



## SOCIAL ASSESSMENT AND SOCIAL SAFEGUARDS

### INTRODUCTION

The social assessment aspect of the National Program on Environment and Natural Resources Management (NP-ENRM) project aims to determine the significant social, cultural, and political features of three selected priority watershed areas in the country and their implications to developing appropriate social development strategies consistent with integrated environment management approach for the communities in the area. These watersheds include the: Libmanan-Pulantuna Watershed in Bicol Region, Ligawasan Marsh in Mindanao, and the Southern Sierra Madre cluster composed of Kanan Watershed in Quezon, Ipo Watershed in Bulacan, Doña Remedios Trinidad- Gen, Tinio Watershed in Nueva Ecija and Bulacan, and Angat Watershed Forest Reserve in Bulacan.

The social assessment basically aims to describe and analyze the baseline socio-demographic and economic conditions in the area as they relate to the objectives and proposed activities of ENRMP, identify the various stakeholders/institutions and determine their capacity and constraints to participate in project implementation, and assess potential social impacts of the proposed interventions and build into the project design policies and measures that would maximize benefits and avoid adverse impacts on the communities.

### I. METHODOLOGY

Data for the social assessment came from various sources: key informant interviews, focus group discussions, field visit, multisectoral consultations, municipal development plans, and documents compiled by DENR central, regional, and field offices. DENR documents included profiling reports, project proposals, site assessment studies, and management plans of projects undertaken in the areas.

The total number of people consulted was 203 most of them comes DENR, LGUs, and the intended beneficiaries. They are the primary and most important stakeholders for the project to proceed. (Table 1).

**Table 1. Summary of stakeholder representatives consulted and interviewed**

Sector	Libmanan-Pulantuna	Ligawasan	Kanan	Ipo, DRT-Gen Tinio, Angat	Total
DENR	17	28	15	9	69
LGUs	10	15	11	8	44
IPs	4	3	4	21	32
PO officers/members	30	2	4	2	38
NGOs	2	6	3	-	11
NGAs (NEDA, DANCIP, PNP/military)	3	-	1	-	4
Women organizations	2	-	3	-	5
Total	68	54	41	40	203

## LIBMANAN-PULANTUNA WATERSHED

Libmanan-Pulantuna Watershed covers 8 municipalities of two southern provinces in Bicol Region--- 6 in Camarines Sur and 2 in Camarines Norte. The 6 municipalities in Camarines Sur include Del Gallego, Cabusao, Libmanan, Lupi, Sipocot, and Ragay. The 2 others in Camarines Norte are Basud and San Lorenzo Ruiz. Libmanan and Sipocot are 2<sup>nd</sup> class municipalities, the rest belong to the relatively poorer class of either 4<sup>th</sup> or 5<sup>th</sup> municipality.

### A. Social Diversity and Gender

#### 1. Geographic Location

The population in Libmanan-Pulantuna Watershed based on 2002 projection was estimated at 313,186 individuals or 56,943 households (2002-2003 study on the Preparation of Comprehensive Watershed Management and Development Plans for Three Watersheds in the Bicol Region). This population is politically differentiated in most of the municipal development plans as upland, lowland, and coastal. Such geographic labels are simple and quick indicators of the occupations people are engaged in, the social services they have access to, and their poverty level. Based on the barangays covered, population groupings in the Libmanan-Pulantuna Watershed using geographic locations are shown in Table 2.

**Table 2. Barangays covered based on geographic location**

Municipality	Total Population*	Barangays Covered			
		Upland	Lowland	Coastal	Total
<i>A. Camarines Sur</i>					
Del Gallego	18,760	2	0		2
Cabusao	16,941	0	3	6	9
Libmanan	93,804	14	35		49
Lupi	27,037	7	31		38
Sipocot	61,549	10	31		41
Ragay	48,266	3	0		3
<i>B. Camarines Norte</i>					
Basud					
San Lorenzo Ruiz	34,774	3	0		3
	12,055	5	1		6
<b>Total</b>	<b>313,186</b>	<b>44</b>	<b>101</b>	<b>6</b>	<b>151</b>

\*2002 Projection

Those in the upland areas account for about 30% and are considered the poorest due to their relatively isolated geographic location that in turn adversely affect their access to livelihood opportunities, education, health services, markets, water supply and electricity.

Since one of the twin goals of ENRMP is poverty reduction, then targeting of the beneficiaries by the project should focus on the poorest of the poor in the watershed. Based on the analysis in the Libmanan-Pulantuna Watershed, they are mostly the uplanders followed by the marginal lowland farmers and subsistence fishermen. By location in terms of municipality, upland farmers and marginal lowland farmers are located mostly in Libmanan, Lupi, and Sipocot while subsistence fishermen are in Cabusao. Migrant and poor IPs are settled also in Lupi.

It used to be that people's groupings of themselves as being uplanders, lowlanders, and coastal residents brings an implicit assumption that they have their own political and social territories and need not necessarily cross boundaries. But the idea that what one does in the upland affects the lives of those in the lowlands and coastal areas seems to be now better understood by the communities as those from the coastal areas of Cabusao point to the degradation of the uplands as one of the causes of siltation of San Miguel Bay. The concept, therefore, of watershed and the relationship between and among the various ecosystems should be reinforced as an important message of the ENRMP IEC component. Membership in the multi-stakeholder Watershed Management Council (WMC) should include representatives from these sectors to insure that their interests are properly heard and protected.

## **2. Education**

Majority of the household heads across municipalities have low educational attainment, having reached or finished only some elementary schooling. This leads to the greater likelihood that households are below poverty line and are into subsistence form of livelihood. Thus, enhancement of the social capital should be a priority in the project as it is the only capital that the poor possesses. This can be done through formal and non-formal education. While this may not fall under the mandate of DENR, it can at least coordinate with the concerned sectoral departments like the Department of Education (DepEd) and the Department of Health (DOH) to facilitate the delivery of services. Another strategy is to include both DepEd and DOH as members of the WMC so they can also establish their stake in ENRMP and also contribute to the implementation of the project.

## **3. Age**

The watershed population in terms of age can be described generally as in productive stage, i.e., 15-64 years old, engaged either in schooling or in any productive undertaking. They are supposed to bear the burden of taking care of the dependent members of the population such as children (below 15 years old) and the senior citizens (64 years and above). Being in that stage, their human capital has to be harnessed and protected. Social services such as education and health including family planning should, thus, be made available and accessible to this segment of the population by ENRMP through direct and indirect means. Directly, it can provide capacity building assistance or training in areas relevant to integrated environment management. Indirectly, it can coordinate with proper government agencies such as the Department of Education (DepEd) and Department of Health (DOH) to facilitate delivery services in the project areas. Also, representatives from these sectors can be made part of the Watershed Management Council so that they become partners of the project.

## **4. Ethnicity**

Ethnicity at the Libmanan-Pulantuna Watershed shows that it is largely dominated (88%) by Bicolanos. The migrants, mostly Tagalogs, pose no big threat to the Bicolanos being marginalized in terms of project benefits. The Tagalogs, though a minority, have not been traditionally victims of social exclusion. By virtue of their financial capital and higher education, many are able to own properties and establish businesses in the area. Being entrepreneurs, they provide secondary economic services such as trading and product processing that boosts the local economy. Thus, in the long run, they can be complementary business allies of the native Bicolanos.

### Presence of IPs

A small community of indigenous peoples (IPs) consisting of 85 Agta families are now settled in private farm lands (owned by the current barangay captain) in the upper portion of San Ramon, Napolidan in Lupi. During the site visit and consultation with the tribal leader and a few of the members last July 21-24, it was found that this IP group voluntarily migrated to the area sometime in 1985. They came from the Agta community in Iriga, Camarines Sur. Initially, a band of three, one of which was a product of intermarriage between an Agta and a Bicolano from Lupi, migrated voluntarily to San Ramon to try out a more sedentary type of living. Soon they increased in number through the years as they brought along other members of their tribe who later on intermarried with the lowlanders in the area.

As the Agta grew in number, the officials of the recipient barangay took notice and they eventually coordinated with the National Commission for Indigenous Peoples (NCIP). The barangay officials actually did not object to accommodating the Agta migrants and instead found it beneficial to their community. The Agtas became known as good farm labor and they soon became farm caretakers and farm hands of Bicolanos in San Ramon. To address the Agtas' need for a more permanent settlement, the LGU of Lupi upon the initiative of the barangay captain, started scouting for government or private lands where they can be more permanently settled. Pending the final acquisition of the land by the LGU, the Agtas are given temporary dwellings made of nipa roofs and walls in the private farm of the barangay captain. Others have huts in the farms where they work as helpers.

When asked if they still prefer to go back to the mountain rather than work as farm help, the Agtas emphatically mentioned the latter. Having been acculturated by lowland culture and somehow assimilated in the lowland community, they singled out access to education and more reliable/regular income source as factors that drive them to stay put in their current settlement area. They also explained that they are culturally more attuned to doing farm work or anything related to land tilling over other types of manual labor and would prefer livelihood that are tied up to farms. The LGU of Lupi has taken responsibility of providing more permanent settlement to this Agta group.

It is, however, still a concern that these Agta be provided with their communal land to till so that they do not remain economically and culturally marginalized. This is further reinforced by the observation of the barangay captain interviewed that despite the Agtas assimilation in the mainstream community, there is still evidence of discrimination against them. For one, lowlanders would not hire the Agta women as house help, only as farm help because of their alleged non-hygienic practices.

In the absence of ancestral lands to claim, being migrants, they can be organized into an indigenous peoples' organization (IPO) and be allowed to apply for CBFM instead. Once organized, assistance should be provided by ENRMP in coordination with the LGU of Lupi in the formulation of an IP development plan that would also form a coherent part of the entire watershed management plan. It would then logically follow that they should be represented in the WMC that has yet to be formed for the Libmanan-Pulantuna Watershed. In undertaking all these activities, the IPRA provision that IPs' free and prior informed consent be secured will be observed.

### IP Development Framework Plan

IP development plan (IPDP) will be formulated following the guidelines set forth by World Bank concerning social safeguards for IPs :

- It should be based on the options preferred by the affected IPs consistent with their right to self determination. For the Agta in Lupi, they prefer to stay as migrants and be engaged in farming activities.
- All efforts should be exerted to anticipate adverse trends which can be created by the ENRMP and develop the means to mitigate the potential harm. Being migrants in the area and IPs at that, it is likely that the Agtas will be marginalized in terms of social (such education, health) services and economic or employment opportunities.
- Institutions responsible for IPs such as the National Commission for the Indigenous Peoples (NCIP) and LGUs should possess the social, technical, and legal skills needed for carrying out the proposed development activities. The LGUs in particular will need to be oriented on the provisions and implementing rules and regulations of the Indigenous Peoples Rights Act or IPRA as they will now assume responsibility over the IPs welfare. Implementation arrangement will be kept simple and will involve appropriate existing institutions, local organizations, and NGOs with expertise on IP matters.
- Local patterns of social organization, religious beliefs, and resource use should be taken account in the plan's design. Of peculiar concern is the organization of IPs into tribal communities parallel to the government LGU structure with their respective tribal leaders representing them in political, social, and economic transactions.
- Development activities should support production systems that are well adapted to the needs and environment of IPs and should help production systems under stress to attain sustainable levels. A CBFM arrangement is an option they can enter into as it provides the Agta community the opportunity to adopt their indigenous production system.
- The plan should avoid creating or aggravating dependency of IPs on project entities. Thus, the plan should incorporate education and training in management skills for IPs at the onset of the project.

The IP development plan based on the World Bank operational directive on IPs should contain the following:

- a. **Legal Framework** – an assessment of the legal status of the affected IPs based on constitution, enacted laws, regulations and administrative orders, and the IPs' ability to effectively use the legal system to defend their rights. Particular attention should be given to the rights of IPs to use and develop the lands they occupy; to be protected against illegal intruders; and to have access to natural resources (such as forests, wildlife, and water) vital to their subsistence and reproduction.
- b. **Baseline Data** – to include (a) maps and aerial photographs of the area of project influence and those inhabited by the IPs, (b) analysis of the social structure and income sources of the population, (c) inventories of the resources that IPs use and technical data on their production systems, (d) relationship of IPs to other local and national groups.
- c. **Land Tenure** – as the concerned IPs are migrants in the area, alternative land tenure or arrangement should be worked out such as CBFMA to grant a long-term renewable right of custodianship to these Agtas.
- d. **Strategy for Local Participation** – mechanisms should be devised to insure IPs sustained participation throughout project planning, implementation, and evaluation. IPs have their representative organizations usually led by their traditional leaders that serve as channels for communicating their preferences. It should be insured through actual consultation that these leaders genuinely represent their tribe.

- e. **Technical identification of Development or Mitigation Activities** – detailed descriptions should be prepared and appraised for proposed services such as education, training, health, credit, and legal assistance as well as for productive infrastructure. Indigenous knowledge and systems (traditional health provider, paralegal worker) should also be considered when planning for these services.
- f. **Institutional Capacity** – involves assessment of the track record, capabilities, and needs of institutions assigned responsibility for IPs such as NCIP. Focus should be made on the (a) availability of funds for investments and field operations, (b) adequacy of experienced professional staff, (c) ability of IPOs, local administration authorities, and local NGOs to interact with specialized government institutions, (d) ability of the executing agency to mobilize other agencies involved in the plan's implementation, and (e) adequacy of field presence.
- g. **Implementation Schedule** - with benchmarks to measure progress periodically; may need to have pilot run and should pursue long-term sustainability of the project.
- h. **Monitoring and Evaluation** – monitoring units should be staffed by professional social science professionals, and appropriate reporting formats and schedules should be formulated. The IPs themselves may also be part of the monitoring group.
- i. **Cost Estimates and Financing Plan** – should include detailed cost estimates for planned activities and investments. Estimates should be broken down into unit costs by project year and linked to a financing plan. Programs such as revolving credit funds that provide IPs with investment pools should indicate their accounting procedures and mechanisms for financial transfer and replenishment.

## 5. Gender

While men take the lead in productive activities, women and able children provide a considerable share of their time in planting, harvesting, processing, and marketing. Women's burden doubles up when men temporarily out migrate during off farm season to look for other jobs in nearby areas.

Since women and children are part and parcel of the household economic activity, then they should also be made part explicitly of the group of beneficiaries for whom the ENRMP livelihood activities and capacity building are being targeted. For example, microfinance can be designed in a manner that 50% of it would be allocated to women and working children as a matter of policy. Facilities, equipment and even construction of infrastructures can be made gender sensitive so that they would indeed benefit the women and children by design, and not by chance. Likewise, the women and children sectors should also be represented in the envisioned WMC.

No concrete data on number of women as household heads was obtained as census and field data don't usually disaggregate data into the men- and women- headed households. It can be inferred and assumed, however, that this occurs mostly to the poorest of the poor and to those 30% who are located in upland areas, who by necessity would have higher propensity to look for alternative livelihood elsewhere..

During project planning stage when some assessments still have to be done, a guideline prescribing that data on households be disaggregated to indicate women-headed ones should be adopted. Also, alternative livelihood should consider the seasonality of family activities so material time can be properly allocated strategically to these additional concerns to insure success.

## **6. Income and Income Sources**

Farming and fishing dominate the livelihood profile (Table 4) with mining, trading, and cottage industries invariably pairing up with the two. The social grouping is basically differentiated by the type of resource-base - agricultural/forest land, coastal, and mine resource. Average monthly income from these sources amounts to P 3,259 or P 39,108 per year, equivalent to per capita income of P 7,821.6 using the average family size of 5. This amount is about 37% lower than the annual per capita poverty threshold of P12,354 for Bicol Region.

A finding related to income is the prevalence of non-cash income sources such as stocks of harvested rice, domesticated animals, hair cut, and dress sewing by family members. When computed, this can amount to P 2,575 per year. It can increase their income from P 7,821 to 8,336 but still not substantial to enable them to move up above the poverty line. At least such non-cash income sources help them survive the harsh times such as during off-farm season.

Backyard fishpond development is also common in the area, being carried out by the POs. Other livelihood projects are forest-based such as bamboo seedlings/cuttings production, contract reforestation, indigenous tree species production, and forest products utilization. Non-forest based entrepreneurial projects include rice retailing, copra trading, and fertilizer retailing.

These, thus, point to the need for ENRMP to focus on livelihood interventions that will provide substantial gain for the households. Interventions should now veer away from the usual traditional subsistence crops like rice and corn. Instead, opportunities for introducing agroforestry and micro-enterprises for value-added processing as well as trading should be considered. Support for capacity building in these areas should also be part of the package. A livelihood shift study will be helpful to minimize the negative impact which could occur during the transition stage.

There is, therefore, a need to for DENR to review the policies regarding harvesting and utilization in CBFM and other similar areas. The policies and rules on CBFM and other management regime should be clear at the very start. To prohibit the access to the resource, when this has been the primary incentive for people to participate, will indeed sound very unfair. DENR through ENRMP should thoroughly review the policies so that they do not contradict their intent. IEC should also be designed such that there would be constant dialogues between contracting parties in addition to clear information about the policies and guidelines. This is an important strategy for trust-building and for sustaining the participation of the stakeholders in the project.

## **7. Farm Size and Farm Ownership**

Majority are small farmers tilling less than 3 hectares. Mean farm size is 3.2 hectares. Farm ownership is about 40%; the rest are tenant/caretakers or have no farm of their own. This could be a major constraint in their access to resources, land being a major asset for production. Hence, management regimes such as community-based forest management (CBFM) that favors communal use and access will be more beneficial to the community. It will also help check illegal activities and unsustainable NRM practices if those affected will be made participants of the ENRMP, whenever feasible.

## **8. Crops Planted**

Farmers in the area are more of the subsistence-, rather than the commercial-oriented type. The former plant staple crops such as palay and corn. The latter plant high value crops such as pineapple and bananas (Table 5) as they can afford to provide the expensive inputs.

Private investments in agriculture have shown that the traditional coconuts, palay, and corn have negative contributions to growth in agriculture due to their low market price. For coconuts, this is due further to the crop's declining productivity and high senility. Those considered engines of growth in agriculture, based on the same study, are high value crops such as pineapple, bananas, poultry, livestock, and fishery. These can compete better in the local and export markets. Livelihood development interventions in ENRMP should consider these crops as potential substitutes to the traditional crops but in suitable areas in the watershed. Similarly, proper inputs and technology and starters should accompany the package.

## **9. Access to Electricity and Potable Water**

Electricity serves 60% of the barangays in the Libmanan-Pulantuna Watershed. And most of these barangays are the urbanized and more accessible ones. This social service then is expected to further leave behind the isolated poorer barangays in terms of economic opportunities.

While 80% of the population in the area have access to water supply, their source mostly is at level 1. This refers to a protected well or a developed spring with an outlet but without distribution system. In some areas, households have access to level 3 system-- i.e., waterworks system with individual house connections—but the services cannot be expanded to cover more houses because of the system's limited capacity. As expected, those who are located in inaccessible upland areas suffer the most deprivation.

Electricity and water are not within the direct mandate of DENR. But through ENRMP implementation it can help expedite the gradual installation of such services in the affected barangays in the watershed areas. Being basic, development in other areas such as livelihood would be difficult to pursue without these two. Project proposals can be submitted by the LGUs to the Department of Energy to complement ENRMP efforts in the focal areas.

### **B. Local Institutions**

#### **1. Cooperation and Volunteerism**

Most communities in the Libmanan-Pulantuna Watershed are willing to cooperate and volunteer in informal community activities where communal effort or intensive labor is needed. These activities could include barangay clean up, wedding, festivities, wake, emergencies, and planting and harvesting. This they would accordingly do out of their genuine concern for their barangay and out of "pakikisama"-- a Filipino value where one joins the others in accomplishing tasks because of friendship or indebtedness. Others do it if only to maintain the good name of and unity in the barangay. As community folks engage into these social organizations, a system of roles somehow informally evolves for integrating their activities. There will be groups who will take care of the food, provide the necessary materials, utensils, or paraphernalia, while everybody will be involved somehow in the actual activities.

These can be tapped as social capital for the implementation of ENRMP on-ground, especially for rehabilitation, law enforcement, IEC, and formation of micro-lending groups. Participation, being one of the project's key elements, will be better enhanced if stakeholder groups have strong social cohesion as it will lessen transaction cost. Strategies to boost such may include communal, rather than individual, activities geared towards mutual benefits between and among the members.

## **2. People's Organizations**

The above cultural trait provides the foundation for establishment of POs in the area. Farmer's cooperative is the most common, the area being primarily an agricultural community. A number of POs are engaged in CBFM. Noted as among the strengths of existing NGOs in the area is the competence of their leaders. These leaders usually come from the ranks of barangay officials. Factors for POs' success include provision of immediate and tangible benefits, provision of financial assistance, active and visible operation in the community, and support of LGUs and NGOs.

A number of POs are currently engaged in CBFM. The project can actually capitalize on these existing ones for delivery of project services. A system of accreditation to screen out the inactive and functional ones and those that genuinely caters to the poorer sector of the community.

## **3. NGO Services**

About 11 NGOs were identified as assisting various communities (upland, agricultural, and coastal) in the watershed area. They are as follows:

- Plan International-Bicol
- BURDFI
- Philippine Rural Reconstruction Movement (PRRM)
- Prime Movers for Development Foundation, Inc. (PMDFI)
- Philippine Federation for Environmental Conservation (PFEC)
- Bicol National Park Foundation, Inc (BNPFI)
- Kabalikat-Civicom
- Guardian Brothers, Inc.
- Savers Inc.
- TABI
- Center for People Empowerment in the Uplands

Assistance provided by these NGOs is mostly in the form of technical training and seminar. Others include livelihood development, educational assistance, communication and rescue operation, provision of housing and toilets, irrigation and water supply, distribution of agricultural inputs, small infrastructure, and health services. As these NGOs put emphasis on building up self-reliance, they extend very minimal financial assistance to individuals and the community.

Most of these NGOs have working relationships with DENR through the CBFM. As their capability deals more on community-based approach and in NRM, they are still much willing to collaborate with DENR on other community-based projects. An advantage is that DENR regional office in Bicol has already established a system for accreditation of NGOs and this can be used in tapping services of NGOs during ENRMP implementation.

#### **4. Conflict Resolution**

In resolving conflict at the community and institutional level, there is the prevailing practice to settle issues through amicable settlement via dialogue among the stakeholders concerned. Dialogues can be direct between the parties involved, or mediated by a person with good reputation in the community and are mutually agreed upon by both parties to act as such. In extreme cases of disagreement, affected parties resort to formalities such as meetings, and bringing the matter to a legal body such as the Hukumang Pambarangay.

Local institutions for conflict resolution are important as conflicts in resource access and use are bound to occur in integrated watershed management. ENRMP can tap local practices and also help enhance the process through capacity building so that conflict resolution develops through time.

#### **5. Local Politics**

There are two types of political leaders that can be observed in the watershed area: the traditional-political and the professional-entrepreneurial leaders. The first are usually products of political dynasty or clan whose tendency is to form strong alliance with the masses through granting of favors. They cater more consciously to the demands and wishes of the local residents, developing an extensive alliance network to consolidate their power. The second usually come from professionals and entrepreneurs ancestry who enter the political arena. By virtue of their educational background and experience, they are more development action-oriented. They treat their position as one geared towards fulfilling the needs of the larger society.

