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ENVIRONMENTAL GOVERNANCE: THE CASE OF APO ISLAND, DAUIN, NEGROS ORIENTAL, PHILIPPINES

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INTRODUCTION

Environmental governance includes the actions of the state and encompasses actors such as communities, businesses, and civil society aiming at changes in environment-related incentives, knowledge, institutions, decision making and behaviors (Lemos and Agrawal, 2006). It also refers to the functioning of stakeholder organizations under the framework of prevalent rules and regulations to deal with the environmental problems (ICIMOD – ADB, 2006)

Lemos and Agrawal (2006) noted that presently a broad array of hybrid environmental governance strategies are being practice, and it has become clear that seemingly purely market-, state-, or civil society-based governance strategies depend for their efficacy on support from other domains of social interactions. They further emphasized that the emergence of these forms of environmental governance is based upon the recognition that no single agent possesses the capabilities to address the multiple facets, interdependencies, and scales of environmental problems. The involvement of community and local voices to environmental governance is seen as providing the benefit of time- and place-specific information that may help solve complex

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environmental problems at the same time allow a more equitable allocation of benefits from environmental assets.

Good governance is transparent, accountable, and honors the rights of the people to participate in the decision making that affects their life. It is equitable and effective in making the best use of natural resources thus promoting sustainable development that is link with the sustainability of the natural environment (UNDP as cited in ICIMOD – ADB, 2006)

In Apo Island several actors have been involved in its governance since 1979 in order to conserve and protect its natural resources and environmental assets. This study aims to showcase the environmental governance in Apo Island from 1979 when Silliman University initiated the Apo Island Marine Conservation Program up to its establishment as Apo Island Protected Landscape and Seascape (AIPLS) pursuant to Republic Act No. 7586 known as National Integrated Protected Areas System (NIPAS) Act of 1992.

Both primary and secondary data pertaining to the development and maintenance of Apo Island were used in the study. Relevant documents were reviewed and additional information needed was elicited from key informants. Efforts were made to ensure that the views of a wide variety of stakeholders were reflected in the study.

THE STUDY SITE

Apo Island is a 74-ha volcanic island lying in the middle of Mindanao Sea. It is located off the southeastern coast of Negros Island in central Philippines (Figure 1). It is under the political jurisdiction of the municipality of Dauin, province of Negros Oriental. It is about 25 km south of Dumaguete City, 7 km east of Brgy. Malatapay, Zamboanguita and west of Siquijor Island (Cabanban and White, 1981; Baggayan et al., 1994; Calumpong et al., 1997; Afuang et al., 1999).

The island's shape is elongated, with the axis oriented in a north-south direction. Its southern half is characterized by a low-lying hill while its highest recorded peak of approximately 200 m is on the northern side of the island. Almost 80% of its land area is grassland and shrubland. It has very little arable land as the island has very limited topsoil, which is continuously being eroded. Its coastline consists of steep, rocky cliffs; five small white beaches with two principal ones located at the southwestern and southeastern portions; and two lagoons with patches of mangrove on the southeast side of the island. A fringing coral reef surrounds the island. The east and southeast parts have the most extensive live coral cover. Apo Island has very sparse but highly diverse algae. No seagrasses were found in Apo Island (Cabanban and White, 1981; Baggayan et. al., 1994; Calumpong et al., 1997; Afuang et al., 1999).



A marine reserve station located at the southeastern side of the island occupies 10% of the reef and includes an 11.2-ha marine sanctuary wherein fishing is not allowed (Russ and Alcala, 1996).



Figure 1: The Study Site

GOVERNANCE IN APO ISLAND

Since 1979, several players have been involved in the conservation and protection of Apo Island's natural resources and environmental assets.

Silliman University Apo Island Marine Conservation Program (1979 – 1983)

The initial environmental intervention in Apo Island was academe-led when Silliman University (SU) introduced the Apo Island Marine Conservation Program in 1979 to promote awareness of the environment among its residents. The aim is to protect and conserve the coastal and marine resources of the island, especially its fringing reef. Extension workers of the said university conducted intermittent non-formal education programs on marine conservation in Apo Island, which introduced the concept of a “marine sanctuary” to the community.

In 1982, an agreement was made between SU and the Apo Island barangay council to set up a marine sanctuary on the southeast side of the Island. Subsequently, a marine sanctuary was established and marker buoys designating a protected area were installed (Cabanban and White, 1981; White et al., 1986).

