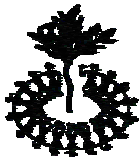


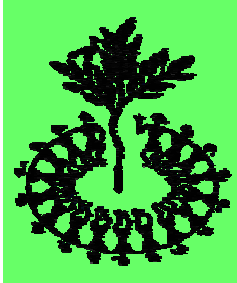
**Community-Based Dialogue  
on Natural Resource Management  
with Local Government  
Candijay Municipality, Bohol, Philippines**



Working Paper  
August 2001



This working paper was jointly produced by the **Asia Forest Network** and the **Environmental Science for Social Change**.



The Asia Forest Network (AFN) supports the role of communities in protection and sustainable use of the region's natural forests. The Network comprises a select coalition of Asia planners, foresters, and scientists from government agencies, universities, and non-government organizations. Solidarity of Network members is based on a common commitment to exploring alternative management strategies for Asia's disturbed natural forestlands. The Network's research emphasis includes the ecology of natural regeneration, the economics of non-timber forest product systems, and the community organizations and institutional arrangements that support participatory management. Lessons stemming from this research are used to inform field implementation procedures, reorient training, and guide policy reform.



Environmental Science for Social Change (ESSC) is a Philippine-based research and mapping institute with the primary purpose of engaging in national and regional research for the sustainability of the environment through developing a science for social change. ESSC works closely with local governments, the business sector, religious and academic institutions, and people's and non-government organizations in its areas of operations. ESSC's emphasis includes community resource management, watershed research, policy implementation, national environmental data sets, cultural empowerment and local governance.

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Front Cover Photograph: Upland and lowland resource use in the Municipality of Candijay, Bohol, Philippines

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## Foreword

This report was developed from a field visit of AFN delegates to Candijay, a coastal municipality in Bohol, which is representative of forest conditions in many parts of Central Philippines.

The Asia Forest Network supports the role of communities in protection and sustainable use of forests and promotes regional exchange on community forestry (CF). Field visits are built into regional meetings as they are viewed as opportunities for exposure and learning from local CF experience. During a regional meeting of Southeast Asian community forestry practitioners in Bohol, Philippines last June 26 – 30, 2001, a field trip was arranged for 20 AFN delegates from Cambodia, Indonesia, Philippines, Thailand and Vietnam. *(Please refer to the Appendix for the Directory of Participants)*

The area of interest for the field exchange was to explore experiences and second generation problems on community forestry in Cadapdapan and Padantaran. The people around the upland area of Cadapdapan have been involved in social forestry projects for over 20 years. Padantaran is a coastal community that manages a mangrove timberland. A meeting with local government and environment officials focused on decentralization, natural resources management and local governance.

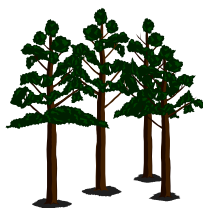
Candijay is a municipality with an existing relationship with ESSC. It had assisted the municipality in Community Mapping and in the preparation of a Comprehensive Land Use Plan. It is also supporting Candijay in its initiative to bring together watershed and coastal municipalities so these can develop a common natural resource management strategy.

While the field exchange was a one-day affair, preparations for a meaningful dialogue took time. The cooperation of the local government was valuable. Maps and briefing materials from a community mapping exercise by the local government and ESSC aided in the initial site analysis. These provided background on key characteristics and resource management challenges in the area.

During the field visit, interaction with local actors enhanced understanding of the operation of policy on field-level socio-political contexts of CF and of natural resource management by local government. Positive experiences as well as problems and issues were surfaced at dialogue events with community forestry groups and with local government and environment officials. *(Please refer to the Appendix for the Program of Activities)*

Consolidation of data for the briefing kit and for this case report required additional secondary data and interviews with relevant offices and with concerned stakeholders before and after the field visit.

After the dialogue, identified problems were referred to the proper agencies. Impressions by AFN participants were fed back to the organizations for response and clarification. Follow-up action will be taken on stakeholder dialogue opportunities by the local government and the ESSC.



## PART I: INTRODUCTION

Over the past decade, Asian nations have begun to decentralize natural resource management to communities and local governments. New decentralization policies represent an historic shift from forms of centralized state authority that characterized resource control during the colonial and early independence era. In the past, forests, watersheds, and coastal fisheries were often held under the sole authority of national resource management agencies, which in turn frequently leased them to private companies or state corporations for industrial use. Decentralization policies appear to be driven by a number of forces including demands for greater rights and responsibilities by local stakeholders, and the realization by planners that centralized management has led to a deteriorating state of natural resources.

The Philippines has been one of the first nations in the Asia region to enact policies that devolve significant authority over natural resources to local government units. In 1991, the Philippine Local Government Code authorized municipal governments to enact land use plans, reclassify land, and levy fines and fees to protect and manage resources. While these and related policies now provide a comprehensive framework to support community and local government resource stewardship, transitions to these new systems of management has presented many challenges for local implementers.

This case study from Candijay Municipality provides important insights into how coastal and upland communities are interacting with local government staff to develop their own unique approach to terrestrial and aquatic resource use and conservation. For decades the forests of Candijay have been deteriorating as commercial and subsistence pressures drive timber exploitation and land clearing in the upper watersheds. Much of Candijay's mangrove forests, which have played an important role in reducing coastal erosion, and as a hatchery for fish, have been cleared for fish ponds by outside entrepreneurs. The fragile fisheries and coral reefs have been over exploited and degraded by dynamite fishing, the use of cyanide, and other unsustainable practices.

The people of Candijay, after decades of relying on a diversity of short term sectoral projects designed in Manila, are now struggling to find ways to stabilize their natural environment, drawing on their own human and financial resources. As one of the lowest income class municipalities in the Philippines, this has been

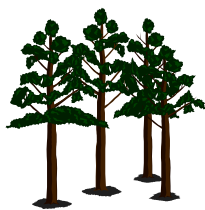
a challenge for local government leaders. Yet, this case study indicates that important changes are taking place as a result of decentralization both in terms of local action and the way in which local people perceive their responsibilities and roles in management. The people of Candijay and their municipal leaders are evolving innovative management strategies based on community organizations and drawing on local resources. At the same time, there have been important changes in their own perceptions of their rights and responsibilities to act as stewards of their micro-watershed which extends from mountain ridges to coral banks.

This case demonstrates that while enabling policies can provide a framework for decentralized resource management, communities and local governments must find their own way to implement these policies, often with limited experience and resources. By examining how different communities and local governments are approaching this transition, ESSC and the AFN hopes readers will gain a better understanding of the challenges involved in implementing decentralization policies and promising strategies being developed to do so. Ultimately, ESSC and the AFN would like to identify ways these processes can be supported from within, as well as through outside assistance.

### **COMMUNITY FOREST MANAGEMENT - A DEFINITION**

Community Forest Management (CFM) broadly describes local residents who have developed institutions, norms, rules fines and fees to sustain forest resources. CFM systems characteristically involve one or more communities protecting a specific forest area. While the forest may be under the legal jurisdiction of the community, country, state, or nation, community management groups strongly identify with the resource and perceive they have special rights and responsibilities for its management. While some governments or outside stakeholders may be interacting with CFM groups, typically communities exert operational controls over access and use of the forest.

***Source: Mark Poffenberger, ed., Communities and Forest Management, IUCN (The World Conservation Union), no date, p. 16***



## PART II: SETTING OF THE DIALOGUE

### PHYSICAL SETTING: CANDIJAY AND THE CARO-UD WATERSHED

Candijay is fairly representative of the region's forestry conditions estimated at 20% of landmass and of the concerns of local governments on natural resource management.