ENRMP should take advantage of the emergence of the professional-entrepreneurial type. These leaders can be easily singled out in the area. AS kingpins in the area, they can help institutionalize environmental and natural resource management in the practice of good governance. They can also pave the way for demonstrating how an LGU would eventually absorb ENRM functions devolved to them. If this is sustained, then DENR would be relieved of a very big responsibility and can focus more on its developmental and technical assistance function to LGUs in the country. In short, these leaders can contribute much to the success of the project.

#### **6. Grass root Politics**

At the micro level, political dynamics within POs would somehow depict certain features of grass root politics. The criteria used by PO members in selecting core group leaders or officers are as follows:

- Popular and well respected by majority in the community
- Manifests enthusiasm in the implementation of the project
- Has better knowledge/information and manifests rationale/creative thinking and disposition
- With strong leadership potentials
- Can lead discussions and always present in assemblies/gatherings
- Has time for the project
- Curious and eager to learn

These suggest that local populace choose leaders on the basis of popularity, commitment and dedication to the project, knowledge, and communication ability. These criteria, though, do not necessarily come in this order. There is also a seeming preference for a leader with higher level of knowledge and rationality than the rest of the members. Nowhere do influence and wealth get into the picture.

These could imply then that people at the grass root level have more or less reached a considerable level of political maturity in choosing their leaders. It can be an asset which ENRMP can harness in building up representative democracy as a mode for participation in the project. It could lessen the risk of people, especially the vulnerable ones, of being misrepresented by leaders who merely advance their own personal vested interest.

## **7. Peace and Order Situation**

It is a recognized fact in the area that certain upper portions of the Libmanan-Pulantuna Watersheds are footholds of the members of the New People's Army (NPA). This leftist group has become a fact of life that the communities especially in Lupi, Libmanan, and Sipocot have learned to live with. Government officials usually attribute the lack of investors in the area to the presence of NPA.

This is not considered a big threat to ENRMP because the LGUs and the communities therein have seemingly learned to co-exist with the NPAs. In fact, areas that are known to be NPA territories can be accessed by the LGUs as long as certain protocols are observed. Since the project's objective of poverty alleviation is consistent with NPAs' battle cry, it is perceived that the project can proceed without any trouble from the NPA group.

### **C. Stakeholders Analysis**

The stakeholders were initially classified based on their position or roles as well as stakes in the project as follows:

- Beneficiaries - include ordinary community members and households engaged in primary economic activities who are supposed to benefit most from the project. Since the project is about natural resource management and poverty reduction, then the intended beneficiaries would be the poor members of the community whose economic activities depend to a big extent on natural resources are natural resource-based.
- Local Political Leaders as policy and decision makers – refer to the LGU and barangay officials having territorial and political jurisdiction over areas covered by the Libmanan-Pulantuna Watershed who by their mandates are responsible for legislating laws and executing programs that would enhance the welfare of their constituents.
- Intermediaries – refer to groups and institutions performing intermediate roles and tasks that aim to provide linking services to the community so that they facilitate the achievement of development objectives for the area. These may include traders, middlemen, and haulers of their produce.
- Formal Service Providers- include local offices of national government agencies (NGAs) whose mandates include the provision of development assistance and services to the members of the community; also include NGOs providing technical and social assistance to the communities concerned.

- Non-formal Service Providers – refer to people or groups who are not formally organized and do not necessarily possess legal identity but provide vital goods and services to the community.

Based on the above categories, the major stakeholders in the watershed can be summarized in Table 3.

**Table 3. Stakeholder analysis matrix**

Stakeholder Classification	Stakeholder	Assets/Capabilities	Constraints	Degree of Influence
Implementing agency	DENR	Mandate, power and resources for ENRM	Equally important priorities but inadequate resources; weak institutional capacity to enforce laws; mismatch between plan and budget programming	High
Intended Beneficiaries	Farmers, fisher folks, forest product gatherers, laborers, peoples organizations, indigenous peoples, women	Human and social capital; de facto users of natural resources; actual practices can contribute tremendously sustainable ENRM	Lack of alternative livelihood sources; lack of knowledge and skills on sustainable natural resource use; can easily be preyed upon by opportunistic elements	Low
Local political leaders	Provincial officials, LGU officials, barangay officials	Authority mandate to govern, broad follower-ship, funds, policies; growing concern for environment	Limited knowledge of environmental laws; lack of knowledge and skills in enforcing environmental laws	High
Intermediaries	Traders, processing industries, banks and other lending institutions	Funds for loans; mechanisms for lending and collection in place	Aversion to lend to poor segment of population	Medium
Formal Service providers	NGAs- DA, DAR, BFAR, NCIP, DILG, DECS DOH, NIA, PNP	Technical expertise related to ENRM; field staff presence	Bias for more accessible beneficiaries; lack of funds for sustained assistance	Medium
	NGOs – Plan International, Prime Movers for Development Foundation, Bicol National Park Foundation, Inc., Philippine Federation for Environmental Conservation, Savers Inc., religious groups (Social Action Center)	Expertise in community organizing, social mobilization, capacity building	Project-driven; services not sustainable without funds from projects; tendency to exploit IPs' condition for fund sourcing	Medium
Non-formal service providers	Money lenders (5-6 modality), bet collectors of jueteng, hilot, herbolario	Provide quick response to needs of local folks; provide services at lower or no cost at all; easily accessible	Collect very high interest (money lenders); information provided not always reliable; and skills quite crude	Low

## 1. DENR

DENR is the agency in the Philippines responsible for the conservation, management and proper use of the country's natural resources in order to ensure equitable sharing of the benefits derived from such for the welfare of the present and future generations of Filipinos. As provided for in Executive Order 192, the mandate of the DENR can be categorized as follows: to ensure sustainable use, development, management and conservation of natural resources and; to safeguard the environment and ensure equitable access to natural resources. It has, therefore, the most stakes in the project. While it has the mandate, machinery, and resources to pursue ENRMP and its high officials have the commitment to pursue its goals, it is faced with several limitations or constraints. For one, it has to attend to so many equally important ENR issues that it could hardly prioritize its programs. It has also limited manpower especially in the field level to take care of the more problematic law enforcement activities. Compounding these is the inadequate government budget which is not released on time to meet its obligations.

Program prioritization and budget support for DENR will, thus, be the focus of ENRMP. This is meant to strengthen its institutional capacity to provide technical assistance to various players in terms of ENRM, while also slowly empowering the LGUs to take on more of the tasks responsibility.

## **2. Farmers, fisher folks, forest product gatherers, laborers, peoples organizations, indigenous peoples, women**

These are the intended beneficiaries. Being on-ground, they can make a big difference in NRM through their resource use practices. However, being poor and low educated, they don't have much livelihood alternatives to choose from. Oftentimes, they become vulnerable to offers of immediate and big income by unscrupulous elements such as the illegal loggers and miners.

The social component of the project will address the needs of the intended beneficiaries in a way that their basic needs would be met while they contribute to the sustainable management of the natural resources. Provision of alternative livelihood together with microfinance package will be a key component of ENRMP. To insure that loans will not be cornered by the powerful elite, a multisectoral body will be established to manage the implementation of the project. In addition, policies should make it clear at the onset that certain percentage of the loan amount (to be agreed upon later) will be allocated to the more vulnerable sectors of IPs and women.

## **3. LGU Officials**

They have critical and strategic role to play in the project, having direct territorial jurisdiction over the watershed areas and being mandated by law to provide basic social and welfare services to their constituencies. Exercising great influence over the area and its people, they can create significant impact through the project. Activities to be undertaken by ENRMP need the blessing of the LGU officials to proceed. Hence, the interest they expressed in the project is already a plus factor. This has already been evident during the earlier visioning and consultations done with them in preparing the project documents on the Bicol River Basin and watershed plans for three Bicol watersheds.

But LGUs face the limitation of lack of technical knowledge about ENRM (i.e, concept of watershed and protected areas) and the pertinent laws. For example, they said hat it's difficult for them to confiscate endangered species when they don't even know how these species look l like. Hence, their

capacitation in ENRMP will be a major component of the project. LGU officials shall by and large be part of the Watershed Management Council.

#### **4. Traders, Industries, Businessmen, Banks and Lending Institutions**

Traders are the informal but most in demand provider of quick loans. But their interest is prohibitive and is meant more to bind the farmers and fisher folks' loyalty to them. Banks have windows for lending but they consider the poor as not credit-worthy.

ENRMP aims to settle this issue by offering microfinance assistance to legitimate project beneficiaries using already existing system of the LGUs. This not being a DENR mandate can be coordinated with LGUs which have already the system, infrastructure and people, in place. To insure that the loans are not malversed, longer social preparation including value orientation should be given the beneficiaries. Also, a more stringent set of policies for borrowers should be formulated.

#### **5. Service providers from line agencies of national government agencies (NGAs)**

These include development workers from DA, DAR, BFAR, NIA, DOH and local personnel of DILG, NCIP and military. The nature of their work being field-based is an asset to the project. They possess intimate knowledge of the community's psyche, idiosyncrasies and problems. They are also equipped with skills in community organizing and social mobilization, these being part of their work.

However, because of lack of resources (i.e., travel money) and incentives as well as inherent difficulty of the job, they tend to be bias for accessible communities leaving aside the isolated and far flung areas where the poor are located. This should all the more challenge ENRMP to seek and reach out those in inaccessible areas.

#### **6. Non-formal service providers (focus on money lenders)**

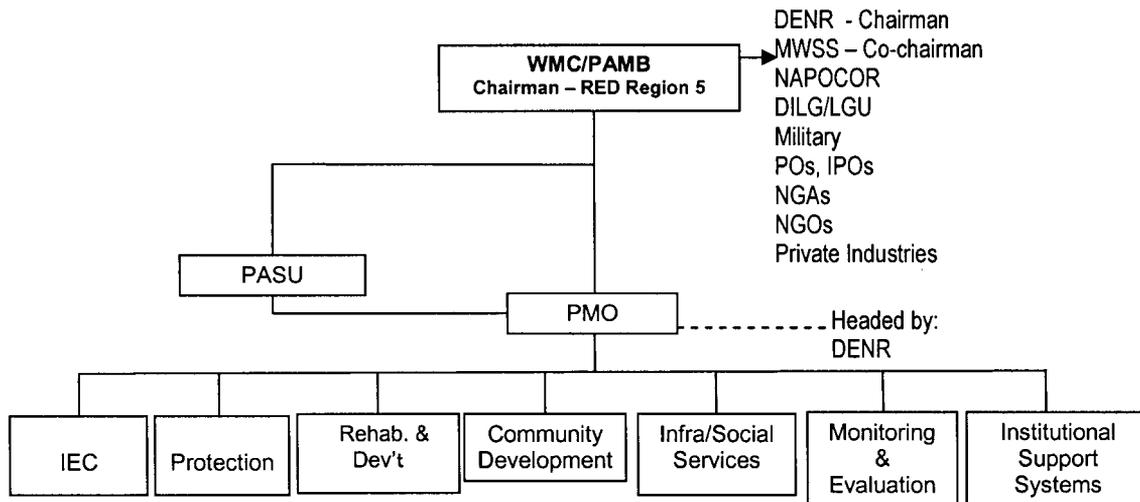
While they may have low influence, they can provide the most needed help in time of need to the intended beneficiaries. Their exorbitant interest can bury the borrower deep into debt before he can ever pay back the principal amount. The project actually has no control over these people but it can pull the poor people away from the practice if it can provide alternative credit facility. Hence, microfinancing, though not part of DENR mandate, will be component of ENRMP.

None so far among the stakeholders have the intention to prevent the implementation of the project. Earlier consultation in Legazpi City were participated in by representatives from LGUs, DENR, NEDA, POs, NGOs; and the recent one held in Cabusao was attended by representatives from various POs (fisher folks, women, barangay officials, NGOs, MAO). Stakeholders present have so far indicated their interest and willingness to support the project. They view the project as a concrete effort of the government towards poverty alleviation.

As the table above would show, the various stakeholders have their respective assets and capabilities which when properly put together can complement each other in pursuing sustainable ENRM. Hence,

a multisectoral management body is indeed in order so that these assets can be tapped while stakeholders continuously pursue their interests aligned to the goals of ENRM.

The above analysis helps define the institutional arrangement most appropriate for managing the Libmanan-Pulantuna Watershed following the principles of social inclusion and equity. Being a watershed, a multisectoral Watershed Management Council is being proposed in Figure 1 of the project implementation plan (PIP) for the Libmanan-Pulantuna Watershed. The figure is reproduced below.



**Figure 1. Proposed organizational structure for Libmanan-Pulantuna Watershed**

The Libmanan-Pulantuna Watershed Development and Management Council shall be headed by the DENR Regional Executive Director. It shall also consist of Senior Officials from the Local Government Units concerned and NGAs. The council or the board shall review policies and oversee the implementation of the watershed plan.

The Protected Area Management Board or PAMB will be composed of local representatives from government, NGOs, POs, IPOs appointed by the DENR Secretary. This board shall serve as the Technical Working Group/ Policy making body of Libmanan-Pulantuna Watershed.

**D. Participation**

Having the most stake in the project, the upland farmers, small fisher folks, and marginal lowland farmers indicated willingness to maximize their participation in the project despite their limited resources and assets. These come in the form of human and social capital. The good interrelationship between and among peers and their practice of reciprocity can broaden participation. They also lessen the cost for constant transaction or dialogue through the conduct of activities involving the community. However, they brought out their lack of gut to assert their right to participate and the skills to do so. These create barrier for equitable opportunity in ENRM. Hence, ENRMP should also address

capacitating the intended beneficiaries in the area of enlightened participation and of communication skills.

The common mode of participation especially in the local setting is through representation by their leaders and officials who are expected to bring the interest of and decide on behalf of their constituency. This is common even among the IPs. While this may be simply adopted by ENRMP, mechanisms to check whether benefits really trickle down or spread out among the other members of the group should be put in place.

While it seems that at this early stage, it is the DENR and LGUs which are strongly asserting their stake over the natural resource, the project design should provide a framework as well as mechanisms by which the other equally important stakeholders will be given social and political space through which their needs would also be incorporated and addressed in the plan and its actual implementation. The framework below proposes how this can be done.

Participation of the various stakeholders in the envisioned integrated watershed management for the Libmanan-Pulantuna is defined by a number of guidelines:

- Stakeholders should indicate and express their consent to participate and collaborate. Hence, orientation about the project should be provided the stakeholders to enable them to make sound decision about their involvement.
- Participation should be by representation. Hence, stakeholders should be vigilant in choosing their representatives. But project implementers should also be keen in knowing more about the background and character of the stakeholders' group representatives.
- Areas of collaboration should be identified and agreed upon by the stakeholders themselves, facilitated by project implementer. Areas of collaboration may include policy making, law enforcement, nursery establishment, marketing, IEC, monitoring and evaluation, etc.
- Participation in a particular area of collaboration should be along the line or direction of the stakeholders' mandates and current activities to maximize resource sharing, avoid putting unnecessary additional burden to the stakeholders, and sustain their participation.

**Table 4. Stakeholder participation plan**

Stakeholder (Who)	Role (based on mandate and asset)	Role and Area of collaboration
Farmers, fisher folks, forest product gatherers, indigenous peoples, women	Being direct resource users, what and how they do things impact on the integrity of the resource. Their decisions and behavior are what the project should aim to influence.	<ul style="list-style-type: none"> <li>• Adoption of sound environmental and natural resource use and practices</li> <li>• Resource protection and law enforcement</li> <li>• Monitoring and evaluation</li> </ul>
Provincial officials, LGU officials, barangay officials	They have the political mandate, authority, as well as material resources for the development of the area. They are key in making policies and decisions favorable to the watershed.	<ul style="list-style-type: none"> <li>• Promulgation of laws and policies consistent with sustainable ENRM</li> <li>• Allocation and provision of reasonable financial resources for ENRM</li> <li>• ENR law enforcement</li> </ul>
Peoples Organizations	They provide the conduit or mechanism for participation of the mass of resource users through organized representation	<ul style="list-style-type: none"> <li>• Adoption of sound environmental and natural resource use and practices</li> <li>• Resource protection and law enforcement</li> <li>• Monitoring and evaluation</li> </ul>

Stakeholder (Who)	Role (based on mandate and asset)	Role and Area of collaboration
NGAs- DENR, DA, DAR, BFAR, NIA,	They provide the necessary technical and social assistance to the local constituencies in areas directly affecting the people's livelihood	<ul style="list-style-type: none"> <li>• Provision of technical services and technologies for sustainable agriculture, fishing, forest resource use</li> <li>• Facilitation of issuance of appropriate instrument for land use and/or tenure or</li> </ul>
DILG	It oversees, regulates, monitors and evaluates performance in local governance of all LGUs in the country	<ul style="list-style-type: none"> <li>• Good governance</li> <li>• Maintenance of peace and order</li> <li>• Monitoring and evaluation</li> </ul>
NGAs- DECS, DOH, PNP	They provide the basic social services to the community (education, health, peace and order ) thus, ensuring enhancement of human capital	<ul style="list-style-type: none"> <li>• Provision of basic social services</li> <li>• Maintenance of peace and order</li> <li>• Provision of good Education</li> <li>• Maintenance of human health and nutrition</li> </ul>
NEDA	Through its regional Development Council, it formulates and monitors the implementation of policies that reduce regional growth disparities, and promote rational allocation of resources LGUs in the region.	<ul style="list-style-type: none"> <li>• Check and balance in area/regional development</li> <li>• Policy formulation</li> <li>• Resource allocation</li> </ul>
NCIP	The national body mandated to formulate and implement policies, programs, and plans that promote and protect the rights and welfare of IPs and the recognition of their ancestral lands and domains.	<ul style="list-style-type: none"> <li>• Protection of the rights of IPs</li> <li>• Formulation and implementation of ancestral domains management plan (ADMP)</li> <li>• Provision of social welfare services to the IPs</li> <li>• IEC and advocacy for IPRA</li> </ul>
NGOs	They take care of organizing and socially preparing the local communities so that they become empowered to participate on development activities affecting their lives.	<ul style="list-style-type: none"> <li>• Community organizing and social preparation of local communities</li> <li>• Capacity building services</li> <li>• IEC and advocacy</li> </ul>

## E. Microfinancing Design

Since activities for the management of Libmanan-Pulantuna Watershed will include provision of microfinance assistance, the project design will insure that rigid rules and procedures will be put in place to provide check and balance. Institutions with good track record and safety net mechanisms for bad debts, such as banks, will be tapped to handle the amount for lending. POs which will serve as conduit for screening and processing should be selected on a competitive basis. To avoid "pakikisama" and kinship coming into play, an oversight body or an assisting organization such as an NGO with good track record in monitoring microfinance will be tapped. Good practices in microfinancing will also be adopted.

Since political maturity at the grass root level is becoming more evident, this should be sustained through IEC on good governance and public disclosure of good and bad performers in microfinancing. LGUs with professional-entrepreneurial leaders or chief executives may also be given priority to access the microfinance assistance for their poor constituencies as a form of incentive.

## F. Social Safeguards

Main social strategies for Libmanan-Pulantuna Watershed include preparation of IP Development Plan, stakeholder participation plan, institutional arrangement, and provision of microfinance. All these pose no major adverse impact such as involuntary resettlement on the intended beneficiaries and the communities (Table 5).

**Table 5. Matrix for Impact and Social Safeguards for Libmanan-Pulantuna Watershed**

Social Concern	Project Design and Impact	Recommendation
<p>a. Marginalization of IPs  (pp.4-6 of Annex 1-5a of final report)</p>	<p><b>ENRMP will have no significant adverse impact on marginalization of migrant Agtas in Lupi.</b></p> <ul style="list-style-type: none"> <li>- ENRMP will use participatory approach and will abide by IPRA provision that IPs' free and prior informed consent will always be sought on matters affecting them.</li> <li>- Envisioned institutional arrangement will include slots for representatives of Agta IPOs in the Watershed Management Council.</li> <li>- Special project component has been included to provide assistance in the formulation and implementation of IP Development Plan for the Agta migrants.</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on IPs.</p> <p>Measures on IP development should be continuously monitored during project implementation.</p>
<p>b. Livelihood displacement  (p.7 of Annex 1-5a of final report)</p>	<p><b>ENRMP will not result to significant livelihood displacement of beneficiaries.</b></p> <ul style="list-style-type: none"> <li>- Project design includes study on livelihood shift, provision of alternative livelihood, microfinancing and training on enterprise development.</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on involuntary resettlement.</p> <p>Measures to avoid livelihood displacement should be continuously monitored during project implementation.</p>
<p>c. Gender inequality  (p. 6 of Annex 1-5a of final report)</p>	<p><b>ENRMP will taper off adverse impact on gender disparities and inequalities in terms of access, use, and control over productive resources as well as in decision making.</b></p> <ul style="list-style-type: none"> <li>- Project will undertake measures that will allow complementation of both men and women in productive and reproductive activities.</li> <li>- Project will allot definite slots for women's representatives to the Watershed Management council.</li> <li>- Certain percentage of microfinance will</li> </ul>	<p>Project can proceed as it will not trigger procedures on gender and development.</p> <p>Measures to avoid gender disparities and inequalities should be continuously monitored during project implementation.</p>

Social Concern	Project Design and Impact	Recommendation
	be allocated for women.	
<p>d. Capture of project benefits by the elite thereby reducing benefits to other stakeholders</p> <p>(p.2 and p.13 of Annex 1-5a of final report)</p>	<p><b>ENRMP will not adversely affect the pursuit of sustainable poverty reduction goal.</b></p> <ul style="list-style-type: none"> <li>- Project will target the poorest of the poor (IPs, upland dwellers, landless farmers, small fisher folks, women and children) in the identification and selection of the project beneficiaries.</li> <li>- Participatory approach in IWM will be adopted in project implementation.</li> </ul>	<p>Project can proceed as it will not trigger procedures on poverty reduction.</p> <p>Measures to avoid capture of project benefits by the elite should be continuously monitored during project implementation.</p>
<p>e. Social exclusion of vulnerable groups (upland dwellers, landless farmers, small fisher folks, women and children)</p> <p>(p.6 and p.13 of Annex 1-5a of final report)</p>	<p><b>ENRMP will not significantly result to social exclusion of vulnerable groups.</b></p> <ul style="list-style-type: none"> <li>- Project will have components dealing on formulation and implementation of stakeholders' participation plan; and an institutional arrangement where slots will be allotted to representatives of vulnerable groups.</li> <li>- Project will allot percentage in microfinancing favoring the vulnerable groups</li> </ul>	<p>Project can proceed as it will address social exclusion of vulnerable groups.</p> <p>Measures to avoid social exclusion of vulnerable groups should be continuously monitored during project implementation.</p>
<p>f. Devolution process among LGUs</p> <p>(please see report on devolution)</p>	<p><b>ENRMP will not adversely affect the devolution process.</b></p> <ul style="list-style-type: none"> <li>- Project incorporates component on the capacitation of LGUs for devolution and decentralization of ENRM functions</li> <li>- Measures also include preparation and implementation of IEC plan in support of devolution.</li> </ul>	<p>Project can proceed as it will not stifle the devolution process.</p> <p>Measures that will enhance the devolution process should be continuously monitored during project implementation</p>

## SOUTHERN SIERRA MADRE MOUNTAIN RANGE

The Sierra Madre Mountain Range covers communities in the eastern length of the Luzon Island from the province of Cagayan in the north up to Quezon in the south. To be covered by this project are the Kanan Watershed Forest Reserve, Angat Watershed Reservation, Dona Remedios Trinidad- Gen. Tinio Watershed, and Ipo Watershed. Together, they form the watersheds of Southern Sierra Madre Mountain Range.

