

PERSPECTIVES ON ENVIRONMENTAL AWARENESS AND ACTIONS: A COMPARATIVE STUDY OF TWO LOCAL GOVERNMENT UNITS¹

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WHY DO TWO NEIGHBORING COMMUNITIES relate differently to the environment where they are located? And why is one community more able than the other to develop and maintain a sustainable and community-based environmental program? In order to answer these questions, a comparative analysis of the local officials' perceptions about programs and concerns related to environmental protection and management was conducted on two local government units in northern Palawan, specifically San Vicente and an adjoining municipality. This adjoining municipality, is in the eastern side of northern Palawan while San Vicente is in the western side. Both municipalities have coastal and marine areas.

From May 12 to 27, 1996, twenty nine heads of local government offices, comprising 17 males and 12 females were interviewed. Of this total, fifteen respondents came from San Vicente, the community which has pursued a Strategic Environmental Plan-San Vicente Project (SEP-SVP) and is considered, for purposes of this study, a "more environmentally active" municipality. Fourteen were local government officials from the adjoining town, a municipality considered "less environmentally active" as it has not generally pursued a unified environmental agenda for its constituency. More males rather than females head the government offices which would explain the greater number of male over female respondents particularly in San Vicente. The table below shows the distribution of the respondents by the offices they represented.

¹ This paper is based on the data gathered by the author in San Vicente and by Susan Gavino who conducted the interview in the comparison municipality in Palawan. A detailed version is contained in the final report submitted to the Academy for Educational Development-Environmental Education and Communication Project (AED-GreenCom) which funded the research through a grant from USAID.

Table 1: Distribution of respondents by offices represented

San Vicente		Comparison Municipality	
Male	Female	Male	Female
Mayor	Municipal Council	Mayor	Local Government Operation
Municipal Council (2)			
Municipal Planning and Development	Municipal Social Services & Development	Municipal Council (3)	Human Resource Manager
Municipal Treasurer	Municipal Engineer	Municipal Planning and Development	Municipal Social Services & Development
Municipal Health	Municipal Assessor	Municipal Agriculture	Municipal Social Services
Municipal Agriculture	Municipal Registrar	Municipal Environment and Natural Resources	Municipal Registrar
Municipal Environment and Natural Resources			Municipal Accountant
Local National Police (under the DILG)			Municipal Budget Officer
Municipal Accountant			

The respondents were asked the same questions during the in-depth interviews. These interviews were conducted either at the respondents' respective offices or at another place they themselves chose at a time they considered most convenient. Questions were asked both in English and in the local dialects understood by the respondents (e.g. Tagalog, Cebuano, Ilonggo).

Data gathered from this study show that the respondents from the comparison municipality are older with an average age of 45.2 years, than those of San Vicente, with an average age of 42.8 years. Generally, the males are 14 years older (50.9 years) than the females (37.1 years). This difference in age may imply that prominent positions in the government, usually political, are held by older residents, especially male, particularly in remote traditional communities like San Vicente and the comparison municipality. All of the respondents are married and are generally degree holders, but female respondents had more years of schooling than their male counterpart. While all the female respondents have finished college, the four male respondents from both municipalities were only elementary and high school graduates. These male respondents were also generally older and may have been elected to their positions because of their prominence in the community. Despite being only undergraduates, these officials are able to hold public office because elected positions are not covered by civil service rules on educational qualifications,

All respondents are Catholics, except for one male respondent of San Vicente who is a Jehovah's Witness and two female respondents of the comparison community who are Baptists. Majority of the respondents from San Vicente are migrants from other provinces like Cebu, Cavite, Cagayan de Oro, Bicol, Panay, Leyte, Samar and Zamboanga del Sur while, those of the comparison community are from Negros Occidental and from other towns in Palawan and the city of Puerto Princesa (but the parents of the latter were migrants from other provinces). The respondents from the comparison municipality have been residents of this town longer (\bar{x} = 21.93 years) than those of San Vicente (\bar{x} = 8.85 years).

Data reveal that respondents from the comparison community have been in their present positions in the local government unit for about

4.64 years compared to 4.15 years of those from San Vicente. This fact also indicates that the local government officials of the adjacent municipality have been in government service longer than those of San Vicente (13.78 years and 12.9 years, respectively).

The same data also show that the local government officials of San Vicente are not as involved in community organizations as those of the adjacent community. However, the local officials of this adjoining community did not generally describe themselves as active in these organizations. It is likely that the duties of all these local government officials do not allow them much time to be involved in other community activities aside from their official functions. Table 2 summarizes some characteristics of the local government officials of San Vicente and the adjacent community.