*The Caro-ud Watershed in Candijay is a mixed-use area. Here, a ten-year old tree plantation at the ridge and in the gulleys coexists with upland farm areas.*

Candijay, land area 10,695 hectares and 860 meters above sea level at its highest elevation, is one of 6 municipalities in the Caro-ud Watershed (20,289 hectares) in southeastern Bohol. It covers almost 3% of the area of Bohol mainland. Four of its 21 barangays are along the coast in Cogtong Bay, where the Cabidian, Matul-id and Caro-ud rivers join the sea. It shares coral reefs with Mabini, an adjacent municipality. It has 1,200 hectares of mangroves; another



300 hectares are on lease as fishponds. *(Please refer to Caro-ud Watershed Map)*

DENR estimates that only 320 hectares remain of the dipterocarp forest in the uplands. Reforestation projects in the past two decades rehabilitated or established forest cover in over 2,000 hectares of previously degraded timberland. These include *Gmelina arborea*, mahogany and bamboo plantations. The mangrove timberland, though most trees are visibly young, has retained above-average levels of diversity with at least 42 mangrove species still to be found at Barangay Buyo-an. On the other hand, satellite imagery maps show that 16% (over 1,700 hectares) of Candijay has no vegetative cover and is severely eroded; 36% of the area is 18% - 50% in slope with Bolinao and Ubay clay soil types that are susceptible to erosion. The remaining areas are potential agricultural lands with slopes of from 0 – 18 degrees. Cogtong Bay, with its mangroves and reefs, is known for its fishery resources. *(Please see Land and Water Use Map of Candijay)*

Community mapping, a participatory approach to problem identification and planning, pointed to watershed problems in Candijay as severe erosion, saltwater intrusion and flooding of ricelands in 5 barangays. Other problems are: siltation, continued cutting of trees in parts of upland and mangrove timberlands, poor productivity of agricultural lands, dwindling remnants of natural forests, intermittent water supply for irrigation and uncontrolled settlement of migrants into some mangrove areas, and decrease in fisheries and loss of coral reefs due to destructive fishing. The severity of erosion is evident when the coastline turns brown after a heavy rain. Other watershed municipalities share similar problems. *(Please refer to LGU Concerns Map that summarizes environmental challenges of the municipality.)*

## **SOCIO-POLITICAL AND POLICY CONTEXTS**

Candijay, population 25,729 in 1995, is a 5th class municipality with an annual budget of around P16 million (\$320,000). It is heavily constrained by lack of funds to support development and environmental projects with only 4% of its budget to spare after it pays for office upkeep and personnel.

Candijay, with growth rate of 3.9%, ranks number 1 in the district and number 2 throughout Bohol Province as having the greatest number of ultra poor, based on a standard provincial income measure. It has 3,481 of 4,962 or 70% of families in all 21 barangays with monthly incomes of no more than P4,000 (\$75), lower than Bohol's poverty threshold set at P6,000 (\$113). *(Provincial Poverty Profile, PPDO, 2001)*

Bohol's average annual income of P56,940 (\$1,074), was the lowest in the region. *(Bohol Provincial Profile, PPDO, 2001)*

Candijay is also number 1 as having the most malnourished children in Bohol. Predominantly rice producers on small land-holdings (average: 0.3 hectare), many in the labor force leave town seasonally to find work or augment incomes with upland farming, and firewood and nipa gathering.

The Philippine Local Government Code of 1991 gives more power and autonomy to local governments to protect, develop and manage forestlands and other natural resources. While environmental management was not absolutely devolved, LGUs can enact land use and zoning plans, reclassify lands based on land use, issue regulations, as well as levy fines and fees to protect and manage natural resources.

Bohol is one of the first provinces in the country to enact a Local Environment Code. Candijay is taking lead roles in bringing together coastal and watershed municipalities to discuss ways to jointly address problems and manage common resources. It established the Integrated Fishery and Aquatic Resources Management Council with neighboring towns, Anda and Mabini, which some observers from Candijay, perceive as lacking political will to enforce the council's action plan on coastal law.

The uplands were targets for reforestation since the '80's with loans for the environment sector

### **Box 1: A Chronology of Forest Management Programs in the Philippines**

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*The reforestation projects of Candijay reflected national programs on forestry during the past 20 years, which marked a progressive shift in policy that favored upland communities.*

1979 - System of short-term contractual agreements; Family Approach to Reforestation/Community Tree Planting Contract Reforestation - participants were paid to establish and maintain tree plantations. These were turned over to the DENR after 3 years with 85% survival.

1982 - Integrated Social Forestry - Agroforestry project that provided 25 year Certificate of Stewardship Contracts (CSC) to both community groups and families.

1993 - Recognition of Ancestral Domains/Claims - A DENR strategy to recognize the rights of indigenous peoples to their ancestral lands to ensure their economic and cultural well being.

1993 - Forest Land Management Program - Forest Land Management Agreements (FLMA) replaced short-term contract reforestation systems. Participants had sole rights to occupy and manage forestland, subject to repayable technical assistance from DENR, and to harvest, sell and use products from land.

1995 - Executive Order and Implementing Guidelines on Community-Based Forest Management - A Community-Based Forest Management Agreement (CBFMA) is a production-sharing agreement between community and the government to develop, use, manage and conserve specific portion of forest land.

*(Source: A Compilation of Policies on Community-Based Forest Management. DENR, 1998)*

from the World Bank, Asian Development Bank and the Overseas Economic Cooperation Fund. Organizing for coastal resource management came later in the mid-'90's. Despite numerous policy instruments that advanced community participation in natural resource management, strides in turning over state control of forests to local government units and organizations in the area has made slow progress after 20 years. A perceived stumbling block is the environment bureaucracy itself. Observers and some foresters admit that a policy shift to community forestry has not been easy to implement by many agents of the Department of Environment and Natural Resources (DENR) whose basic training and experience has been in commercial logging.

### **Box 2: Relevant Provisions of the Local Government Code on the Devolution of Natural Resource Management**

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Under principles of devolution in the Local Government Code, LGUs can enact land use and zoning plans, reclassify lands based on land use, issue regulations, as well as levy fines and fees to protect and manage natural resources. The municipal government also takes on functions in turned-over integrated forestry and community forestry projects outside watershed reservations.

#### Section 2

General Powers and Attributes of Local Government Units

#### Section 3

Operative Principles of Decentralization

#### Section 5

Rules of Interpretation of Provisions Favors Local Government

#### Section 16

General Welfare Provisions provide for LGU's Role to, among others, Preserve and Enrich Culture, Enhance Right of People to Balanced Ecology, Economic Prosperity, etc.

#### Section 17

LGUs shall discharge the functions of national agencies and offices devolved to them. For the municipality, this includes (i) extension and research services related to agriculture and fisheries; water and soil resources utilization and conservation projects; enforcement of fishery laws; conservation of mangroves. (ii) implementation of community-based forestry programs and similar projects; management and control of communal forest; establishment of tree parks, greenbelts and similar forest development projects. (vi) solid waste disposal and environmental management system and services or facilities; tourism facilities and attractions.

For the province: (i) agriculture extension and research; organizing of farmers and fishermen's cooperatives, transfer of appropriate technology, enforcement of forestry laws on community-based forestry, pollution control, small-scale mining, and environmental protection, mini-hydro electric projects.

#### Section 20

Reclassification of Lands and Preparation of Comprehensive Land Use and Zoning Plans

#### Section 26

Duty of National Government Agencies to consult with LGUs, NGOs, and Other Sectors on the Impact of Projects on the Environment

Section 27

Prior Consultations before Implementation of any Project

Section 33

Encourages Cooperative Undertakings among Local Government Units

Section 34 - 36

On the Role of People's and Non-Government Organizations

Section 129

Power to Create Sources of Revenues

Section 186

Power to Levy Other Taxes, Fees and Charges

Section 289

Share in the Proceeds from the Development of National Wealth

Section 389 (b.9)

Role of Punong Barangay: Enforce Laws and Regulations relating to Pollution and Control and Protection of the Environment

Section 444 (b.3)

Role of Municipal Mayor on Revenue Generation and to Call on any National Official assigned in the Municipality for Advice

Section 447 (a.1), Section 458 (1.v), Section 468 (a.1.vi)

Provides for Sanggunians to protect the environment and impose appropriate penalties for acts which endanger the environment such as dynamite fishing, illegal logging and smuggling, slash and burn farming, eutrophication of rivers, etc.

*Source: Jose Nollado, ed., The 1991 Local Government Code with Basic Features, Rex Book Store, 1999*

## COMMUNITY HISTORY

The municipality of Candijay was established in 1829 as a resettlement site for forces of the failed Dagohoy revolt against the Spanish crown. The uplands was originally inhabited by the Eskaya indigenous group whose ancestral domain of 3,173 hectares (CADC-07-014 issued on February 5, 1996) straddles the Mayana Mountain Range between Duero and Ubay; 118 Eskaya households live in Cadapdapan. With a distinct language and retaining its ancient script, the Eskaya who total 7,000 in 3 watersheds, practice wet rice and upland farming. They have tribal councils that regulate cutting of trees within their territory. An ancestral domain resource management plan, a requirement for domain certification, is not in place.