### **A. KANAN WATERSHED FOREST RESERVE**

The Kanan Watershed Forest Reserve covers the "REINA" area of Real, Infanta and Gen. Nakar in Quezon province.

#### **1. Population**

Results of the 2005 survey and registration of protected area occupants in areas within the Kanan Watershed show that there are about 563 households or 3,000-5,000 individuals in the area. Of these, majority are Dumagats. No exact figure for the population of Dumagats can be cited because many Dumagat households are not covered by the national censuses due to their semi-nomadic character. It is not uncommon for them to transfer their residence from Quezon and Bulacan to Aurora or Nueva Ecija and back to their original territories in search of new sources of livelihood. Because census requires that someone must be a resident of an area for at least six months to be covered, many Dumagats are disqualified by technicality and therefore remain unregistered. The population is generally young with about 50% belonging to the 15-30 years old bracket.

The population structure suggests that intended stakeholders of ENRMP in the area will be generally young. This can be considered advantageous to the project because they will be more open to changes particularly in their natural resource use practices. Through non-formal education, they can be taught to shift to more sustainable farming practices or even to an entirely non-forest based economic activities. This is also to relieve the highly stressed watershed of destructive activities that led to a natural disaster in Infanta and Real, Quezon last 2004.

## 2. Ethnicity

As stated earlier, the population in the Kanan Watershed is dominated by indigenous peoples group called the Agta or Dumagats. Agta is a direct translation of the word "tao" or person and Dumagat refers to their ethnic grouping. The Dumagat tribe has occupied the area since time immemorial while the non-cultural occupants comprising of the Tagalogs, Bicolanos, and Visayans are former workers of logging companies who opted to stay permanently in the area. There are a few Remontados, people of Tagalog descent who retreated to the mountains during the Spanish colonial regime in order to escape Spanish taxation. Many of them have eventually intermarried with the Dumagats.

Despite being the dominant ethnic group, the Dumagats are easily sidelined by the minority group of migrants especially the Tagalogs. This is because they tend to flee away from their aggressors rather than openly confront them. This has been their recognized practice even during the Spanish period when they fled to the interior parts of the Sierra Madre rather than be under the Spanish subjugation. Also, their low educational level has brought them into having dead-end jobs such as upland farming, farm laborers, and forest product gatherers.

Being IPs, the Dumagats are protected by the provisions of the Indigenous Peoples Rights Act or IPRA, especially when it comes to access, use, and control of resources found in their ancestral domains. And this is strongly recognized by the ENRMP. As such they are considered the primary intended beneficiaries in terms of project interventions and benefits. Given their CADC/CADT, they will be assisted in developing their AMDPs or ADSPP in accordance with the bigger goal of the integrated watershed management plan. In addition, they will be assisted in preparing their IP development plan which can possibly subsume later their AMDP or ADSPP.

While there is high degree of ethnic homogeneity among the settlers, it has been reported by the IP leaders themselves that intra-ethnic conflicts have started to divide the Dumagats in the area. This was evident when the team met some of the IP leaders during the consultation with the Kanan stakeholders last May 25, 2006 and based on the interviews conducted separately with another two IP leaders from another Indigenous Peoples Organization (IPO) on a separate occasion. The conflict is caused primarily by differences in the way they should manage the natural resources in their ancestral lands.

Some of the Dumagats alleged that their leaders have started pursuing their personal interest more than that of the tribe. That the way they manage their natural resources have become more market-oriented and these they attribute to the influence of some NGOs who organized them earlier. They noted that their leaders are now trading rattan in Manila without consulting the community.

From one original IPO, there are now three with one being a break away group of the original Adhikain ng Grupong Taong Nagtatanggol sa Lupain (AGTA) group organized by the religious sector. The IP leaders alleged that they have been exploited all the time by the assisting organizations (i.e., NGOs and religious groups) under the guise of working for their development. Other IPs accused a co-IP woman leader as a coddler of illegal loggers in the area.

The current conflict between IPs in the area should be addressed by ENRMP through appropriate conflict resolution and community organizing so that the IPs can be later mobilized as a solid group of stakeholders. High transaction and participation cost will be incurred if the project will be dealing with fragmented groups residing in the same area.

Also the provision of NGO assistance to IPOs needs careful investigation and study. There is still a need to investigate it further in fairness to the NGO concerned. Meantime, that they mistrust NGOs, including religious groups, another scheme of providing technical assistance and social preparation for the Dumagats should be explored. Local offices of national government agencies such as NCIP, DA, DAR or even DENR may be tapped as long as they have the required expertise needed.

### **3. Gender Roles**

The Dumagats used to be hunters and gatherers before they switched to shifting cultivation. Every member of the family is involved in their economic activity. However, the father performs the heavier tasks such as cleaning and burning the ground to prepare the field for planting. The mother and the children do the weeding and the harvesting. Women are now being accorded rights to leadership. In fact, the current IP governor is a woman.

This implies then that targeting of beneficiaries for integrated and sustainable watershed management should involve not only the male household heads, but also women and children. Interventions should address the farmers' household as an intact economic entity. Hence, slots in trainings and microfinance assistance should be deliberately and proportionately assigned to women and able children.

### **4. Concept of Land Ownership**

The semi-nomadic tendency of the Dumagats is related to their cultural belief. For them, it is "*Makidyapat*," their supreme maker, who created the natural resources. Hence, the land is commonly owned; it is for all the people because all of them were born there and must be buried there. Land is sacred, and not an economic means of production for the Dumagats.

But an encounter with the tribal governor suggests that the IP group that she represents is now more economic-oriented as attested by the contents of their ancestral domain management plan allowing for small scale logging and even mining.

Farming interventions in the project should take this into consideration. Most farming activities and technologies are usually designed for individual farmers and for enhancing productivity per unit of land. But for this IP group, farming technologies may need to be redesigned to suit the communal farming approach of IPs and their concept of land as sacred. The latter concept may, however, need to be revisited as the IPs in Kanan is now more of the acculturated type. It could be that as a result of their orientation now to market economy of the mainstream community where they have become assimilated, their concept of land has already changed.

## **5. Educational Level and Religion**

Only few Dumagats reached elementary and many are illiterate. This is the main reason why they are into shifting cultivation. They are not equipped with other skills which would allow them to diversify their income sources.

This is a major concern which ENRMP should help address through provision of alternative livelihood. Having low human capital, Dumagats would require relatively higher investment in terms of capacity building for livelihood.

Majority of the people, including the Dumagats, are Roman Catholic. This suggests that a certain degree of acculturation has indeed taken place among these IP population and that in terms of cultural practices, a lot may not anymore be considered traditional and customary.

## **6. Economic Activities**

People living in the barangays around the reservation primarily depend on lumber for their daily sustenance. Most people are engaged in logging activities, both legal and illegal, the latter flourishing more than the former. This is a reality which the community itself is privy of but has remained apathetic about, rationalizing that it's the only job easily available for the people.

This is one concern that ENRMP has to address if forest areas in the watershed will be placed under certain management regimes. People's sources of livelihood can still be maintained by making them join community groups or IPOs which can undertake sustainable activities in their CADC/CADT areas according to their ancestral domain management plan (ADMP) or their ancestral domains sustainable development and protection plan (ADSDPP). The minority non-IPs can form themselves into a PO and apply for a CBFMA with DENR. They may also be introduced to alternative non-forest livelihood.

With the assimilation of the Dumagats in the bigger community, they are now exposed to other forms of sourcing income such as being a hired labor in public utilities and services. In addition, the natural resource management plan for the watershed should consider an appropriate area for utilization where access to forest products can still be allowed but in legal manner. In this way, no abrupt displacement in terms of livelihood and income will take place.

The community is also into agricultural crops. Others are engaged in handicraft making and raising of livestock such as pigs and chicken. As supplementary subsistence activity, they also engage in charcoal-making and in gathering of uway (rattan), buho (light almaciga, vines, honey, and other resources which they trade with products of lowlanders.

At present, many Dumagats are generally subsistence swidden agriculturists who cultivate dry rice, vegetables, and fruit trees in forestlands that have been cleared for cultivation. Dependent on rain for irrigation, only one crop-yield of rice is harvested per year. Hunting and fishing, however, remain as supplementary economic activities. Wild boar, deer, and monkeys are occasionally caught in the nearby forests for meat, especially during the months of September to January. On the other hand, fishing plays an important role during the months of April to August. It should be noted that in terms of addressing and dealing with the market economy, the Dumagats in the area are relatively acculturated.

## **7. Social Organization and Political Affiliation**

Dumagats' social organization is primarily based on kinship. Members of a community are often kinsmen, whether by consanguinity or affinity. The elders are afforded with respect in the family. This is the reason why the task of decision-making mainly relies on the elders, whether they are male or female. The IP elders are, thus, significant actors in the management of watershed.

Three indigenous people organizations (IPOs) have been organized among the Dumagats by NGOs in the area. These are the:

- a. Pambayang Katipunan ng Sangguniang Katutubo (PKSK) – an organization based in General Nakar, Quezon and chaired by Damaso Tena.
- b. Samahan ng mga Kaagtaang Binabaka ang Suliranin tungo sa Adhikain (SAKABINSA) – an organization of Dumagats in Infanta, Real, and General Nakar organized by the Tribal Filipino Apostolate of the Catholic Prelature of Infanta in 1979.
- c. Adhikain ng Grupong Taong Nagtatanggol sa Lupain (AGTA) – a break-away group from the original indigenous peoples' organization AGTA organized and supported by the church group.

It is, thus, expected that IPOs will be represented by their tribal leaders in the Watershed Management Council. But as the cultural practices of the Dumagats are now beginning to erode, choice of their leader-representatives to the management body may need to be reconsidered. As there are now allegations from the Dumagats themselves that their leader is a coddler of illegal loggers in the area, a more participatory manner of choosing their legitimate representative to the management body can be introduced with their free and prior informed consent.

## **8. Indigenous Peoples Plan of the Dumagats of the Kanan Watershed**

The Dumagats of Kanan Watershed acquired a Certificate of Ancestral Domain Claim (CADC) from the DENR in August 7, 1997 in accordance with DENR's Administrative Order No. 2, series of 1993.

This issuance, CADC No. R04-CADC-090 covers 3,011 hectares of land in Gen. Nakar, Quezon. The PKSK in Gen. Nakar acts as the CADC holder of the said domain.

The said organization has formulated an Ancestral Domain Management Plan (ADMP) for the said territory in 1998. Consistent with Department Administrative Order No. 34, series of 1996, this ADMP was affirmed by the DENR in the middle of 1999. In December 1999, NCIP also affirmed the said ADMP and recognized it as equivalent to the Ancestral Domain Sustainable Development and Protection Plan (ADSDPP) mandated by the Implementing Rules and Regulations of the Indigenous Peoples Rights Act (IPRA).

As such, the *Plano ng Pangangasiwa sa Minanang Lupang Ninuno ng PKSK* (ADMP of PKSK) is consistent with the project's concept of an Indigenous Peoples Plan (IPP) based on its intent and content. This Plan was prepared by the indigenous peoples themselves and is written in a language that is understandable to them.

Generally, the contents of the IPP are consistent with the overall objective of protecting the Kanan Watershed. There are many provisions within the said IPP that call for the protection of the environment.

On the other hand, invoking their rights based on IPRA, the PKSK believes that they alone, as CADC holders, have the right to determine what they can and cannot do within their ancestral domain. Thus, they professed that they will continue to hunt and trap deer, wild boar, monkeys, monitor lizards, pythons, civet cats, wild chickens, birds, and other forest fauna in their CADC area. They will continue to collect rattan and other vines, almaciga, ferns, and other forest plants. Anyway, these have been traditional practices of the Dumagats. Aside from these, however, they believe that it is only right for them to engage in non-traditional practices, such as the cutting of trees for building houses. They, thus, envision the establishment of a local sawmill. The PKSK also plans for the opening up of large tracts of agricultural land for rice farming.

In an interview with a leader, she said that they are only critical of mining and logging by foreigners but they are open to doing mining and logging activities by the indigenous peoples, supported by Filipino businessmen.

These plans may be in conflict with the overall thrusts of the Kanan Watershed as a protected area. However, the indigenous peoples in Kanan also invoke upon their rights according to IPRA. These conflicts can be better resolved through a multistakeholder planning strategy in developing the Kanan Watershed Management Plan. The establishment of a Protected Area Management Board (PAMB) definitely should include CADC holders. Therefore, more stakeholders consultations with special involvement of IPs and their women should be carried out in future action planning.

#### *IP Development Framework Plan*

While one PKSK as a CADC holder has already formulated its ADMP, it may need to be reviewed in the light of the bigger integrated watershed management plan for the area. Likewise, the other IPOs (SAKABINSA and AGTA) with no development plan yet, could be assisted by ENRMP in coming up with its IP development plan.

IP development plan (IPDP) will be formulated following the guidelines set forth by World Bank concerning social safeguards for IPs :

- It should be based on the options preferred by the affected Dumagats consistent with their right to self determination. However, the options preferred by the PKSK in utilizing and managing their ancestral domains may need to be reviewed in the context of the bigger integrated watershed management plan as they contain activities which could be environmentally damaging in the long run.
- All efforts should be exerted to anticipate adverse trends which can be created by the ENRMP and develop the means to mitigate the potential harm
- Institutions responsible for IPs such as the National Commission for the Indigenous Peoples (NCIP) and LGUs should possess the social, technical, and legal skills needed for carrying out the proposed development activities. The LGUs in particular will need to be oriented on the provisions and implementing rules and regulations of the Indigenous Peoples Rights Act or IPRA as they will now assume responsibility over the IPs welfare. Implementation arrangement will be kept simple and will involve appropriate existing institutions, local organizations, and NGOs with expertise on IP matters.
- Local patterns of social organization, religious beliefs, and resource use should be taken account in the plan's design. Of peculiar concern is the current rift among IPOs in terms of resource access and use. While some Dumagats have remained conservative in the use of natural resources in their ancestral domains, others have become so enterprising and market-oriented.
- Development activities should support production systems that are well adapted to the needs and environment of IPs and should help production systems under stress to attain sustainable levels.
- The plan should avoid creating or aggravating dependency of IPs on project entities. Thus, the plan should incorporate education and training in management skills for IPs at the onset of the project.

The IP development plan based on the World Bank operational directive on IPs should contain the following:

- a. **Legal Framework** – an assessment of the legal status of the affected IPs based on constitution, enacted laws, regulations and administrative orders, and the IPs' ability to effectively use the legal system to defend their rights. Particular attention should be given to the rights of IPs to use and develop the lands they occupy; to be protected against illegal intruders; and to have access to natural resources (such as forests, wildlife, and water) vital to their subsistence and reproduction.
- b. **Baseline Data** – to include (a) maps and aerial photographs of the area of project influence and those inhabited by the IPs, (b) analysis of the social structure and income sources of the population, (c) inventories of the resources that IPs use and technical data on their production systems, (d) relationship of IPs to other local and national groups.
- c. **Land Tenure** – as the Dumagats have organized themselves already into IPOs, acquisition of their CADC/CADT, for those which have not acquired theirs yet, should be pursued in the plan.
- d. **Strategy for Local Participation** – mechanisms should be devised to insure the Dumagats sustained participation throughout project planning, implementation, and evaluation. IPs have their representative organizations usually led by their traditional leaders that serve as channels for communicating their preferences. It should be insured through actual consultation that these leaders genuinely represent their tribe.

- e. **Technical identification of Development or Mitigation Activities** – detailed descriptions should be prepared and appraised for proposed services such as education, training, health, credit, and legal assistance as well as for productive infrastructure. Indigenous knowledge and systems (traditional health provider, paralegal worker) should also be considered when planning for these services.
- f. **Institutional Capacity** – involves assessment of the track record, capabilities, and needs of institutions assigned responsibility for IPs such as NCIP. Focus should be made on the (a) availability of funds for investments and field operations, (b) adequacy of experienced professional staff, (c) ability of IPOs, local administration authorities, and local NGOs to interact with specialized government institutions, (d) ability of the executing agency to mobilize other agencies involved in the plan's implementation, and (e) adequacy of field presence.
- g. **Implementation Schedule** - with benchmarks to measure progress periodically; may need to have pilot run and should pursue long-term sustainability of the project.
- h. **Monitoring and Evaluation** – monitoring units should be staffed by professional social science professionals, and appropriate reporting formats and schedules should be formulated. The IPs themselves may also be part of the monitoring group.
- i. **Cost Estimates and Financing Plan** – should include detailed cost estimates for planned activities and investments. Estimates should be broken down into unit costs by project year and linked to a financing plan. Programs such as revolving credit funds that provide IPs with investment pools should indicate their accounting procedures and mechanisms for financial transfer and replenishment.

## 9. Stakeholders Analysis

The stakeholders have different interests in the watershed and these are dictated primarily by their mandates and needs. Government implementing agencies such as DENR, its field offices, and LGUs are concerned about the protection of the watershed. And they happen to have high influence. The IP community is as expected most concerned about what they can exploit in the watershed. In fact, reading through the table below would indicate that the IPs has been biased more about utilization and the intensity goes higher as the group becomes acculturated. Intensive economic activities are among the prominent interest of highly acculturated IPs. This interest runs contrary to their cultural belief that land is sacred.

One concern which ENRMP should address is the opening of mangrove areas as fish ponds and this has actually started when the site was visited last May 2006. Lines of rich mangroves looked very beautiful from afar but up close they have pockets of private fishponds inside. This will definitely expand as fish pond operators have expressed their interest in establishing fishponds in these mangroves.

This suggests the need to intensify protection and at the same time the need to educate the stakeholders of the consequences of exploitative approaches. Having undergone a very serious natural disaster, it should be easier this time to bring the message across. Involving the local communities in the protection efforts can also be considered as this has already been tried and has been shown to work in other places in the country.

Also needing attention is the need of the Tagalog-migrants living on the fringes of the watershed and in the coastal areas for security of tenure. They can be organized also so that they become part of the

resource users who will be trained on more sustainable resource use practices. Setting them aside will just lead them to do illegal activities as they proceed earning their living.

**a. DENR**

As the government agency mandated to protect, conserve, and manage the country’s natural resources, DENR is at the forefront of all the efforts under the ENRMP. The field offices particularly have placed their stake on the project as a way of redeeming themselves of the flak they got from the angry public when massive flashfloods killed many innocent people on November 2004. Millions of logs floating on seas were evidence of rampant logging (legal or illegal) occurring in the area. But despite strong commitment to avert illegal poaching and logging, lack of manpower and logistics just won’t do the job. DENR recognizes the need to strengthen law enforcement and also the need to divert the IPs’ and community’s interest on forest-based livelihood.

Alternative livelihood especially for those who only knew swidden farming and timber poaching for life is high on the list of priority activities. This is also to facilitate the highly degraded areas in the watershed.

**b. LGUs**

LGUs are key players in ENRMP, having the power or influence to institute changes in the community through formulation and implementation of ordinances as well as projects that will promote sustainable use of natural resources. But this has to be supplemented with adequate technical knowledge and skills about ENRM. Hence, the project will provide capacity building support to enhance the LGUs’ capacity in NRM. This is also to pave the way for the eventual devolution of ENR functions from DENR to LGUs.

**c. Dumagat IP Community**

As one of the intended beneficiaries, the Dumagats are potential bearers of the sustainable practices in use of natural resources. But having been exposed to the market-economy they have altered their farming system to meet the demand not only for subsistence but also for their expanding needs. Despite these, they remain the poorest sector in the area as they have been exploited by lowland migrants involved in illegal activities.

To avert this misdirected consequence of acculturation, the IPs will be assisted and guided in their already completed Ancestral Domain Management Plan, a blueprint similar to their IP development plan. As the plan is still expected to evolve, certain provisions inconsistent with the goals of ENRMP can be reviewed and discussed in multisectoral planning workshop for the watershed.

**Table 1. Stakeholder analysis matrix for Kanan Watershed**

Stakeholder Category	Relevant Stakeholder	Capacity and/or Asset	Constraint/Liability	Influence
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Stakeholder Category	Relevant Stakeholder	Capacity and/or Asset	Constraint/Liability	Influence
Government policymakers	DENR	Mandate, power and resources for ENRM	Equally important priorities but inadequate resources; weak institutional capacity to enforce laws; mismatch between plan and budget programming	High
	NCIP	Mandate to protect indigenous peoples' rights; tasked to oversee implementation of IPRA provisions	Weak institutional capacity in terms of manpower and funds; not very vocal and assertive in defending IPs rights	Medium (Influence is only among the Dumagats)
Implementing agency staffs	CENRO-Infanta	Commitment to apprehend illegal loggers within the watershed	Inadequate manpower and logistics	High
	NCIP-Lucena	Assistance to IPs in processing of their CADTs	Low profile; no funds; credibility is low	Medium (Influence is only among the Dumagats)
	LGU-General Nakar	Authority and power over the area; regular resources for ENRM activities; Commitment to protect the watershed so as to prevent landslides in the future.	Inadequate knowledge of environmental laws and skills in enforcing them	High
	LGU-Infanta	Authority and power over the area; regular resources for ENRM activities; Commitment to protect the watershed so as to prevent landslides in the future.	Inadequate knowledge of environmental laws and skills in enforcing them	High
Intended beneficiaries	Semi-nomadic Dumagats (50 to 100 families)	Subsistence level of production, e.g. fishing, swidden cultivation, collection and selling of rattan and other forest products.	Low education, poorest among the poor	Low
	Acculturated Dumagats  Approximately 200 families in (located outside the CADC).	Equipped with skills to dialogue and negotiate; quite assertive and open	Market-orientation; resolve to engage in more intensive economic activities, such as irrigated rice production, logging, and small-scale mining.	Medium
	Remontados	More educated and are at ease	To engage in more intensive economic activities, such as	Medium

Stakeholder Category	Relevant Stakeholder	Capacity and/or Asset	Constraint/Liability	Influence
		in dealing with outside groups.	irrigated rice production, logging, and small-scale mining.	
	Tagalogs	Even in minority, not prone to social exclusion	Even if minority, can marginalize the timid IPs	Low
Organized interest groups	Fishpond owners	Serve as local capitalists for operating fish and prawn ponds in Infanta	Desire to increase by converting more mangrove areas into fishponds	High
Civil society organizations	Samahan ng Kaagtaang Binabaka ang Suliranin tungo sa Adhikain (SAKABINSA)	Aims to protect the ancestral domain of the Dumagats.	Low education; among the poorest	High
	Pambayang Katipunan ng Sangguniang Katutubo (PKSK)	Officially recognized holder of the 3,011-hectare CADC in the Watershed; works for the establishment of a Dumagat municipality in Sitio Uma.	Faction within the group (between the provincial tribal governor and the IPO members)	High
	Pang-Probinsyang Tanggapan	Church-based office affiliated with the Diocese of Infanta; aims to promote and protect the rights of the Dumagats	Other IP groups do not trust the group	Medium
	Salve Mater Dei Development Foundation (SMDDF)	NGO based in Real, Quezon that assists Dumagats.	Interest to invest in Dumagat activities by financing their logging and rattan cutting activities	Medium

#### d. Migrants (Tagalogs, Visayans, Bicolanos)

Though a minority, they can exert strong influence on the activities of the Dumagats. Many are associated with illegal activities in the area (logging, mining, poaching) driven by their market economy orientation. If not converted to become partners in sustainable resource use, they can indeed be a threat in project implementation despite them being a minority. Hence, ENRMP will consider them as possible partners in CBFM and in the development of livelihood enterprises, having been more exposed to the workings of market economy. Being migrants, their security of tenure will also be addressed through some legitimate arrangements.