Table 2: Some characteristics of local government officials of San Vicente and the Comparison Municipality

Characteristics	San Vicente		Comparison Municipality	
	Male	Female	Male	Female
Number of Respondents	10	5	7	7
Age	49.8	35.8	52.0	38.43
<i>Civil Status</i>				
Single	0	0	0	0
Married	10	5	7	7
Education (Years)	13.0	14.2	12.7	13.7
Religion	Catholic Jehovah's Witness	Catholic	Catholic	Catholic, Baptist
Years of Residence	6.9	10.8	22.71	21.14
Place of Origin	Puerto Princesa, Cebu, Cavite, Cagayan de Oro, Bicol, Palawan, Aklan	Leyte, Ormoc, Zamboanga del Sur, Samar, Palawan	Puerto Princesa, Negros Occidental, Palawan Province	Puerto Princesa Palawan Province
Years in present position in public office	4.9	3.4	3.86	5.43
Years in public office	13.8	12	15.14	12.43
Active Membership in community organization (Number)	0.4	1	1.43	0.86

Awareness of Environmental Conditions and Problems

Generally, the local government officials of San Vicente and the comparison municipality could not agree whether their respective environmental conditions are damaged or not. For example, respondents from the comparison municipality who are exposed to the same environmental condition considered their environment (both coastal and marine) as both damaged and not damaged. Those who perceived it as really damaged considered the role of human activities in the destruction. These respondents pointed out examples of damaged conditions such as soil erosion during rainy season, destruction of the coral reefs, and decrease in supply of fish and fingerlings. They believed these conditions have affected the local economy negatively (*may kahirapan*).

Meanwhile, respondents from San Vicente assessed the environmental condition of the community in terms of the effects of the interventions made by the local government. Although they also considered the environmental condition of San Vicente as either partly devastated or rehabilitated, most of them claimed that the abusive use of resources is gradually decreasing because of environmental programs such as rehabilitation projects and preventive programs which have been initiated in the community. In other words, according to the respondents, if it were not only for the interventions being undertaken, the deterioration of the environment of San Vicente would have become as serious as the situation before the environmental program was introduced.

Both communities blamed the destruction of their environment on illegal cutting of trees and *kaingin* in the forest areas, illegal fishing, and over-fishing in the marine areas. Illegal fishing includes the use of cyanide and dynamite which damage the corals and other marine life while over-fishing is caused by purse seiner and other devices, like compressor and electrical lights which are commercial in scale. These devices do not only capture young fish, but also destroy the corals. Although the abuse of environmental resources, particularly the use of dynamite, cyanide, and compressor had been reduced in San Vicente, the practice continues to proliferate in the adjoining town.

According to the respondents, these illegal activities are not only done by residents of the community, but also by migrants. It was reported that recent arrivals in the community usually open a forest area for farming by "slash-and-burn" method. Meanwhile, some of those who engage in illegal fishing are reported to be transient fisherfolk who do not stay long in the community. A respondent from the adjoining community said that they come from Mindoro and Cavite and from other provinces. This is also true in the case of San Vicente.

This observation, however, has little bearing on the two communities' assessment of the seriousness of the problem. The local government officials of both municipalities did not consider the environmental problem serious (*walang masyadong problema*), particularly when they compared their situation with other places. Those who said that the condition is all right (*ayos pa*) cited figures such as the forest cover is still 75% to 80% intact and coral areas within three miles from the shoreline are "okay." Therefore, according to the respondents from the comparison municipality, the condition is not really that alarming as the situation in other provinces like Cebu. According to them, the condition has not yet reached a critical stage when resources would be very scarce and life would become very difficult. Both respondent groups indicated that there are still resources available and pointed out that something is being done to check the deteriorating condition. However, they believed that the condition will inevitably worsen if no interventions are introduced immediately.

Realization of Local Environmental Functions

The local government officials of both San Vicente and the comparison municipality are aware of the existence of the Local Government Code of 1991 and of several changes which have taken place in both municipalities since its implementation. In particular, the respondents mentioned the devolution process and its effect on local funding. This process has also placed several offices from the national level under the local administration, a move which has financially burdened the local governments.

One of the provisions of this Code is the protection and management of environmental resources. In response to this provision, the local government of San Vicente established its environmental program known as Strategic Environmental Plan-San Vicente Project (SEP-SVP) whose over-riding strategy is community-based resource management. All local government units, barangay officials, and representatives from the people's organizations were involved during the data-gathering (rural rapid appraisal) and planning stages of the program.

