, and southern agro-ecological zones of the municipality, respectively.

The municipality[12] was the recipient of the CADC and would have normally drawn up the ancestral domain management plan (ADMP) as required by Article VI, Section 3 of DAO 2. However, the municipality, which is a politico-administrative subdivision of the national governmental system, is not coincident with the village or *ili*. The *ili* is an autonomous socio-political unit, which traditionally controls its own decision making through the council of elders regarding village welfare and the control of common property resources (Prill-Brett 2001, 7). The research produced three management plans for the ancestral domains of Fidelisan Ili, Central Sagada Ili and Barangay Ankileng. In so doing, it was able to demonstrate as it intended that the village or *ili* was the practical planning and implementation unit for a natural resource management plan.

The participatory mapping of the ancestral domain of Fidelisan, Demang and Ankileng was undertaken in November 1998. The process continued through a series of community workshops in 1999 and 2000. Mapping activities were undertaken by *ili* members using extant base

maps and technical support from a partner agency (Environmental Science for Social Change). In several community meetings, *dap-ay* elders, *membantays* (administrators of clan forests or *sagudays*[13]), *barangay* officials and other villagers confirmed and corrected these maps to identify the *ilis*. They also enriched these maps by identifying cultural landmarks, locating resources such as forests, rivers, and water sources; providing place names; and delineating traditional boundaries. The *ili* maps were also important inputs in the preparation of the ADMP as these identified the traditional village settlement. In addition, they helped delineate areas of resource degradation and the stakeholders' interest in resources.

The NRMP 2 research activities confirmed that the *ili* is the locus of institutionalized control and regulation of practices in resource access as asserted by Prill-Brett (2001). Because the research project chose to work with the indigenous socio-political structures of the *ili* in all the activities which led to the development of the management plan, several customary rules on resource management were recorded and confirmed (though not in all cases).

An example is the use of lumber from trees grown in communal forests by members of the *ili* of Fidelisan as described by San Luis (2001, 63-64):

> An *ili* member can get lumber from communal forests after submitting the quantity of lumber needed to the barangay council. The officials concerned assess whether the request is appropriate. The applicant is given a certificate allowing the felling of 3 to 5 trees at a time and only for internal and not for commercial purposes. The officials are obliged to inspect and mark the trees that are felled. The use of a chainsaw to cut lumber is prohibited except when the position and location of a tree does not allow the use of a two-man saw.
>
> Logging is strictly prohibited on designated watershed areas (even if privately-owned by clans, families or wards) and on areas overshadowing the *ili*. Those apprehended selling or transporting lumber outside the village would be fined with an amount equivalent to the monetary value of the lumber.
>
> A women's group called Ladies of Aguid and Pide for Environmental Development takes care of monitoring the exit of lumber outside the community. Their members act as guards, manning exit points of the village.

Clear rules also cover the access to lumber in clan-owned forests as narrated by Cruz (2001) in the management of clan-owned forests or *sagudays* in Demang. In this case, the *saguday* member requiring lumber seeks the permission of the administrator of the clan forest or *membantay*.

> Some individuals first 'survey' the different *saguday* to which they have access and then they approach the *membantay* where the best trees for housing are found. The latter determines the number of trees to be cut and points out the best places to get the required lumber. Although the *membantay* has the final word with regards to which part of the *saguday* to cut trees from, the requesting party could negotiate and compromise with the *membantay* (p. 39).

By choosing the village or *ili* as the appropriate planning unit, the NRMP 2 research was able to demonstrate, among other things, the critical role that the rules and regulations of indigenous property regimes played in the sustainable management of forest resources in the research sites.

4. Collective Action, Norms and Economic Changes

In this process of devolution in natural resource management whereby "user groups will take on roles formerly assigned to the state," some form of collective action is necessary. The collective action may be to coordinate individuals' activities, develop rules for resource use, monitor compliance with rules and sanction violators, and mobilize the necessary cash, labor or material resources (Meinzen-Dick and Knox 2001, 45-46).