#### e. Fishpond owners

While they can be asset in diversifying and enhancing livelihood sources in the community, the problem with this group is that many of them are operating illegally and will not come forward. They are a big

threat since portions of the mangrove have been openly opened up for fishpond and nobody seems to be able to identify the culprits. Vigorous law enforcement in mangrove areas is needed. And this can be facilitated if the communities would become vigilant to report such illegalities. Hence, a strong IEC and advocacy have to be carried out to help avert this problem. Parallel to this effort will be the provision of alternative livelihood accompanied by the necessary training and microfinancing. Gradually, IPs, including the migrants will shift to legal, NRM-friendly, adequate, and sustainable sources of income.

All the above constitute the legitimate stakeholders of the Kanan Watershed who should be represented in the Watershed Management Council.

## 10. Impact and Social Safeguards

Table 2 summarizes the impact of ENRMP and the social safeguards.

**Table 2. Matrix for impact and social safeguards for Kanan-Watershed**

Social Concern	Project Design and Impact	Recommendation
a. Marginalization of IPs (p.2 Annex 1-5b of final report)	<p><b>ENRMP will have no significant adverse impact on marginalization of Dumagats in Kanan Watershed.</b></p> <ul style="list-style-type: none"> <li>- ENRMP will deliberately focus on the Dumagats as the primary intended beneficiaries.</li> <li>- Institutional arrangement will include slots for representatives of Dumagats IPOs in the Watershed Management Council.</li> <li>- Special project component has been included to provide assistance in the formulation and implementation of IP Development Plan for the Dumagats.</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on IPs.</p> <p>Implementation of measures on IP development should be continuously monitored during project implementation.</p>
b. Relocation or loss of shelter and loss of access to assets (p.3 Annex 1-5b of final report)	<p><b>ENRMP will not result to relocation of shelter and loss of access to assets by the beneficiaries</b></p> <ul style="list-style-type: none"> <li>- Options considered in project design include management in place; tapping de facto users as partners in sustainable resource use and conservation; and putting occupied areas under appropriate management regime so that tenurial instrument can be issued.</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on involuntary resettlement.</p> <p>Implementation of measures to avoid relocation of shelter and loss of access to assets should be continuously monitored during project implementation.</p>
c. Livelihood displacement (pp.3-4 Annex 1-5b of final report)	<p><b>ENRMP will not result to significant livelihood displacement of beneficiaries.</b></p> <ul style="list-style-type: none"> <li>- Project design includes study on livelihood shift, provision of alternative livelihood, microfinancing and training on enterprise development.</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on involuntary resettlement.</p> <p>Implementation of measures to avoid livelihood displacement should be continuously monitored during project implementation.</p>
d. Gender inequality	<b>ENRMP will taper off adverse impact on</b>	Project can proceed as it will

Social Concern	Project Design and Impact	Recommendation
(p.2 Annex 1-5b of final report)	<p><b>gender disparities and inequalities in terms of access, use, and control over productive resources as well as in decision making.</b></p> <ul style="list-style-type: none"> <li>- Project will undertake measures that will allow complementation of both men and women in productive and reproductive activities.</li> <li>- Project will allot definite slots for women's representatives to the WMC. Certain percentage of microfinance will be allocated for women.</li> </ul>	<p>not trigger procedures on gender and development.</p> <p>Implementation of measures to avoid gender disparities and inequalities should be continuously monitored during project implementation.</p>
<p>e. Social exclusion of vulnerable groups (Dumagats especially the semi-nomadic ones) (please see stakeholder analysis)</p>	<p><b>ENRMP will not significantly result to social exclusion of vulnerable groups.</b></p> <ul style="list-style-type: none"> <li>- Project will have components dealing on formulation and implementation of stakeholders' participation plan; and an institutional arrangement where slots will be allotted to representatives of vulnerable groups.</li> <li>- Project will allot percentage in microfinancing favoring the vulnerable groups (Dumagats and women)</li> </ul>	<p>Project can proceed as it will continuous social exclusion of vulnerable groups.</p> <p>Implementation of measures to avoid social exclusion of vulnerable groups should be continuously monitored during project implementation</p>
<p>f. Devolution process among LGUs (please see report on devolution)</p>	<p><b>ENRMP will not adversely affect the devolution process.</b></p> <ul style="list-style-type: none"> <li>- Project incorporates component on the capacitation of LGUs for devolution and decentralization of ENRM functions</li> <li>- Measures also include preparation and implementation of IEC plan in support of devolution.</li> </ul>	<p>Project can proceed as it will not stifle the devolution process.</p> <p>Implementation of measures that will enhance the devolution process should be continuously monitored during project implementation.</p>

## B. IPO WATERSHED

### 1. Demography and Ethnicity

Based on the COMELEC records conducted in 2004, the number of voters in the Ipo Watershed was 118. On the other hand, per census of DENR Composite Team in 2004, Ipo Watershed had 142 families with an average of six persons per family. About 39 families (27.46%) residing within the watershed belong to Dumagat tribe while 103 families (72.54%) are new settlers coming from the provinces of Quezon, Bicol, Ilocos and other provinces in the Visayas. This suggests the dominance of migrants in the area. Migrants though, especially the Tagalogs, are not traditionally victims of social exclusion. They can even dominate the place even if few in number.

#### IP Development Framework

To ensure that the Dumagats are not marginalized nor displaced, an IP development plan will be put in place under ENRMP. This will be carried out following the process framework that includes among others the observance of the following:

- a. The Dumagats of the Southern Sierra Madre should be consulted with regards to all plans affecting their traditional territories. This includes the various Action Plans to be implemented under this project. All of these consultations shall be conducted in the *lingua franca* used and understood by the said communities. Recommendations as to how to improve these Plans shall be solicited from the IP stakeholders.
- b. The traditional socio-political institution of the Dumagats, as well as their indigenous modes of decision-making, shall be respected in the conduct of the meetings and consultations with them. Aside from this, however, the proper representation of various sectors among these indigenous groups will be assured, e.g. women, youth, elders, etc.
- c. The Dumagats will be assisted with regards to the documentation and follow-up of their claims for Ancestral Domains. This will entail linking up with concerned agencies, such as NCIP, DENR, LGUs.
- d. The proper representation of Dumagats in the Watershed Management Council or PAMB, both in terms of number and quality, should be addressed by the project. These bodies can serve as the forum where the various stakeholders, including the Dumagats and Tagalogs, can negotiate with one another vis-à-vis natural resource management concerns.
- e. Efforts will be made to integrate indigenous knowledge systems and practices (IKSP) of the Dumagats that are proven to be effective in terms of biodiversity conservation and watershed management with those of the best practices being implemented by government agencies and NGOs. To be able to do this, it is necessary to document these IKSP before they are totally lost forever.
- f. Cultural sensitivity seminars will be undertaken for other stakeholders so that they are familiar with the indigenous culture and so that conflicts between different ethnic groups are minimized if not completely eradicated.

IP development plan (IPDP) will be formulated following the guidelines set forth by World Bank concerning social safeguards for IPs :

- It should be based on the options preferred by the affected IPs consistent with their right to self determination. For the Dumagats in Ipo Watershed, they desire to continue their economic activities within their ancestral domain, e.g. engaging in slash-and-burn agriculture, fishing, and logging. These then should be tied up with the overall goal of integrated watershed management which is sustainable resource management.
- All efforts should be exerted to anticipate adverse trends which can be created by the ENRMP and develop the means to mitigate the potential harm.
- Institutions responsible for IPs such as the National Commission for the Indigenous Peoples (NCIP) and LGUs should possess the social, technical, and legal skills needed for carrying out the proposed development activities. The LGUs in particular will need to be oriented on the provisions and implementing rules and regulations of the Indigenous Peoples Rights Act or IPRA as they will now assume responsibility over the IPs welfare. Implementation arrangement will be kept simple and will involve appropriate existing institutions, local organizations, and NGOs with expertise on IP matters.
- Local patterns of social organization, religious beliefs, and resource use should be taken account in the plan's design. Of peculiar concern is the organization of IPs into tribal

communities parallel to the government LGU structure with their respective tribal leaders representing them in political, social, and economic transactions.

- Development activities should support production systems that are well adapted to the needs and environment of IPs and should help production systems under stress to attain sustainable levels.
- The plan should avoid creating or aggravating dependency of IPs on project entities. Thus, the plan should incorporate education and training in management skills for IPs at the onset of the project.

The IP development plan based on the World Bank operational directive on IPs should contain the following:

- a. **Legal Framework** – an assessment of the legal status of the affected IPs based on constitution, enacted laws, regulations and administrative orders, and the IPs' ability to effectively use the legal system to defend their rights. Particular attention should be given to the rights of IPs to use and develop the lands they occupy; to be protected against illegal intruders; and to have access to natural resources (such as forests, wildlife, and water) vital to their subsistence and reproduction.
- b. **Baseline Data** – to include (a) maps and aerial photographs of the area of project influence and those inhabited by the IPs, (b) analysis of the social structure and income sources of the population, (c) inventories of the resources that IPs use and technical data on their production systems, (d) relationship of IPs to other local and national groups.
- c. **Land Tenure** – involves identifying the steps that would help IPs acquire recognition of their customary right over ancestral domains or long-term, renewable rights of custodianship and use of lands.
- d. **Strategy for Local Participation** – mechanisms should be devised to insure IPs sustained participation throughout project planning, implementation, and evaluation. IPs have their representative organizations usually led by their traditional leaders that serve as channels for communicating their preferences. It should be insured through actual consultation that these leaders genuinely represent their tribe.
- e. **Technical Identification of Development or Mitigation Activities** – detailed descriptions should be prepared and appraised for proposed services such as education, training, health, credit, and legal assistance as well as for productive infrastructure. Indigenous knowledge and systems (traditional health provider, paralegal worker) should also be considered when planning for these services.
- f. **Institutional Capacity** – involves assessment of the track record, capabilities, and needs of institutions assigned responsibility for IPs such as NCIP. Focus should be made on the (a) availability of funds for investments and field operations, (b) adequacy of experienced professional staff, (c) ability of IPOs, local administration authorities, and local NGOs to interact with specialized government institutions, (d) ability of the executing agency to mobilize other agencies involved in the plan's implementation, and (e) adequacy of field presence.
- g. **Implementation Schedule** - with benchmarks to measure progress periodically; may need to have pilot run and should pursue long-term sustainability of the project.
- h. **Monitoring and Evaluation** – monitoring units should be staffed by professional social science professionals, and appropriate reporting formats and schedules should be formulated. The IPs themselves may also be part of the monitoring group.

- i. **Cost Estimates and Financing Plan** – should include detailed cost estimates for planned activities and investments. Estimates should be broken down into unit costs by project year and linked to a financing plan. Programs such as revolving credit funds that provide IPs with investment pools should indicate their accounting procedures and mechanisms for financial transfer and replenishment.

## **2. Livelihood and Income Profile/Sources**

Most of the occupants are engaged in kaingin making and barbecue and banana cue stick making. In addition, some forest occupants disclosed that sometimes, they are hired by timber poachers to transport illegally cut lumber for P12.00 per bd ft. Others are given contracts to reforest open areas within the watershed under the Watershed Rehabilitation Project of DENR. Other sources of income have not been fully explored because of lack of capital.

The computed average annual income of the people in the Ipo Watershed ranges from P20,000.00 to P30,000.00. Translated to a per capita income for a family of six, it amounts only to P3,333- P5,000 which is just about one fourth to one third of the of the annual per capita threshold of P14,615 set for Region 4. This poverty existence will be addressed through the provision of livelihood alternatives and financial assistance through microfinance.

## **3. Social, Educational and Medical Services**

The presence of the community within the watershed reservation is recognized or sanctioned by Department of Education and LGUs concerned as shown by the construction of an elementary school and a day care center in Sitio Sapang Munti serving the community. The settlers avail of health services offered by LGUs and National Power Corporation (NPC). The presence of a relatively good road network system makes health facilities accessible to occupants of the watershed.

## **4. Behavioral and Cultural Patterns**

According to the old management plan of Ipo Watershed, the Dumagats have a distinct cultural behavior. They being nomadic in nature, transfer from one place to another in search for food and bounties of nature. Most of them live-off the land and rivers. They live in small bands of 10 to 30 families. Normally, the father is the supreme authority of the family. They are also accustomed to spending the whole day with their family looking for food just for the day and leave it up to their God their needs for the following day.

It is also their custom that when one of them dies, they immediately bury the dead and promptly leaves the area. They respect the dead so much, that they do not want to trample the burial grounds.

The Dumagats love to drink liquor and other intoxicating beverages. They are also fond of beetle nut (nganga). Apparently, the lowlanders already influenced this indigenous cultural community and some

have adopted the latter's customs and traits like cigarette smoking, mode of clothing and social interaction.

These suggest that the Ipo Dumagats are of the acculturated group and their beliefs, traditions, and practices may not anymore depict that of pure IPs. Despite this, they are still entitled to define the direction of their own development under their rights to self determination. ENRMP can assist in terms of providing technical assistance, particularly in terms of managing and protecting their resources, and also considering the threat to their resource by the presence of migrant speculators.

## **5. Tourism and Recreation**

Based on the statistical profile visited in the protected area of Angat Game Refuge and Bird Sanctuary, only local visitors enter and visit the area. Most are students from different college/high schools who conduct their field experience and practicum and some are from other government agencies looking for projects for the community. Based on the proposed management zones of the watershed, the Ipo Reservoir will serve as the tourist zone in the area. The dam was built in 1920 using the water resource from Angat. This can serve as a potential income source for the community, though the other social and environmental impacts of undertaking such have yet to be studied.

## **6. Stakeholder Analysis**

The stakeholders list for Ipo Watershed indicates a number of institutions depending on it for goods and services, being host to a dam that supplies domestic and industrial water supply to Metro Manila. Of these DENR and LGUs have high influence. This situation leads to a number of competing demands and conflicting uses that now confront the watershed. The complexity of multistakeholder demands and how these affect their relationship with one another are discussed below. The matrix also tackles the stakeholders' capacity and constraints for participating in the project.

### **a. DENR**

Having the mandate to manage and protect all natural resources in the country, including watersheds, DENR has the most stakes in the area. While it is equipped with laws and resources to undertake this mandate, it has certain weaknesses that need to be addressed by the project. Among these are its failure to fully protect the Ipo watershed from illegal activities and unsustainable resource uses.

Under its ENRMP initiative, it seeks to tap the other stakeholders' capacity and resources to enable to fulfill its mandate. It also will rationalize the use of its budget by prioritizing its activities around critical areas and actions such as watershed rehabilitation and protection.

### **b. NCIP**

It is the national government agency under IPRA mandated to provide assistance to and promote the rights of IPs in the country. For Ipo Watershed, it wants the cancellation of CBFMA existing in CADC areas. This could of course rub on DENR's existing community-based programs. Hence, provisions of IPRA may need to reviewed vis-à-vis DENR's policies and rules and regulations on resource use so

that conflict will be avoided. This is a legal matter that has to be resolved together by NCIP and DENR.

Being a recent creation, much is desired in NCIP's ability to provide technical and legal assistance to the IPs. For one, while it has a regional office in San Fernando, Pampanga, it has no provincial offices in Bulacan and Rizal where considerable population of Dumagats resides. It has also very limited funds which could not even sustain its staff mobility.

It, therefore, needs to be strengthened in terms of its administrative, technical, and legal capacities to enable it to effectively assist the IPs. At present, it is preoccupied with facilitating the processing of CADCs into CADT. But it also needs to establish linkage and good will with other government agencies where other services for the IPs would come from.

**Table 3. Stakeholder analysis matrix for Ipo Watershed**

Stakeholder Categories	Relevant Stakeholders	Capacity and/or Asset	Constraint/Liability	Influence
Government policymakers	DENR	Mandate, power and resources for ENRM	Equally important priorities but inadequate resources; weak institutional capacity to enforce laws; mismatch between plan and budget programming	High
	NCIP	Mandate to protect indigenous peoples' rights; tasked to oversee implementation of IPRA provisions	Weak institutional capacity in terms of manpower and funds; not very vocal and assertive in defending IPs rights	Medium (Influence is among the Dumagats only.)
Implementing agency staff	MWSS	Mandate to ensure sufficient drinking water for Metro Manila; with considerable resources for watershed	Undefined role in watershed rehabilitation and protection efforts	High
	LLDA	Protects Ipo Watershed so it can continue to provide water for Laguna Lake	No clear/definite role in watershed rehabilitation and protection; does not share in watershed rehabilitation and protection, the area being outside Laguna de Bay Region	Low
	CENRO-Tabang	Responsible for the Ipo Watershed; tracks down illegal loggers	Holds office outside the area; inadequate resources	High
	LGU-Norzagaray (Bulacan)	Territorial jurisdiction over 33% of the total area of the Watershed; fiscal and legislative powers	No clear and definite long term program for the watershed	High
	LGU-San Jose del Monte	Territorial jurisdiction over 62% of the total area of the	Contesting encroachment of ERodriguez in its territory;	High

Stakeholder Categories	Relevant Stakeholders	Capacity and/or Asset	Constraint/Liability	Influence
	(Bulacan)	Watershed; fiscal and legislative powers	focus on demand for higher share in the dam's revenue	
	LGU-E. Rodriguez (Rizal)	Territorial jurisdiction over 5% of the total area of the Watershed; fiscal and legislative powers	Encouraging massive in-migration to the southern portion of the Watershed for wider electoral base; establishing government structures in the area; encroaching and claiming sitios within San Jose del Monte.	High
Intended beneficiaries	Dumagats	Holder of CADC covering 1,816 ha, 840 hectares of which are within the Ipo Watershed.	Desire to continue their economic activities within their ancestral domain, e.g. engaging in slash-and-burn agriculture, fishing, and logging.	Low
	Tenured migrants	Potential human capital for watershed rehabilitation and protection	Demand for security of tenure within the watershed; destructive forest-based economic activities	Medium
Organized interest groups	CBFMA holders	Tree planters within the CADC area provided with tenurial status by the DENR.	To derive income from tree production in the Watershed.	Medium
	Usufructees	Found in 34 usufruct areas in the Watershed comprising of 116.712 hectares.	Planting of more fruit trees and agricultural crops by burning the existing vegetation in the watershed.	Low
Civil society organizations	CAMBASI Veteran Association	Potential partner in watershed conservation and protection	Illegally occupying 50 hectares of land of the Dumagat CADC.	High

### c. Manila Waterworks and Sewerage Authority of MWSS

It is an autonomous government corporation, 125 years in existence, managing and administering the water supply and sewerage services in the country. The MWSS charter of 1971 (RA 6234) mandates that MWSS maintain and operate water and sewerage services in Metro Manila. In 1997 the government privatized MWSS into two private concession contracts. At the time of takeover, it was producing about 3,200 MLD of potable water to 11 million urban inhabitants accounting for 65 percent of water distribution network in Metro Manila.

It is not; however, clear how MWSS as a revenue generating institution is plowing back a portion of its funds for watershed rehabilitation and protection. This is an area of collaboration which can be explored as part of institutional arrangement for managing the Ipo Watershed.

#### **d. CENRO**

As a field operations arm of DENR, CENRO is at the frontline of watershed management and protection. The CENRO in charge of Ipo Watershed is focused on the apprehension of illegal loggers. It has also recommended the cancellation of all of the remaining 34 usufruct contracts in the area. According to DENR 3 records, these involved employees of DENR who were allowed by then DENR Secretary Antonio Cerilles to live within the Ipo Watershed provided they plant forest trees and don't use any hazardous chemicals that will pollute the water. At that time, it was already petitioned by MWSS which argued that the presence of families in the forest can cause water contamination due to improper sanitation. As such, this is an internal matter for DENR to resolve.

#### **e. LGUs**

LGUs with political jurisdiction over areas covered by Ipo Watershed include Norzagaray, San Jose del Monte, and E. Rodriguez. Their common interest is to have greater share from the royalties generated by the dam. But between and among LGUs themselves, there is also boundary conflict. San Jose del Monte, for example, is contesting the encroachment of E. Rodriguez into its territory. According to allegations, E. Rodriguez is by encouraging massive in-migration to the southern portion of the Watershed and establishing government structures there to have a wider electoral base. In fact, it is now claiming many sitios within the Watershed which in the past are under the jurisdiction of San Jose del Monte.

This magnifies the need for an institutional whereby all stakeholders will be represented so that conflicting demands and competing uses of the resource can be addressed.

#### **f. Dumagats**

There are now 39 families reported in Brgy. Baliwag, Norzagaray, Bulacan. This group possesses a CADC covering 1,816 hectares, 840 hectares of which are within the Ipo Watershed. But their claim to the resource does not end in having the CADC. The Dumagat group has yet to prepare their Ancestral Domain and Management Plan (ADMP) or their IP Development Plan.

ENRMP will provide such kind of assistance to the Dumagats during project implementation. As part of the partnership, the Dumagats can be tapped to promote their indigenous knowledge system and practices in sustainable natural resource management.

#### **g. Tenured Migrants**

Tenured migrants are found in five sitios (Sapang Paco, Sapang Munti, Sapang Baliwag, Anahaw, and Katmon) in Brgy. San Mateo, Norzagaray; three sitios (Bininit, Anginan and Sapang Katmon) in Brgy. San Lorenzo, Norzagaray; and two sitios (Balagbag and Burak) in Brgy. San Isidro, San Jose del Monte. They are currently engaged in engaging in swidden agriculture (in 140 sites scattered in the western portion of the watershed) and cattle grazing cattle (particularly in Balagbag). Of greater concern is their preponderance to earn a living through large-scale timber poaching (particularly in Balagbag, Sapang

Catmon, Anahaw, Burak, and Anginan). Added to this is of course their expectation to be provided with security of tenure in the watershed just like the Dumagats.

Though a minority, these tenured migrants will forever be threat to the integrity of the watershed unless they are made part of the management body with defined roles to perform in the management of the resource. ENRMP by design will move towards this direction so that sustainable resource management (resource-oriented) will also lead to sustainable livelihood (people-oriented).

#### **h. CMBASI Veteran Association**

This is an association of retired and active members of the military who are still armed and still have connections with the military officials. They are currently occupying 50 hectares of land within the CADC areas of the Dumagats as settlement.