However, similar efforts have yet to be undertaken in the comparison municipality. In fact, the local government officials of this community could not agree among themselves whether the local environmental functions are already in place. Moreover, respondents reported that although the legislative body of the comparison municipality tried to do the task, it is faced with the problem related to the varying interpretations of the provisions of the Local Government Code. This awkward state of affairs is exemplified by the number of different offices managing several environmental projects being undertaken in the adjoining town. In addition to poor coordination, these environmental projects, according to the respondents of this community, are further hampered by either the lack of funds or, if there are any, by the delay in their release. Respondents from the comparison municipality claimed that the previous administration, more than what the present has ever accomplished, had initiated more projects, a number of which concerned the environment.

Needless to say, there are lots of gray areas in the local government environmental functions that have to be resolved. For example, the mayor of San Vicente pointed to the alleged interference of the Department of Environment and Natural Resources (DENR) on the activities of the local government related to the operation of its environmental program, like the communal forest project, which resulted in a court case. Meanwhile, some respondents of the comparison municipality are disappointed with their local officials for allowing the provincial government to take over the local mining activities which have been supposedly devolved. In their perception, the "local government units are given the responsibility to take care of their own environment, but without the authority" to manage their

own programs even if this is mandated by the local government code. It is the widespread belief that unless these conflicting interpretations of the local government code are clarified, the community's development programs have little chance of succeeding.

Local government officials of both municipalities are aware of the applicability of national policies and laws on the environment of San Vicente and the adjoining municipality. According to the respondents, these policies serve as basis for their actions if no local ordinances are available. For example, among the legal initiatives that have been undertaken in these areas is the introduction of laws on the total log ban, prohibition of illegal activities in the forest, illegal fishing with the use of dynamite and cyanide, and the prohibition of commercial fishing in municipal waters. All local ordinances passed by San Vicente and the comparison municipality have similar concerns except one. While the adjacent town established communal fishing grounds where all fishing activities, as long as they are legal, are allowed, San Vicente established fish sanctuaries where the "no fishing policy" is imposed. According to the respondents of both municipalities, they have ordinances prohibiting the use of compressor, strong electrical lights, cyanide, and dynamite in fishing, and illegal cutting of trees.

Respondents from the comparison community reported two ordinances which are not found in San Vicente: one, the regulation which requires the location of rice mills away from residential areas because of pollution; and two, the prohibition on washing of chemical sprayers in rivers. For its part, San Vicente has developed a proposed land and water use for a zoning ordinance in connection with the Environmentally Critical Areas Network (ECAN) project presently in progress. Similarly, the adjacent municipality is involved in ECAN which is actually a province-wide project. ECAN delineates areas in the community according to their uses and prohibits any illegal utilization of resources in these areas.

Except for one official who had personally encountered an incident involving a breach of the local environmental law, the local government officials of San Vicente and the adjoining town are surprisingly unaware of any laws or policies that run counter to their own policies on sound environmental management. Yet, it was evident in San Vicente, for

example, that the quarrying of sand and gravel and the operation of silica mining in the shoreline through open pit system had worsened erosion and siltation problems in the area. The same problem is also experienced in the comparison municipality. These environmental problems have attracted negative reactions from the community in San Vicente.

Respondents of both communities differed markedly in their views regarding the issue of responsibility over environmental problems. On the one hand, the local government officials of San Vicente considered the task of solving environmental problems as the responsibility of the people and the community. They explained that such task is the major responsibility of the people because they are directly affected by the consequences of environmental problems like the scarcity of resources. However, they stressed the need for the community to be supported by the local government unit in order to enhance its capability to implement environmental programs.

On the other hand, although the respondents from the comparison municipality believed that solving environmental problem is the task of the government, they were not convinced this was the sole responsibility of the local government unit. Most of them mentioned the role of line agencies such as the Department of Environment and Natural Resources (DENR) and the Community Environment and Natural Resources (CENRO), and the support of the local agencies like the Philippine National Police (PNP), and the Municipal Agriculture Office (MAO) in solving environmental problems. Respondents from the comparison community believed that these government agencies are the most responsible organizations because they are mandated by law. Just recently, both municipalities created the Municipal Environment and Natural Resources Office (MENRO) to monitor and regulate environmental activities in their respective areas.