Collective action may be enabled by a strong sense of community often found in traditional communities. Here, resource users follow the rules of use and access to forests defined by their indigenous property regimes. Rules are enforced and violators are sanctioned. The actions of individuals are easily observed by others in the traditional *ili*. Individual behavior is governed by the values of reciprocity, solidarity and social pressure based on common norms and values.

Customary Norms

Collective action based on customary norms has been observed in several of the 'traditional' communities of the Cordillera. The examples from the community studies of Fidelisan and Demang in the previous section attest to this. Also, the collective action is enhanced if local users find support from their local governments. Customary norms that regulate the utilization of forest products can be reinforced through ordinances passed by the barangay or municipal government. This is the case in Barangay Ankileng, where the support of Barangay Ordinances to

enforce customary rules regarding forest management was reported by Cabalfin (2001, 16-17):

> The Barangay Ordinance No. 10, series of 1997 made the prevention of forest fires the task of every community member. Another ordinance rewards a forest guard (chosen by the barangay council in consultation with the members of the *dap-ay*) who catches a person who cuts trees without a permit or one who causes wild fires.

Collective action has also been confirmed in communities that have always exercised their management prerogatives over their forests as in the forests of Patay, Sagada (see Diaz 1994). Patay is one of the NRMP 1 research sites. The community study described the modus vivendi between the community and the DENR since the early 1980s whereby the community, not the DENR, regulates its members' use of the forests following the rules of their indigenous property regimes as long as the forest products do not leave the geographical territory of the municipality (or the barangay) where the forest is located. State rules are enforced by the DENR only when these forest products leave the community's boundaries.

That the pine stands of the municipality of Sagada are mainly artificially established is also the assertion of Tacloy (2001, 2) who studied the forestry practices in Sagada. He reported about how customary norms[14] coordinate community members' action in times of forest fires:

> In case of fire, the villagers are mobilized automatically to help in fire suppression, especially if it threatens other properties such as granaries and houses.
>
> The respondents reported, however, that this spirit has significantly diminished. Forest fires in the communal forest are most likely ignored by the villagers when no important properties are threatened.
>
> Some respondents commented: 'let the DENR come and suppress the forest fires because they prohibit us to cut trees under our community rules' (Tacloy 2001, 5).

If there are communities where collective action for natural resource management exists supported by customary norms and indigenous property systems, there are also communities where little or none of these institutions exist. This is the lesson from the community studies of NRMP 1. In traditional communities, both property rights and collective action support the community's forest resources management practices. Hence, the forest resources are utilized in a sustainable

manner, protected and conserved. In these communities, devolution of authority and responsibility over forests from the central government to user groups has a chance to succeed.

Unfortunately, the above assertion will not hold true for communities where the property regimes over forest lands is open access, usually because the settlements were established recently through internal migration in the Cordillera. Let us take the example of Mount Data where the forest has been treated as open-access by in-migrants from elsewhere in the Cordillera and there are no community norms to penalize over-exploitation (Rood 1995, 11-12). Resources at the Mount Data Plateau are deteriorating at a rapid rate—roughly two percent of the original forest is left—and the settlements seem to have no norms to stop this process (Rood 1995). The probability for collective action to emerge is low because it implies a conscious working together. Collective action is something that is not often observed among migrant communities because there is no sense of community or collective identity among resident households.

The same pattern of outcomes is also reported as taking place at the Mount Pulag National Park[15] by Batcagan (2007). A new road, from Ballay to Tawangan,[16] as well as the availability of irrigation have made vegetable gardening an attractive source of cash income to subsistence farmers here. Pine and mossy forests have been cleared to give way to vegetable gardens (Batcagan 2007, 61). The pattern of agricultural transformation that took place at Mount Data where formerly subsistence farmers have shifted to vegetable gardening has also taken place at the Mount Pulag National Park.

Economic Changes

Even in traditional communities the incentives for local users to manage forest resources may be altered or even diminished because of economic changes. Let us discuss a few of these economic changes that have occurred in the Cordillera Region: the commercialization of agriculture, the establishment of non-farm livelihoods, and the opportunity to be employed overseas.