All the above are current stakeholders in Kanan Watershed. Between and among them, conflicts can arise in terms of access and use of the land and resources therein. For example, the CMBASI Veteran Association's stake conflicts with that of the Dumagats CADC holders. The tenured migrants stakes are inimical to the other stakeholders. Concerned LGUs in Bulacan and Rizal are all fighting it out to have a bigger share in the area and in the share from the dam's revenue. This makes it necessary that an institutional arrangement such as a WMC be established so that no stakeholder, especially the Dumagats group, will be left out or excluded especially in working out the policies regarding the management of the watershed.

### **7. Impact and Social Safeguards**

Table 4 summarizes the project impact and social safeguards for the Ipo Watersehed.

**Table 4. Matrix for Impact and Social Safeguards for IPO Watershed**

<b>Social Concern</b>	<b>Project Design and Impact</b>	<b>Recommendation</b>
a. Marginalization of IPs (p. 13 – Annex 1-5b of final report)	<p><b>ENRMP will have no significant adverse impact on marginalization of Dumagats in Ipo Watershed.</b></p> <ul style="list-style-type: none"> <li>– ENRMP will deliberately target Dumagats settled in the area.</li> <li>– ENRMP will use participatory approach and will abide by IPRA provision that IPs' free and prior informed consent will always be sought on matters affecting them.</li> <li>– Envisioned institutional arrangement will include slots for representatives of Dumagats IPOs in the Watershed Management Council.</li> <li>– Special project component has been included to provide assistance in the formulation and implementation of</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on IPs.</p> <p>Implementation of measures on IP development should be continuously monitored during project implementation.</p>

	IP Development Plan for the Dumagats.	
b. Livelihood displacement (p. 15 – Annex 1-5b of final report)	<b>ENRMP will not result to significant livelihood displacement of beneficiaries.</b> – Project design includes study on livelihood shift, provision of alternative livelihood, microfinancing and training on enterprise development.	Project can proceed as it will not trigger social safeguard policies on involuntary resettlement.  Implementation of measures to avoid livelihood displacement should be continuously monitored during project implementation.
c. Social exclusion of vulnerable groups (Dumagats)  (p. 20- Annex 1-5b of final report)	<b>ENRMP will not significantly result to social exclusion of vulnerable groups.</b> – Project will have components dealing on formulation and implementation of stakeholders' participation plan; and an institutional arrangement where slots will be allotted to representatives of vulnerable groups.	Project can proceed as it will continue social exclusion of vulnerable groups.  Implementation of measures to avoid social exclusion of Dumagats should be continuously monitored during project implementation
d. Devolution process among LGUs	<b>ENRMP will not adversely affect the devolution process.</b> – Project incorporates component on the capacitation of LGUs for devolution and decentralization of ENRM functions	Project can proceed as it will not stifle the devolution process.  Implementation of measures that will enhance the devolution process should be continuously monitored during project implementation.

## C. DRT- GEN. TINIO WATERSHED

### 1. Demography and Ethnicity

The DRT-Gen. Tinio Watershed Forest Reserve has a total population of 46 families comprising 184 individuals of which 97% are Dumagats. There are 30 families scattered in 8 sitios covered by Penaranda while the rest are concentrated in Sitio Mangat Kalawakan, DRT, Bulacan. Population is very young, with 36% aged 15 years and below, and 25% aged between 16-30 years. Family size averages 5 persons. Dumagats comprise 75% of the total population and non-Dumagat/Tagalog comprise 25%.

#### IP Development Framework Plan

Similar to other watersheds in the Sierra Mountain Range, DRT-Gen Tinio Watershed is predominantly Dumagats or IPs. This, thus, calls for development plan uniquely for them. Part of the project intervention would be the formulation of their Indigenous Peoples Development Plan following the guidelines below:

- a. The Dumagats of the Southern Sierra Madre should be consulted with regards to all plans affecting their traditional territories. This includes the various Action Plans to be implemented under this project. All of these consultations shall be conducted in the *lingua franca* used and understood by the said communities. Recommendations as to how to improve these Plans shall be solicited from the IP stakeholders.

- b. The traditional socio-political institution of the Dumagats, as well as their indigenous modes of decision-making, shall be respected in the conduct of the meetings and consultations with them. Aside from this, however, the proper representation of various sectors among these indigenous groups will be assured, e.g. women, youth, elders, etc.
- c. The Dumagats will be assisted with regards to the documentation and follow-up of their claims for Ancestral Domains. This will entail linking up with concerned agencies, such as NCIP, DENR, LGUs.
- d. The proper representation of Dumagats in the Watershed Management Council or PAMB, both in terms of number and quality, should be addressed by the project. These bodies can serve as the forum where the various stakeholders, including the Dumagats and Tagalogs, can negotiate with one another vis-à-vis natural resource management concerns.
- e. Efforts will be made to integrate indigenous knowledge systems and practices (IKSP) of the Dumagats that are proven to be effective in terms of biodiversity conservation and watershed management with those of the best practices being implemented by government agencies and NGOs. To be able to do this, it is necessary to document these IKSP before they are totally lost forever.
- f. Cultural sensitivity seminars will be undertaken for other stakeholders so that they are familiar with the indigenous culture and so that conflicts between different ethnic groups are minimized if not completely eradicated.

IP development plan (IPDP) will be formulated following the guidelines set forth by World Bank concerning social safeguards for IPs :

- It should be based on the options preferred by the affected IPs consistent with their right to self determination. For the Dumagats in DRT-Gen. Tinio Watershed, they would like to continue practicing their subsistence activities, e.g. fishing, swidden cultivation, collection and selling of rattan and other forest products.
- All efforts should be exerted to anticipate adverse trends which can be created by the ENRMP and develop the means to mitigate the potential harm.
- Institutions responsible for IPs such as the National Commission for the Indigenous Peoples (NCIP) and LGUs should possess the social, technical, and legal skills needed for carrying out the proposed development activities. The LGUs in particular will need to be oriented on the provisions and implementing rules and regulations of the Indigenous Peoples Rights Act or IPRA as they will now assume responsibility over the IPs welfare. Implementation arrangement will be kept simple and will involve appropriate existing institutions, local organizations, and NGOs with expertise on IP matters.
- Local patterns of social organization, religious beliefs, and resource use should be taken account in the plan's design. Of peculiar concern is the organization of IPs into tribal communities parallel to the government LGU structure with their respective tribal leaders representing them in political, social, and economic transactions.
- Development activities should support production systems that are well adapted to the needs and environment of IPs and should help production systems under stress to attain sustainable levels.
- The plan should avoid creating or aggravating dependency of IPs on project entities. Thus, the plan should incorporate education and training in management skills for IPs at the onset of the project.

The IP development plan based on the World Bank operational directive on IPs should contain the following:

- a. **Legal Framework** – an assessment of the legal status of the affected IPs based on constitution, enacted laws, regulations and administrative orders, and the IPs' ability to effectively use the legal system to defend their rights. Particular attention should be given to the rights of IPs to use and develop the lands they occupy; to be protected against illegal intruders; and to have access to natural resources (such as forests, wildlife, and water) vital to their subsistence and reproduction.
- b. **Baseline Data** – to include (a) maps and aerial photographs of the area of project influence and those inhabited by the IPs, (b) analysis of the social structure and income sources of the population, (c) inventories of the resources that IPs use and technical data on their production systems, (d) relationship of IPs to other local and national groups.
- c. **Land Tenure** – involves identifying the steps that would help IPs acquire recognition of their customary right over ancestral domains or long-term, renewable rights of custodianship and use of lands.
- d. **Strategy for Local Participation** – mechanisms should be devised to insure IPs sustained participation throughout project planning, implementation, and evaluation. IPs have their representative organizations usually led by their traditional leaders that serve as channels for communicating their preferences. It should be insured through actual consultation that these leaders genuinely represent their tribe.
- e. **Technical identification of Development or Mitigation Activities** – detailed descriptions should be prepared and appraised for proposed services such as education, training, health, credit, and legal assistance as well as for productive infrastructure. Indigenous knowledge and systems (traditional health provider, paralegal worker) should also be considered when planning for these services.
- f. **Institutional Capacity** – involves assessment of the track record, capabilities, and needs of institutions assigned responsibility for IPs such as NCIP. Focus should be made on the (a) availability of funds for investments and field operations, (b) adequacy of experienced professional staff, (c) ability of IPOs, local administration authorities, and local NGOs to interact with specialized government institutions, (d) ability of the executing agency to mobilize other agencies involved in the plan's implementation, and (e) adequacy of field presence.
- g. **Implementation Schedule** - with benchmarks to measure progress periodically; may need to have pilot run and should pursue long-term sustainability of the project.
- h. **Monitoring and Evaluation** – monitoring units should be staffed by professional social science professionals, and appropriate reporting formats and schedules should be formulated. The IPs themselves may also be part of the monitoring group.
- i. **Cost Estimates and Financing Plan** – should include detailed cost estimates for planned activities and investments. Estimates should be broken down into unit costs by project year and linked to a financing plan. Programs such as revolving credit funds that provide IPs with investment pools should indicate their accounting procedures and mechanisms for financial transfer and replenishment.

## 2. Education and Health

There is one elementary school established by DECS within the watershed, located at Sitio Pantay of San Miguel and Igsapit. Medical services are also provided in the same building. This indicates their relative access to basic education and health services.

### **3. Accessibility and Transport**

During dry season, the area is accessible through land transportation from Brgy. Pias to Sitio Sumacbao passing thru Sitio Saudi, Sapangbato, Bayak-bak, Minalungo, Makatulang, and Cunacon in Nueva Ecija. The only access into the interior parts of the watershed is by walking through old logging roads and trails. In Bulacan, the area could only be reached by hiking. Starting from Tubigan, Kalawakan, DRT, Bulacan it would take about a day's hike.

### **4. Religious Sector, Political and Social Organizations**

The majority (44.44%) of the local residents are Born Again Christians, 33.33% are Catholic and 22.23% have no identified religion. This suggests that this group of Dumagats must have undergone some degree of acculturation already and that their beliefs and practices have been blended with those of the lowland migrants.

### **5. Income and Livelihood**

Occupants residing in the watershed live on a hand-to-mouth existence. About 83.33% get their income from rattan gathering which provides them an annual income of P15,000-P18,000. Translated to a per capita given a family of six, this translates to only P2,500-3,000. Based on the annual per capita poverty threshold for Region 4 of P14,615 (2003), the income of Dumagats accounts for a measly 17%.

Illegal logging and timber poaching are lucrative businesses in the area, spearheaded by outsiders who usually tap the Dumagats to haul the lumber or poach timber for them. In fact Gen. Tinio is known to be the hotspot of illegal logging in the area.

This is major issue that needs to be addressed by ENRMP. Extensive and intensive forest protection cannot do the job alone. There must be a mix of incentives and disincentives for those engaged in illegal practices. If they are to be banned from doing something illegal, there must be other viable alternatives to offer. Hence, the livelihood component and its accompanying microfinance should help move watershed management towards this direction.

### **6. Institutions/Agencies Involved in Watershed Management**

Several government and private institutions in one or several ways are involved in the management of DRT-Gen. Tinio Watershed. Government agencies include the DENR, DOH, LGUs, DND and DSWD. The Wesleyan University Philippines and Miriam College are private institutions who have been involved in the projects implemented in the watershed.

## **7. Social Concerns**

Forest protection is of prime concern in the area. It is a common knowledge that illegal activities such as illegal logging, gold panning, and hunting are rampant in the area and could hardly be checked.

Limited livelihood opportunities that stems from the absence of skills, financing, and other capital resources leave the poor communities no other option aside from illegal logging, mining, destructive rattan collection and other forest-based livelihoods that tend to erode the sustainability of the watershed resources and services. This is especially true among the Dumagats who are forced by lack of capital resources to hugely depend on watershed resources for their livelihood with some using erosive practices while others resorting to illegal activities.

On a positive note, the concerned LGUs in the watershed are now highly concerned about protecting the integrity of the area. This is a plus factor and would be an important point for enhancing devolution of managing the DRT-Gen. Tinio watershed to the LGUs.

## **8. Stakeholder Analysis**

Major stakeholders in the watershed include government agencies and policy makers, implementing agencies, intended beneficiaries including tenured migrants, and civil society organizations. Of these, DENR and LGUs have high influence.

### **a. DENR**

DENR's credibility in the case of DTR-Gen. Tinio is being challenged by the presence of rampant illegal logging and timber poaching. It has the mandate, machinery, access to resources but lacks the institutional capacity to fully enforce the laws and effectively manage all the watersheds in the country. As the implementing agency of ENRMP, DENR has the most stakes to make its strategies work both in terms of technical and social aspects as well as in planning and budgeting.

### **b. CENRO, San Rafael**

As a field operation unit of DENR, CENRO San Rafael was given the responsibility for the DRT-Gen. Tinio Watershed, although the Municipality of Gen. Tinio is technically beyond its area coverage.

### **c. NCIP**

This is the national body assigned to implement the provisions of IPRA. It aims to promote and protect the IPs' rights. At present, it is assisting the Dumagats in the processing of their CADTs.

Being a relatively new government agency, it lacks the technical, legal, and financial resources to enable it to function effectively. Nonetheless, its staff has been patiently assisting the Dumagats especially in linking up with government agencies whose services are relevant to the IPs needs.

### **d. LGUs**

LGU here refers to the Provincial Government of Bulacan. It sees to it that the basic services for the communities are delivered by the respective municipalities to their constituencies. Having the power to legislate and execute, access resources, and authority to govern, LGUs can play a big part in the ENRMP implementation.

In the case of Bulacan, however, some caution must be taken as it has expressed during the consultation to generate income for the province by issuing small-scale mining permits. This may not be the sentiment of the majority of the stakeholders and could even go against the goals of ENRMP.

Table 5. Stakeholder analysis matrix for DRT-Gen. Tinio

Stakeholder Categories	Relevant Stakeholders	Capacity and/or Asset	Constraint Liability	Influence
Government policymakers	DENR	Mandate, power and resources for ENRM	Equally important priorities but inadequate resources; weak institutional capacity to enforce laws; mismatch between plan and budget programming	High
	NCIP	Mandate to protect indigenous peoples' rights; tasked to oversee implementation of IPRA provisions	Weak institutional capacity in terms of manpower and funds; not very vocal and assertive in defending IPs rights	Medium (Exert influence only among the Dumagats.)
	Provincial Government of Bulacan	Covers the DRT portion of the Watershed.	Direction is to generate income through small scale mining permits	High
	LGU-Nueva Ecija	Covers the Gen Tinio portion of the Watershed.	Not Clear.	Low
Implementing agency staffs	CENRO-San Rafael	Responsible for direct management of the watershed; with commitment to apprehend illegal loggers	To apprehend illegal loggers within the watershed.	High
	Bulacan Task Force for Ancestral Domain (BSTFAD)	Harmonize the different agency plans affecting the IPs of Bulacan	Lean manpower; slow process	Medium
Intended beneficiaries	Dumagats	35 families found in Sitios Kambubuyugan, Maugat, and Tubigan, all in Brgy. Kalawakan, DRT, Bulacan, with a total population of 130.	To continue practicing their subsistence activities, e.g. fishing, swidden cultivation, collection and selling of rattan and other forest products.	Low
	Tenured migrants	11 families located in Brgy. Peñaranda, Gen. Tinio, with a total population of 54.	To be provided with security of tenure within the watershed.	Low
Civil society organizations	Samahan ng Kaunlaran ng Sitio Talamsi	People's organization with 90 members	To raise the standard of living of tenured migrants in their village.	Low
	Samahan ng mga Dumagat sa Kambubuyugan, Inc.	Indigenous people's organization with 35 member households.	To continue practicing their subsistence activities, e.g. fishing, swidden cultivation, collection and selling of rattan and other forest products.	Low

### e. Civil Society Organizations/POs

They comprise the biggest number and are concerned mostly with livelihood. In the absence of knowledge about other options, they stick to continue doing what they have been doing for years despite the meager income they derive from such subsistence activities e.g. fishing, swidden cultivation, collection and selling of rattan and other forest products. Among the stakeholders, they are most vulnerable as any change in land and natural resource control and use can immediately affect their subsistence.

### f. BSTFAD

Bulacan Special Task Force for Ancestral Domain (BSTFAD) is the Coordinating Task Force organized by the Bulacan Provincial Government, and chaired by the Province's ENRO and DENR's PENRO.

## 9. Impact and Social Safeguards

Below is the table that summarizes the project impact and social safeguards.

**Table 6. Matrix for impact and social safeguards for Dona Remedios - Gen. Tinio Watershed**

Social Concern	Project Design and Impact	Recommendation
<p>a. Marginalization of IPs (p.23 Annex 1-5b of final report)</p>	<p><b>ENRMP will have no significant adverse impact on marginalization of Dumagats in DRT-Gen. Tinio Watershed.</b></p> <ul style="list-style-type: none"> <li>- ENRMP will target the Dumagats as primary stakeholder and beneficiaries of the</li> <li>- Envisioned institutional arrangement will include slots for representatives of Dumagats IPOs in the Watershed Management Council.</li> <li>- Special project component has been included to provide assistance in the formulation and implementation of IP Development Plan for the Dumagats.</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on IPs.</p> <p>Implementation of measures on IP development should be continuously monitored during project implementation.</p>
<p>b. Relocation or loss of shelter and loss of access to assets (p.25 Annex 1-5b of final report)</p>	<p><b>ENRMP will not result to relocation of shelter and loss of access to assets by the beneficiaries</b></p> <ul style="list-style-type: none"> <li>- Options considered in project design include management in place; tapping de facto users as partners in sustainable resource use and conservation; and putting occupied areas under appropriate management regime so that tenurial instrument can be issued.</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on involuntary resettlement.</p> <p>Implementation of measures to avoid loss of access to assets should be continuously monitored during project implementation.</p>

Social Concern	Project Design and Impact	Recommendation
<p>c. Livelihood displacement (p.25 Annex 1-5b of final report)</p>	<p><b>ENRMP will not result to significant livelihood displacement of beneficiaries.</b></p> <ul style="list-style-type: none"> <li>- Project design includes study on livelihood shift, provision of alternative livelihood, microfinancing and training on enterprise development.</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on involuntary resettlement.</p> <p>Implementation of measures to avoid livelihood displacement should be continuously monitored during project implementation.</p>
<p>d. Social exclusion of vulnerable groups (Dumagats) (p.29 Annex 1-5b of final report)</p>	<p><b>ENRMP will not significantly result to social exclusion of vulnerable groups.</b></p> <ul style="list-style-type: none"> <li>- Project will have components dealing on formulation and implementation of stakeholders' participation plan; and an institutional arrangement where slots will be allotted to representatives of vulnerable groups such as the Dumagats.</li> </ul>	<p>Project can proceed as it will not lead to social exclusion of vulnerable groups.</p> <p>Implementation of measures to avoid social exclusion of vulnerable groups should be continuously monitored during project implementation</p>

## D. ANGAT WATERSHED

### 1. Population/Households

Based on 2000 data, there are 2,749 persons residing within the Angat Watershed Reservation (AWR), with the Dumagats accounting for almost two-thirds of the population. The non-Dumagats are composed of Tagalogs, Bicolanos, and Visayans.

Most of the Dumagats are found along the elevated ranges and river banks of the Sierra Madre mountains, near the Angat River Dam in San Lorenzo, Norzagaray, Bulacan. They also inhabit places in eastern Luzon like Lucena, Tayabas (Quezon) and eastern parts of Cagayan, Isabela, Nueva Viscaya, Nueva Ecija, Bulacan, Rizal and Laguna.

Dumagats live in small bands of 10 to 30 families. Normally, the father is the supreme authority of the family. Disputes seldom occur as they accept what is offered to them for their produce.

#### IP Development Framework Plan

IP development plan (IPDP) will be formulated following the guidelines set forth by World Bank concerning social safeguards for IPs :

- It should be based on the options preferred by the affected IPs consistent with their right to self determination. For the Dumagats in DRT-Gen. Tinio Watershed, they would like to

continue practicing their subsistence activities, e.g. fishing, swidden cultivation, collection and selling of rattan and other forest products.

- All efforts should be exerted to anticipate adverse trends which can be created by the ENRMP and develop the means to mitigate the potential harm.
- Institutions responsible for IPs such as the National Commission for the Indigenous Peoples (NCIP) and LGUs should possess the social, technical, and legal skills needed for carrying out the proposed development activities. The LGUs in particular will need to be oriented on the provisions and implementing rules and regulations of the Indigenous Peoples Rights Act or IPRA as they will now assume responsibility over the IPs welfare. Implementation arrangement will be kept simple and will involve appropriate existing institutions, local organizations, and NGOs with expertise on IP matters.
- Local patterns of social organization, religious beliefs, and resource use should be taken account in the plan's design. Of peculiar concern is the organization of IPs into tribal communities parallel to the government LGU structure with their respective tribal leaders representing them in political, social, and economic transactions.
- Development activities should support production systems that are well adapted to the needs and environment of IPs and should help production systems under stress to attain sustainable levels.
- The plan should avoid creating or aggravating dependency of IPs on project entities. Thus, the plan should incorporate education and training in management skills for IPs at the onset of the project.

The IP development plan based on the World Bank operational directive on IPs should contain the following:

- a. **Legal Framework** – an assessment of the legal status of the affected IPs based on constitution, enacted laws, regulations and administrative orders, and the IPs' ability to effectively use the legal system to defend their rights. Particular attention should be given to the rights of IPs to use and develop the lands they occupy; to be protected against illegal intruders; and to have access to natural resources (such as forests, wildlife, and water) vital to their subsistence and reproduction.
- b. **Baseline Data** – to include (a) maps and aerial photographs of the area of project influence and those inhabited by the IPs, (b) analysis of the social structure and income sources of the population, (c) inventories of the resources that IPs use and technical data on their production systems, (d) relationship of IPs to other local and national groups.
- c. **Land Tenure** – involves identifying the steps that would help IPs acquire recognition of their customary right over ancestral domains or long-term, renewable rights of custodianship and use of lands.
- d. **Strategy for Local Participation** – mechanisms should be devised to insure IPs sustained participation throughout project planning, implementation, and evaluation. IPs have their representative organizations usually led by their traditional leaders that serve as channels for communicating their preferences. It should be insured through actual consultation that these leaders genuinely represent their tribe.

- e. **Technical identification of Development or Mitigation Activities** – detailed descriptions should be prepared and appraised for proposed services such as education, training, health, credit, and legal assistance as well as for productive infrastructure. Indigenous knowledge and systems (traditional health provider, paralegal worker) should also be considered when planning for these services.
- f. **Institutional Capacity** – involves assessment of the track record, capabilities, and needs of institutions assigned responsibility for IPs such as NCIP. Focus should be made on the (a) availability of funds for investments and field operations, (b) adequacy of experienced professional staff, (c) ability of IPOs, local administration authorities, and local NGOs to interact with specialized government institutions, (d) ability of the executing agency to mobilize other agencies involved in the plan's implementation, and (e) adequacy of field presence.
- g. **Implementation Schedule** - with benchmarks to measure progress periodically; may need to have pilot run and should pursue long-term sustainability of the project.
- h. **Monitoring and Evaluation** – monitoring units should be staffed by professional social science professionals, and appropriate reporting formats and schedules should be formulated. The IPs themselves may also be part of the monitoring group.
- i. **Cost Estimates and Financing Plan** – should include detailed cost estimates for planned activities and investments. Estimates should be broken down into unit costs by project year and linked to a financing plan. Programs such as revolving credit funds that provide IPs with investment pools should indicate their accounting procedures and mechanisms for financial transfer and replenishment.

