# Decentralization and Ignored Local Dynamics: A Case Study on CBFM in the Philippines

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## ABSTRACT

Decentralization has emerged as a major strategy for many developing countries to pursue environmental management, and it has created new local commons. Existing empirical studies on the subject have been attentive to the dynamics among user groups and to the multi-level dynamics. On the other hand, these studies focus very little on heterogeneity among villagers — user group members and non-user group members inside a village, and how this heterogeneity affects the outcome of decentralization. This research seeks to shed new light on the study of decentralized natural resource governance by focusing on relations between these two actors.

In this case study, a forest which is under community-based forest management (CBFM) in the Philippines today has long provided various livelihood resources to all villagers as a communal forest. Most villagers subsist by using three types of land: (1) uplands and forests for fuel wood and timber, (2) yards for vegetables and fruit, and (3) lowlands for rice. Under decentralized forest policies, however, only user group members can legally access resources inside the CBFM area because the policy divides villagers into members and non-members. To members, a CBFM area means resources for fuel wood and timber, while for non-members it is important as a watershed for providing water to lowland rice fields. Most non-members want members to refrain from using forest products inside the CBFM area so as to prevent soil erosion and water shortages, and they complain to foresters if they grant cutting permission to members. This pressure from non-members protects the CBFM area from excessive forest utilization. These local dynamics, which have thus far been ignored, affect the CBFM project implementation process differently from other actors that researchers have focused on heretofore, such as local governments, forestry bureaus, and NGOs.

**Keywords:** *Decentralization, Local dynamics, Heterogeneity, Community-based forest management, Republic of the Philippines*

## INTRODUCTION

This research suggests by means of a case study that intra-village heterogeneity, which creates informal institutions under national forest policy, has an impact on forest policy implementation. Decentralization has emerged as a major strategy for many developing countries to achieve environmental management, and it has created new local commons. Existing empirical studies on the subject have been attentive to the dynamics among user groups and to multi-level dynamics (Young 2002; Berkes 2002). This research especially discusses the interfaces between different organizations, but they focus very little on heterogeneity among villagers — the user group members and non-user group members in a village, and how this

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heterogeneity affects the outcome of decentralization. This research seeks to shed new light on the study of decentralized natural resource governance by focusing on relations between these two actors.

This article is based on an empirical study of community-based forest management (CBFM) in the Philippines. As other various developing countries, forest conservation is an important part of the policy agenda in the Philippines today. The government changed its centralized forest management to decentralized forest management after launching the Integrated Social Forestry (ISF) Program in 1982. Under the ISF Program, local people have the right to use natural resources inside the ISF area under a Certificate Stewardship Contract (CSC). Decentralized forest management was institutionalized by the CBFM Program in 1995. It became a national strategy, and all community forestry programs were integrated into CBFM.

CBFM goals include promoting (1) sustainable management of forest resources, (2) social justice and improved well-being of local communities, and (3) strong partnerships between local communities and the Department of Environment and Natural Resources (DENR). User group members, i.e., People's Organization members, can manage their area for 25 years if they have a CSC, which is the main incentive for local people to join. Because of CBFM, user group members have a legal guarantee for using natural resources in public forests (Utting 2000; Contreras 2003), and their activities lead to restraining deforestation in some areas because members acquire new agricultural and forestry techniques (Pulhin et al. 2007).

On the other hand, CBFM has a big gap between seemingly wonderful policy and complicated local reality. There are two reasons. The first is the problem of policy itself. User group members have to get permission from DENR when they cut planted trees for commercial purposes. DENR has important authority in that decentralization forest policy under CBFM leads to recentralization (Grainger and Malayang 2006). The second is that policy cannot accommodate complicated local dynamics. For instance, politics among user group members make for unequal sharing of CBFM benefits (Dahal 2006).

While this analysis explains the limitations of decentralized forest policy, it cannot tell us why some CBFM sites implement the policy well in spite of those problems. This research takes on the challenge of answering this question by shedding light on the informal institutionalizing process which results from local heterogeneity under decentralized forest policy.