Sectoral Participation in Environmental Affairs

In terms of community participation in environmental affairs, respondents of San Vicente considered their local government unit, the members of their community, and their people's organizations as active in the enforcement of environmental ordinances. Their claim is supported by

the number of apprehensions and cases of violations against illegal fishers and loggers filed by authorized agencies such as the Philippine National Police and by community members and people's organizations who monitor and report the violations. However, the respondents of San Vicente also explained that some violators who were not constant offenders or who did not commit a grave offense were not apprehended outright. They were either given lectures on environmental awareness or made to promise not to commit the same violation again. This information supports San Vicente's position that policing the environment also includes the task of making people aware of their responsibilities.

Although the respondents of the adjoining municipality claimed, in general, that the local government unit in their town is active in enforcing environmental ordinances, they did not describe the involvement of the community members, the non-government organizations, and the people's organizations. Their responses revealed that the enforcement of environmental ordinances in this town relied so much on the activities of the concerned government agencies. Such an attitude takes largely for granted the fact that the absence of support from the community could hamper the strict and serious enforcement of ordinances. By and large, these observations tend to cast doubt on the ability of the local government unit of the comparison municipality in enforcing local environmental ordinances.

As mentioned earlier, most of the environmental projects in San Vicente have been implemented in coordination with the people's organizations in specific barangays. Respondents from this municipality stressed that project implementation came only after members of the community had been organized to actualize and to maintain projects considered appropriate to the local conditions. Most of these are in the marine areas and include projects such as the construction of fish-attracting devices, the establishment of fish sanctuary, development of artificial reefs, the introduction of fish cage technology, and other related projects. The only major project reported in the upland areas of San Vicente includes the designation of a communal forest where regulated forest use could be done by the people's organizations in the area and reforestation, particularly in individual farm lots not suited for agriculture use.

All of these projects mentioned above were initiated by the local government of San Vicente through the Resource Management Center (RMC) and other agencies in the municipality like the Municipal Agriculture Office (MAO) and the Second Palawan Integrated Area Development Project (SPIADP). Results showed that these projects had some success, particularly in the aspect of decreased illegal activities. Still, some respondents believed that much has yet to be done before one could really say with certainty that these projects are successful. For example, the operation of the communal forest for commercial disposal was reported as a failure. However, the failure was attributed not to the reluctance of the community to accept it, but to the intervention by the provincial office of the DENR which questioned the legality of cutting forest trees in the communal forest for commercial purposes. A case of illegal logging is now filed in court against two personnel of the Resource Management Center (RMC). The operation of the communal forest project has been stopped and the beneficiaries, particularly the Tagbanwas in the area who were involved in its operation, have been adversely affected by this negative turn of event. Respondents involved in the communal forest project reported that these people have already started enjoying the benefits brought by this project such as increased income.

On the other hand, environmental projects in the comparison municipality are being managed by specific government agencies in the municipality like the Department of Environment and Natural Resources (DENR), the Community Environment and Natural Resources Office (CENRO), the Municipal Environment and Natural Resources Office (MENRO) and Municipal Agriculture Office (MAO). These projects include forest seedling distribution, communal forest, reforestation, hillside farming, mangrove reforestation, communal fishing ground, and dam construction. Yet, the local government officials of this town generally considered these projects unsuccessful because, according to them, these did not only solicit rejection from the community but also lacked supervision, monitoring, follow-up, and maintenance due to lack of funds. Some respondents reported that a number of residents in the area rejected projects like mangrove reforestation because these would obstruct their shell gathering activity. It was also reported that no specific community

organizations are actively involved either in managing the projects mentioned or in their implementation.

As far as community support for government environmental programs is concerned, the small fisherfolk and farmers of San Vicente, who have shown their concern for preserving nature through sustainable use, have been cited by the respondents as the most ecologically-aware sector. However, respondents also mentioned that some small fisherfolk and farmers were involved in illegal activities. It has been widely observed that dire needs (*pangangailangan at kahirapan*) usually force these people to resort to environmentally damaging practices. Meanwhile, those whose single personal interest is to make more money through environmentally-deleterious practices have been cited by the local government officials of San Vicente as the sector most unsupportive of any environmental initiatives. Included in the respondents' list of unsupportive groups are commercial fisherfolk and big business people who are also engaged in illegal activities, like illegal logging and the use of prohibited fishing equipment. In the same way, respondents from the adjoining municipality have also drawn a similar list identifying the groups least supportive of environmental projects.

Perceived Benefits and Barriers

Respondents generally considered the economic benefits for the people and the local government units as the favorable gains that can be expected from solving environmental problems. Local government officials of both municipalities believed that the success of the environmental programs will lead to sustainable use of resources and consequently increase people's employment opportunities and income on the one hand, and the local government revenues on the other.