Insights on the effect of the commercialization of agriculture on forests can be obtained from the agro-ecosystem researches of the CSC in the 1980s. Agro-ecosystem research is undertaken primarily to clarify the relationships among the biophysical and socio-cultural elements in rural communities as these undergo change from subsistence agriculture to commercial cropping. The human-environment interaction is studied from the point of view of the household. The farming household views the forests as part of a portfolio of resources and livelihood activities

alongside farming (subsistence and/or commercial), animal husbandry, etc.

The community studies undertaken from 1987 to 1990 highlight how the farming households are experiencing a rise in their cash requirements because of their aspiration for children to be better educated, their desire for consumer goods and appliances, and the need to purchase agricultural inputs. How farmers respond to market opportunities and cope with their cash needs have important implications on the upland environment and thereby on the interaction between agricultural change and forest conversion.

The research concluded that "agricultural expansion stimulated by commercialization, inevitably has a negative effect on the preservation of forest" (Prill-Brett et al. 1994, 36). Therefore, programs intended to intensify or expand agricultural production in Cordillera communities must take into consideration their potential impact on forest conversion. More importantly, Cordillera forest conservation cannot be pursued successfully without consideration of how forests and their products are utilized within the farming systems of households and communities. The study warns that projects narrowly focused on achieving the department or ministry's agenda, i.e., Department of Agriculture for agricultural productivity, DENR for reforestation or community-based forestry and conservation, especially because they are independently pursued, do not lead to appropriate outcomes.

The emergence of non-farm livelihoods like those related to the growth of tourism may also alter the local community's use of forest resources. In the municipality of Sagada, the pine forests are a major reason for its being a top tourist destination in the Cordillera Region. In this community of 12,300 people (in 2007), the monthly total of local and foreign visitors comprise from a quarter to a third of its local residents[17] making tourism a significant economic activity in the locality.

Therefore, one can argue that the incentive to preserve and conserve the pine forests has increased with the growth of tourism here. On the other hand, Cruz (2001, 42) would contend that "the increasingly important role played by tourism in the Central Sagada economy could also lead to higher rates of forest extraction as tourist inns and hostels get renovated and new ones established."

The last among the sources of economic changes is overseas employment. This has not bypassed the Cordillera Region given that the Philippines registered one of the highest numbers of overseas contract workers in the world today. The 2004 Survey on Overseas Filipinos[18] shows that in October 2004, there were 1.06 million overseas Filipino workers (OFWs), of which 820 thousand worked in Asia, 108 thousand in Europe, and 95 thousand in North and South America. Although the Cordillera Region ranked only 14th out of 17 regions in

the Philippines, it registered 24 thousand OFWs. Of this total, three-fourths were female (18,000).

Overseas Filipino workers remit money to their families. Through this income source, houses are built or renovated, consumer goods are purchased, e.g., cars, motorcycles, appliances, and productive tools like farming implements are bought. This source of cash income reshape livelihood strategies as McKay and Brady (2005) assert. Money is used to plant a commercial crop or to establish small enterprises, or invested in the education of the young. In Asipulo, Ifugao, remittances are invested to change subsistence agricultural systems to less sustainable cash crops, replacing pond field rice with input-intensive vegetable crops and abandoning upland shifting cultivation fields (McKay and Brady, 2005, 93). Changes in livelihoods also come about not only due to the entry of cash income but also through the loss of labor hands. Family labor decreases because members now work overseas or go off to study in the city or urban center. The absence of women can increase the work load of husbands.

The effect of overseas contract work on collective action and thereby on forest resource management still has to be systematically studied. Part of what needs to be established is whether overseas employment in some households will lead to an increase or decrease in the importance that these households give to conserving forest resources. Let us recall that the value of forest resources is in some way linked to the value of farming as a livelihood. Also, we have to determine whether this valuation will differ from the way that the other households without family members in overseas work will value the forest resources. In other words, will the community still be of one heart and one voice about the way to manage forest resources in the locality? To the extent that consensus breaks down, or norms are weakened with the differing interests of households, collective action will become more difficult. In the words of Bardhan and Dayton-Johnson[19] (2001, 2) social heterogeneity can "weaken social norms and sanctions to enforce cooperative behavior and collective agreements."