Although the impact of the program was not formally evaluated, the people of Apo Island seemed to gain some understanding of the importance of the reef ecosystem as

a result of the non-formal education on marine conservation conducted by SU staff (White et al., 1986). Numerous conversations, interview sessions, and fora indicated that the people of Apo Island had considerable understanding of the importance of the reef ecosystem in meeting their basic economic needs (Cabanban and White, 1981).

Marine Conservation and Development Program (MCDP) (1984 – 1986)

In 1984, Apo Island was chosen as one of the three sites of the Marine Conservation and Development Program (MCDP), which was a collaborative project of SU, the Asia Foundation, and PVO-USAID. The MCDP was a 2-year program (October 1984 – September 1986) designed to promote the conservation of coral reefs in Central Visayas through community-based resource management. The program consisted of five components 1) marine resource management; 2) community development; 3) agroforestry; 4) linkages and replication; and 5) institutional development (White et al., 1986).

Environmental education was a major component of MCDP and was given emphasis in the initial stage. Two MCDP field workers lived at the site 2 - 3 week a month for the duration of the program, interacting closely with the residents. They conducted non-formal classes, small group discussions and one-on-one conversations, which focused on marine ecology as well as on the rationale and methods of resource management.

Through its agroforestry component, the MCDP provided tools for the farmers, conducted a series of meetings and seminars on proper land use practices and facilitated field visits of Apo farmers to model agroforestry sites. Consequently, agroforestry practices were undertaken in a number of farms.

Marine conservation in Apo Island was undertaken in collaboration with national government agencies, local government units, nongovernment organizations and other entities such as the Central Visayas Regional Project (CVRP) in Cebu City. This was done through the linkages and replication component of the program.

With the institutional development component, selected faculty and staff members of SU interacted and worked with the Apo Island community during the project. The project pursued an interdisciplinary approach to marine resource management wherein the faculty and staff from various disciplines collaborated with each other.

The MCDP initiatives enlightened more residents in Apo Island about the benefits of the marine sanctuary. This led to the establishment of the marine sanctuary of 11.2 ha, bordering 450 m of shoreline on the southeast side of the island in October 1985 by virtue of a municipal ordinance approved by the municipal council of Dauin and upon the endorsement of a marine reserve/sanctuary resolution by the Apo Island barangay council.

Work groups such as the Marine Management Committee (MMC) and Apo Weavers Group were formed in September 1985, while a consumers' cooperative was formally organized in March 1986.

The MMC was formed as the core group responsible for the management of the marine reserve. The MMC had its own identity, separate from the barangay council (traditional power structure in the barangay), but was linked to it through certain individuals in as much as some MMC leaders were also barangay council officials (Liberty Rhodes, pers. com., 2001).

In coordination with the barangay council, MMC was responsible for the participatory enforcement of the provisions of the marine reserve guidelines stipulated in an approved Dauin municipal ordinance and duly published in the Apo Island Marine Reserve brochure.

To generate funds for the maintenance of the marine reserve, the MMC decided to collect donations since it had no legal authority to collect fees. Visitors were required to register in a logbook at the community center and encouraged to give donations for the use of the facilities. In addition, the MMC rationed rainwater to the community at 50 centavos per 4 gallons from a water tank built by the members in March 1986.

When Apo Island became a training site for another community-based project, MMC officers and members were involved in the training workshops as resource persons and

facilitators, sharing their community-based resource management experience with the participants (White, 1989).

The Apo Weavers Group was organized to assist women weavers in improving their plight. Their major concerns were the inadequate and unreliable source of *Romblon* fiber for the making of mats as well as the marketing of their products.

In addressing these concerns, the MCDP workers attempted to locate new supplies of *Romblon* fiber. Through the agroforestry component, women were encouraged to plant *Romblon* in Apo Island, thus making the supply of *Romblon* fiber adequate locally.

Moreover, the MCDP workers helped the weavers market their mats. The project however, was unsuccessful since no regular marketing mechanism was established for the mats. The marketing of mats outside Apo Island and Barangay Malatapay depended on the contacts of MCDP field workers, which were irregular and uncertain.

The Apo Consumers' Cooperative was established as one of the income-enhancement mechanisms for Apo Island residents. A cooperative store opened in mid-July 1986, selling rice, corn, soap, bread, candy and soft drinks at prices lower than those of other stores in Apo Island. In addition, members were given patronage refund annually (Annie Omilig, pers. com., 2001).

Community-based Resource Management (CBRM) (1986 – 1992)

The community-based resource management (CBRM) approach was fully in place in Apo Island when the MCDP terminated in 1986. The marine conservation activities initiated by the said program were being continued by the community through the leadership of MMC officials in collaboration with the barangay council and other existing people's organizations in the island. Meanwhile, SU, the Dauin municipal government, national government agencies especially the DENR and non-government agencies provided technical and/or financial assistance to Apo Island.