To the respondents from San Vicente, however, these benefits could only be realized after investing substantial amount of money in environmental projects. They believe this would leave the local government in a financially vulnerable situation. As a result, some oppositions have emerged from sectors of the community who do not have a favorable opinion of the environmental priorities of the local

government. For instance, the community-based resource management program of San Vicente became an issue against the mayor during the last election because the opposition party claimed that the program was a failure and a waste of money. The election victory of the incumbent mayor, however, suggested that these environmental issues were not taken seriously by the electorate. According to some respondents who were closely involved with the program, the mayor's reelection further encouraged him to pursue his environmental program.

As the data reveal, the local governments of both the comparison municipality and San Vicente face many obstacles in their efforts to enforce ordinances aimed at solving environmental problems. Foremost of these barriers identified as common to both municipalities is the lack of funds which ultimately led to other problems such as the lack of personnel and transportation and communication facilities to run after violators. Lack of funds also created problems related to the filing of cases in courts against violators. Some respondents perceived a lack of support from the government in this endeavor. Moreover, the respondents also pointed out that people in the community have lost trust in the capability of the local government to run after violators because the officials concerned have been slow to respond to reports. Respondents attributed their respective government's inability to mobilize its resources to the crippling financial problems besetting both municipalities.

Respondents of both municipalities have also pointed to the community members' ignorance of environmental laws as another barrier to solving environmental problems. They observed that there are community members who simply do not understand the process of complying with requirements to legalize their use of resources, for instance, the cutting of trees for domestic use. In their observation, people have negative perceptions of environmental programs because they do not understand the adverse consequences of indiscriminate and unregulated use of environmental resources. Moreover, it was also pointed out that there are community members who refuse to report illegal activities because they are either related to the violators or are afraid of reprisals, especially from "prominent" individuals. The latter response could be attributed to the community members' desire to maintain social ties with

relations of all types as well as to the fear for their lives if they come into conflict with "powerful" people. These particular reactions from the community point to the urgent need to make people understand and internalize all environmental issues and concerns.

Attitudinal barriers are seen by San Vicente respondents as further posing a challenge in solving environmental problems. These are manifested in the lack of personal commitment to and knowledge of environmental issues among community members, and in their unwillingness to work with people coming from another cultural background. Respondents from San Vicente observed that there are community members who hold a negative attitude toward some environmental projects because these are run by individuals who belong to other ethnic groups who are new in the community (for example, community organizers coming from Cebu). Furthermore, the respondents pointed out that there are people who are more concerned with their own personal interest rather than with the welfare of the community in general. As mentioned earlier, economic constraints have been identified as the single factor underlying the people's tendency to abuse nature. Their need to augment their income consequently lead them to resort to environmentally-damaging activities such as *kaingin*. The Batak and Tagbanwa indigenous cultural communities as well as the migrants, given their economically vulnerable situation, are particularly notorious for these environmentally deleterious practices.

Problems of a political nature further complicate the whole situation. For instance, ordinances or projects could not be enforced or implemented because of some political problems such as the involvement in illegal activities of some local government officials who take advantage of their political power to gain access to valuable natural resources. Partisan politics has also undermined support for environmental programs. For example, programs supported by one political party cannot expect to be supported by the opposing party. Misunderstanding with the mayor was also reported as one reason for the divided support of projects in the adjoining town.

Needed Skills, Technology and Support Services

In the area of skills, technology, and other support services necessary for the successful management of environmental projects, respondents of both San Vicente and the adjacent town stressed that their local government officials as well as the individual members of their respective communities must be knowledgeable on environmental conditions and must understand the effects of human activities on the environment. Such skills are believed to be vitally necessary in making these individuals willing and personally committed to work for the protection of the environment. Both groups of respondents believed that the ability of local officials to effectively implement environmental laws and policies largely depends on their knowledge of environmental issues and concerns since such knowledge will enable them to act accordingly with commitment and personal concern. Respondents from the adjoining municipality in particular deemed it crucial that every local official is familiar with his functions either as an executive, a legislator, or a manager in order to maintain proper coordination with other offices and thereby avoid overlapping of functions. In the same vein, both groups of respondents underscored the importance of the local officials' willingness and ability to initiate consultations and dialogues with the people in order to gather feedback from the community. Most of all, the respondents stressed that a local official must be just and fair in all his actions and avoid politicking as much as possible. The same skills were also reported to be immensely useful in implementing sound environmental management decisions and practices. Generally, the respondents believed that knowledge of the present circumstances and the ability to see the consequences of present actions should be considered by local officials as basis for decision making.