## 2. Education

Only about one-fourth of the community members have gone to school, thus, they have very low literacy rate. Although formal education is very new to the Dumagats, most of them have started to value the importance of formal education for their children. They value education so that their children will not remain illiterate as their parents. However, some of the Dumagats do not believe in education because they feel that it would keep them away from their indigenous culture and traditions.

The Dumagats are among the poorest in the watershed. And they are basically attached to the natural resource for their swidden cultivation for subsistence. Hence, their plight should be of high concern in the ENRMP. But as to whether they should be prescribed to go to school is something the project may not have the liberty to do. Of course, the option of schooling can be presented as a development option but the final decision should be left to them. This is with due respect to the IPs' right to self determination as invoked by IPRA.

## 3. Employment

Fishing, farming, gold panning, rattan gathering and hunting are the main sources of livelihood for the Dumagats. The few ones who have attained higher level of education serve the community as Barangay Officials and as Day Care Workers.

The non-Dumagats being non-nomadic are engaged in kaingin, fishing, and forest product gathering. Of the total Dumagat population, 73.80% are employed while 26.20% are unemployed. Barangay San Lorenzo has the highest (61.91%) rate of employment, while Pinag-anakan has the lowest employment rate, which is 0.84%. Monthly income of the residents ranges from Php 600.00 to Php 3,840.00 or per capita of P640 per month (assuming a family size of 6). This is just about half of the per capita poverty threshold of P1,218 per month for the region.

Livelihood is, thus, a high concern for this group as with the other IPs and migrants in the Sierra Madre cluster. However, recommendations for livelihood options among the Dumagats can only be made in the context of their IP Development Plan. This plan will be a major activity and output of ENRMP and its preparation is discussed as a separate topic in this report.

#### **4. Social Capital**

It is typical of Dumagats to congregate in one area to dwell and share their food until it is consumed. This reciprocity phenomenon helps the community cope during period of scarcity.

This can be harnessed in ENRMP as the IPs engage in working out their own development plan consistent with their cultural beliefs and practices.

#### **5. Religion and Cultural Pattern**

Some degree of acculturation has found its way in the Dumagats' current behavior and these include smoking, mode of dressing, and social interaction. Many have also embraced the Catholic faith and a few are even followers of the Born Again group.

Such transformation in their culture is not without bearing on the way they will utilize and treat their natural resource. As their worldviews change due to the religious beliefs that they now embrace, their mode of natural resource use will also likely change.

#### **6. Social and Political Organizations**

Both the Dumagats and the non-Dumagats have been organized into POs for easy monitoring and for a more efficient dealing with their group. There was the Pinagbuklod na Samahan ng mga Dumagat sa Angat Watershed in 1985 with 226 members; Fishermen's Association with 60 members; the Samahan ng Malayang Magsasaka ng Karahume at Balagbag in 1990 with 59 members; and the Ipo Watershed Tree Planters Association Inc. in 1993 with 23 migrants and non-Dumagat members.

Their PO experience may be considered a valuable asset as it has exposed them to administrative, managerial and more responsible leadership. This could be an asset which the ENRMP can capitalize on in mobilizing the Dumagats as intended beneficiaries of the project.

## 7. Stakeholder Analysis

The line up of stakeholders in the Angat Watershed Reservation indicates its importance as a resource. Table 7 describes these stakeholders and their assets and constraints in participating in the project.

### a. DENR

It has the mandate, machinery, access to resources but lacks the institutional capacity to fully enforce the laws and effectively manage all the watersheds in the country. As the implementing agency of ENRMP, DENR has the most stakes to make its strategies work both in terms of technical and social aspects as well as in planning and budgeting.

Bringing all the stakeholders together into a consensus on the vision and management direction of the watershed is a big challenge for DENR, especially when it implements and

### b. CENRO

As the frontline unit of DENR, it is in charge of apprehending illegal loggers within the watershed. But the complexity of the mafia on illegal logging has outdone DENR's resolve to address the issue.

The CENRO intends to collect rattan cutting fees from the Dumagats. This could make resource use and access more inequitable considering that the Dumagats have claim over their ancestral domains. Matters like this have to be referred to the envisioned multisectoral Watershed Management Council for deliberation and approval.

### c. National Power Corporation (NPC)

NPC was created in 1936 as the national hydroelectric industry. It is a stock corporation wholly government -owned. While it does carry out some rehabilitation and protection work for the watershed, there is no clear delineation of their role in the overall integrated watershed management of the area vis-à-vis that of DENR. Also NPC's view about the forest occupants as illegal does not jibe with the project's philosophy. Hence, there is a need to level off with all the stakeholders on what ENRMP is all about during the formation of the Watershed Management Council so that everyone will be guided by the same philosophy and principles in its implementation.

**Table 7. Stakeholder analysis matrix for Angat Watershed Reservation**

Stakeholder Categories	Relevant Stakeholders	Capacity/ Asset	Constraint/Liability	Influence
Government policymakers	DENR	Mandate, power and resources for ENRM	Equally important priorities but inadequate resources; weak institutional capacity to enforce laws; mismatch between plan and budget programming	High

Stakeholder Categories	Relevant Stakeholders	Capacity/ Asset	Constraint/Liability	Influence
	NCIP	Mandate to protect indigenous peoples' rights; tasked to oversee implementation of IPRA provisions	Weak institutional capacity in terms of manpower and funds	Medium (Influence is only on the Dumagats)
Implementing agency staffs	NPC	Maintains an office within the Watershed.  Commitment to preserve the watershed so that it could hold enough water to generate hydropower.	Management perspective about current occupants not consistent with social forestry	High
	CENRO-San Rafael	Commitment to apprehend illegal loggers within the watershed.	Covers the towns of DRT and Norzagaray but holds office outside of the Watershed.  Intent to collect rattan cutting fees from the Dumagats.	High
	Provincial Government of Bulacan	Covers both the municipalities of DRT and Norzagaray.	Intent to generate more income for the province by issuing small-scale mining permits in Brgy. Camachin.	High
	LGU-Norzagaray	Covers most of the Angat Watershed Reservation.	Intent to have a wider electoral base by encouraging in-migration to the watershed and established a barangay there – Brgy. San Lorenzo.	High
	LGU-Doña Remedios Trinidad	Covers the northern portions of the Angat Watershed Reservation.	Intent to derive more revenues from the NPC; redelineation of its barangays so that each barangay would have a portion of the Reservoir and thus get revenues from NPC.	High
	Barangay Camachin, DRT	Covers the northern sitios of the Angat Watershed Reservation.	To get more revenues from NPC by claiming Sitio Maputi of Brgy. Kabayunan	Medium
Intended beneficiaries	Dumagats	144 households in nine sitios (Maputi, Manalo, Iyak, Arsabo, Pinagminahan, Pinaganakan, Sinilaban, Anuling, and Basyo) with a total population of 660.	Intent to continue practicing their subsistence activities, e.g. fishing, swidden cultivation, collection and selling of rattan and other forest products; resent the NPC's discouragement of their swidden activities	Low
	Tenured migrants	44 households in five sitios (Talagyo, Magnayon, Tagpis,	Interest to be provided with security of tenure within the watershed; intent to earn a living by cutting trees and	Low

Stakeholder Categories	Relevant Stakeholders	Capacity/ Asset	Constraint/Liability	Influence
		Banaba, and Maputi) with a total population of 195.	selling timber.	
Organized interest groups	Rattan buyers	Individual middlemen based outside of the Watershed.	Intent to buy rattan from the Dumagats at a low cost; dictate the demand for rattan.	Medium
	Logging firms	Located outside the watershed.	Intent to cut timber (illegally) from the Watershed and sell it to the market.	High
	Mining companies	Comprising of both Filipino small-scale miners and Chinese capitalists.	Intent to extract iron ore from Brgy. Camachin.	High
Civil society organizations	Fisherman's Association	Presently with 111 members, 89 are Tagalogs while 22 are Dumagats.	Intent to sell tilapia and other fish harvested from the reservoir.	Low
	Pinag-isang Samahan ng mga Dumagat sa Angat Watershed (PISADUSAW)	Multipurpose cooperative where all Dumagats within the watershed are automatically members of the cooperative.	Intent to sell rattan and other forest products to middlemen coming from outside of the watershed.  The organization, however, is currently inactive as its members refuse to pay membership dues.	Low
	Biskal Foundation	NGO based within the Watershed. To assist the Dumagats through literacy programs and other services.	Have only five known members.	Medium
	Indigenous Peoples Apostolate (IPA)	To promote and protect the rights of the Dumagats	Church-based office attached with the Diocese of Malolos but based in San Jose del Monte.	Medium
Other external stakeholders	Katribu	Non-government organization that funds the Biskal Foundation	To advocate for IP rights.  Wants the Dumagats of the Watershed to join the Central Luzon Ayta Association (CLAA).	Medium  (Exerts influence through Biskal Foundation)
	Central Luzon Ayta Association (CLAA)	Federation of IP organizations in Central Luzon. Based in Pampanga. No members within Bulacan.	No members within Bulacan.	Low  (No influence even among Dumagats of Bulacan).

#### **d. LGUs**

LGUs involved are the provincial government of Bulacan and the municipalities of Norzagaray, and Dona Remedios Trinidad. The provincial government's vested interest is on being able to generate more income for the province by issuing small-scale mining permits. Norzagaray meanwhile encourages in-migration to broaden its electoral base and has even established a barangay inside the watershed. Dona Remedios Trinidad is also after generating more revenues from NPC. These prevailing sentiments are rather not very encouraging as they reflect more of the opportunistic tendencies of the LGU rather than their environmental concern. This will also put the envisioned devolution at high risk considering the attitude and tendencies of the future care takers of the natural resources in the area. Indeed, IEC and capacity building on managing natural resources will be important aspects of the project.

#### **e. Dumagats**

There are now 144 households in 9 sitios (Maputo, Manalo, Iyak, Arsabo, Pinagminahan, Pinag-anakan, Sinilaban, Anuling, and Basyo) totaling 660 population. Their plan is to continue practicing their subsistence activities such as fishing, swidden cultivation, collection and selling of rattan and other forest products. They resent NPC's discouragement of their swidden activities.

Being natives in the area, they know of no other sources of subsistence. So unless the Dumagats are provided with alternative livelihood, their dependency on the resource will become more intense. Likewise, their cultural farming practices may not anymore be intact and could have in fact been eroded already due to acculturation.

#### **f. Tenured Migrants**

Tenured migrants have 44 households in 5 sitios: Talagyo, Magnayon, Tagpis, Banaba, and Maputi) totaling 195 persons. Having been there for quite a time, they look forward to being provided with tenure. To earn a living, they usually cut trees and sell the timber.

Provision of alternative livelihood and microfinance should help reduce too much dependence on the resource. But priority must be given to the IPs. Tenured migrants must be able to properly situate themselves during orientation to the project.

#### **g. Organized Interest Groups**

This group is composed of rattan buyers, logging firms, and mining companies. Their influence is considered high as they dictate the price of rattan, lumber, and timber products. Their common interest is to be able to buy their products from Dumagats at low price. Furthermore, mining companies intends to extract iron ore from Bgry. Camachin. These extractive activities if not checked and regulated could definitely damage the resource.

Hence, part of the project design will be to gradually undertake a livelihood shift so that organized groups will not be economically displaced.

## h. Civil Society Organizations

The group consists of the Fisherman's Association, PISADUSAW, Biskal Foundation, and IPA. The Fisherman's Association is a PO based in Brgy. Kabayunan, DRT and San Lorenzo, Norzagaray. It was organized by NPC and has presently 111 members, broken down into 89 Tagalogs and 22 Dumagats. They harvest fish from the reservoir. Their intent is to be able to sell fish harvested from the reservoir.

The Pinag-isang Samahan ng mga Dumagat Sa Angat Watershed or PISADUSAW is a multipurpose cooperative for Dumagats organized jointly by NCIP and NPC. All Dumagats in the watershed are automatically members of the cooperative. The organization, however, is currently inactive as its members refuse to pay membership dues. The group aims to sell rattan and other forest products to external middlemen. They resent the rattan cutting fees imposed by CENRO since they believe that that they the right to do whatever they want within their territories based on IPRA.

Biskal Foundation is an NGO based in the watershed. It has only 5 known members. It assists the Dumagats through literacy programs and other services.

The Indigenous Peoples Apostolate or IPA is a church –based office attached to the Diocese of Malolos but based in San Jose del Monte. Its interest is to promote and protect the rights of Dumagats.

These POs and NGOs can serve as potential partners in ENRMP, though their track records don't show much of their credibility and accomplishments yet. More investigation of locally based POs and NGOs can be done so that ENRMP will be able to get good partners.

## i. Other External Stakeholders

Though low in influence, the other external stakeholders may be worth mentioning also. They are the Katribu and CLAA. Katribu is an NGO that funds Biskal Foundation. It is an advocate of IP rights. It wants the Dumagats within the watershed to join CLAA.

## 8. Impact and Social Safeguards

Table 8 below summarizes the impact and social safeguards for the Angat Watershed Reservation.

**Table 8. Matrix for impact and social safeguards for Angat Watershed Reservation**

Social Concern	Project Design and Impact	Recommendation
a. Marginalization of IPs  (p. 30 Annex 1-5b of final report)	<p><b>ENRMP will have no significant adverse impact on marginalization of Dumagats in Angat Watershed Reservation.</b></p> <ul style="list-style-type: none"> <li>– ENRMP will target Dumagats as primary beneficiaries of project benefits.</li> <li>– Envisioned institutional arrangement will include slots for</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on IPs.</p> <p>Implementation of measures on IP development should be continuously monitored during project implementation.</p>

Social Concern	Project Design and Impact	Recommendation
	<p>representatives of Dumagats IPOs in the Watershed Management Council.</p> <ul style="list-style-type: none"> <li>- Special project component has been included to provide assistance in the formulation and implementation of IP Development Plan for the Dumagats.</li> </ul>	
<p>b. Livelihood displacement (pp. 30 and 35 Annex 1-5b of final report)</p>	<p><b>ENRMP will not result to significant livelihood displacement of beneficiaries.</b></p> <ul style="list-style-type: none"> <li>- Project design includes study on livelihood shift, provision of alternative livelihood, microfinancing and training on enterprise development.</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on involuntary resettlement.</p> <p>Implementation of measures to avoid livelihood displacement should be continuously monitored during project implementation.</p>
<p>c. Social exclusion of vulnerable groups (Dumagats, landless migrants) (p.35 Annex 1-5b of final report)</p>	<p><b>ENRMP will not significantly result to social exclusion of vulnerable groups.</b></p> <ul style="list-style-type: none"> <li>- Project will have components dealing on formulation and implementation of stakeholders' participation plan; and an institutional arrangement where slots will be allotted to representatives of vulnerable groups.</li> <li>- Project will allot percentage in microfinancing favoring the vulnerable groups</li> </ul>	<p>Project can proceed as it will not lead to social exclusion of vulnerable groups.</p> <p>Implementation of measures to avoid social exclusion of vulnerable groups should be continuously monitored during project implementation</p>
<p>d. Devolution process among LGUs (Please refer to write up on devolution)</p>	<p><b>ENRMP will not adversely affect the devolution process.</b></p> <ul style="list-style-type: none"> <li>- Project incorporates component on the capacitation of LGUs for devolution and decentralization of ENRM functions</li> </ul>	<p>Project can proceed as it will not stifle the devolution process.</p> <p>Implementation of measures that will enhance the devolution process should be continuously monitored during project implementation</p>

## 9. Summary of Inputs to Project Design

Being IP-dominated, the action plans for the South Sierra Madre Mountain Range have considered the integration of social safeguards for involuntary resettlement, IPs, cultural property, and gender. Activities to be undertaken for all the covered watersheds in South Sierra Madre have been designed such that there will be free and prior informed consent to be sought first from the Dumagats; that there will be no involuntary resettlement; that the rights of the IPs as stipulated in IPRA will be respected and protected through the special effort of helping them come up with their own IP

development plans; and that no property of cultural significance such as burial grounds will be been transgressed.

Exiting ADMP of Indigenous Peoples Organizations (IPOs) with approved CADC/CADT has been integrated also into the overall management framework for the watersheds in South Sierra Madre. For the other CADC holders with no ADMP yet, technical assistance will be provided in the formulation of the plan.

Participatory social assessment should be part of the preparatory activities. The word participatory is being underscored to emphasize that the stakeholders would be in a better position to plan intelligently and mobilize them strategically if they have a better picture of their baseline condition. This can actually be a good starting point for mobilizing them. This would also address the issue of social exclusion of the marginalized sector such as the IPs, landless migrants, and women.

But it should be noted that even among the IPs, there is the danger of perpetrating capture of project benefits by the "elite", especially among their appointed leaders. Now that they are already acculturated and fragmented, countercheck or verification about the integrity and sincerity of their leaders to represent the IP community's interest (and not their own selfish interest) should be done. Competition among IPOs for project benefits is now becoming imminent. Thus, community organizing should be undertaken so that there will be a better way of bringing in the marginalized in project planning and implementation and ensuring that they will be able to share equitably from the project benefits.

This should further be reinforced by a framework for participation and collaboration to be agreed upon by the concerned multistakeholders. With such a mechanism in place, the ever recurring poverty issue in the community can be better addressed. Initially, data indicate that a number of livelihood alternatives identified by the IPs in their CADCs are not compatible with the thrust of ENRMP (e.g. small scale mining). This still is a tricky issue. Because even if the social safeguard on respecting the rights of IPs and assisting them in the drafting of their development plan are in place, the bottomline is to see to it that the IP plans are consistent with the principles and goals of sustainable ENRM and integrated watershed management. IEC can help inculcate the sound environmental principles and check on the bad influences of IPs acculturation.

Livelihood alternatives should also consider the fact the since many of the IPs in the various watershed areas are now integrated with and exposed to the market economy, then non-land based activities such as food processing, retailing, and the like may also be introduced to them as other options. A number have in fact been engaged in trading, particularly of lumber. But with the recent landslide disaster that occurred in Kanan Watershed in Quezon, livelihood options should veer way from forest-based extractive activities. Focus on intensifying unit productivity of agricultural areas which also abound on the area is a suggested alternative. This can be complemented by micro-enterprises such as tending of sari-sari store, home-based food processing of agricultural products, livestock raising, and acquisition of vocational skills. This is in consideration of the fact that many of the Dumagats have now been exposed and are embracing the mainstream economic activities in the locality.

Given the need to ease the pressure created by livelihood on the natural resources in Kanan watershed, investments could re-focus on other non-forest based livelihood and enterprises that will require small capital. Venturing into micro-enterprise development should consider the following ingredients as guide (World Bank, 2006):

**Table 5. Framework for micro-enterprise development**

Ingredient	Item to Consider
1. Economic viability and potentials for business expansion	<ul style="list-style-type: none"> <li>- Product marketability and demand</li> <li>- Project site suitability and access to cash economy</li> <li>- Production costs and profit margin</li> <li>- Potentials for production expansion</li> <li>- Income stability</li> <li>- Potential for tie ups with other funding agencies and private business</li> </ul>
2. Credit assessment	<ul style="list-style-type: none"> <li>- Capability to manage business</li> <li>- Organization's collective will and confidence</li> <li>- Over all track record</li> </ul>
3. Counterpart funds from other institutions	<ul style="list-style-type: none"> <li>- Micro-enterprise acceptability to other funding institutions tapped by the project</li> <li>- Buy in by other institutional services/donors</li> </ul>
4. PO as micro-enterprise development cooperator and recipient	<ul style="list-style-type: none"> <li>- Organizations of farmers primarily on a cooperative basis, that are actively and consistently participating in ENRM shall be the focus of livelihood development assistance</li> </ul>
5. A business plan	

On the issue of devolution, stakeholder analysis of various watersheds in Southern Sierra Madre indicates that the current perspectives of the different LGUs on natural resource management in the watersheds are not very encouraging. San Rafael intends to collect fees from rattan gatherers; Norzagaray hopes to widen its political base by encouraging migrants to the area; Bulacan would like to go into issuing permits to small scale mining; Nueva Ecija has no clear plan; DRT aims at getting more revenue from NPC; and San Jose del Monte in Bulacan and Rodriguez in Rizal are into boundary conflict.

## **LIGAWASAN MARSH**

### **G. Geographical Location**

Ligawasan Marsh is located in the island of Mindanao which is historically called "*Land of Promise*" being endowed with rich natural resources. Specifically, the Ligawasan Marsh is within the Cotabato River Basin. Comprising of the three adjoining marshes of Ligawasan, Ebpanan, and Libungan, it is singly referred to as Ligawasan Marsh. The entire marsh area cuts across the three provinces of Cotabato, Maguindanao, and Sultan Kudarat.

Rampant denudation of forests in the surrounding watershed has drastically increased siltation in the wetland, a condition that can lead to its ultimate disappearance. Should this happen, the unique and diverse aquatic and wildlife resources found within the Marsh and from which the local inhabitants derive their sustenance will also vanish.

The Maguindanaons orient and classify themselves based on their geographical location. Those living in the upper portion of the Pulangi river called themselves *tao-sa-roya/tao-sa-laya* or upstream people, while those living in the lower portion of the river referred themselves as *tao-sa-ilud* or downstream people.

The latter live in scattered dwellings made of simple and light building materials like nipa, bamboo, and wood. This serves a practical purpose for migrants who move in and out of the Marsh depending on the season. Some of the permanent residents are found in relatively higher areas or town centers.

## **H. Demography and Socio-Economic Characteristics**

### **1. Population and Ethnicity**

The total population of the area is 1,094,170 individuals or 48,577 families.

A socio-economic survey for the communities of the proposed Ligawasan Protected Area was conducted by DENR covering 53 barangays in nine municipalities (4 in Maguindanao, 4 in Cotabato, 1 in Sultan Kudarat) located within the Ligawasan Marsh. It was found that 91.8% were Maguindanaon Muslims. They inhabit almost the entire Marsh, concentrated particularly on the province of Maguindanao and some municipalities of Cotabato (formerly known as North Cotabato). Other ethnolinguistic groups represented in the survey are Ilocanos (2.78%), Ilonggos (2.59%), Cebuanos (0.62%), and Christians (0.12%).

These findings are supported by the 2000 Census showing that about three-fifths (64%) of the population of Maguindanao classified themselves as Maguindanaon, about 14% as Iranons, 5% Tedurays, and 17% belong to other ethnic groups. In Cotabato, about 32 percent of the household population classified themselves as Hiligaynons/Ilonggos, followed by 22.64 % Cebuanos, 17.75 % Maguindanaons, 6.88 % Ilocano, 4.70 % Karay-a, 4.37% Manobos/Ata Manobos and 3.60% Boholanos.

Populations in and around the Ligawasan Marsh are predominantly Maguindanao Muslims, with a few migrant-settlers in some of the barangays around, but not inside the Marsh. This implies that social acceptability of the ENRMP will be highly influenced by the worldviews and beliefs of the Maguindanao Muslims.