Lowland migrants from Loon in Western Bohol started to move in before World War II and by the 90's, the upland settlement of Cadapdapan had more than doubled its population.

Panadtaran, the coastal village along Cogtong Bay, has a population of 1,215 with 215 households. Having migrated from farming areas, the primary means of livelihood is farming with fishermen making up only 3% of the population. Fuel

wood and nipa from the mangroves add to family incomes. Nipa, a material for roofing, is exported to other islands. Most households use firewood. Moreover, mangrove firewood has a big market in restaurants and bakeries due to its good burning quality.

In the 1980's, mangroves were cleared for fishponds and prawn farms of out-of-town businessmen. Some of these were abandoned when Philippine producers lost the Japanese prawn market some years ago. Fishpond owners were not held accountable for clearing mangroves. Instead, they hold on to their leases due to a technicality (leases were not cancelled) despite disuse and violation of the terms of use of the area.

Before DENR's coastal resource management project, residents used dynamite to catch fish. Cyanide was also popular to stun fish for capture. A sharp decline in fish supply was inevitable. A recovery has been noted since a local ban on illegal fishing. But light fines for offense and a relatively better catch in Cogtong Bay attracts other dynamite fishermen from Tintinan Island whose activities continue to be a menace to the coral and barrier reefs, now assessed to have only 15% live coral left.

While no commercial loggers operated in the area, slash and burn agriculture and uncontrolled burning by a fast-growing population very quickly turned much of the landscape into grassland. The Cadapdapan reforestation site had a bigger stand of dipterocarp forest until fire gutted a sizeable section of this in the '70's. It was during the period that many forest dwellers abandoned their upland farms due to political turmoil towards the close of the deposed regime of Ferdinand Marcos. Terrain and access from the sea through Duero town made the uplands an ideal hideout for guerrillas of the New People's Army of the then outlawed Communist Party of the Philippines.

Soil quality, soil erosion and inadequate fallow periods contributed to complaints of low productivity by a farming community that is specialized in rice production. Social forestry projects were initiated in Candijay and in neighboring watershed municipalities since the '80's. These have been able to reverse deforestation but forest cover problems still exist in the watershed. Severe flooding became a recent phenomenon. Some of the worst occurred in 1997 and in 1999 when rampaging waters from the Caro-ud River destroyed fish cages in Panadtaran.

A DENR field office for the Cabidian-Matul-id Watershed Rehabilitation Project has been in Canawa for the past 10 years to oversee over 2,000 hectares of community and DENR-established plantations in the area. The prospect of its closure is an unknown factor in watershed management.

**Box 3: DENR Reforestation and Community Forestry Projects  
Candijay, Bohol**

<b>CF Group</b>	<b>Barangay</b>	<b>Year Organized</b>	<b>Number of Members</b>	<b>Land Area Planted (ha.)</b>
Canawa-Luan Multipurpose Cooperative (under process for CBFMA)	Canawa, Luan	1995	25	194 - 120ha. (FLMA: 5ha./family) - 74ha. (under cooperative)
Pandataran Mangrove Growers Association	Panadtaran	1996	150 (originally 42)	597
Mahayahay Cadapdapan Agroforestry Association (MACAAI)	Cadapdapan	1998	99	132.5ha. - 100ha. (1997) - 32.5ha. (1998)
Boyo-an Mangrove Planters Association	Boyo-an	1996	53	163
Integrated Social Forestry Association	Cadapdapan	1981	110 (some members also with MACAAI)	70
Rehabilitation and plantation establishment by administration (DENR)	Cadapdapan, Canawa, Luan	1990's	-not available-	906
Contract Reforestation Projects implemented under DENR administration	Cadapdapan, Canawa, Luan	1990's	-not available-	160 (part of previous 906 ha.)
FLMA with OECF funds	Cadapdapan, Canawa, Luan	1990's	-not available-	29
Bamboo plantation	Cadapdapan, Canawa, Luan	1990's	-not available-	69
Eskaya Ancestral Domain	Cadapdapan, Candijay; and in the municipalities of Duero; Guindulman, Pilar and Ubay	1996	118 households in Candijay; Population: 7000 (throughout the Matama Mountain Range)	3,173 - 5ha. (rattan plantation) - 2ha. (abaca plantation) - 5ha. (reforestation under family approach)

*Sources: CENRO Tagbilaran; PENRO Bohol*



## PART III: DISCUSSION WITH COASTAL COMMUNITY

### ACTORS

The Panadtaran Mangrove Growers' Association (PAMAS) hosted the coastal community dialogue. PAMAS was organized in 1996 by Tetrattech, a NGO contracted under DENR's Coastal Resources Management Project (CRMP). Unconvinced about benefits, only 42 signed up. In 1999, the PAMAS signed a Community-Based Forest Management Agreement with the DENR over an area of 597 hectares of mangroves. Membership has since expanded to 150.

PAMAS President Ceriaco Cunado states the purpose of the organization:

*Before the PO was established, there was rampant cutting of wood without any rehabilitation or replanting. Up to ten years ago, there used to be big mangrove trees here. PAMAS has planted at least 70,000 propagules. The group was also organized to try and improve livelihood in the area -- to ease poverty.*

Organization leaders perceive significant changes on account of the association. But PAMAS must defend the area against poachers whose main livelihood is dynamite fishing and firewood trade. Barangay Captain Bienvenido Buscano, also a member of PAMAS explains some membership benefits and responsibilities:

*PAMAS not only protects the mangroves but also guards against illegal fishing. Before we had the organization, dynamite, poison (cyanide) and fine mesh that ensnared even tiny fish were used. Now the only fishing gears allowed are hook and line, and fishnets with at least 2 inch-holes. There is better fish catch now. The Bantay Katungan (Mangrove Wardens) was organized. This is composed of seven patrol teams of 10 members each that make the rounds daily to enforce association rules on illegal fishing and cutting of mangrove – now mostly by nonmembers.*

As a rule, a member can harvest nipa twice a year. But, one with more harvest-ready stock can go ahead and cut more often. On average, a member can collect P10,000 (\$200) worth of nipa per hectare per year.

An incentive for mangrove protection is the development of livelihood opportunities for members. Training was given by CRMP on oyster production and mud crab fattening. About a kilometer of bamboo boardwalk was constructed along a mangrove trail as the association's latest investment to promote ecotourism. There is a standing request for the cancellation of the lease for an abandoned fishpond in favor of the association. A 25-year development plan by the association set priority livelihood investment projects.

The municipal government hired a community organizer to help facilitate organization strengthening of the town's two mangrove associations.



*A boardwalk takes visitors through an educational trail where mangrove species are identified. A recent CRMP survey indicates that the area still ranks high on mangrove diversity. Some 36 species can be found within PAMAS area, just slightly lower than in nearby Buyo-an with 42 species; 15 species is a good number in an average site in the country.*



## PROBLEMS AND ISSUES

The following policy and operational concerns were cited by members. These are potential areas of action by the local government and concerned agencies.

### : **Inconsistent Guidelines on Resource Use in Mangroves**

Members replanted mangroves and expect to be entitled to gather forest products other than nipa. A Resource Use Plan provides guidelines for utilization, which becomes in force once replanted mangroves are mature for harvest in 15 years. Section 5 of DENR Administrative Order 10, Series 1998, states:

*Unauthorized cutting of mangrove species, particularly naturally growing species or non-replanting of areas where harvesting had been conducted shall be sufficient cause for the suspension or cancellation of the CBFMA without prejudice to penalties provided for in P.D. 705 as amended by RA 758 and under other forest policies, rules and regulations.*

Resource use is technically illegal at present because the DENR cannot issue cutting permits. The provision is considered impractical by the people and some DENR field personnel because it does not consider members' present needs in the face of their rehabilitation and protection activities. Thus, it is considered a disincentive to resource management.

### : **Dangers of Law Enforcement by PAMAS**

Cutting of mangroves and illegal fishing by non-members is carried out even within PAMAS area where guards are deployed every day. Members feel unable to deal with the intruders who they fear may be armed. Furthermore, they are not deputized to undertake arrests. It is felt that low fines do not create enough disincentives for violation.

### : **Take-Over of Abandoned Fishponds**

An abandoned 49-hectare fishpond was replanted with mangrove by the association. The leaseholder uprooted the growing propagules because his 25-year lease has not yet expired. The PAMAS requests cancellation of the fishpond lease by the Department of Agriculture or for the retention only of the area (6 hectares) that is in use by the claimant. PAMAS intends to manage the area as a collective income source. Other fishponds have been cleared of mangroves.