The local officials of San Vicente and the adjacent town agreed that a number of important factors have to be taken into account in order to make their respective communities active in environmental protection and management. Foremost of these factors is the introduction of appropriate technology which could enhance the livelihood projects of the community and consequently draw people away from harmful

environmental activities. It is widely perceived that the acquisition of livelihood skills is necessary in order that alternative means of making a living could be found without further destruction of environmental resources through over-use. A second factor calls for regularly organized training and seminars to facilitate the transfer of technology. The third factor is making financial assistance accessible to the people in order to help them start any livelihood program. The fourth factor is the improvement of transportation and communication facilities in the two municipalities in order to provide mobility for the people and facilitate the marketing of products in and out of the community.

It is interesting to note that some local officials of the comparison municipality have thought of having technical consultants from other places in order to assist the local government in developing its own environmental program. They have probably realized, as the San Vicente officials have, that there is a need to learn from other people who are experts in the field of environmental resource management. According to a Sangguniang Bayan (SB) respondent who was directly involved in the planning, this was actually the experience of San Vicente when the municipal government started with its environmental programs. Consequently, consultants from other existing environmental projects, like the Central Visayas Regional Project (CVRP) were invited to assist in the establishment of SEP-SVP. In fact, most of the community organizers of San Vicente came from Cebu who were formerly involved in the environmental program of that province.

Gender Differences on Environmental Issues

Male and female local officials differed generally in their views on environmental issues depending on the degree of their involvement in environmental work. Those who are more active in environmental programs assigned the responsibility of protecting the environment to the people in the community who will be directly affected. On the other hand, the less active male and female officials attributed this task to the concerned agencies, the DENR and other local government units as these agencies, according to them, were given the functions and authority by

law. Although all respondents pointed out that financial constraints on the part of the local government created barriers to efforts toward solving environmental problems in their respective municipalities, the more active males added the lack of environmental knowledge among the people and some government officials as another contributing factor. Females who are more active also cited that this lack of knowledge often accompanies the negative attitude of some people toward environmental programs.

Less active males and females, for their part, pointed out that due to poverty, some people might have violated some environmental laws in order to make a living. Because of this, they suggested that people must have skills in other forms of livelihood technology so that they could augment their income or find alternative means of deriving income. Although both sexes believed that environmental knowledge is needed to make people effectively involved in environmental management, more active males also thought that people must develop personal concern and commitment for the undertaking.

More active males and less active females also differed in their views regarding the skills that they think local government officials must have so that they could effectively implement environmental laws and policies. While the more active male believed that political will and legal knowledge are necessary, the less active females believed that managerial skills, particularly in environmental management, have to be given more concern. The same holds true with the responses of both more active females and less active males.

Furthermore, more active males and females believed that a local government official must have foresight in implementing sound environmental management decisions and practices. They described such official as having the ability to see the future scenario based on the actions about the environment he/she is going to make now and the consequences that will follow if he/she is not going to make such decisions today about the environment. This also requires the official to be knowledgeable in environmental issues in order to do the task effectively. Foremost for this group of respondents is that a local official must be socially conscious in his/her decisions and, in making such decisions, must always consider the benefits that people will get from them.

Barangay-Poblacion Differences on Environmental Issues

While all respondents generally assessed their respective environmental conditions as not really damaged, there were barangay respondents from the comparison municipality who considered their environment to have been destroyed by indiscriminate human activities. But these respondents remarked that something could still be done to prevent the worst. Meanwhile, the poblacion respondents, particularly those who compared their situations with badly damaged provinces like Cebu, and basing their evaluation on the effects of the environmental intervention programs they had undertaken, assessed their situation as not serious.

It was observed that poblacion respondents also have a different explanation of their assessment of the environmental condition if examined by municipality. The respondents of San Vicente felt that the decrease in illegal activities in their locality restored their environment. But the respondents of the adjoining town did not see the drastic effects of some illegal activities on their environment. In other words, they did not perceive the environmental problem in their municipality as serious.

Barangay respondents of the adjacent town observed that the community members have done little to curb environmental deterioration and even remarked that these people also are engaged in illegal activities. This observation is expected because no people's organizations have been institutionalized in the barangay level which could significantly help in the implementation and monitoring of some environmental projects as reported earlier in this paper. By contrast, the poblacion respondents of the adjoining municipality believed that the community members have contributed something to check environmental degradation with projects such as tree planting, cleanliness drive, and reporting of illegal activities.