### **2. Age Structure**

Based on the 2000 census, half of the population of the provinces of Cotabato and Maguindanao are below 19 years old. Moreover, 15 percent of the total population of Maguindanao is 5-9 years old. It only implies three important points that the project should look into:

- a. High birth rate
- b. There are only a few that participate in the production of goods and services
- c. High chances of child labor

The project may invest on building the capacity of the children and youth of the Ligawasan Marsh through scholarship grants, skills training program and improving the educational system in the Marsh. But before putting in place such programs that target the children and the youth, the project may support both local and national governments' effort to control population. The project may tie up with the Department of Health and LGUs in the campaign for family planning as a tool to fight poverty and hunger.

Since only a small portion of the population contribute to the production of goods and services, mostly depending on farming and fishing, alternative sources of livelihood should be introduced to give the working sector opportunities to earn extra income. It will also reduce pressure on the natural environment.

Increasing number of child laborers should be mitigated by providing their parents alternative sources of livelihood and granting free education to the most impoverished children in the Ligawasan Marsh. Students receiving scholarship grants to pursue secondary education and undergraduate degree in college should sign a contract requiring him/her to return to his/her hometown and work for the development of the Marsh for a certain number of years.

Also, young reformers actively participate in social issues that concern Muslim society. Many young Muslims, dissatisfied with the old leaders, assert that datu and sultans are unnecessary in Modern Islamic society. These young reformers were divided between moderates, working within the system for their political goals, and militants, engaging in guerilla-style warfare. To some extent, the government managed to isolate the militants, but Muslim reformers, whether moderates or militants, are united in their strong adherence to Islam.

### **3. Educational Attainment**

Information about education profile of the population is conflicting. DENR study indicate high level of educational attainment among the Muslims while that of the socio-economic survey conducted for the Wetland and Biodiversity Component for Ligawasan Marsh Project show that about 2% percent have college degree; 4% reached college; 35% reached elementary; and less than one-third have no formal schooling.

Considering, however, that the Autonomous Region for Muslim Mindanao (ARMM) is ranked as the first among the poorest region in the Philippines, it can be inferred that its population would have low educational attainment.

### **4. Gender**

Gender roles in agricultural systems are highly influenced by indigenous beliefs and practices. The Maguindanaon males who usually perform productive roles such as planting, fishing, and hunting while females perform the reproductive roles like child rearing, cooking, weaving and cleaning the house. In between planting and harvesting, women and children are left in the house to attend to the household and sometimes to tend the planted patches of land near their houses.

In terms of social roles, traditional leaders are usually males. Religious leaders or elders that perform rituals, such as *apo na palay* who carries out rituals during harvesting, are also males.

Males and females in suburban areas, however, perform almost equal gender roles. Many women in towns are leaving their families to work in big cities or in abroad. In turn, males are left with the responsibility of taking care of their children and looking after their home. Modern day Maguindanaons and the gender roles they perform are, to a certain degree, affected by Islam teachings and principles. Although Muslim Filipino women are required to stay at the back of the mosque for prayers (out of the

sight of men), they enjoy more freedom in daily life than women in many other Islamic societies or countries.

Some gender roles contribute to the degradation of Ligawasan Marsh and its resources. For example, women in the Municipality of SK Pendatun gather bird eggs and fish fry as source of livelihood. Hence, in a consultation with DENR, the communities have proposed to provide these women as well as wives of those killed in armed conflict with environment-friendly sources of consumption goods and cash income.

The Biodiversity Conservation and Restoration of the Ligawasan Marsh Project funded by GEF, formed the Women's Movement for the Conservation of the Ligawasan Marsh. Sustainable livelihood projects were introduced to lessen pressure on marshland resources. These included a cooperative store, wild duck raising, traditional fishing, and handicraft making. The women's organization also planted valued sedges, palm, and grass species for use in indigenous craft production. The women's organization is composed of 54 members who participate in conservation activities, handicraft making, and managing cooperative store. It is also very important that women's voices are heard and recognized not only in the implementation but also in the design and evaluation stages of the program.

Aside from giving women livelihood options, it is equally important to provide them with managerial skills and to open up opportunities to market their products not only in Mindanao, but in other parts of the country and outside the country as well. This initiative could be a collaborative program of this project with the Department of Trade and Industry.

## 5. Livelihood

Most of the inhabitants within and surrounding the Marsh are engaged in fishing and farming. There are big scale fishermen (those who have pump boats and engage in fish marketing- buy and self) but majority are small fisher folks. The socio-economic survey conducted by DENR revealed that more than three-fourth (80.38%) of all the respondents are involved in farming while only one-third (32.71%) depend on fishing as their source of livelihood. Next to farming, more than one-third (36.63%) of all the respondents get their livelihood from livestock/poultry. Only 6.32% earn income from handicrafts and 2.74% from wildlife collection. One third of the respondents get their livelihood from other sources, such as overseas employment and direct selling, among others.

The *tao-sa-roya* is engaged in farming and is practicing kaingin or swidden agriculture. During summer, a large portion of the Marsh dries up leaving the land easy to burn. They plant and produce either rice or corn. Others plant vegetables and root crops. Some residents have small sari-sari stores, cafeterias or *carinderias*.

The current trend now among the Muslims is overseas employment, both for the men and women. Most of the Muslim women are hired as domestic helpers and the men are hired as construction workers/laborers, drivers, or as helpers. Many are able to build modest houses and buy household appliances out of their income from working abroad.

It can be inferred that among all the key players in the production of goods and services in the Ligawasan Marsh, the small farmers and fisher folks are the most marginalized sectors of the society. Aside from building their capacity in sustainable fishing and farming and providing alternative sources of livelihood, it is very important that these sectors are empowered. Farmers and fisher folks need to

form a support group that will help them act as buffer to changes that the project may bring to their lives. This peoples' organization (PO) should work both for the people and for the conservation of Ligawasan Marsh and its resources.

This Muslim PO can be supported eventually under ENRMP. The expectation is that it will support the implementation of project activities, facilitate the adoption of livelihood programs, recognize and tap the knowledge and skills of women, propose changes in development plan, and advocate policies sensitive to their needs particularly to the most deprived sectors of the Muslim society. Those who depend on wildlife collection as source of livelihood can be hired as police rangers because of their knowledge about wildlife species and familiarity about the poachers in the area.

## 6. Poverty Incidence and Poverty Factors

Despite the above natural endowments, the three provinces within the Marsh rank among the country's poorest provinces. The incidence of poverty is high at 54.9% in Sultan Kudarat, 54.5% in Cotabato, and 48.4% in Maguindanao. There is a higher incidence of poverty among the *tao-sa-ilud*. Hence, the project should target this marginalized sector through delivery of basic services such as food, clean water, sanitary toilet, and electricity.

The increasing population's demand for basic needs (food, clothing, water, amenities) will exert tremendous pressure on the environment in various ways:

- a. highly intensified aquaculture increases soil erosion, acidification, and eutrophication of the aquatic resources;
- b. overfishing for food; over-utilization of the Marsh' nipa/mangroves for shelter and household energy;
- c. increased demand for consumer goods enhances commercial activities, footloose industries, and consequently urban sprawl;
- d. the man-land-ratio increases, further limiting access to land resources and further encouraging intrusion into the upland zone. This will consequently add to soil erosion and degradation of the watersheds' hydrologic functions; and
- e. greater demand for basic social services (education, health, infrastructures, safety, etc.), thus putting added strain to public financial resources.

Reducing pressure on the land and fishing grounds of Ligawasan Marsh is a gradual process that can be best achieved through empowering the farmers and fisher folks of the Marsh. Adult learning on sustainable farming and fishing as well as skills development programs can reduce communities' dependency on natural resources.

## 7. The Maguindanao Muslims

Taking into account that Maguindanao Muslims or Maguindanaons comprise a bulk of primary stakeholders, it is interesting to find out how this group can contribute to or hinder the design and implementation of ENRMP. It entails breaking down the Maguindanaon society into smaller social groups and identifying the marginalized, less capable sector among them.

It is also important to recognize the relationships of Maguindanaons with other social groups and assess the conditions/terms and strengths of these relationships. Understanding the socio-cultural characteristics of the Maguindanaons also gauges possible constraints to development opportunities.

The Maguindanaons are referred to historically as the "People of the Flooded Plains." They were known as *maginged* (settlers) of the *danao* (lake). Through time, the ethnic tribe became known as Maguindanao and later on, Maguindanaon. Long before the arrival of Shariff Kabungsuan in 1475 who successfully introduced Islam to the ethnic group, the Maguindanaons had been practicing indigenous beliefs and practices.

The coming of Islam has put in place a new paradigm of worldviews encompassing traditional or indigenous practices in farming, hunting, and fishing. Although Islam has penetrated the core values of the present-day Muslims, Islam in the Philippines have absorbed indigenous elements, much as has Catholicism. Some of these century-old traditions and beliefs prove to be helpful in conserving the Ligawasan Marsh and its resources.

An example is the indigenous practice called *kapanundayong* or ancestral worship. Sacred natural sites are conserved or paid respect to by the Maguindanaons. This practice, though considered un-Islamic is still practiced up to now by some conservative and traditional Maguindanaons. This does good for some people as sacred places and grounds are left untouched, thereby contributing to the preservation of the Ligawasan Marsh.

However, these sacred natural sites are subject to the changing value systems and culture of the Maguindanaons. Modern development and changes in societal systems may reduce the integrity and significance of sacred sites to the communities of Ligawasan Marsh. Moreover, transmission of traditional knowledge is collapsing. The meanings/value that communities put into sacred sites must be weighed along with Islamic beliefs and livelihood opportunities.

The practice of *kapanundayong* is just a slice of Maguindanaons' high regard for nature and its relationship to human beings. Up to this day, they believe that some birds and animals in the marsh should be spared from hunting, because if captured or killed, something bad will happen to them. Crocodiles and other reptiles, even monkeys, especially the white ones, are not harmed because of Maguindanaons' conservative belief that these animals are relatives of men. Traditional ecological knowledge is often applied with regard to their management, thus providing good opportunities for integrating science and traditional knowledge systems.

Although indigenous practices and beliefs of Maguindanaons affect their attitude towards the conservation of Ligawasan Marsh, it is Islam that highly influences their philosophy, worldviews and attitude towards natural resource conservation and sustainable development.

## 8. Islam and the Environment

In a Muslim area like Mindanao, particularly in the Ligawasan Marsh, the concept of development should be in harmony with the philosophy and teachings of Islam. Natural resource management must complement the rules and customary laws (*adat*) of Islamic institutions. Customary law — *adat* among the Moros — is based on the notion that there can be no absolute ownership of land. Islamic principles hold that land and all creation belong to God and that human beings are trustees or stewards of God's creation. Thus, among Moros, land holding is based on the right to the produce of the land.

Muslims nowadays are divided between those adhering to the political system of the Philippine government and those adhering to Islam. Early on, when the Marsh was sparsely populated, anyone could settle and fish or farm in the Marsh, subject only to asking permission from the datu in the area. At present with the influence of other concepts of land ownership (Islamic and Philippine State) and with population pressure on resources, there is increasing tension and conflict over resources in the Marsh.

## **9. The Maguindanao Muslim Sentiments**

The stakeholders' analysis conducted by DENR also found that many people feared that by declaring the Ligawasan Marsh as a protected area, they would be prohibited to fish and farm within the Marsh.

The Moro Islamic Liberation Front (MILF) claims that Ligawasan Marsh is a *de facto* protected area. Many supporters of MILF come from rural villages of the provinces of Maguindanao and Cotabato. Hence, the long-standing conflict between MILF and the Philippine Government may pose peace problems and may slow down smooth implementation of the project if interests and expectations of MILF are not leveled off.

MILF is an Islamic liberation movement based in the Bangsamoro region in Mindanao and the neighboring islands. Hashim Salamat, founder of MILF, is a Maguindanaon himself and has teamed up with traditional, conservative Islamic leaders. Hence, most of MILF leaders are Islamic scholars from traditional aristocratic and religious backgrounds.

Given the above information about MILF, it is very important to integrate the Islamic teachings on environment to the proposed ENRMP. Islam views the environment as an element that cannot be separated from the human life. Conservation efforts should be sensitive to the fundamental teaching of Islam about the environment: land and all creation belong to God and men are stewards of nature. Hence, the project needs to be very cautious in designating zoning areas that would limit or cause dislocation of livelihood opportunities in the communities.

Typically, the Maguindanaon Muslims are skeptics about the government's development interventions in Mindanao. They felt that they have just been "used" or exploited in past research and development projects. This is a long-standing sentiment common among many Muslims who blame the Philippine Government for taking for granted the *Moros*, or Filipino Muslims in terms of public investment and development.

To address this issue, the project will include delivery of basic social services such as health and education as well as IEC integrated into the peace process. Meanwhile, sustainable livelihood and the necessary microfinancing will be among the priority components of ENRMP's social component.

## **I. Social Institutions**

### **1. Sultanate**

Long before the creation of the Philippine Republic, the Mindanao Muslims were organized - socially and politically - in a government called sultanate. Sultanates are defined by political territory and are governed by sultans. Three sultanates have emerged in Maguindanao and are still recognized up to this

day. These are the Sultanates of Kabuntalan, Buayan, and Maguindanao. All the members and descendants of the sultanates are considered as members of the royal families and are revered by the communities as leaders ruling over different areas in Maguindanao. These traditional leaders are commonly referred to as *datu*.

Traditional leadership is both ascribed and achieved. A *datu* who is a descendant of a royal family has ascribed social status since birth. On the other hand, traditional leaders who are not descendants of a royal family had earned their social status through possession of wealth and political power.

Although changing value systems have reduced the powers of these powerful clans through time, some of them have managed to sustain their influence particularly on the political arena in Mindanao. Well known political dynasties such as the Pendatuns, the Sinsuats, the Matalams, the Masturas, the Ampatuans, and lately, the Candaos, can trace their lineage to the traditional royal houses or to the descendants of Shariff Kabungsuan whose roots can be traced to the Buayan\_Kabuntalan *tarsilas* or genealogies.

Traditional leaders usually decide for the people, especially on national and local issues like politics, clan or family feud, land acquisition/ownership, etc. Sadly, they are also implicated in the frequent feuding between political clans or groups.

The Shariah court, which implements the Muslim laws, takes care of personal and family relations. All problems emanating from these, especially pertaining to marriage and divorce, ownership and inheritance, as well as divisions of properties, are taken care of by the Shariah court. Criminal cases, however, do not fall under this jurisdiction.

Based on the above description of how sultanates and traditional leadership regulate and direct the lives of the Maguindanaon Muslims, two informal rules inherent to this traditional government may affect the desired outcomes of ENRMP. First, political figures who are mostly descendants of traditional royal families have social responsibility of shaping public opinions. Second, Islam (through the Shariah Court) cast judgment on conflicts over land and natural resources.

Understanding the characteristics and interests of influential political figures in the Marsh is the first step in reducing their threat to the project's success. This social group is usually composed of intellectuals and advocates of an independent Islamic nation. Many of them are skeptical about the sincerity of the Philippine Government in bringing development projects to Mindanao. Hence, it is very important that the Muslim communities take ownership of the project and lead in gaining support from the political leaders. In this way, the Muslims for the Muslims design the project. This approach may increase political leaders' interest towards supporting the ENRMP efforts.

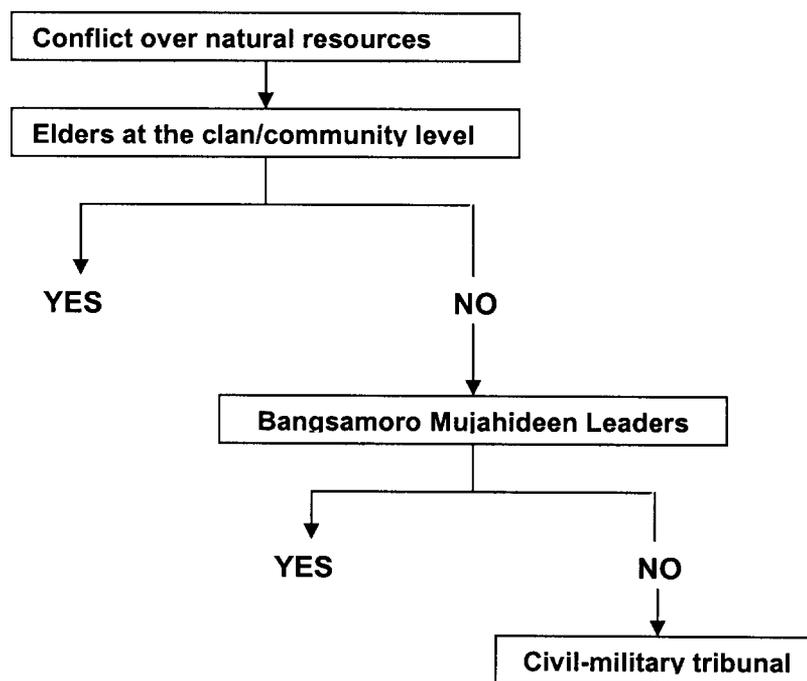
Designating zoning areas in the Marsh for different land uses may gain disapproval from some communities. Such conflicts may end up in a Shariah Court. In order to come up with a win-win situation both for the affected communities and for the entire Ligawasan Marsh, the project should understand the composition of the court and anticipate the use of fundamental Islam teachings and customary laws applicable to natural resource management.

## **2. Islam and the Philippine Government**

The social organization of Muslims nowadays is divided between those adhering to the political system of the Philippine Government and those adhering to Islam. Islamic groups refer to those who are tasked to implement the *agama* or religious principles as *ulamas*, *uztadses*, *imam*, *shariah* judges and other religious and learned groups, including the MILF constituents and *mujahideen*. The traditional leaders, on the other hand, belong to both, and they tend to enter electoral politics. Whatever groups they belong to, these groups are powers to reckon with.

Resolving conflicts over land and natural resources became more complicated as population pressure increases along with the new policies and concepts on land ownership imposed by Islam and the Philippine Government. Figure 1 is a process map that shows the path of decision regarding conflicts over rights to own and control natural resources.

Conflict over rights to own and control rice or fishing areas are usually solved at the clan or community level presided over by the elders of those involved and usually ending in amicable settlement. If still unresolved, the case is brought to the Bangsamoro mujahideen leaders in the area such as the revolutionary barangay chairman or area commander. In other cases, it is the government barangay captain who is also a datu or a descendant of the royal houses who is consulted. The difficult cases are brought to the civil-military tribunal in the area.



**Figure 1. Path of decisions on conflicts over rights to own and control resources**

The advantages and disadvantages to ENRMP of the traditional judiciary system of the Muslims are summarized in Table 1 below. Implications of advantages and disadvantages to the project are also included in the table.

**Table 1. Advantages, disadvantages, and implications of the traditional judiciary system on ENRMP**

Advantages	Disadvantages
<p><b>Conflict resolution is community-driven.</b> A considerable number of cases are resolved at the community-level through amicable settlement.</p> <p>Community members are closely knit; the system facilitates a democratic and civil way of resolving conflict.</p> <p><i>Implications:</i> Cumbersome bureaucratic process of the government will be avoided.</p>	<p><b>Judgment can be swayed by external factors.</b> Partial judgment can be a result of personal interests, lobbying among the same social class, and under-the-table transactions involving money, among others.</p> <p><i>Implications:</i> Objectivity and partiality of decisions will be sacrificed. The system may tend to serve justice to the communities involved in the conflict but not to the Philippine Government implementing the project.</p>
<p><b>Judgments are contextualized in the communities' culture and religion.</b> The traditional judiciary system is sensitive to unspoken and unwritten rules and behaviors inherent to the culture of the <i>Moros</i> and to Islam, as well. There is a greater chance to come up with a well-rounded decision that recognizes social, political, cultural, religious, and even psychological dimensions of the parties involved.</p> <p><i>Implications:</i> The level of social acceptability of the decisions is very high.</p>	<p><b>In dealing with the project, homogenous composition of the Shariah Court may invoke long-standing sentiments on an independent Islamic nation and other related issues.</b> Since all the members of the traditional judiciary system are elders, Islam scholars, and respected figures in the Muslim society, it can be generalized that the dominant and emerging sentiments common among these people might get in the way of a partial and objective decision making.</p>
<p><b>Religious figures comprise the traditional judiciary system.</b> To a certain extent, the communities may not question the decision of the traditional judiciary system because of the high credibility of the members of the court. They are religious icons and therefore, considered as wise, credible, and competent persons to resolve such conflicts.</p> <p><i>Implications:</i> High level of social acceptability of the decisions; easy to impose policies and sanctions.</p>	

## J. Stakeholder Analysis

Stakeholders of the Ligawasan Marsh can be categorized into eight groups namely: government/policy makers, implementing staffs, intended beneficiaries, adversely affected persons, organized interest groups, civil society, donors, and other external/international stakeholders. Stakeholders include not only those who will be affected by the project but also those who can affect the project. These groups are identified and described in Table 2.

Since the success of a development project depends on the extent of the stakeholders' participation to the development process, their interest towards the project outcomes is an indicator of stakeholders' openness to change and willingness to participate in the decision making processes of the project. Varying interests that stakeholders have towards the project may also serve as benchmark data on the expectations, inhibitions, and biases of the stakeholders to the project.

Stakeholders who are open to change and have strong influence over the project will most likely cooperate with the implementing agencies. These are composed of women's organization, people's organizations, academic and research institutions and some government agencies that are tasked to deliver basic social services, educational programs, and skills training/ capacity development programs. The project should use these channels, especially the civil society groups, to reach those who resist change and facilitate a dialogue towards a common understanding of the project.

On the contrary, stakeholders who have strong influence over the project but expressed little interest to the project outcomes are both stumbling blocks and opportunities to a successful implementation of the project. They are the gatekeepers of information, services, and policies in Ligawasan Marsh. Among those identified under this are the LGUs, traditional and religious leaders, and the MILF. Without the affirmation and cooperation from these stakeholder groups, it would be impossible for ENRMP to proceed.

Another compelling issue is the distrust that these gatekeepers have on the Philippine Government, and in this case, it can be the DENR. The agency, along with other government agencies, is among those who have low influence over the most influential stakeholder groups in the Ligawasan Marsh. This can be attributed to the long-standing conflict between the Muslims and the Philippine Government. This is the opportune time for the Armed Forces of the Philippines (AFP) to "blend" and create a mutual understanding with other armed groups in the Ligawasan Marsh. It may be necessary and possible to arrive at a common agreement on the roles that AFP and other armed groups including MILF will play in the conservation and protection of Ligawasan Marsh.

However, the project should also target those who have low interest and low influence over the project because most of the time, these are the stakeholder groups adversely affected by the project. These include small farmers and fisher folks and non-Muslim and non-Christian indigenous groups. The best way to increase the influence of these stakeholder groups over the project is by treating them as equals of those who have more influence especially in the decision-making process. They should be represented in all the stakeholder consultation meetings and Protected Area Management Board or PAMB. After all, in the end, the sustainability of the project depends on the people who are living at the heart of the proposed protected area.