## RESEARCH METHOD AND DATA GATHERING

The focus of this research is on understanding local dynamics beyond decentralized forest policy and how they create an informal institution. For that purpose, this research reports on a case study of a village hosting Cacupangan CBFM in the Philippines province of Tarlac. This CBFM site is still forested because user group members have planted and have managed timber and fruit trees. The user group membership is distinct and well known by the villagers. Activities are supported by not only DENR, but also an international donor, the Japanese International Cooperation Agency (JICA), and by the local government. It appears that

Cacupangan CBFM is well implemented compared with many inactive CBFM sites.

In this research, “local dynamics” means the influence of natural resource politics on a CBFM site between user group members and non-user group members in a village. To understand this interaction, one must see that their livelihoods are supported by three land use types: forest, residential, and lowland. Here forest means both upland forests and lowland tree plantation. In the Philippines today few people subsist in forest areas alone. Almost all upland people move to seek employment in lowlands or towns when they need more money. Uplands/forests cannot provide them with enough money for their families. Moreover, some user group members live not in CBFM sites but in lowlands, other villages, or in towns. Therefore we need to see their livelihoods as a combination of lowlands and forest.

Data were gathered from November 2009 to January 2010 through semi-structured interviews of 42 user group members, including 21 CSC holders, 20 non-CSC holders, and 15 non-user group members who were Farmers Association members.

## STUDY SITE

### *History of forest management*

The history of land use tells us how decentralized forest policy engendered heterogeneity in the forest management of Maniniog village. This village was well forested before the Ilokano people migrated there from the Ilokos area or from near towns in the 1930s. After World War 2 people started opening lowland and uplands because of population growth. They planted rice and vegetables in lowlands and practiced slush-and-burn (kaingin) in uplands as communal areas to grow upland rice, beans, and fruit trees. Everyone could cultivate uplands, including the area which would later become Cacupangan CBFM.

However, the Philippine government imposed greater restrictions on natural resource use in public forests from the 1970s and they prohibited cultivation there by people without title. The government started the Communal Tree Farm (CTF) program in 22 ha of Cacupangan in 1979, and it allowed only some people who participated in this governmental project to cultivate Cacupangan area. In the CTF program DENR personnel chose only 22 people who were allowed to cultivate around 1 ha each. Those 22 people were the first user group members under the national community forestry program. That CTF area was converted to the ISF program in 1982, and integrated into the CBFM program in 1995 with an additional 57 ha.

The forest under CBFM in this village has provided various livelihood resources to all villagers as a communal forest for a long time, but under decentralized forest policies only user group members can legally access resources inside the CBFM area. Thus the policy divides the villagers into user group members and non-user group members. Second, in 1995 Persan dam construction at the foot of the Cacupangan CBFM area influenced local dynamics. Persan dam, which was constructed with Japanese aid, has provided water to some (around 106 ha) lowland rice fields. About 100 people who could get water from Persan dam organized a

Farmers Association for managing their water resource. They started claiming that the Cacupangan CBFM area is a watershed and prohibited cutting any of its trees. Therefore some of the non-user group members, especially Farmers Association members and CBFM user group members, have different purposes for Cacupangan area.

Third, CBFM user group members increased after JICA supported the Cacupangan CBFM for three years starting in 2007. In addition to the 22 original CSC members, 19 people who participated in the JICA project became user group members in 2009. Because their incentive to join CBFM was to get some CBFM land, DENR personnel conducted a boundary survey for preparing a new CSC issuance. But the 19 are still non-CSC holders because DENR doesn't have a policy of new CSC issuance.

For these reasons there are now three types of Cacupangan-area beneficiaries in this village: (1) user group members who have CSC areas and manage CBFM areas, i.e., CSC holders, (2) new user group members who do not have CSC area, i.e., non-CSC holders, and (3) non-user group members who get water from Persan dam at the foot of the Cacupangan CBFM area, i.e., Farmers Association members.

### *Livelihoods and three types of land utilization*

This section examines three groups' livelihoods by means of comprehensive land use to understand their characteristics. Table 1 shows that most villagers combine the use of three types of land: forest, residential, and lowland. On average, 45% of Maniniog residents are landed farmers and 55% are tenants. The obvious difference comparing these three groups is that Farmers Association members include a higher percentage (85.7%) of lowland owners than the user group members, with CSC holders at 57.1% and non-CSC holders at 55.0%. Most Farmers Association members are landlords, and especially three families among Farmers Association members are extremely rich because they have overseas Filipino workers in their families. On the other hand, some CBFM user group members work on others' farms as tenants or wage laborers.