The island was considered as one of the successful community-managed marine reserves in the Philippines. Apo Island and its vicinity, particularly the marine sanctuary, were maintained by the local residents in the spirit of volunteerism. "*Bantay Dagat*" volunteers patrolled the sanctuary in shifts.

The Apo Consumers' Cooperative is still viable. It continues to sell household necessities such as rice, cooking oil, toiletries, and the like to residents at low prices and on credit. It has increased its membership and capitalization and was able to provide cash loans as well as patronage refund to its members.

On the other hand, the Apo Weavers Group became inactive because most of the members shifted to T-shirt vending, which became a more lucrative source of income than mat weaving because of the development of tourism in the island.

Meanwhile, the Center for Women Studies of SU organized another people's organization called Development through Active Women Networking (DAWN) in 1991. The objectives of the organization were to protect the rights of women and improve women's status in the island.

The MMC continued to generate funds from donations for their maintenance and operating expenses. Every month, two collectors were elected among T-shirt vendors to collect donations from visitors daily. Donations and contributions from tourists and other donors averaged P8,000.00 per month (Bernardo, 2001). The disbursement scheme was as follows: 10% - incentives to collectors; 25% - incentives to MMC officials (chairman, vice-chairman, secretary, treasurer and auditor); and 65% for the maintenance of the community center, emergency fund, medicine, educational funds and reef protection (Brgy. Capt. Pascobillo, pers. com., 2001).

As part of its income-generating activities, MMC had a cottage with two rooms and a common toilet rented at P75.00 a night. The cottage earned around P10,000.00 per month during peak season – i.e., from November to March – and P5,000.00 per month during lean season (Bernardo, 2001).

Unfortunately, the aforementioned funds had caused internal and external problems to the MMC. As noted by Bernardo (2001), fund collections amounting to P82,000.00 could not be accounted for between 1988 and 1989. Moreover, the Apo Island barangay council resolved to collect fees on behalf of the Dauin municipal council in 1989 but

stopped collecting 3 months after for lack of appropriate legal instruments (i.e., municipal ordinance) to back up such collection. In 1993, the municipality of Dauin intervened again by passing a municipal ordinance that required the MMC to share a percentage of the donations to the municipal government. The MMC officials and members agreed to share the funds with the municipal government on the basis of specific project proposals that the municipal council would submit to the MMC.

Despite the setbacks, with the leadership of the MMC and in coordination with the barangay council, the Apo Island residents were able to generate, allocate, and disburse funds for the maintenance of the marine sanctuary and emergency needs of the community (Bernardo, 2001).

The Apo Island experience illustrates an island community's effort in protecting its fisheries and coral reef resources through partnership with both academic institutions and government programs (La Viña, 1999).

Coastal Environment Program (CEP) (1993)

In 1993, Apo Island was designated as part of the DENR's Coastal Environment Program (CEP) by virtue of DAO No. 19, Series of 1993, pursuant to Executive Order 192, which mandated the DENR to implement programs and projects on conservation and management of the Philippine environment.

The program was coordinated by the DENR Office of the Secretary, through the Coastal Environment Program Coordinating Office (CEPCO), and implemented by the DENR field offices in partnership with the local government units (LGUs), non-government organizations (NGOs) and people's organizations (POs). The CEP was founded on the concept of community-based coastal zone management. Its essence was to rehabilitate, protect, conserve and sustainably manage the country's coastal zone through the active participation of coastal communities and stakeholders. In this regard, DENR personnel collaborated with the MMC in conducting activities related to resource and environmental management of coastal ecosystems in Apo Island.

Through CEP, DENR implemented a contract reforestation program using *Gmelina* and mahogany trees in Apo Island. In 1995, DENR personnel also assisted in the formation and registration of the Apo Community Development Association (APCODA), through which an alternative livelihood project, a swine dispersal program, was implemented. However, the CEP projects suffered setbacks. The agroforestry project was not implemented on schedule because of the late disbursement of funds by the DENR. A hog-raising project was stopped because of a disease epidemic (Annie Omilig, pers. com., 2001).

Apo Island Protected Landscape and Seascape (1994 – Present)

In 1994, Apo Island and its vicinity (1.5 km of sea) was declared a protected landscape and seascape, pursuant to Republic Act No. 7586 known as the National Integrated

Protected Areas System (NIPAS) Act of 1992 and Presidential Proclamation No. 438, dated August 9, 1994 to ensure the preservation, conservation and development of its natural resources and environment.