## QUESTIONS AND ANSWERS

Foreign participants were interested to learn about arrangements on the distribution of benefits and responsibilities as well as on the nature of linkage between the association and local government.

### : **Benefit Sharing and Social Equity Considerations**

San Afri Awang of Indonesia sought clarification on the organization's scheme for distribution of benefits among members. He wanted to know how the 597 hectares, and therefore such benefits as nipa harvests, was shared among PAMAS members. The response indicated that the organization respected existing land claims and social arrangements in favor of imposing equal access and risking reaction by disturbing existing social arrangements:

Members develop and have access to between 0.3 to 20 hectares of mangroves. The mangrove area assigned to each member corresponds to locations that a family claimed or occupied through settlement and through permits previously granted. DENR issued permits for firewood and nipa gathering.

### : **Privileges and Responsibilities of Association Members**

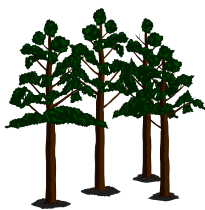
Do members pay taxes? Stewardship bestows privileges, rights and obligations:

*Since we were organized in 1996, members no longer paid permit fees or taxes. But the association has internal controls. We have a policy that if a person mismanages his area, his share is taken away and parceled out among other members.*

### : **Relationship between PAMAS and Local Government Units**

What is the relationship between the association and the local government? Leaders claimed that PAMAS enjoyed autonomy as an organization but that it coordinated with the barangay and the municipal government. The guidance and support of the local government units were perceived to reinforce a sense of value for their work in mangrove development:

*We were organized by the CRMP of the DENR. But PAMAS has the support of both barangay and municipality in its projects and activities. Many barangay officials are also members of the association. The barangay endorses mangrove protection activities of the association. The association has also received material (patrol boat, etc.) moral and financial support from the municipality.*



## PART IV: DISCUSSION WITH UPLAND COMMUNITY

### ACTORS

Represented at the dialogue in Cadapdapan were 4 CF associations from adjacent barangays Cadapdapan, Luan and Canawa, within the area of the Cabidian-Matul-id Watershed Rehabilitation Project. Many of their members had participated in various reforestation schemes since the '80's. In many cases, the same areas became beneficiaries of a number of projects. For instance, some CSCs were waived in favor of succeeding tenure instruments or were the same areas that were converted for contract reforestation, thus getting separate funding support under different projects. Many members are land claimants who have small parcels of rice lands at lower elevations. In this case, upland farms are a secondary source of food/income.

Groups present were: the Integrated Social Forestry (ISF) Association, Mahayahay, Cadapdapan Agroforestry Association Inc. (MACAAI), Tanabo Farmers Association (TAFa) and the Canawa-Luan Multipurpose Cooperative (CLMPC).

MACAAI is a composite of several CF groups that mushroomed in the area. MACAAI President Graciano Anub, recounts:

*Ninety members started out with 2-year contracts for reforestation with Forest Occupancy Management papers. After two years, these were converted into Certificate of Stewardship Contracts (CSC) under the Integrated Social Forestry Project (ISF). In 1981, 110 forest occupants of 211 hectares were selected to be part of ISF. CSCs were awarded for a period of 25 years renewable for another 25 years. An association was formed headed by Nida Salingay, its woman president. After 5 years, some of the claimants became absentee owners.*

In 1996, the Community-Based Forest Management Project started and also organized occupants in the area. MACAAI developed 132 out of 211 hectares granted with a P3.8 million budget to cover plantation establishment and maintenance. In 1999, a retainer of over P400,000 was released upon certification of the survival of the seedlings; P72,000 of this was used to establish a credit facility for members.

CBFMP was funded by an ADB loan. There was lack of consultation on the local application of loan proceeds. News of ghost projects and poor performance of community reforestation projects elsewhere served as baseline against which to measure local performance. Anub recalls the early days of MACAAI:

*In 1997, the CBRM project in our area started with an office, office supplies and a radio antenna. The antenna was stolen. In a meeting that some of us attended in Manila, we learned of other associations that did not do too well. One only developed 33 hectares out of the 1000 hectares granted to them...*



*Graciano Anub gives an account of his association's experience with various forestry project in Cadapdapan.*

Jocelyn Perocho, former NGO-worker (Blessed, Inc.) and wife of President Serapio Perocho, provided the following account on the Canawa-Luan Multi-Purpose Cooperative:

*In 1988, DENR developed timberlands with funds from ADB Loan 1; 150 hectares were planted to fast-growing species. Interested families were given three-year contracts to plant five hectares under the Family Approach Reforestation Program at a contract price of P20,000 per hectare.*

DENR later awarded Certificates of Forest Land Management Agreement (CFLMA) to qualifying contractors. In 1992, another 74 hectares was developed. This was awarded to the Canawa-Luan Multipurpose Cooperative (CLMPC). A FLMA certificate was issued in 1996 for CLMPC to manage and protect the plantation. Most of the 34 members grew trees in their own lots. A few were FLMA holders.

External facilitators were contracted by the DENR to organize community forestry groups. CLMPC was organized by DENR with the assistance of Blessed Phils., Inc. It facilitated monthly meetings, a capital build-up plan and the formulation of association rules and farm plans. Members decided to plant root crops (carlen), pineapple, sweet potato (camote) and cassava (bolanghuy). Some crops were not so successful due to attack by rats and monkeys. Training was a key component of organizing. Some training-workshops given included:

- ù · Importance of trees to environment and economy
- ù · Silviculture and timber stand improvement
- ù · Forest laws, rules and regulations
- ù · Forest fire control and management
- ù · Control of pests and diseases
- ù · Orientation on responsibilities of FLMA holders
- ù · Cross-visit to a demonstration area on Sloping Agriculture Land Technology (SALT) in Bansalan, Davao del Sur

Members of the Tanabog Farmers' Association, another group of upland farmers, also planted trees in designated timberland areas. Each member was given P80,000 to take care of 5 hectares for three years. Additional support came from donor agencies like PACAP (Philippines-Australia Community Assistance Program) that helped establish livelihood sources as well as a learning and health center.

The oldest surviving association is the Integrated Social Forestry Association, which was organized in 1982. Headed by woman president and former DENR employee, Nida Salingay, the group still maintains common funds from fertilizer trading and other fund raising activities. It has also entered into contract reforestation, trail making contracts, etc. Current plans include building a warehouse for its fertilizer business from association funds, getting a utilization permit so members can go into bamboo weaving and related enterprises, and getting formally registered as an association.

Nida assesses gains from ISF as an agroforestry project and the prospects of the forestry projects without DENR supervision:

*The concepts of agroforestry were retained. Now farmers do crop rotation, intercropping and boundary planting of trees. Aside from root crops, coffee, coconut and animals were also integrated. It would help strengthen the organization and the transfer of technology if there was periodic monitoring by DENR.*

There is a tendency of the associations to depend on government assistance. The closure of DENR field office in the area may lead to more cutting of trees (*balik-kawat*).

## PROBLEMS AND ISSUES

The dialogue was an opportunity for the people to bring up their concerns on the implementation of community forestry in the area and to seek technical assistance on farming problems. Community participants made light of the associated risk to being in the uplands as sometimes being tagged as a communist/supporter. (New People's Army guerillas still retain a presence in the area.) While not expressed as an issue by the people, it reflected schisms in Philippine society that somehow affect upland communities. A military contingent of 300 is camped out in the vicinity.

Some problems raised are:

- Leaders of Canawa-Luan Multipurpose Cooperative wanted to know why they were not eligible for a CBFM Agreement when they had fulfilled requirements (CENRO's response: CBFMA is in process)
- Help is needed on how to deal with rats and monkeys, which attack their crops at the agroforestry sites

- ù · A serious concern that was directed at the DENR relates to the impact of a foreign-assisted reforestation project on natural forests. Paul Antaloquio, President of Tanabog Farmers' Association (TAFAs) and Coordinator of NGO, Community Awareness of Social and Ecological Concerns (CASEC), expressed misgivings on the replacement of vanishing natural dipterocarp species with favored exotic reforestation species by some contractors because accomplishment was measured in terms of seedlings planted and maintained:

The Tanabog Farmers' Association considers the forest as a very important ecosystem as it protects farms. The problem is that in the Philippines, trees are planted for harvest, not for any other purpose. In some cases, under the family contract reforestation approach with ADB funding, natural stands of tugas (molave), narra, acacia, and baganga (neem) were cut by contract reforestation participants and replaced by reforestation species such as gmelina and mahogany.