*Table 1. Land ownership at Maniniog in 2009 (%).*

| Land | | | CSC holders N=21 | Non-CSC holders N=20 | Farmers Association members N=15 |
|---|---|---|---|---|---|
| Forest | Inside village | CBFM | 100.0 | 100.0 | 0.0 |
| | | Owner | 9.5 | 45.0 | 50.0 |
| | | Tenant | 0.0 | 0.0 | 14.3 |
| | Outside village | Owner | 14.3 | 0.0 | 14.3 |
| | | Tenant | 0.0 | 0.0 | 0.0 |
| | None | | 0.0 | 0.0 | 35.7 |
| Residential | Inside village | Owner | 57.1 | 55.0 | 85.7 |
| | | Tenant | 38.1 | 40.0 | 14.3 |
| | Outside village | Owner | 4.8 | 5.0 | 0.0 |
| | | Tenant | 0.0 | 0.0 | 0.0 |
| Lowland | Inside village | Owner | 19.0 | 15.0 | 92.9 |
| | | Tenant | 52.4 | 45.0 | 35.7 |
| | Outside village | Owner | 0.0 | 5.0 | 28.6 |
| | | Tenant | 9.5 | 5.0 | 21.4 |
| | None | | 23.8 | 30.0 | 0.0 |

Source: Field research in 2009

Table 2 shows that people cultivate three types of land for different purposes: (1)

forest including uplands, pasture, and lowland tree plantations for fuel wood and timber, (2) residential land for vegetables and fruit, and (3) lowlands for rice. This tendency is common among the three groups, while at the same time they conduct different activities in forests. Whereas CBFM user group members produce trees for timber and charcoal, Farmers Association members put cows and goats out to pasture.

Table 3 shows that farmers have various sources of income from the three land types. However, their main income is rice, and there is a big difference in annual incomes from rice between user group members and Farmers Association members. User group members have less income than Farmers Association members because many of them use some rice to pay debts and tenant fees. User group members, on the other hand, have more income from charcoal making. Their income is insufficient because water from Persan dam doesn't reach down to their lowland farms. As such, their crops are rainfed and can be harvested only once a year. Especially during summer, forests provide user group members with important income, while Farmers Association members can survive by lowland farming.

*Table 2. Three types land use in 2009 (%).*

| Land use | | | CSC holders N=21 | Non-CSC holders N=20 | Famers Association members N=15 |
|---|---|---|---|---|---|
| Forest | Agricultural products | Rice | 9.5 | 15.0 | 6.7 |
| | | Beans | 14.3 | 10.0 | 26.7 |
| | | Root crops | 19.0 | 10.0 | 20.0 |
| | | Vegetables | 14.3 | 15.0 | 46.7 |
| | | Bananas | 14.3 | 15.0 | 40.0 |
| | Forest products | Timber | 100.0 | 60.0 | 46.7 |
| | | Charcoal | 57.1 | 15.0 | 46.7 |
| | | Fruit | 47.6 | 30.0 | 60.0 |
| | | Bamboo | 4.7 | 5.0 | 13.3 |
| | | Cogong | 9.5 | 5.0 | 0.0 |
| | Hunting animal | | 4.7 | 15.0 | 0.0 |
| | Pasturage | | 0.0 | 0.0 | 40.0 |
| | Fish faming | | 0.0 | 0.0 | 6.7 |
| Residential | Agricultural products | Beans | 28.6 | 20.0 | 40.0 |
| | | Root crops | 71.4 | 75.0 | 40.0 |
| | | Vegetables | 71.4 | 65.0 | 26.7 |
| | | Bananas | 61.9 | 70.0 | 40.0 |
| | Forest products | Timber | 14.3 | 20.0 | 20.0 |
| | | Charcoal | 9.5 | 5.0 | 13.3 |
| | | Fruit | 90.5 | 100.0 | 100.0 |
| | | Edible trees | 47.6 | 50.0 | 53.3 |
| | | Cotton | 4.8 | 0.0 | 0.0 |
| | | Bamboo | 4.8 | 15.0 | 13.3 |
| | Livestock | Chickens | 76.2 | 80.0 | 93.3 |
| | | Ducks | 19.0 | 30.0 | 0.0 |
| | | Turkeies | 4.8 | 5.0 | 0.0 |
| Lowland | Agricultural products | Rice | 71.4 | 70.0 | 100.0 |
| | | Beans | 9.5 | 5.0 | 20.0 |
| | | Root crops | 9.5 | 10.0 | 20.0 |
| | | Vegetables | 14.3 | 0.0 | 40.0 |
| | | Bananas | 0.0 | 10.0 | 6.7 |
| | Forest products | Fruit | 0.0 | 15.0 | 13.3 |
| | | Timber | 0.0 | 0.0 | 0.0 |
| | | Charcoal | 0.0 | 5.0 | 0.0 |
| | | Edible trees | 0.0 | 5.0 | 0.0 |
| | | Bamboo | 0.0 | 5.0 | 0.0 |
| | Livestock | Goats | 38.1 | 40.0 | 46.7 |
| | | Cows | 71.4 | 45.0 | 86.7 |
| | | Water baffalos | 38.1 | 40.0 | 60.0 |
| | | Pigs | 23.8 | 5.0 | 26.7 |
| | Shellfish | | 57.1 | 42.9 | 60.0 |
| | Fish faming | | 28.6 | 15.0 | 46.7 |
| | Forage | | 66.7 | 80.0 | 100.0 |