In accordance with the NIPAS Act of 1992, which mandated that all protected areas should be under the control and administration of the DENR, AIPLS is presently being administered by the Protected Area Management Board (PAMB). The Board was chaired by the DENR Regional Executive Director (RED) who designated the Provincial Environment and Natural Resources Officer (PENRO) as presiding officer during PAMB meetings. The members of PAMB are: 1) the Provincial Planning & Development Officer; 2) Mayor of the Municipality of Dauin; 3) representative of Silliman University; and 4) Barangay Captain of Apo Island. As a policy-making body, the PAMB has the responsibility of setting the direction toward the sustainable development of AIPLS.

A Protected Area Superintendent (PASu) was appointed as the chief operating DENR officer in order to administer the day-to-day activities at the site. As provided for in DAO 2000 – 45, the duties and responsibilities of the PASu are categorized into three: regulatory, administrative and financial matters.

To collect the fees and charges specified in Board Resolution No. 1, Series of 1999, the PAMB hired Collection Clerks who are residents of the island. The PAMB also provided honoraria to *“bantay dagat”* or wardens which resulted in the shift from volunteerism to compensated labor. The amount and schedule of payment of honoraria, however, were

irregular which caused disappointment with the PAMB among the residents in general and *'bantay dagat'* in particular (Bernardo, 2001).

In compliance with the NIPAS Act of 1992 and Presidential Proclamation No. 438, the DENR personnel conducted community meetings and consultation and information dissemination activities. They also designated the buffer zones in the island.

The declaration of Apo Island as a protected landscape and seascape resulted in a shift in the management and operations of Apo Island from being community-based to being under the PAMB in behalf of the DENR. Bernardo (2001) noted that the shift in the management structure of the sanctuary from the MMC to the PAMB under the NIPAS Law was seen by some stakeholders as a step backward in terms of giving communities more authority, responsibility and accountability over their local resources. The Apo Island community has been successful in managing the sanctuary through participatory, voluntary and concerted community action prior to its establishment as protected landscape and seascape in accordance with the NIPAS Act of 1992.

CHALLENGES IN IMPLEMENTING THE R.A. No. 7586 (NIPAS ACT OF 1992)

Administrative Mechanisms

The essence of constituting the PAMB as provided in the NIPAS Act of 1992 is to sustainably manage the marine and coastal resources of the protected area through the active participation of the local communities and other stakeholders. Unclear delineation

of responsibilities of PAMB and other stakeholders causes difficulty in implementing programs and projects as well as achieving coordination and cooperation among stakeholders. Although the duties and functions of the PAMB as a body are spelled out in the NIPAS Act, there is ambiguity with regard to the roles and interrelationships of the stakeholders represented in the PAMB. There is no distinction in the functions and responsibilities of the different sectors involved in the management and operation of AIPLS. For instance, the role of the community in the present arrangement is limited to participating in the decision-making process in PAMB, just like any other stakeholders. The roles of the barangay council and the local people's organizations (POs) as well as their functional relationship with the PAMB are not specified, except for the membership of the barangay captain and PO representatives in the board.

Financial Management

The NIPAS Act of 1992 provided for the establishment of the Integrated Protected Areas Fund (IPAF) "for the purpose of promoting the sustained financing of the System." As defined in DENR Administrative Order No. 96 – 22 (Guidelines on the Establishment and Management of Integrated Protected Areas Fund), IPAF is a trust fund created or established for the purpose of promoting the sustained financing of the System. It consisted of taxes, donations, endowments, grants, fees, fines and all income/revenues generated from the operation of the System as defined in Section 16 of the NIPAS Act of 1992 and Section 58 of DAO 25, Series of 1992. Of the total amount in the IPAF, 25% formed part of the Central IPAF, which is a trust fund directly

administered by the IPAF Governing Board (GB). Seventy-five percent comprised the Protected Area Sub-fund, which was a trust fund retained by AIPLS and managed by its PAMB for the development and maintenance of the area in accordance with the IPAF-GB guidelines.

The NIPAS Act and DENR Administrative Order No. 96 – 22 provided protected areas the legal authority to collect fees and charges that formed part of the IPAF. Thus, the PAMB was able to generate a substantial amount of funds for the operation and maintenance of AIPLS.

The monthly income of PAMB was very much higher than the P8,000.00 average monthly income earned by the MMC when Apo Island was community-managed.

However, the residents were disappointed about the releases of IPAF. When the island was community-managed, the residents participated in the disbursement of funds and the funds were used for the maintenance of the sanctuary and emergency needs of the community.