Upon verification, it was discovered that while this happened, it was not the norm. Farmers were briefed by the DENR to maintain existing trees at the plantation site.

## QUESTIONS AND ANSWERS

Questions focused on operations and benefits.

### : **What are the perceived benefits of community forestry projects?**

Association representatives cited organizational development, environmental, educational and economic opportunities due to projects coming in. TAFAs cited the following:

- ù · Education and exposure to what is going on in CF in the country
- ù · Rice mill for livelihood
- ù · Additional income from reforestation contract
- ù · Nitrogen-fixers for agriculture due to rehabilitated forest

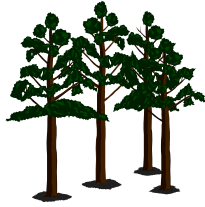
While members acknowledged benefits from CF organizing, Jocelyn Perocho, Blessed's organizer, is doubtful about the level of maturity that has been attained by community forestry groups:

*The associations need livelihood. Members still need formation. Continuing education and technical assistance is important so members can carry on with the project and bring it to a sustainable level, otherwise the organizations will be short-lived.*

**: How do communities maintain what they have planted?**

A budget of P20,000 (\$377) per hectare was given as project support to CF participants to cover plantation establishment and maintenance for three years. Maintenance involved clearing of trails, construction of firebreaks, ring weeding, etc. Beyond the three-year period, the aluyon, a traditional system of cooperative labor, is the basis of maintenance work without pay. With encouragement from Forester Filadelfo Jumawid, DENR watershed project manager, it is usual among CF associations to allot 4 days a month for clearing and other forest maintenance activities.





## PART V: EXCHANGE WITH LOCAL GOVERNMENT AND THE DENR

### ACTORS



*Mayor Camacho stressed that her government's primary challenge is to provide relief for poverty. She has the support of the Vice-Mayor and the municipal council in background.*

The municipal leadership headed by re-electionist Mayor Monina Camacho, identified her government's twin challenges as poverty and natural resource degradation:

*The main vision of the local government of Candijay is to see to the implementation of social justice in its highest form – to get to the core of why poverty is not eradicated... A problem is that some constituents are still not aware of what they have and what they must protect. Candijay is*

*number 100 on a wait-list for a foreign-assisted loan-grant on natural resource management.*

While any form of external support could give a boost to the local government's campaign on the environment, Mayor Camacho would rather not rely on external assistance. She declares:

*We will not wait for Manila or for outside assistance; rather, local government and communities are working together to restore our natural resources...*

Also present at the dialogue were members of the Sangguniang Bayan (municipal council) and Ann Piquero-Dy, Candijay's newly elected vice-mayor who was an active leader of CASEC, an environmental NGO in the province.

PENRO Arius Ilano and CENRO Jovencio Taer led a contingent from the Provincial and Community Environment and Natural Resource Management Offices (ENRO), highest provincial and district environment officers, respectively.

PENRO Ilano gave the reason for a strategic shift in DENR's policy of state management of forests to shared management with local governments and communities. He admitted:

*If you alienate the communities from the resources that are necessary for their livelihood, they will not care for them. The DENR has made a paradigm shift. It now involves communities because the main purpose of all these undertakings is to sustain the forests and to solve the problem of poverty. Dole-outs have never been healthy...*

MPDO Bert Bernales attributes environmental degradation to an increasing population of poor resource users and to lack of political will. He issues a challenge to the new set of officials whose predecessors tended to be fragmented in their support for environmental concerns:

*Issues on environmental degradation is attributed to a) increasing populations of resource users, b) poverty of marginal farmers and fisherfolk who rely on natural resources for daily needs, c) lack of political will of some government officials to implement environmental laws.*

The challenge for the new local government administration is to formulate and implement short-term, medium-term and long-term solutions to the problems just raised. We would be successful in all our efforts if understanding, cooperation and cohesiveness reside within us.

## AFN COMMENTS AND OBSERVATIONS

AFN participants took advantage of the presence of the highest officials of the DENR in the province to relay community organization problems that were gathered from the field. A participant to Cadapdapan brought up questions posed by the community to the DENR on why the Canawa-Luan Cooperative could not be granted a Community-Based Forest Management Agreement. Other problems concerned the use of exotic species for reforestation.

### : **Lack of Social Preparation of Some Community Associations?**

Referring to an association's project to build cement benches, a participant wondered if an upland association's investment priorities could be taken as an indication of its level of environmental orientation. Or did it indicate a lack of social preparation that with limited resources, the association did not choose to instead to invest on environmental or livelihood enhancement activities?

The association president later explained that the observation may be inaccurate because many other projects had been done to uplift the condition of members, including investing in hundreds of fruit trees. The benches were donated as a civic duty from a Christmas fund-raising campaign of the ISF Association.

### : **Planning for Economic Viability of Investments**

A delightful walk on bamboo boards through a stretch of mangroves was a special treat for AFN visitors to Panadtaran. It was constructed to coincide with CRMP turn over of the project to the association and to the local government.

Romy Acosta of the Philippines was concerned that the boardwalk that was constructed for ecotourism may not be able to pay for itself due to the limited number of tourists to Candijay. He suggested promotion of the facility and the collection of adequate entrance fees to help defray cost of construction and maintenance, to translate the project into social capital and as a popular way to promote the value of mangroves.

There were apprehensions among some AFN participants that mature mangrove trees may have been cut for the kilometer-length walkway. Upon clarification, only branches were actually used; 200 bamboo poles were contributed by the DENR.

### **: Radiation of Coverage Area of Community-Managed Mangroves**

PAMAS protects its mangrove area. But the organization is on the defensive against non-members who continue to use illegal fishing methods and poach fuel wood from PAMAS preserve. Nearby mangroves outside PAMAS are noticeably worse off.

Some AFN observers noted that it might be strategic to also target other users for a coastal resource management agreement. Continually expanding the reach of the project to include all effective users may improve the development of the entire area and significantly reduce the cost of protection among CF groups. As the CRMP is winding up, the momentum for organizing falls on the local government and regular staff of the DENR. Mangroves, as timberland, are under the jurisdiction of the DENR but terms of cooperation with local government may be established to expand coverage area in terms of both size and mangrove users reached.

### **: Dependency among Some CF Associations?**

Some AFN participants got the impression that some organizations tended to look for external support rather than generate internal resources to continue developing their CF areas.

Additional improvements taken on the initiative of farmers do not occur at the reforestation sites. Bamboo plantations were established as a separate project of the DENR. There appears to be a perception among association members that further forest improvements in the area could continue only with infusion of more funds. Some AFN participants wondered if dim traces of dependency could be the unintended result of contract reforestation schemes and long years of external assistance – if a sense of ownership over the project still needs to be nurtured?

### **: Local Government Support to Community Organizations**

Local government support to CF organizations was observed as an important ingredient in having vibrant associations. Participants to Panadtaran acknowledged the assistance given to the mangrove association by the barangay and municipal governments.

### **: Women Power for Good Governance and the Environment**

Participants did not fail to notice the role of women in Candijay's political hierarchy. They complimented the vibrant leadership, the passion and clarity of vision of the lady chief executive. They expressed great hopes in a potentially

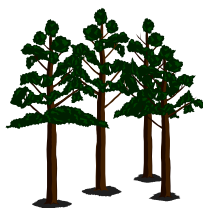
powerful partnership with her environmentalist lady Vice-Mayor. Some foreign AFN representatives expressed the hope that there would be more women leaders in their countries, as well.

: **Offer of Technical Assistance on Rice Terraces Maintenance**



*"People from Besao can share our skills in managing rice terraces. The problem with terrace walls and worms can be eliminated by building rock walls for the terraces." - Modesto Gaab, MPDO, Mountain Province.*

The area visit did not only foster an exchange of ideas. It also facilitates technical exchange among participants. MPDO Modesto Gaab, an AFN participant from a rice terrace-building tradition in northern Luzon, observed slipping mud walls and big worms in the terraces. He offered his people's help to transfer technology on building stone walls for the terraces.



