

Stakeholders' Awareness and Participation in Coastal Resource Management (CRM) in Villa Beach, Iloilo City, Philippines

BRIAN GIL S. SARINAS

<http://orcid.org/0000-0001-5927-6763>
briangilsarinas@gmail.com
John B. Lacson Foundation Maritime University-Arevalo
Iloilo City, Philippines

TERESITA A. PARAGON

<http://orcid.org/0000-0002-0260-1948>
paragon.teresita@gmail.com
John B. Lacson Foundation Maritime University-Arevalo
Iloilo City, Philippines

Gunning Fog Index: 10.50 Originality: 100% Grammae Check: 96%
Flesch Reading Ease: 52.21 Plagiarism: 0%

ABSTRACT

Villa Beach is one of the tourist destinations in Iloilo City because of its rich culture such as Paraw Regatta and seafood delicacies. However, coastal resource management (CRM) seemed to be neglected among the locals of the beach as evidenced by poor waste management beneath the shore. Thus, this study was conducted. Specifically, this study delved into the awareness and participation of locals on CRM when classified according to zonation. Furthermore, a significant difference in the awareness and participation and relationship was sought. This

study was conducted in January 2015. The respondents of this survey were the locals of Villa Beach from Zones 1 to 3 taken through stratified random sampling. All tests were set at .05 level of significance. The results showed that locals had “high” awareness and they abide by the laws on CRM. Furthermore, there was a significant difference in the level of awareness and participation on CRM in terms of zonation. Finally, there was a significant relationship in the awareness and participation of locals on the CRM. It is recommended that the locals and the local government should cooperate one another to manage the coastal resources of the beach from environmental degradation due to anthropogenic activities. The local government unit (LGU) should create a monitoring procedure in terms of the participation of the locals of Villa beach in coastal resource management.

Keywords - coast, coastal resources, coastal resource management (CRM), Villa Beach, Iloilo City, Philippines

INTRODUCTION

Coastal zone is the most diverse and productive ecosystem comprising of mangroves, wetlands, tidelands, and coral reefs. It is where marine species feed and interact, recycling of nutrients, and acts as a buffer against storm, erosion, and pollution (Fazi & Flewwelling, 2000). This is the area where most of the families depend their living because of the rich resources (La Viña, 2002).

The land, forests, coastal waters and wetlands, sand minerals, hydrocarbons, and other living coastal organisms are considered as natural coastal resources (Walters, 1998; Jin, Ran, & Zhang, 2002). Their uses are divided into two: extractive (living or non-living) and non-extractive (tourism, recreation and designation as protected areas). Other uses include shipping and port development and industrial and urban development (La Viña, 2002). To preserve balance, minimize environmental degradation, and maximize the benefits of the stakeholders, a sustainable development strategy is needed (Fazi & Flewwelling, 2000). This is where coastal resource management comes in. It could be community-based coastal resource management or co-management concept (Parras, 2001).

Community-based coastal resource management according to Pomeroy and Carlos (1997) refers to a process by which the locals or residents of the coast are given the opportunity as well as responsibility to manage their resources for their well being. Meanwhile, co-management concept seeks support from the

government (Parras, 2001).

From this study, the local government unit (LGU) of Iloilo City could look into the perspectives of the locals in terms of their awareness and participation in the management and preservation of coastal resources of Villa Beach, Iloilo City, Philippines. In this manner, the LGU could create and implement other policies for the preservation of the beach.

OBJECTIVES OF THE STUDY

This study aimed to determine the awareness and participation in the coastal resource management (CRM) of the locals in Sto. Niño Sur, Villa, Iloilo City, Philippines. Specifically, this investigation aimed to determine the (1) awareness of the locals on coastal resource management when taken as an entire group and when classified according to zone; (2) the frequency of participation of the locals on coastal resource management when taken as an entire group and when classified according to zone; (3) the significant difference in the awareness of the locals on coastal resource management when respondents are classified according to zone; (4) the significant difference in the frequency of participation of the locals on coastal resource management when respondents are classified according to zone; and (5) the significant relationship in the awareness and participation of the locals on coastal resource management.