In general, barangay respondents have observed that there are community members who are afraid to report the violations because of possible reprisals, particularly when those involved are perceived to be powerful in the community--politically and economically. They also mentioned that some individuals were disappointed due to the delayed responses of the government to act on their reports or request for

assistance. And all these reasons probably resulted to the lack of interest among some community members to be further involved and are considered as barriers to the implementation of environmental programs.

Meanwhile, local government officials of San Vicente residing in the barangays have observed that ethnocentric attitude also hampered the implementation of environmental programs. They explained that some early residents in the community had a negative attitude toward the program particularly when they saw this as a threat to their traditional way of utilizing the environment, or when they felt overpowered by the newcomers in the control of their affairs. It was also reported that the high salary received by environmental workers of the local government drew negative comments from those who have been in the government before these workers were hired.

Generally, the poblacion respondents of the comparison municipality observed that the community members are positive in their responses to the implementation of environmental programs and enforcement of environmental laws and policies. But the barangay respondents noticed that community members were negative at the outset, but later accepted the programs. Nevertheless, respondents believed there will always be community members who will resort to illegal activities just to pursue their personal interest.

Probably, because the barangay respondents of the adjoining town realized the failure of the community to be actively involved in environmental work, they believed that the people need leadership skills to organize themselves and be united in solving environmental problems. Those from the poblacion suggested that they learn income-generating skills which could help them find alternative ways of making a living, particularly those engaged in illegal activities. These efforts must be coupled with enough environmental awareness and determination to really do their share in environmental protection and management.

Meanwhile, respondents of San Vicente and the adjoining municipality differed in their views on what skills local government officials need in relation to environmental work. Barangay respondents of San Vicente believed that local government officials must consider the people foremost in whatever environmental programs they would envision. Their

counterparts in the adjacent town mentioned about the need for skills in the conduct of public hearing to get people's sentiments. Both respondents, however, emphasized the need to develop persuasive skills to motivate people and resolve conflicts. As well, they stressed the importance of legislative skills which could plan, implement, and enforce ordinances which could benefit more people.

The poblacion respondents of the comparison municipality were more concerned with the need for local government officials to be familiar with their functions. They believed that government officials must have good educational qualification. Moreover, they stressed the need for their officials to have the ability to plan programs and manage them, as well as to improve their technical knowledge about environmental work. On top of these, they expected their officials to be sincere and firm in upholding whatever the law mandates. These skills were also mentioned by the poblacion respondents of San Vicente who also stressed the need for their officials to have the foresight and the wisdom in the exercise of their authority especially in relation to environmental endeavors.

Generally, both barangay and poblacion respondents from the adjacent town felt the need for financial assistance from outside sources in order to improve their project's capabilities in terms of personnel, technical, and material support for their environmental work. The poblacion respondents of San Vicente saw the necessity of providing the people with livelihood technology, particularly food processing. The barangay respondents, on the other hand, opted for agricultural technology which will not only increase food production, but will also strengthen efforts aimed at preserving the environment.

Factors that Determine Involvement in Environmental Management

Several factors related to environmental work derived from existing studies were presented to the respondents in order for them to determine the degree of influence these factors have in getting people to be actively involved in environmental management (refer to Table 3). Of all these factors, only approval and support from family and influential people were considered by the local officials of San Vicente as important while the rest

were considered as crucial. However, the degree of how crucial these factors were could also be determined when the weighted mean of their ratings is examined.

For example, it was observed that local officials of San Vicente considered local government support as a very crucial factor. This is logical because they considered environmental protection and management as the major responsibility of the community. For them, in order for people to take an active role, support from the local government must be available and this must include technical, material and financial assistance. In fact, it is shown that these officials rated second access to appropriate technology and technical support services and training. These local officials also considered equally vital the understanding of people about environmental problems. The data show that it is the task of the local government to make people aware of the seriousness of environmental problems and to support their initiatives in protecting and preserving the environment.

The local government officials of the comparison municipality considered only the above mentioned factors as important and helpful. Foremost among those which they rated important is access to credit and funds which they believe could make people active in environmental work. The local officials of this town also considered personal investment in terms of time, money and materials important for motivating people while the local officials of San Vicente thought of this factor as crucial. Furthermore, respondents from this adjacent town, unlike those of San Vicente, did not consider highly social relationship and an increased family income as factors which could enhance people's participation. In general, however, both groups of respondents believed that all these factors, including traditional folk beliefs, are relevant. Their varied experiences about environmental management could possibly explain the different ratings they made.

The respondents from the adjoining community mentioned financial matters in their ratings more often than the respondents from San Vicente. This may suggest that the respondents from this town considered financial constraint as a reason for their inability to establish some environmental projects or for the failure of other projects.