Source: Field research in 2009

*Table 3. Sources of income in 2009 (pesos).*

| Source of income | | Annual income (pesos) | | |
|---|---|---|---|---|
| | | CSC holders N=21 | Non-CSC holders N=20 | Farmers Association members N=15 |
| Agricultural products | Rice | 25,530 | 24,628 | 129,003 |
| | Beans | 4,140 | 1,990 | 400 |
| | Vegitables | 7,711 | 416 | 100 |
| | Root crops | - | 750 | 553 |
| | Fruit | - | 2,625 | 15,000 |
| | Flowers, Cotton | 300 | 500 | - |
| Forest products | Firewood, Charcoal | 9,656 | 4,575 | 0 |
| | Timber | - | - | 0 |
| | Bamboo | 4,000 | 2,000 | - |
| | Furniture | 36,000 | 3,250 | - |
| Livestock | Chickens | 250 | 420 | 1,000 |
| | Ducks | 3,750 | - | - |
| | Pigs | - | 40,000 | 11,500 |
| | Goats | - | - | - |
| | Cows | 13,000 | 9,000 | 8,750 |
| | Water baffalos | 13,000 | 22,000 | - |
| | Fish | 2,000 | - | 2,000 |
| Employment | Farm wage labor | 13,965 | 11,851 | 11,640 |
| | Livestock care taker | - | n.a. | - |
| | Upland care taker | - | 6,000 | - |
| | Carpenter | 6,000 | 9,000 | 8,400 |
| | Domestic Filipino worker | - | n.a. | - |
| | Oversea Filipino worker | n.a. | n.a. | n.a. |
| Business | Thresher, Water pump | n.a. | - | n.a. |
| | Store manager | 30,000 | 14,400 | 32,400 |
| | Driver | - | 6,240 | 12,000 |
| | Dress maker | - | - | 14,400 |
| | Barber | - | - | 140 |
| | Village official | 14,400 | 14,400 | 14,400 |
| | Government employee | - | - | n.a. |

Source: Field research in 2009

## LOCAL DYNAMICS BETWEEN USER GROUP MEMBERS AND NON-USER GROUP MEMBERS

### *Activity of user group members at CBFM site*

Cacupangan CBFM is covered by a secondary forest of timber and fruit trees that user group members planted and manage. The typical species are gmelina and ipil-ipil, which are good for timber and charcoal. They don't have extensive grasslands or soil erosion. How are they able to increase and maintain forest in the CBFM area?

According to the CBFM Implementation Framework that prescribes the rules and institutional process of CBFM, user group members have to set up a "Community Resource Management Framework (CRMF)" and a "Five-Year Work Plan (FYWP)" as a guideline for their activities. User group members prepared them during a Japanese-assisted program, but all was forgotten after six months. Instead of following these formal institutions, members decide individually what, where, and when they plant in their CSC area.

User group members recognize the following rules inside the CBFM area: (1) small swidden operations are allowed inside individual CSC areas for family consumption only, (2) members must get permission for commercial logging by asking their chairman, the village chief, and DENR, and (3) gathering firewood and making charcoal in another member's CSC area are allowed only if the person gets permission from the CSC holders. Thus even if user group members seem to be following the formal implementation process, they only follow procedures based on their own decisions.