In addition to social heterogeneity, there is economic heterogeneity. The latter can take the form of an unequal distribution of income and/or wealth which reduces the incentive to cooperate and thereby negatively affect collective action. Economic changes like commercialization of agriculture, the growth of non-farm employment like tourism-related activities, and the opportunity for overseas employment are expected to bring about not only social but also economic heterogeneity among households in Cordillera communities. Heterogeneity, when it arises, will adversely affect local collective action.

5. Co-management of Forest Resources in the Cordillera

The Joint AO is the latest among the policy initiatives in the forest management policy of the national government. It transfers some authority and responsibility for natural resource management, specifically over forest resources, from the central government to user groups in indigenous cultural communities. More importantly, it confers legal standing to indigenous socio-political structures like the Council of Elders or Leaders, assigning them roles and responsibilities in forest management.

The issuance of the Joint AO has moved the pendulum of forest policy to the position where forest inhabitants are perceived as 'partners' in forest conservation rather than as 'enemies' of forest protection and 'culprits' of forest degradation. What new initiative with regard to forest management is made possible with the issuance of the Joint AO? To answer this question, we need to take a closer look at the provisions of the Joint AO.

The Joint AO sets the guidelines and procedures for the DENR and NCIP (under Section 2.1) to undertake the recognition, documentation, registration and confirmation of traditional and indigenous forest resources management systems and practices found **to be sustainable** in the forest and watershed areas within the ancestral domain or ancestral land of the concerned indigenous cultural community or indigenous peoples. These will be referred to as Sustainable Traditional and Indigenous Forest Resources Management Systems and Practices or STIFRMSP. In the Cordillera, the traditional forest management practices include the *muyong* system of Ifugao which was earlier recognized through DENR Administrative Order 96-02 and 96-10, the *tayan* and *batangan* of Mountain Province, the *ginubat* of Kalinga, and the *lapat* system of Abra and Apayao. There is formal recognition of customary laws and the role of indigenous knowledge systems and practices (see Section 2.1) as well as the role of indigenous socio-political institutions (see Section 5.3). The recognition of customary tenure systems restores local control over resource use and management (see Ngaido and Kirk 1999).

A Joint Confirmation and Recognition Order (JCRO) shall be issued by the Regional Directors of DENR and NCIP after appropriate documentation and verification that such STIFRMSP promotes and practices forest and biodiversity conservation, forest protection and sensible utilization of the resources found therein based on existing customary laws. The STIFRMSP must be duly endorsed by the concerned Local Government Units through resolution or ordinance (see Section 6).

Roles and responsibilities are assigned to the DENR in Section 5.1 and to the NCIP in Section 5.2 as well as to the Indigenous Socio-Political

Structures such as the Council of Elders or Council of Leaders in Section 5.3. Specifically, the Council of Elders/Leaders are tasked to

> (a) Formalize the traditional leadership system pursuant to customary laws and practices in managing forestlands and the forest resources found therein;
>
> (b) Take the lead role in resolving conflicts/disputes in accordance with their customs and traditions on consensus building within their domain;
>
> (c) Initiate and approve the participatory formulation of community policies relative to the effective management and conservation of forest resources, including the recommendation for the establishment of community/village forests within their territory;
>
> (d) Activate its authority within the community for the implementation of cultural governance towards effective sustainable forest conservation and management;
>
> (e) Actively support and participate with the DENR, the NCIP and all the LGUs concerned in the preparation and forging of a MOA for the effective implementation of this Order.

Registration of the STIFRMSP shall be issued with a Joint Implementing Rules and Regulations jointly approved by the DENR, the NCIP, the concerned LGU and the head or duly authorized representative of the concerned ICC/IP. Section 10 specifies that the resource management within the registered STIFRMSP adhere to the established traditional leadership structure and practices. In particular a resource management plan will be prepared including collective agreements and commitments for natural resource protection and utilization.