On the other hand, the collection and disbursement of the IPAF were subject to the terms provided in DAO 96 – 22 and the Manual on the Establishment and Operationalization of the Integrated Protected Area Fund (IPAF) approved by the IPAF-Governing Board on October 12, 1998.

As indicated in the manual, all incomes generated from the use of the resources within the protected area must be remitted to the National Treasury. Thus, the collected fees and charges were deposited in a special account in the Land Bank of the Philippines (LBP) in accordance with the government accounting and auditing procedures.

Furthermore, Section 6 of DAO No. 96 – 22 provided that “the Protected Area Sub-fund shall be disbursed solely for the protection, maintenance, administration and management of the PA concerned and duly approved projects by the PAMB, in the amounts authorized by the Secretary or his duly designated representative as provided for in Section 66 of DAO No. 25, Series of 1992. It can be availed of by the protected area concerned upon submission of the Work and Financial Plan approved by the PAMB. The said proposal shall be approved by the DENR Secretary or his duly designated representative. The Secretary shall endorse the approved Work and Financial Plan for release of special budget under PA sub-fund by the Department of Budget and Management (DBM).”

In view of these provisions, the disbursement of funds in AIPLS from the Protected Area Sub-fund suffered from bureaucratic red tape. The process of disbursing the funds for the development, maintenance, administration and management of AIPLS was circuitous and took a long time, considering the flow of documents and the too many signatories. The process flow for availing of the PA Sub-fund involves many steps. With the approved work and financial plan, the PAMB requests for the disbursement of the PA Sub-fund through the DENR Regional Office; then to the Protected Area and Wildlife

Bureau (PAWB), as the Secretariat of the IPAF-GB, the staff evaluate and prepare the documents for the endorsement of the PAWB Director to the DENR Secretary; the DENR Secretary then approves and endorses the request to the Office of the Secretary of Department of Budget and Management (DBM); and the DBM releases the funds by issuing the advice of NCA to the Negros Oriental PENRO. Finally, upon the receipt of the said advice, the AIPLS management disburses the funds for its operation and maintenance.

In fact the AIPLS was able to avail of its Protected Area Sub-fund after one and a half years after it started collecting fees and charges for the use of its resources. The existing remittance procedures had created conflicts between DENR and the community to such an extent that some community members were pushing for the abolition of the PAMB and the return of the management of the sanctuary to the MMC (Bernardo, 200).

CONCLUSIONS AND RECOMMENDATIONS

Although the environmental protection and conservation undertaking was initiated by the academe, the environmental governance of Apo Island remains a multisectoral concern requiring a multisectoral approach. The different stakeholders have distinctly important roles in facilitating the sustainable development of the island. The NIPAS Act of 1992 provided the framework for the administration of the protected areas like the Apo Island. Under the Act, the Apo Island Protected Landscape and Seascape is under the control and administration of the DENR. The real powers were vested in the PAMB chaired by the DENR Regional Executive Director. Thus, the role of DENR is still pivotal

in providing an enabling policy environment and influencing a favorable sociopolitical and financing climate towards sustainable development of AIPLS.

The study findings have also underscored the significant roles of LGUs and academe in environmental governance. To be more effective, these roles need to be complementary rather than competing for good governance should be participatory, people-oriented, and involves government bodies, private sector agencies, social groups, communities, and the civil society at large in the process.

On financial procedures, apparently the disbursement of the IPAF involved a lot of bureaucratic red tape, thereby hampering the operation and maintenance of protected areas like the AIPLS. This necessitates the streamlining of the financial procedures of IPAF particularly the Protected Area Sub-fund.

To achieve this, the PAMB shall be given a degree of fiscal autonomy in the management and use of the Protected Area Sub-Fund. A legislative amendment to the NIPAS Act of 1992, particularly in Section 16, shall be made, giving the PAMB the authority to retain and disburse 75% of the IPAF without the need of depositing the said fund to the National Treasury.

The aforementioned recommendation is not without precedent. Republic Act of 8292, better known as the Higher Education Modernization Act of 1997, gives the same degree of autonomy to the State Universities and Colleges (SUCs). Similar but

applicable provisions should be incorporated in the NIPAS Act of 1992 providing the PAMB a degree of autonomy in the administration of its Protected Area Sub-fund. Subsequently, the Implementing Guidelines on the Establishment and Management of Integrated Protected Areas Fund shall be revised in accordance with the aforementioned legislative amendment as well as Government Accounting and Auditing Procedures.

Finally, following Lemos and Agrawal in designing and assessing strategies of environmental governance, it is critical also to focus not only on efficiency and equity, but also on criteria related to long-term sustainability and a concern for nature.

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