## PART VI: CONCLUSION

### SUMMARY

This report shows the concerns of resource management by local government and CF groups in the uplands and mangrove areas in Bohol, Philippines. Local experience indicates that degradation can be arrested and that forest regeneration is possible with help from communities.

On the other hand, the report points out problems related to CF policy and project implementation as actors institutionalize participatory resource management. Two decades after the policy shift towards social forestry, there still exists a demand for sustainable livelihoods and to strengthen appropriate traditional institutions and resource management capacities of CF groups. Also needed is support to make meaningful the devolution of resource management to local government and CF groups.

### SOME LESSONS LEARNED

The Candijay experience provides insights on at least three broad areas of concern on the implementation of natural resource management projects. The section summarizes some problems and corresponding recommendations.

#### : **Project Implementation**

Factors of social equity, poverty, population increase and migration contribute to deforestation and unsustainable use of critical slopes. A complex web of causes demands an integrated solution.

Tenure security, by itself, is not sufficient to reverse forest degradation. Poverty reduction measures are here shown as both ends and means to improve viability of CF organizations. Access rights and sustainable livelihood options are viewed as incentives for participation. Thus, the poverty alleviation potential of forest management projects can be enhanced to ensure sustainability of CF organizations.

The question of social equity was also highlighted. Panadtaran's experience with fishpond leases in mangrove areas brings to focus the principle that access rights of local people should take precedence over those of distant resource users while placing restriction upon overexploitation of these resources or needless clearance of the area (e.g. non-resident fishpond leaseholders clearing then abandoning mangrove).

On the other hand, forcing the issue of equal access in the distribution of benefits within an organization may not be workable if it unduly destabilizes an existing social order (i.e. variable land sizes within CBFM areas). Social sensitivity is needed to avoid imposing single solutions in favor of strict interpretation of such principles as social equity, etc.

A major objective of decentralized governance is to bring decision-making closer to the people. Candijay shows that it is important to consider how people at the community level perceive the issues and proposed solutions to environmental problems. The people's involvement in local plans and activities is crucial to their successful implementation and enforcement.

Blueprints of national projects can be adapted to local sites through participatory project planning, implementation and monitoring techniques. Costly errors can thus be avoided. The replacement of natural forests with exotic plantation species under reforestation contract is a case in point. An assessment would also have shown people's preferences – i.e. mangrove species are rated highly as building material and as firewood with bakeries as a steady market. Dipterocarps provide the preferred raw material for housing, furniture making, etc. A balance in endemic and fast-growing species would then have been aimed for.

The causes of deforestation show the way for possible solutions. Reforestation projects of the past period involved the use of a select number of fast growing species. Experience suggests the value of also promoting local forest species. Moreover, plantation approach should not fully replace the natural regeneration approach. Not only is biodiversity maintained, it also fulfils subsistence needs and supplies preferred raw materials of forest communities.

The Eskaya people whose ancestral domain straddles the entire watershed received recognition of their ancestral domain in 1996. But a linkage between formal structures of governance and indigenous systems of resource management is not yet well established.

The advantages of resource management by the Eskaya are its rules for exclusive access of the community to resources within the territory, traditional structures for decision making and resource management and clear sanctions enforced in case of non-compliance. Their traditional system for resource management can be recognized and strengthened.

Finally, the case shows that national policy can be designed with more flexibility and more dialogue with different stakeholders.

To do this well, there is a need to match the structure and to enhance skills and values for participatory forest management within the forestry bureaucracy. This calls for a management approach that is multi-sectoral, interdisciplinary, process-oriented, need-driven, flexible and participatory. This is in contrast to existing systems that tend to be loan-dependent, sectoralized, target-oriented, resource-driven -- using standardized blueprint approach.

Social forestry has been in existence in the area for the past 20 years. Problems of implementation can be seen in the context that change is a process that may take time and experiential learning. Lessons from past loan projects can be considered in improving the design of community forestry projects and in strengthening the role of local government in resource management.

**A major objective of decentralized governance is to bring decision making closer to the people. Blueprints of national projects can be adapted to local sites through participatory project planning, implementation and monitoring techniques.**

## : Decentralization

Local government can use its planning, regulatory and other functions to mobilize citizens for natural resource management. Low-income local government units may be immobilized if these rely completely on external assistance to initiate natural resource management projects. Candijay demonstrates that opportunities for action may be missed if local government is loan-dependent. In this sense, Candijay's mayor is unique. A lot of mayors are still not fighting for involvement in resource management.

Coastal resource management and the watershed approach to planning and problem solving cut across political boundaries. Candijay's initiative to convene other neighboring municipalities is a significant step towards forging a collective response against resource degradation.

On the whole, devolution is a principle that still needs to be strengthened on the ground. It is not adequately in place in the sense that a national agency went directly to communities without passing through local government structures. But the solution is at hand. The PENRO has tremendous power in interpreting programs and in deciding whether to work with the local government or not. Furthermore, forums can take place which prepare local government on its devolved functions.



## : **Organization and Management of CF Associations**

CF associations in Candijay increased membership with time and demonstration of benefits. It appears that common funds and livelihood projects helped sustain the organizations. Candijay associations tend to reinforce an observation that sustainable livelihood options are needed to reduce forest dependence. (It helped that fishery, mangrove and upland farms only augmented income from limited wetland rice cultivation.)

Local groups also stress that leadership is an important factor in the development of active CF associations. On the other hand, environmental education, technology transfer, organizational development activities and opportunities for organized action tended to improve agroforestry practices, as well as leadership and management knowledge and skills.

It would appear that the role of women in CF needed better articulation. Whereas there were women in leadership positions and women were involved in work activities, their role in decision-making was not clear but could be enhanced, being primary resource users.

Maintenance of plantations requires time. Traditional practices such as aluyon (cooperative labor) exist and can be strengthened for forest establishment and maintenance.

The concept of exclusivity where only members are given rights of access in exchange for responsibility to manage is a workable incentive. But for a long-term view, the challenge is to expand project coverage to allocate rights and responsibilities to other resource users. Continual pressure from outside raises costs of forest management and can erode the viability of organized community forest management groups.

Though a sense of ownership needs to be developed instead of a sense of dependency, it was clear in Candijay that local government support to CF groups reinforced resource management practice by community associations.

Motivations for joining CF associations may differ, making CF organizations very dynamic:

*I had the simplistic idea that once you identify the right mechanism and right group, everything would work out. Changing memberships, projects coming and going in Cadapdapan as in other places in South Asia, indicate that this is very dynamic, because motivations of different people are different. Our strategies must change with changing memberships and dynamics. (- Mark Poffenberger)*

## FUTURE CHALLENGES FOR CANDIJAY

The Candijay experience provides some insights on some factors for sustainability of community forestry groups and learning on implementing new loan projects. The case also highlights the complexity of the problem of deforestation. Structural issues on poverty and wealth distribution as well as the realities of population growth and migration compound resource management by low-income local government units. In the face of these challenges, Candijay is a study on self-reliance and on local government initiatives to use devolved powers on natural resource management.

### : Targeting Participants, Social Preparation and Institutionalization of CF

Overlapping of reforestation and social forestry projects in the Candijay uplands tended to limit overall CF project impact in terms of participants reached after 20 years and area covered as a percentage of the open and denuded areas that still need to be reforested (1,700 hectares). It can also be considered modest as a fraction of rehabilitated upland areas, the DENR having gone into reforestation / tree plantation establishment by administration through contract reforestation and paid labor of community members in about 1,000 hectares.

CF associations set up under contract reforestation and under terms of continued project support may not necessarily establish and manage better forests. Developments in the area were largely limited to plantation establishment and protection. If care is not taken, funding for forest plantation and maintenance may be construed as payment in exchange for services instead of as support for forest management. Reforestation by community members then becomes a business transaction instead of a personal investment by participants for better living conditions in the forest.

**Tenurial security is not enough. Sustainable livelihoods and adequate social preparation are needed for Community Forestry to succeed.**

As projects must come to an end, the state of preparedness of CF groups determines the attainment of the projects' long-term objectives on forest management and poverty reduction. Candijay shows that tenurial security is not enough.

Adequate social preparation for a new role in resource management means that people have a sense of ownership over the project, that they are weaned from a framework of dependency.

Organizational development also proves to be an important ingredient for success of CF associations. Environmental awareness was promoted while efforts were made to enhance leadership, conflict resolution, management and

technical skills (i.e. agroforestry, soil conservation, appropriate technologies in farming, fuel conservation, etc.) Feedback from forestry staff shows that training and increased exposure and opportunities for action through the CF organizations have yielded perceptible results in the development of local leaders who were able to engage government officials on their concerns.