In effect, this framework as described sets up a co-management governance mechanism for forests in the Cordillera. Co-management was recommended by NRMP 2 partly because new mechanisms were sought by community members in partnership with government and/or agencies to deal with new needs. For example, people requested for assistance for water impounding projects and water harvesting techniques. Thus, it was proposed that there should be

> … agreements on governance procedures for forest management, between the DENR and the *ili*/community; between politico-administrative units and socio-cultural settlements, i.e., barangays, municipality and the *ili*; among households, kinship groups and *dap-ays*/wards; among competing resource user

> groups; among government agencies, non-government organizations and community groups.

This idea is similar to that stated in Section 2.2 as a specific objective:

> To institutionalize the consultative, collaborative effort and consensus building processes between and among indigenous socio-political institutions including its leadership system, local government units (LGUs), the DENR, the NCIP and other concerned agencies/offices/organizations for the enhancement of appropriate indigenous practices of forest resources management as a mechanism to be effected in the community as a whole.

There are other provisions of the Joint AO which echo and coincide with some recommendations based on the research findings of NRMP 2 (see Mendoza 2006). For example, NRMP 2 used the *ili* as the Ancestral Domain Unit to produce its Management Plan. Three such plans were completed for Fidelisan Ili, Central Sagada Ili and Barangay Ankileng of Sagada, Mountain Province.

Section 8 of the Joint AO states that:

> The documentation process shall focus NOT (emphasis provided) on specific barangay levels but on **traditional domain management unit/s** as a whole and should capture the integrative landscape/ nature of the domain.

Section 12.2 also makes reference to village and not only municipality:

> There shall be organized a local management group to be handled by the Environment and Natural Resources Council (ENRC) at the **village** or municipal level… (emphasis provided)

Another was a recommendation to acknowledge the dynamism and evolution of traditional practices and indigenous knowledge (Mendoza 2006, 8). The Joint AO tasks the DENR to identify and recommend enabling systems/schemes to promote indigenous knowledge/practices as an alternative approach and/or management tool in forest ecosystem management in Section 5.1 (e).

From this initial reading of the Joint AO, there is basis to conclude that the current policy framework which recognizes indigenous forest management practices and formally recognizes the indigenous socio-political structures will thereby enable the local users and indigenous cultural communities to become partners in the management of forest resources in the Cordillera. However, the optimism for this improved governance framework for forest management must be tempered by a

realization that there are a few key elements that were missed. Let us now turn to them.

First, the Joint AO could have been more specific about how the recognition of STIFRMSP can enable or lead to the "federating" of resource management units or ancestral domain management units into broader coalitions for environmental sustainability, even if initially, this will only cover forest resources.

An important outcome of the mapping exercises of NRMP 2 was the identification of common areas located within the ancestral domain of *ilis* that were shared with other communities located in neighboring municipalities and/or provinces. There were common pasture grounds, hunting grounds, and forests. An early recommendation by the NRMP 2 research team was to pay attention to mechanisms that allow 'managers' of neighboring ancestral domains to negotiate how to utilize the resources located in these common and shared areas.

Second, that the Joint AO mandates another round of documentation, registration and confirmation towards recognition of STIFRMSP in addition to the processes that accompany the drawing up of ADSDPP under IPRA or ADMP under DAO 2 seem like so much bureaucratic paper work. Hopefully, the Implementing Rules and Regulations being sought by the Regional Development Council of the Cordillera Region for the implementation of the Joint AO (reported by Dexter See in the *Baguio Midland Courier*, March 22, 2009) will precisely ease this requirement.