However, putting all the unsustainable practices of small-scale farmers and fisherfolks in halt does not end the continuing degradation of the Ligawasan Marsh caused by large-scale banana plantations, loggers, industries, and mining corporations that aggravate the problem of soil erosion and siltation. These stakeholders are very interested in the project since possible policy reforms will affect their business and operations; however, they have not been included in all the stakeholder consultation meetings conducted in the planning phase of the project.

The following discussion will focus on selected stakeholder groups that will be affected by the project and could potentially affect the project largely during the course of its implementation.

## **1. DENR**

DENR is mandated to be the primary agency responsible for the conservation, management, development, and proper use of the country's environment and natural resources. It works through regional offices and satellite agencies. In the case of Ligawasan Marsh, DENR Region 12 governs it because there is no DENR regional office in ARMM.

DENR works directly with the donors and international partner agencies bringing in both local and international consultants to work at the field level. This poses a threat to the locals, especially to the elders, who discourage researchers to collect information without permission from the traditional/religious leaders. Such informal rules need to be well understood by DENR to enable it to blend project design with the people's culture, and to avoid creating or aggravating barriers between the project proponent and the project beneficiaries.

The agency also maintains relationship with mass media that could be an effective advocacy tool specifically for policy makers and religious leaders who have regular access to these channels.

The goals of the Ligawasan Protected Area Project are consistent with the national goals of DENR, particularly with the objectives of the ENRMP. But these national goals may be conflicting with the traditional institutions of Muslim communities in the Marsh. Adjusting these goals and putting them in the social context of the communities is the key step towards public understanding and social acceptability of the project.

DENR is interested in conserving and protecting natural resources found in Ligawasan Marsh and on building the capacities of project beneficiaries. It is willing to carry out necessary interventions for the project to materialize. These include arriving at a consensus with the project beneficiaries. The project has also been designed to be participatory. The locals will have a big role in running the project through a multi-sectoral PAMB.

## 2. LGUs

As stipulated in the Local Government Code of 1991 (RA 7160), the LGUs are provided with a strong mandate for planning, budgeting, and implementation of development efforts in their specific areas of responsibility that include environment and natural resource conservation. LGUs are mandated to implement national environmental laws such as RA 9003 or the Solid Waste Management Act. They are also in-charge of drafting and implementing municipal ordinances and laws on environmental management and resource conservation.

LGUs work closely with the national government such as the Department of Social Welfare and Development (DSWD) and the Department of Education (DepEd). LGUs are given enough leeway and powers to institute innovative strategies or reforms in the delivery system of basic services based on the peculiar needs and priority of the locals and the constituents.

The implementation of the community-based social welfare programs and services and ENRM projects are already devolved to LGUs, along with other government programs. However, the devolution has never been very productive and effective in some areas because of varying degrees of priorities and resources given by the Local Government Executives for social and environmental programs and projects.

Unlike DENR, LGUs have direct relationship with the communities specifically with the barangay captains and traditional leaders. Since LGUs are considered as part of the community, the level of mistrust that communities hold for LGUs is low compared to the mistrust they have towards the national government. Hence, they are more appropriate to act as intermediaries between the communities and the national government and facilitate a dialogue between the two. During the

stakeholders consultation meeting, the participants suggested that LGUs can also play a very important role in facilitating peace talks with MILF and other armed groups. LGUs have expressed commitment to the conservation and protection of Ligawasan Marsh given that the communities of the Marsh will be the ones to benefit most from it. Communication programs should target policy makers particularly the LGUs to educate them on the long-term implications of unregulated unsustainable practices in and around the Marsh.

### **3. NEDA, BFAR, DOT, DepEd, DSWD, BFAR, DA, DAR**

These are national government agencies that act as support system to the DENR and the communities in the delivery of program activities on agriculture, fisheries, alternative sources of livelihood, development of Ligawasan as a tourist attraction, educational programs, delivery of social services, and distribution of ancestral lands.

These agencies also provide buffer to project beneficiaries who will be affected by the project through provision of livelihood and educational or skills training program.

The National Economic and Development Agency (NEDA) is the country's independent economic development and planning agency headed by the President. The regional offices of NEDA provide staff assistance to implementing agencies in identifying and developing programs and projects. The main goal of NEDA is to achieve the development agenda of the State. Conservation of Ligawasan Marsh and development of its people are believed to fast track the development of the poorest region in the Philippines, which is ARMM.

The Department of Tourism (DOT) is the national agency in charge of promoting tourism in the country. It is tasked to integrate tourism in the Management Plan while keeping the integrity of the communities' culture and identity. DOT recognizes that tourism in Ligawasan can provide high revenue to the local government. These funds can be used to provide basic services to the locals and/or support conservation efforts in the area. Tourism can also offer alternative source of livelihood to the communities of the Marsh. Traditional elders, however, do not want an influx of non-Muslims to enter their territory. Moreover, the image of Ligawasan as central abode of MILF makes it more impossible to develop this area as a tourist spot in the immediate future.

The Department of Agriculture (DA) and the Bureau of Fisheries and Aquatic Resources (BFAR) can help DENR in developing environment-friendly livelihood activities such as goat and duck raising, mat and kalakat weaving, and support Mini-Growth Centers, focused on Fish and Food Crops Marketing. DA, in particular, has the knowledge and capacity to conduct on-site training on sustainable farm practices, agroforestry, and community-based natural resource management. BFAR, on the other hand, has the knowledge and capacity to educate fisher folks on sustainable fishing practices, breeding seasons of fishes, mangrove planting, and food processing, among others.

DA and BFAR have medium to high influence over the project beneficiaries because communities are interested on how they could increase their income and how to access knowledge necessary to improve the quality of their lives. These communities are more inclined to learn new farm technologies and innovative farming techniques, as well as putting value-added to their current products.

The Department of Agrarian Reform (DAR) plays an important role in resolving conflict over land ownership. Long before non-Muslims from the north and plantation-owners settled in Mindanao, the

Maguindanao Muslims and other, non-Muslim non-Christian indigenous groups (Lumad) owned these lands. However, because these people were unaware that they have to get titles for their land, they were claimed by the powerful, the wealthy, and the educated. At present, the large part of the Ligawasan Marsh is declared as forestlands. It means that people are prohibited in establishing their settlement in those areas unless declared Alienable and Disposable (A and D). However, there are settlers claiming that these areas are part of their ancestral domains. Turning back these ancestral domains to the native settlers can diminish the level of distrust among the locals towards the Philippine Government. This can be a major turning point to a certain extent, for the Philippine Government to win again the hearts of the Mindanao Muslims.

The Department of Social Welfare and Development (DSWD) helps in the delivery of basic social services and establishment of social infrastructure on health and sanitation. One of the main programs that DSWD is implementing for the disadvantaged sector is the Comprehensive and Integrated Delivery of Social Services (CIDSS). It aims to empower disadvantaged communities through capability building and community organizing to address their minimum basic needs. Sanitation in the Marsh needs to be addressed as this can affect the water quality.

Another program, which can help to uplift the economic condition of the disadvantaged, is the Self-Employment (SEA) Program. It provides opportunities for the beneficiaries to engage in income-generating projects. Women are provided with informal courses on functional literacy, sanitation, breastfeeding and skills training such as dressmaking, stuffed-toy making, and home-based food processing.

Persons with disability are provided assistance for physical restoration, opportunities for self and social enhancement, and social preparation seminars for employment.

However, most of these services are concentrated in the poblacion and nearby barangays and as such; the residents in the Marsh generally do not have access to these services. The type of social development assistance they had received in the past usually came in the form of emergency assistance during disasters, such as during the flashfloods brought about by Mt. Parker eruption in 1995, which badly affected some municipalities in the Marsh.

There is also a notable lack of viable people's organizations in the Marsh area. The people are not yet fully conscious of the potentials of organized group action and of the need for community participation in addressing problems.

In the stakeholders' consultation meeting, there were participants who mentioned that there were traditional leaders who resist and disallow the delivery of basic social services from the government. DENR and DSWD may need to look into this issue to determine how to address the problem.

#### **4. Traditional and Religious Leaders**

Traditional and religious leaders are usually wealthy and powerful individuals who either inherited their status from the sultanates of Mindanao or have gained it through time. Most of the local politicians are members of the royal families. They are highly influenced by Islam.

Aside from their strong religious beliefs, these people have strong sentiment against the government. This is because of their long-standing demand for an independent Islamic nation. Their interest lies on taking ownership of the project; fear that other people will manage the Ligawasan Marsh.

### 5. Small farmers and Fisher Folks

The farmers in Ligawasan are divided into two, based on their geographical location: upland farmers, and farmers in the lower portion of the Marsh. Most of the farmers are into unsustainable farming practices. Some of the farmers are also fishers, hence, if the catch is not enough, they also farm. They are the poorest among the members of the communities. Most of the illiterates can be found in this sector.

They are interested to adopt sustainable farm practices. They are concerned on how to increase their production, acquire alternative sources of livelihood, and gain a wide market for their products. Aside from giving them opportunities to improve the quality of their lives, it is also very important to make them more capable of accessing these opportunities.

Like the farmer sector, the fisher folks are one of the poorest sectors. They practice illegal and unsustainable methods of fishing. Since most of them are also farmers, they tend to practice illegal method of fishing so that they could have more time in the farm.

**Table 2. Stakeholder analysis matrix for Ligawasan Marsh**

Stakeholder categories	Relevant stakeholders	Characteristics social situation, location, size, organizational capability	Interests Commitment to status quo vs. openness to change	Influence H=High, M=Medium, L=Low
Government policy makers	a) DENR	<ul style="list-style-type: none"> <li>• Proponent of the Ligawasan Protected Area Project</li> <li>• Works through regional offices.</li> <li>• The goals of the project are consistent with the objectives of the National Program on Environment and Natural Resources (NP-ENRM).</li> <li>• Works directly with the donors and international partner agencies.</li> </ul>	<ul style="list-style-type: none"> <li>• Interest lies on the conservation and protection of Ligawasan Marsh and on building the capacities of project beneficiaries.</li> <li>• Vested interests of some DENR staff towards the project should be curbed and check immediately, as this will aggravate the conflict between many Muslims and the Philippine Government.</li> </ul>	<b>LOW</b>
	b) LGUs	<ul style="list-style-type: none"> <li>• Draft and implement municipal ordinances and laws on environmental management and resource conservation.</li> <li>• Mandated to implement national environmental laws</li> <li>• Have direct interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Dedicated to the conservation and protection of Ligawasan Marsh.</li> </ul>	<b>HIGH</b>

Stakeholder categories	Relevant stakeholders	Characteristics social situation, location, size, organizational capability	Interests Commitment to status quo vs. openness to change	Influence H=High, M=Medium, L=Low
		<p>with local communities through the barangays and traditional/religious leaders.</p> <ul style="list-style-type: none"> <li>• May serve as intermediary between the Philippine Government and leftist groups.</li> </ul>		
	c) NEDA	<ul style="list-style-type: none"> <li>• The country's independent economic development and planning agency</li> <li>• Developed the Ligawasan Marsh Development Master Plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Conservation of Ligawasan Marsh as part of fast tracking the development of ARMM.</li> <li>• Helps in coming up with alternative sources of livelihood.</li> </ul>	<b>MEDIUM</b>
	d) DOT	<ul style="list-style-type: none"> <li>• The national agency in charge of promoting tourism in the country.</li> <li>• Integrates tourism in the Management Plan while keeping the integrity of the communities' culture and identity.</li> </ul>	<ul style="list-style-type: none"> <li>• Highly interested because of the potential of the Ligawasan Marsh to be a premier tourist spot in ARMM.</li> <li>• Tourism can provide high revenue to the local government. These funds can be used to provide basic services to the locals and/or support conservation efforts in the area.</li> <li>• Tourism can also offer alternative source of livelihood to the communities of the Marsh.</li> </ul>	<p><b>LOW</b></p> <p>Muslims of the Marsh opt to keep their space from the influx of non-Muslims in their area.</p>
	e) DENR-PAWB	<ul style="list-style-type: none"> <li>• Responsible in the establishment, management, and development of National Integrated Protected Areas System (NIPAS)</li> <li>• In charge of the conservation of wildlife resources and in the dissemination of information on and education for nature conservation.</li> </ul>	Interested in implementing the rules and guidelines prescribed in the NIPAS.	<b>LOW</b>
	f) DA and BFAR	<ul style="list-style-type: none"> <li>• Has the knowledge and capacity to conduct on-site training on sustainable farm practices, agroforestry, and community-based</li> </ul>	Alternative livelihood options and capacity building training are crucial tools needed by the communities to successfully adapt on the social changes that the project will bring.	<b>MEDIUM to HIGH</b>

Stakeholder categories	Relevant stakeholders	Characteristics social situation, location, size, organizational capability	Interests Commitment to status quo vs. openness to change	Influence H=High, M=Medium, L=Low
		natural resource management approaches, sustainable fishing practices, breeding seasons of fishes, mangrove planting, and food processing, among others.		
	g) DAR	Plays an important role in resolving conflict over land ownership/ancestral domain.	Interested in the effective implementation and management of land reform through land tenure improvement and security and provision of integrated development services to landless farmers, farm workers, small landowner-cultivators and titling.	<b>LOW</b>
	h) DSWD	<ul style="list-style-type: none"> <li>• Helps in the delivery of basic social services and establishment of social infrastructure on health and sanitation</li> <li>• They can also lead in the formation and support to people's organization.</li> </ul>	<p>Highly interested</p> <p>Implements the Comprehensive and Integrated Delivery of Social Services (CIDSS) and Self-Employment (SEA) Program.</p>	<b>MEDIUM</b>
	i) DPWH	<ul style="list-style-type: none"> <li>• Blamed for the increase siltation in the Marsh because of the cut of the Pagalungan River.</li> </ul>		<b>LOW</b>
	j) DepEd	<ul style="list-style-type: none"> <li>• Leads on the Special Literacy Program</li> <li>• May incorporate environmental themes to the curriculum at the primary and secondary levels, as well as in the informal mode of education.</li> </ul>	Interested	<b>HIGH</b>
Implementing agency staffs	a) DENR-PAWB	<ul style="list-style-type: none"> <li>• Works through regional offices.</li> <li>• Works closely with the LGUs, donors and/or international partners.</li> </ul>	<p>Highly interested</p> <p>Should look at the conservation at a macro perspective, not only focusing on the areas within the marsh, but also on its neighboring areas, as well.</p>	<b>MEDIUM</b>
	b) LGUs	<ul style="list-style-type: none"> <li>• As stipulated in the Local Government Code of 1991 (RA 7160), the LGUs are provided with a strong mandate for the planning, budgeting, and</li> </ul>	<p>Level of interest is moderate because of bad perceptions regarding the protected areas.</p> <p>Desire of other municipalities (eg. Pikit) to convert hectares of land</p>	<b>HIGH</b>

Stakeholder categories	Relevant stakeholders	Characteristics social situation, location, size, organizational capability	Interests Commitment to status quo vs. openness to change	Influence H=High, M=Medium, L=Low
		implementation of development efforts in their specific areas of responsibility. <ul style="list-style-type: none"> <li>Works closely with barangay captains and the communities.</li> </ul>	situated in the portion of the Marsh from Wetland to Alienable (A & D).	
	c) Armed Forces of the Philippines	<ul style="list-style-type: none"> <li>Can be an effective agency to help resolve social conflicts arising from land disputes and other differences.</li> <li>Halt the presence of armed elements both AFP and BIAF and let the community to police the Marsh</li> </ul>	<ul style="list-style-type: none"> <li>Also seen as an effective mechanism in initiating development efforts within the Marsh, as can be gleaned from the reforestation project.</li> </ul>	
Intended beneficiaries	a) traditional leaders, elders, <i>datu</i> , religious leaders	<ul style="list-style-type: none"> <li>Composed of wealthy and powerful individuals who inherited their status from the sultanates of Mindanao.</li> <li>Most of the local politicians are members of the royal families.</li> <li>Highly influenced by Islam. Most of them are important religious figures in their communities.</li> <li>Aside from their strong religious beliefs, these are the people who have strong sentiment against the government. This is because of their long-standing demand for an independent Islamic nation.</li> </ul>	<ul style="list-style-type: none"> <li>This group of people wants to maintain their status quo.</li> <li>Resistance to access basic services</li> <li>Incorporation of IEC during Friday religious congregation</li> <li>Establishment of Biodiversity Resource Center</li> <li>Financing Madrasa school and conduct the appropriate skills training</li> <li>Religious enforcement of environmental laws</li> <li>Their interests lie on taking ownership of the project; fear that other people will manage the Ligawasan Marsh.</li> </ul>	<b>HIGH</b>
	b) farmers	<ul style="list-style-type: none"> <li>This sector is divided into two based on their geographical location: upland farmers, and farmers in the lower portion of the Marsh.</li> <li>Most of the farmers are into unsustainable farming practices. Some of the farmers are also fishers, hence, if the</li> </ul>	Interested to adopt sustainable farm practices. They are concerned on how to increase their production, alternative sources of livelihood, and wide market of their products.  Aside from giving them opportunities to improve the quality of their lives, it is also very important to make them more	<b>LOW</b>

Stakeholder categories	Relevant stakeholders	Characteristics social situation, location, size, organizational capability	Interests Commitment to status quo vs. openness to change	Influence H=High, M=Medium, L=Low
		<p>catch is not enough, they also farm.</p> <ul style="list-style-type: none"> <li>• Most of the farmers are the poorest among the members of the communities. Most of the illiterates can be found in this sector.</li> </ul>	<p>capable of accessing these opportunities.</p> <p>The local people's concerns might not be heard since the experts, who are more knowledgeable about the marsh might be the only ones making the decisions.</p>	
	c) fisherfolks	<ul style="list-style-type: none"> <li>• Like the farmer sector, they are one of the poorest sectors. They practice illegal and unsustainable methods of fishing.</li> <li>• Since most of them are also farmers, they tend to practice illegal method of fishing so that they could have more time in the farm.</li> </ul>		
	d) Maguindanaon Development Foundation, Inc. (MDFI)	They have been assisting in organizing fishermen into associations.		
	a) Banana and other crop plantations/ industries	Siltation comes from uplands, where banana plantations are to be found. They used unsustainable farming practices that affect the soil conditions in the marsh by bringing loose soil materials downstream.		
	b) Loggers (legal and illegal)			
	c) Mining operations	The proposal to establish the EMRC Tampakan mining operations, water from the Tampakan river flows toward the Ligawasan Marsh and it has been reported that traces of mercury have been found in water samples taken from the river.		

Stakeholder categories	Relevant stakeholders	Characteristics social situation, location, size, organizational capability	Interests Commitment to status quo vs. openness to change	Influence H=High, M=Medium, L=Low
Civil society (NGOs, CBOs, religious organizations )	a) Women's Sector Organization in Pikit b) Regional Commission for Bangsa Moro Women c) Mindanao State University d) Fisherfolk Organization in Pikit			
	e) Bangsa Moro Youth Assembly	Provide assistance to NGOs in organizing these fishermen, by helping them conduct IEC activities and orientation seminars.		
	f) Ligawasan Youth Association for Sustainable Development	Provides alternative livelihood sources for people living in the marsh.		
	g) Academic and Research Institutions	<ul style="list-style-type: none"> <li>• Mindanao State University conducts research on the siltation problem</li> <li>• The Sultan Kudarat Polytechnic State College informed that their institution strongly promotes organic farming, and they have conducted numerous research and programs to educate farmers on this technique. Their school can be a resource center on information about sustainable practices, and they can also be tapped to conduct on-site farmers.</li> </ul>		

### C. Project Impact and Social Safeguards

Despite the vulnerability of the area, certain development activities can still be conducted to enhance the value of the Marsh in environmental and natural resources management in the country. The measures adopted to make this possible are shown in the table below.

Activities to be carried out in Ligawasan Marsh will be limited mainly to institutional strengthening and livelihood support. These will specifically include IEC, capacity building of PAMB, alliance building between DENR-12 and ARMM, and livelihood diversification diversification. Hence, social impacts will also be limited.

**Table 3. Matrix for impact and social safeguards for Ligawasan Marsh**

Social Concern	Project Design and Impact	Recommendation
<p>a. Marginalization of Maguindanao Muslims as an ethnic group  (p.6-7 Annex 1-3c fo final report)</p>	<p><b>ENRMP will have no significant adverse impact on marginalization of Maguindanao Muslims as an ethnic group</b></p> <ul style="list-style-type: none"> <li>- ENRMP will use participatory approach and will seek the Maguindanao Muslims' participation in all matters affecting them.</li> <li>- Envisioned institutional arrangement will include slots for representatives of Maguindanao Muslims in PAMB.</li> <li>- Special project component has been included to provide assistance in the formulation of Maguindanao Muslims Development Plan that will include: <ul style="list-style-type: none"> <li>- options preferred by Maguindanao Muslims</li> <li>- capacitation of institutions responsible for Maguindanao Muslims in social, technical, and legal skills needed for carrying out proposed development activities</li> </ul> </li> <li>- simple institutional arrangement involving local organizations and NGOs with expertise on Muslim affairs</li> <li>- consideration of social of organizations, religious beliefs, and resource use of Maguindanao Muslims</li> <li>- development activities supportive of production systems adapted to the needs and environment of Maguindanao Muslims</li> <li>- avoidance of dependency by Maguindanao Muslims on project entities through education and training in management skills in early part of project</li> </ul>	<p>Project can proceed as it will not trigger marginalization of Maguindanao Muslims in Ligawasan.</p> <p>Implementation of measures on Maguindanao Muslims development should be continuously monitored during project implementation.</p>
<p>b. Livelihood displacement  (p.2,3,6 Annex 1-5c of final report)</p>	<p><b>ENRMP will not result to significant livelihood displacement of beneficiaries</b></p> <ul style="list-style-type: none"> <li>- Project design will include study on livelihood shift, provision of alternative livelihood and microfinancing</li> </ul>	<p>Project can proceed as it will not trigger social safeguard policies on involuntary resettlement.</p> <p>Measures to avoid livelihood displacement should be continuously monitored during project implementation.</p>
<p>c. Social exclusion of vulnerable groups</p>	<p><b>ENRMP will not significantly result to social exclusion of vulnerable groups.</b></p>	<p>Project can proceed as it will address social exclusion of</p>

Social Concern	Project Design and Impact	Recommendation
(upland dwellers, landless farmers, small fisher folks, women and children)  (p.10 Annex 1- 5c of final report)	– Project will have components dealing on formulation and implementation of stakeholders' participation plan; and an institutional arrangement (PAMB) where slots will be allotted to representatives of vulnerable groups e.g. Maguindanaon and Lumads.	vulnerable groups.  Measures to avoid social exclusion of vulnerable groups should be continuously monitored during project implementation.

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29 November 2006

**JOACHIM VON AMSBERG**  
Country Director  
World Bank Philippines  
23<sup>rd</sup> Floor, Taipan Place, Ortigas Center,  
Pasig City

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Dear Director Von Amsberg,

We are pleased to officially submit the attached Environmental Assessment reports for the National Program Support for the Environment and Natural Resources Management Project (NPS-ENRMP).

Thank you and regards.

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Sincerely yours,  
*Analiza R. Teh*  
**Atty. ANALIZA R. TEH**  
Assistant Secretary  
Foreign Assisted and Special  
Projects Office