Furthermore, it underscores the necessity to plan environmental programs which allow people access to financing. Since the support from the local government unit as a factor is rated second in importance by the respondents, this may be translated as either providing the people directly with funding or assisting them in securing funds from outside sources.

Male and female doers did not differ in the rating they made on the relevance of some factors in influencing one's involvement in environmental management, except on their ratings on enforcement of environmental ordinances and social approval of significant others (refer to Table 3). It is in the responses of non-doers that some differences are explicit. Foremost, male non-doers considered access to credit and understanding of environmental problems as crucial to make one active, a factor their female non-doer counterparts deemed important. They also differed in what they considered as important or helpful. Male non-doers rated values, beliefs, practices, and social approval only as helpful, while the female non-doers rated the same as important. And while maintenance of smooth interpersonal relationship and increased family income are considered as important by the male non-doers, these are considered only as helpful by the female non-doers.

In terms of residence, the poblacion respondents believed that people must have access to credit or funds and must have personal investment in terms of time, money, and materials to start their own projects. But according to them, these have to be reinforced also by their understanding of environmental problems. They considered these three factors, together with local government support, as crucial. Meanwhile, barangay respondents believed that support from the local government unit is more crucial than access to credit and funds which they considered only important.

Table 3 shows a comparative picture of how the respondents, categorized as more active and less active (by gender), and in terms of their residence, rated the factors believed to influence one's involvement in environmental activities.

Table 3: Factors influencing people to be actively involved in environmental management

FACTORS	DOER			NON-DOER			URB AN	RUR AL
	M	F	C*	M	F	C*		
1. Values, beliefs and practices.	C	C	C	H	I	H	I	I
2. Understanding of environmental problems	C	C	C	C	I	I	I	C
3. Existence of environmental laws and ordinances	C	C	C	I	I	I	I	C
4. Consistent enforcement of laws and ordinances	I	C	C	I	I	I	I	I
5. LGU support	C	C	C	I	I	I	C	C
6. Access to appropriate technology.	C	C	C	I	I	I	I	I
7. Access to technical support services and trainings	C	C	C	I	I	I	I	I
8. Access to credits and funds.	C	C	C	C	I	I	I	C
9. Personal investment in terms of time, money and materials	C	C	C	I	I	I	I	C
10. Approval and support of family and influential people.	C	I	I	H	I	H	I	I
11. Maintenance of smooth interpersonal relationship	C	C	C	I	H	H	I	I
12. Increased family income.	C	C	C	I	H	H	I	I
13. Traditional folk beliefs.	H	H	H	H	H	H	H	H

C* - Combined

Ratings: C - Crucial, I - Important, H - Helpful

Summary and Recommendation

The study shows that the community members' perceptions of the conditions of their environment can influence the actions of the local government unit. However, the problem is not so simple as initiating environmental policies because the existing priorities, technical knowledge and skills, resources both human and financial coming from within and outside the community, as well as available opportunities and supports from the people can also affect the viability of environmental programs. Similarly, economic and political climate may be barriers to the development of the program. It has been established that not everyone can be expected to possess similar environmental awareness and priorities which could influence and motivate ecologically-sound conduct.

One of the most important findings of this study is that an effective political leadership with a clear vision and mission to sustain the environment for the future is vital. In this context, leadership means the ability to influence others either directly or indirectly to support the programs of the local government on environment. Yet, although the importance of quality leadership cannot be overstressed, it is the democratic approach to environmental programs which is considered more crucial for the success of environmental initiatives. It has been widely accepted that popular support from the people will ensure that the program will be self-sustaining even when the political leader is no longer in office. It is the people themselves who will take the initiative and responsibility, regardless of the person in office, to make the program work. After all, it is the community members themselves who will either benefit from the success of their project or be disadvantaged when something goes wrong. It is an accepted fact that getting popular support depends on developing a positive environmental awareness and social consciousness among the people who will initiate positive individual actions toward the care of the environment. Therefore, the involvement of people's organizations or non-government organization in the planning process, implementation, and monitoring is a vital component of every community-based resource management program. The organization becomes obligated to achieve results and be responsible for its project's sustainability.

But some questions need to be resolved first. What are the priorities of the local government unit? Should it sacrifice the environment for the sake of economic development which comes in the form of infrastructure and disturbance of the natural processes? Who will benefit and how many will be affected? Ideally, development efforts must always include policies aimed at maintaining a balance between the use of natural resources and the conservation of the natural ecosystem. Furthermore, their products must benefit not just the elite but the majority of the population. ❖