### *Different CBFM site interests among actors*

Table 4 shows that the Cacupangan CBFM site has provided various natural resources not only to user group members but also to Farmers Association members. Most CSC holders think their benefits from the CBFM site are timber and charcoal, but in addition to family consumption, they get income from it. Because many of them are tenants or farm laborers, their income is insufficient. In particular they sell charcoal during in the summer when there is no work in the lowlands. Most non-CSC holders have received no benefits because the survey was just finished and they are afraid to cultivate without formal stewardship documents.

On the other hand, more than half of the Farmers Association members said that their benefit from the CBFM site was water. Some of them call Cacupangan a watershed and claim that no one is allowed to cut trees and branches, even CSC holders. On the other hand, new members have received no timber products yet because they are very new. Most non-CSC holders did not ascend to the area for one year after DENR personnel allowed them to use the area because they are afraid of complaints from Farmers Association members and village officials. Below we see why non-CSC holders must fear other villagers and how this relationship influences CBFM implementation.

*Table 4. Benefits from Cacupangan CBFM site (%).*

| Benefit | CSC holders N=21 | Non-CSC holders N=20 | Farmers Association members N=15 |
|---|---|---|---|
| Timber | 52.4 | 15.0 | 0.0 |
| Charcoal | 52.4 | 10.0 | 7.1 |
| Vegitables, Root crops | 19.0 | 10.0 | 0.0 |
| Rice | 9.5 | 5.0 | 0.0 |
| Fruit | 14.3 | 15.0 | 0.0 |
| Cogongrass | 9.5 | 5.0 | 0.0 |
| Bamboo | 4.8 | 0.0 | 0.0 |
| Rattan | 4.8 | 0.0 | 0.0 |
| Water | 0.0 | 0.0 | 57.1 |
| Fish, Shellfish | 0.0 | 0.0 | 7.1 |
| None | 19.0 | 60.0 | 35.7 |
| No idea | 0.0 | 0.0 | 7.1 |

Source: Field research in 2009

### *Politics between user group members and non-user group members*

Different interests in the CBFM area among actors create tension in their relations. To user group members, the CBFM area means supplying fuel wood and timber, while for most Farmers Association members it is a watershed that is important for providing water to lowland rice fields. Most Farmers Association members do not want the user group members to use any forest products inside the CBFM area in order to prevent soil erosion and a lack of water. Moreover, they complain to foresters if they give cutting permission to members.

DENR personnel admire some Farmers Association members for influencing some of their tasks such as organizing user groups and issuing cutting permission. DENR said that some Farmers Association members complain and object when they know that DENR has granted cutting permission to user group members. They also do not want DENR to increase the number of user group members. According to DENR personnel, this is one reason why DENR has been reluctant to increase members for a long time.

In fact a few Farmers Association members who are much richer than others in the village and have more lowland farmland insist that user group members should not enter the Cacupangan CBFM because it is watershed. They claim that user group members' activities influence their rice production because water for their lowland rice fields comes from the Cacupangan area. Therefore they oppose adding new members because that might have a negative impact on forest protection.

User group members have experienced other objections to their activities by Farmers Association members. For instance Farmers Association members complained when water tanks were constructed inside the CBFM area as a JICA-supported project. They claimed that their water resource would be harmed because the spring inside Cacupangan would run dry due to water tank construction. This makes user group members careful about their activities inside the CBFM area. CSC holders have refrained from large swidden operations and from cutting many trees in their use of resources for family consumption. Non-CSC holders are afraid to enter because they know someone will complain about their actions. Only four members started to open areas and to plant in 2010.Therefore pressure by non-members results in protection from excessive forest utilization inside the CBFM area.

## CONCLUSION

In this case the conflict of different interests in the CBFM site between user group members and Farmers Association members worked to restrain the exploitation of natural resources inside the CBFM site. Local politics among competing interests create an informal monitoring system. We should consider how this informal institution appeared via people's livelihoods based on a combination of forest and lowland activities. These ignored local dynamics affect the CBFM implementation process in different ways from other actors such as the local governments, forestry bureaus, and NGOs that researchers have heretofore focused on.

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