Community representatives also acknowledged the value of functional relations and support by local government units. The *aluyon*, a traditional system of cooperative labor is an important institution for forest maintenance. In addition, indigenous structures and practices on resource management can be reinforced. This has potential among the Eskaya who are strategically located in the Caru-od and nearby watershed areas.

## : **Poverty Reduction**

Poor economic opportunities to meet the needs of an increasing number of forest-dependent residents pose serious challenges for government. Social preparation also means that livelihood options are in place. The municipal chief executive spelled out the town's primary challenge as getting "to the core of the problem of poverty." The PENRO likewise, conceded, "that to sustain the forests, one has to solve the problem of poverty."

Tree planting is a long-term investment. However, some of the upland reforestation projects were not strong on strategies to address short-term needs or to establish long-term livelihood options. Outside of the ISF Project that provided technical assistance on agroforestry and slope stabilization, a source of misgiving among some participants is that improvement in the cultivation of crops and fruit trees was not maximized. Other projects exclusively focused on planting exotic reforestation species.

Elsewhere, sustainable livelihood is defined as a means of living that can cope with and recover from stresses and shocks. It can focus not only on building assets but also capabilities. Time should show the linkages between long-term sustainable livelihoods and strategies for reducing poverty among the mangrove growers and the ISF Association.

Prospects of direct benefit provide strong incentives for participation. On the other hand, increased production may not translate to benefits without markets that enhance value of production. The training in basket weaving for the Eskaya did not result in sustainable livelihood in the absence of a steady market for their products.

Making a dent on poverty also means understanding the structures of society that make people poor and poverty hard to reverse. In Candijay, poverty points to issues on social equity, as well. Inequities in wealth distribution could be seen in undeveloped or abandoned fishponds and open grasslands/grazing lands of

absentee landowners. Cancellation of abandoned fishponds, as sought by mangrove stewards, can be a positive reinforcement for mangrove management –as well as a tool for wealth redistribution. Revocation of lease can be initiated by the LGU for action by the DENR and the Department of Agriculture.

### : **Radiation of CF Coverage**

Local experience shows that to help sustain the gains of CF associations, the needs of other forest users must also be addressed. It is a threat to the viability of the forests and of the associations to be continually on the defensive against non-member-users that are given no responsibilities for the upkeep of their source of livelihood. Unless needs are filled, regulations can be hard to enforce.

**Continually expanding the reach of mangrove management organizing to include all effective users of the resources may reduce the high cost of protection.**

The number (7 groups of 10) needed to patrol PAMAS area on a daily basis highlights the high cost of enforcement and the need for more lasting solutions, which may in turn have to tackle both demand and supply sides of the problem.

Potential partners in resource management within the watershed and across political boundaries are the Eskaya indigenous people (population 7,000) who have an ancestral domain claim in the Mayana mountain range. They can be supported in the preparation and implementation of an ancestral domain/natural resource management plan that recognizes indigenous knowledge systems, structures and practices on resource management. The lack of linkage between formal governance structures and traditional cultural institutions, a common weakness that tends to inhibit sustainable forestry, can thus be corrected.

### : **Population, Poverty and Environment**

Candijay corroborates projections that movements into forests will continue to rise as the number of poor people increase; 70% of the town's population have incomes below even the provincial poverty threshold. A study by Maria Concepcion Cruz of the World Bank, which analyzes the linkages between "Population Pressure, Poverty and Deforestation" in the Philippines, shows that community management is vulnerable to breakdown, especially when population growth and migration rates are excessive. (*Electronic copy from mcruz3@worldbank.org*)

Candijay had a high growth rate of close to 4% during the last census period. The Philippine trend for upland migration is 14.5% by the 1980's. This may be true for both the upland and mangrove areas of Candijay. The high growth rate was partly accounted for by in-migration into open access mangroves outside PAMAS. In addition, in the uplands, the increase in CF association membership

is also accounted for by the parceling of land among relations even while there was actual decrease in original membership in such groups as MACAAI and the ISF Association. This raises the question of how far small parcels of land can continually be cut up due to a rapidly growing population.

An indication of population pressure is the rate of soil erosion in areas that are occupied by migrants engaged in unsustainable grazing and upland farming. Thus, continuing technical assistance on upland farming is relevant as more fragile areas become cultivated. Fuel wood sources also need to be augmented.

### : **Mobilizing Lowland Support for CF**

Candijay reforestation was partially done through community forestry projects made possible by national loans for the environment sector. Action to reverse deforestation need not depend on donor assistance.

With the completion of many loan projects on natural resource management and limited prospects for more, a paradigm shift from loan-dependence to resource management as a collaborative endeavor by the various sectors of society may have to be resorted to. The idea is to make CF part of the solution with the active cooperation of communities that believe that they can help themselves. Then, the cost of forest establishment and maintenance can be shared.

The site shows that while it is important to expand and strengthen community forestry by organized groups, it may also be strategic to get wider populations – households, schools, civic organizations, etc., into the stream of integrated resource management. Mobilizing broad support of the citizenry is a role that local government can play. Thus policies and activities that reinforce support by the lowlands

for upland reforestation can also be explored.

**With the completion of loan projects on natural resource management, a paradigm shift from loan-dependence to resource management as a collaborative endeavor of various sectors of society, can be an option to inaction.**

After all, the

environment issue is everybody's concern and lowland communities are beneficiaries of forest management through irrigation and domestic water supply, maintenance of microweather, etc. On the other hand, the lowlands are also affected by degradation in the uplands as seen in the problems of river pollution, flooding and siltation that now occur.

There is an opportunity where, for instance, landowners are encouraged to invest in agroforestry in idle lands or bakeries to maintain sources of firewood. Or tree planting that this year occurred along riverbanks and eroded slopes can be a continuing activity.

In addition, the establishment of community wood lots and backyard tree

plantations may help ease dependence on depleted firewood sources and augment incomes. It is a solution that has been tried with positive effects in a nearby municipality (Loboc) that decreed that all its barangays delineate and maintain at least 1-hectare community forests. It is also well documented in the *tayan* and *muyong* (private wood lots) of the peoples of the Cordillera in northern Luzon. After due consultation, updated land use and zoning plans can reflect the location of designated community forests/wood lots, parks, etc. that may be developed.

Nursery establishment by the LGU and backyard nurseries for fruit trees and endemic forest species is a potentially low-cost-high-impact activity. The prospect of irrigators' associations contributing to the maintenance of water sources has yet to be explored by local government units and the irrigation agency. This may happen through resource pricing strategies that charge cost of water source maintenance to be ploughed back to forest management or by directly involving irrigators' associations in forest establishment/maintenance activities. Local action can be supported as in the case of PAMAS and its Bantay Katungan (mangrove police). Furthermore, the role of communities in law enforcement on fisheries and forestry can be formalized through DENR's process of deputization.

To mobilize wider sections of society for resource management, environmental awareness has to be raised. The schools, including the fisheries college in the area, NGOs, etc. can be partners in environmental awareness raising programs and actions.

Candijay shows good prospects that local government can use its devolved powers to create incentives for popular participation in resource management while giving adequate disincentives for destructive practices and overexploitation at the levels of policy and law enforcement. Local experience shows that low fines for illegal fishing, no action on cutting of mangroves by fishpond operators and settlers, etc., do not tend to encourage restraint when personal benefit are much higher than the cost of violation.

### **: Support Needed for LGU to Undertake Devolved Functions**

The transfer of power over community forestry has gray areas. Another complaint is that while responsibilities were decentralized, corresponding resources were not. A challenge is to seize opportunities and translate devolved functions on natural resource management in strategic ways. There are few models for doing so. Local environment and municipal officials can take initiatives to define areas of cooperation and creative action. This may be speeded up with an awareness of a need to reorient systems and structures within the forestry bureaucracy to better implement community forest management given role change from law enforcement and control to service delivery and support to local administration and communities.

There is a need to be prepared for the possible closure of the DENR field office in Canawa. There are fears that loss of the office will affect forest maintenance. On the other hand, the role that the local government takes is not yet clear. Periodic monitoring and technical assistance and continuing organization strengthening were identified needs by CF associations. Local government is often unprepared to perform devolved functions in such areas as agroforestry, soil conservation, etc.