Third, the initiatives of local users, though now encouraged, will still be dictated by the terms set for the registration of an STIFRMSP as enumerated in Section 9. We quote below four of the six provisions:

> (1) The existing Indigenous Forest Resources Management Systems/ Practices are promoting forest conservation, protection, utilization and biodiversity conservation;
>
> (2) The basis of the indigenous forest resources management practices **shall focus on the maintenance of the watershed system necessary to sustain/maintain the protective and productive functions of the forest** (emphasis provided) through indigenous knowledge approach/practices which will enhance soil and water conservation and biodiversity;
>
> (3) The presence of customary laws, **if verified to be within the framework of sustainable forest resources management** (emphasis provided), which may be written or unwritten rules, regulations, usages, customs and practices traditionally observed, accepted and recognized by the respective ICCs/ IPs in the management of forest resources;

(6) The current indigenous forest resources management systems/practices **can be harmonized** with current ENR laws, rules and regulations (emphasis provided).

As Sundar (2000, 276) would argue, the terms are dictated by the overall framework of targets and activities prescribed by government rules. However, the participation by villagers or forest users should not be limited to small-scale sectoral units but should also be enabled in bodies which influence the entire direction of the political process.

6. Conclusion

Co-management schemes to control forest resources may take a number of forms. Agrawal and Ostrom (1999) described two cases—the Forest Councils of Kumaon in India and the Parks and People Project in Nepal. In India, forest councils formally manage and control about a quarter of the forests in three districts of Kumaon. The Forest Council Rules of 1931, amended in 1976, defined the limits of local autonomy: Villagers cannot clear the forest, they cannot impose fines beyond the specified amount, they can raise revenues through certain limited sources, and they must take recourse to established legal procedures to resolve conflicts (Agrawal and Ostrom 1999, 28). Councils meet frequently to set up rules regarding withdrawal of forest products, monitor the enforcement of rules and sanction violators. Officials of the Revenue department and the Forest department perform specific functions in the operations of these elected forest councils numbering to about 3,000. Forest officials coordinate commercial harvest of forest products from community forests and provide technical assistance. Revenue officials underwrite the enforcement of rules (Agrawal and Ostrom 1999, 30).

In Nepal's Parks and People Program, residents of the buffer zone of four national parks are allowed rights of access and use. During specified times of the year lasting from 10 to 15 days, zone residents are permitted to enter the protected area and they can harvest products (like thatch grass), graze animals and collect firewood. Rules covering these activities are crafted by the officials of the Protected Area without the involvement of the local residents (Agrawal and Ostrom 1999, 34). The change in the status of buffer zone residents since the Parks and People Program began was to make them authorized entrants and users of resources in the Protected Area. The relationship of the residents to the Protected Area officials has not been altered by the Program. Devolution in the form of transfer of responsibility to local users in the case of Nepal is very limited.

It is hoped that the form of co-management for forest resources that will evolve in the Cordillera will take the shape more of the former

rather than the latter. From the community studies referred to in the preceding sections, we can assert that the elements required for a viable co-management scheme are present. There are effective property rights in the *ilis* of the Cordillera. Customary norms support and enable collective action here.

The institutional landscape now consists of organizational actors whose attitude has become more sympathetic to ICCs and their practices. Among them are the local government units that have become empowered through the Local Government Code. For example, Colongon et al. (2005, 83-85) report that several barangay councils in Bucloc in the province of Abra have passed ordinances that formalize the use of *lapat* as the management and protection system in reforestation sites. There is a national agency like the NCIP that is tasked "to promote and protect the rights and well-being of the ICCs/IPs and the recognition of their ancestral domains as well as their rights thereto." The DENR, which is primarily responsible for forest policy, together with NCIP have now through the Joint AO formally recognized indigenous forest management systems and role of indigenous socio-political structures in forest management. The stage appears to be set for a 'successful' co-management of forest resources in the Cordillera specifically where customary norms regarding forest and land management have remained strong. However, the research findings of Pinel from her study of the co-management experience of Mount Pulag National Park conclude that "in the Mountain Pulag institutional context, the structure of decentralization and indigenous rights created incentives for competition and not collaboration" (2007, 254). Now the policy environment, i.e., the local government code of 1991, IPRA of 1997 and the DENR-NCIP Joint AO of 2008, has come closest to effectively making a transfer of control from national government to local user groups of forest resources among Cordillera indigenous communities. At the same time, economic changes have transformed the structure of aspirations and opportunities for individuals and households giving rise to social and economic heterogeneity in these communities. The nagging question that must be asked is: Have policy innovations come too late? We hope not.