### **: Ecotourism**

Ecotourism is an emerging activity for raising environmental awareness in Candijay's mangroves. An ecotourism action plan can develop the ecotourism potential of the area, which may include the fish sanctuary, and the upland falls and springs. It can formulate an ecotourism strategy to identify target groups and marketing and promotion of local products. An action plan can address issues and accompanying measures for implementation and to raise the economic potential of the activity to directly benefit the people. The Bohol Federation of Tourism Travel Operators, which is now promoting educational tours among high schools, can be a partner in planning and promotion.

### **: Three-Level Strategic Planning Framework**

Candijay uses a 3-level strategic planning framework. It is taking actions across ecosystems (watershed municipalities dialogue, pollution and waste management), within ecosystems (mangrove/coastal/marine) and has done local agenda planning on development and environmental concerns. Community-managed marine sanctuaries are part of a coastal resource management plan now being prepared in addition to a Comprehensive Land Use Plan.

The Candijay initiative to engage watershed municipalities in a dialogue to plan and implement a course of action on common problems on the environment is an important move across ecosystems as are activities to improve conditions for productivity and income. Recent seminars on environmental conservation and sustainable agriculture aim to improve productivity of rice, the main agricultural crop. The municipality is also integrating sustainable development in governance (i.e. policy on waste management, etc.), creating an enabling environment (passage of ordinances on illegal fishing, support to mangrove associations, etc.), investing in human development (community organizing work with mangrove associations), etc.

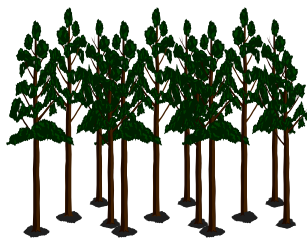
### **: Needed: Champion for Resource Management in Local Government**

Even with devolution, many local government units are unable to deal with environmental concerns under the constraint of tight budgets. The short (3 years)

term of local officials and the long-term gestation period of resource management projects make these unattractive as political investments.

Under such conditions, natural resource management needs a champion. Candijay demonstrates the importance of vision and leadership to put resource management in a local government unit's agenda.

With limited resources and a growing incidence of poverty and environmental degradation, the challenge for local government is enormous. It can depend on external resources, which may not be forthcoming, or it can mobilize the collective will of the people, the forestry department, and other agencies, NGOs, the private sector and other institutions, towards a common goal on resource management and poverty reduction.





## PROGRAM OF ACTIVITIES

### MEETING WITH THE PANADTARAN MANGROVE GROWERS' ASSOCIATION (PAMAS)

Po Dako Island

June 28, 2001

10:00 Am - 12:30 pm

9:30 - 10:30	Walk along Mangrove Trail Pump boat transfer to Po Dako Island	PAMAS
10:30 - 10:45	Invocation Pambansang Awit, Bohol Hymn, Candijay Hymn	PAMAS elder PAMAS
10:45 - 10:50	Welcome Talk	Mr. Bienvenido Buscano - Barangay Captain
10:50 - 10:55	Introduction of Purpose of Meeting and AFN Representatives	Ms. Carolyn Gamiao - AFN Bohol
10:55 - 11:15	Brief Introduction on Resource Management and PAMAS	Mr. Ceriaco Cunado - President: PAMAS
11:15 - 12:00	Open Forum	Moderator: Mr. Efrem Cimafranca - ESSC Bohol
12:00 - 12:15	Intermission Number	PAMAS
12:15 - 12:25	Synthesis of Discussion in Boholano	Ms. Elizabeth Buscano - PAMAS
12:20 - 12:25	Impressions	Mr. Chaleo Kanjan - AFN Country Representative: Thailand
12:25 - 12:30	Message	Mr. Peter Walpole - Field Director: AFN
	Closing Remarks	Mr. Cristino Estapia - Kagawad
1:20	Leave for Municipal Hall	

**CADAPDAPAN MEETING****Cadapdapan Barangay Hall****June 28, 2001****10:00 am - 12:30 pm**

10:00 - 10:05	Invocation, Pambansang Awit	Association Elder
10:05 - 10:10	Welcome Talk	Mr. Sixto Perocho - Barangay Captain
10:10 - 10:20	Introduction of AFN Representatives and Purpose of Visit	Ms. Rowena Soriaga - AFN Bohol
10:20 - 10:35	Introduction of Community Forest Management Organizations, Brief Summary of Forest Management Experience of Mahayahay, Cadapdapan Agroforestry Association	Mr. Graciano Anub - President: Mahayahay, Cadapdapan Agroforestry Association
10:35 - 11:10	Sharing of Experience by leaders of:	
	- Integrated Social Forestry (ISF) Assoc.	Ms. Nida Salingay - President
	- Bamboo Planters	
	- Canawa-Luan Multipurpose Cooperative	Mr. Rafael Perocho - President
	- Tanabo Farmers Association	Mr. Paul Antaloquio - President
11:10 - 12:00	Open Forum	Moderator: Ms. Nida Salingay
12:00 - 12:10	Synthesis of Discussion in Boholano	Ms. Nida Salingay - President: ISF Association
12:10 - 12:15	Impressions	AFN Country Representatives
12:15 - 12:20	Message	Mr. Mark Poffenberger - Regional Program Director: AFN
12:15 - 12:20	Closing Remarks	Mr. Guillermo Palma - Elder
	Lunch Break, Informal Discussions	
1:15	Leave for Municipal Hall	

**MEETING WITH LOCAL GOVERNMENT AND DENR****Municipal Hall of Candijay****June 28, 2001****2:00 - 4:00 p.m.**

2:00 - 2:05	Welcome Talk	Ms. Monina Camacho - Mayor
2:05 - 2:15	Introduction of meeting objectives and AFN participants	Mr. Peter Walpole - Field Director: AFN
2:15 - 2:20	Introduction of municipal officials and DENR representatives	Mr. Bert Bernales - Municipal Planning and Development Coordinator
2:20 - 2:40	Summary presentation on municipal conditions re: environmental management and plans on resource management	Mr. Bert Bernales - MPDC
2:40 - 2:50	Response from DENR	Mr. Arius Ilano - PENRO, DENR
2:50 - 3:50	Open Forum	AFN
3:50 - 3:55	Impressions	Mr. Tony Djogo - AFN Country Representative: CIFOR Indonesia
3:55 - 4:00	Message	Mr. Mark Poffenberger - Regional Director: AFN
3:55 - 4:00	Closing Remarks	Ms. Ann Piquero-Dy - Vice Mayor
4:30	Leave for Tagbilaran	

## **LIST OF AFN PARTICIPANTS**

### **CAMBODIA**

Auv Sophiak  
Ly Chou Beang  
Min Bunnarra

### **INDONESIA**

Nil Makinuddin  
San Afri Awang  
Tony Djogo

### **PHILIPPINES**

Modesto Gaab  
Romy Acosta  
Sylvia Miclat

### **THAILAND**

Chaleo Kanjan  
Jessada Kaewchote

### **VIETNAM**

Ho Manh Tuong  
Nguyen Huy Dzung  
Vu Hoai Minh

### **ESSC**

Efrem Cimafranca  
Mariel De Jesus  
Melvi Viba  
Rosemel Calderon  
Wendy Clavano

### **SECRETARIAT**

Carolyn Gamiao  
Kate Smith-Hanssen  
Mark Poffenberger  
Marlou Pandan  
Peter Walpole  
Rowena Soriaga

## **GLOSSARY OF COMMON ACRONYMS**

ADB	- Asian Development Bank
CASEC	- Community Awareness of Social and Ecological Concerns (NGO)
CBFMP	- Community-Based Forest Management Program
CENRO	- Community Environment and Natural Resources Officer
CF	- Community Forestry
CFM	- Community Forest Management
CLMPC	- Canawa-Luan Multipurpose Cooperative
CRMP	- Coastal Resource Management Project
CSC	- Certificate of Stewardship Contract
DENR	- Department of Environment and Natural Resources
ESSC	- Environmental Science for Social Change
FLMA	- Forest Land Management Agreement
ISF	- Integrated Social Forestry
LGU	- Local Government Unit
MACAAI	- Mahayahay, Cadapdapan Agroforestry Association, Inc.
MPDO	- Municipal Planning and Development Officer
NGO	- Non-Government Organization
PAMAS	- Panadtaran Mangrove Growers' Association
PENRO	- Provincial Environment and Natural Resources Officer
TAFA	- Tanabog Farmers' Association