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NOTES

1. The Indigenous Peoples' Rights Act of 1997 (Republic Act 8371) was signed into law by Philippine President Fidel V. Ramos on October 1997. The Act provides a legal framework for upholding indigenous land rights, particularly over communal land.

2. A copy of the Joint AO can be accessed at <http://server2.denr.gov.ph/files/jointao-denr-ncip-2008-01_634.pdf>.

3. These researches were funded by the Ford Foundation, Philippines.

4. The PRE researches were funded by the National Economic and Development Authority (NEDA), Region I Office.

5. Both NRMP 1 and NRMP 2 were funded by the International Development Research Centre of Canada.

6. See Rood 1995.

7. See Research Reports 1, 2, 3, 4 and 5 on *Ancestral Domain and Natural Resource Management in Sagada, Mountain Province, Northern Philippines* (Baguio City: Cordillera Studies Center, University of the Philippines Baguio, 2001).

8. The Philippine government has not always successfully enforced its land policy on forest reserves and national parks by excluding the original inhabitants of these areas. In the Cordillera, there are well-known exceptions. There was the resettling of households from areas affected by the construction of the Ambuklao and Binga dams in the 1950s. Construction of the Ambuklao Dam began in July 1950 in the municipality of Bokod in Benguet Province and the Ambuklao Hydroelectric plant began operations in December 1956. The Binga Hydroelectric plant was constructed in August 1956 in the municipality of Itogon, also in Benguet Province and it began its operations in March 1960. See <http://www.cityofpines.com/ambuklao.html and http://www.cityofpines.com/binga.html>.

9. DAO 2 defined ancestral domain as all lands and natural resources occupied or possessed by indigenous cultural communities, by themselves or through their ancestors, communally or individually, in accordance with their customs and traditions since time immemorial, continuously to the present except when interrupted by war, force majeure, or displacement by force, deceit or stealth.

10. DAO 2 defined ancestral land as land occupied, possessed and utilized by individuals, families or clans who are members of an indigenous cultural community.

11. *Ili* refers to a physical or geographic area, historically inhabited by a homogeneous population which can trace its descent from common ancestors. These persons share and manage common property resources following customary land law (Mendoza and Brett 2009).

12. Note that CADCs were issued mostly to municipalities, as seen in Table 1.

13. *Saguday* is the term of the northern Kankana-ey of Sagada for common land that belongs to a descent group or clan, a family or ward (*dap-ay*) (see Prill-Brett 2001, 9).

14. Successful indigenous and common-pool forest resource management systems similar to what has been observed in the Cordillera have also been identified in many villages of Nepal. A specific example is the *Shinga naua*

system practiced by the local Sherpa community in the Solukhumbu region of Nepal. Allocating forest resources and enforcing compliance to locally crafted rules are the responsibility of the locally appointed officials called *Shinga naua* (Pradhan and Parks 1995).

15. The Mount Pulag National Park includes within its boundaries five municipalities of Benguet, and one municipality each of Ifugao and Nueva Vizcaya (Batcagan 2007, 7).

16. Tawangan is a village located within while Ballay is located outside the Mount Pulag National Park (see Figure 1 in Batcagan 2007, 8).

17. Data from the Sagada Tourism Office showed that a total of 4041 visitors came in March 2008. Of this total, 77 percent were Filipinos (3097) and the remaining 23 percent included Europeans (569), Asians (210), Americans (139), and Australians (26). But this was the peak when compared to the numbers of visitors for the preceding five months: October 2007 - 1697; November 2007 - 1626, December 2007 - 2458, January 2008 - 2405, and February 2008 – 2660.

18. National Statistics Office, Press Release on the 2004 Survey on Overseas Filipinos, dated April 15, 2005.

19. They studied irrigators in Nepal, Southern India, and central Mexico.

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