METHODOLOGY

Respondents

The respondents of this study were the locals of Sto. Niño Sur, Villa, Iloilo City. Stratified random was employed to gather data from the respondents from Zone 1 to 3. One member of the household served as a sample. Table 1 shows the profile of the respondents.

Table 1. Profile of the respondents

Category	f	%
A. Entire Group	277	100
B. Zone		
One (1)	79	29
Two (2)	79	29
Three (3)	119	43

Instrument

The researchers used the self-administered questionnaire (SAQ) for gathering data needed in determining the awareness and participation of locals on CRM in Brgy. Sto. Niño Sur, Villa, Iloilo City.

The SAQ consists of three parts. Part I contains the profile of the respondents. Part II contains information regarding the level of awareness of the locals on coastal resources management. This part of the questionnaire asked the respondents about their extent of consciousness on CRM. Part III contains information about the participation of the locals on CRM. This portion allowed the researchers to gauge on various ways in which the residents participate on CRM.

All respondents were notified about the aim of the study. They were informed that their participation was voluntary and their responses were handled anonymously. All responses were kept confidential.

Data Collection

This study was conducted in January 2015. A letter of approval to conduct the study was sent to the Barangay Chairman of Brgy. Sto. Niño Sur, Villa, Iloilo City. A list of residents was secured to randomize the samples using fishbowl technique. The researchers administered the instrument in a house to house manner. Only one member of the family served as the respondent.

Data Analysis

The following descriptive and inferential tests were used:

1. Frequency distribution was used to determine the profile of the respondents;
2. Rank was used to order responses of participation of locals on CRM;
3. Mean was used to determine the awareness on CRM. The scale and description are shown as:

<i>Mean Scale</i>	<i>Description</i>
3.02 to 4.0	High (More knowledge on the activities on CRM)
2.01 to 3.01	Average (Moderate knowledge on the activities on CRM)
1.0 to 2.0	Low (Little knowledge on the activities on CRM)

4. Standard deviation was used to determine the homogeneity of responses in the means of the awareness on CRM.

5. One-way analysis of variance (ANOVA) was used to test for the significant differences of the awareness and participation on CRM when respondents were classified according to zone set at .05 level of probability.
6. Pearson's r correlation was used to test the relationship of the awareness and participation of locals in CRM set at .05 level of probability.

RESULTS AND DISCUSSION

The locals had “high” awareness on coastal resource management (CRM) when taken as an entire group. This means that the locals had more knowledge on the activities on CRM.

In terms of zonation, Zone 1 and Zone 2 had “high” awareness on CRM while Zone 3 had “average” awareness which means that they had moderate knowledge of the activities on CRM.

Table 2. Awareness of the locals on CRM According to Variables

Category	Mean	Description	SD
Entire Group	3.08	High	.833
Zone			
One (1)	3.22	High	.483
Two (2)	3.17	High	1.154
Three (3)	2.94	Average	.738

Tables 3 to 4 show the results on the participation of locals on CRM according to variables. In Table 3, locals abided the laws that had a strong advocacy on the genuine principles of coastal resource management (275 locals out of 277 or accounting to 99% of the total selected locals).

Table 3 also shows that people spend less time to join in some environmental organizations that promote the protection and conservation of the coastal resources (223 locals out of 277 or accounting to 81% of the total selected locals). This implies that people tend to support the government projects instead of those that are sponsored by the environmental organizations in Iloilo City.

Table 3. Participation of the locals on CRM

Statement	Yes			No		
	f	%	r	f	%	r
I abide by the laws which have a strong advocacy on the genuine principles of coastal resource management.	275	99	1	2	1	5
I support government projects and programs which foster CRM.	272	98	2	5	2	4
I support the Brgy. Resolutions and Municipal Ordinances that protect, conserve, and rehabilitate the coastal resources.	269	97	3	8	3	3
I refrain from disposing my waste materials like plastics, food waste, toilet waste, and the related items in the sea.	266	96	4	11	4	2
I join the organizations that promote the protection and conservation of the coastal resources.	223	81	5	54	19	1

In terms of zonation, locals in Zone 1 support the government projects and programs which foster CRM and refrain from disposing waste materials like plastics, food waste, toilet waste, and the related items in the sea.

While most of the locals in Zone 2 join in organizations that promote the protection and conservation of the coastal resources.

In Zone 3, locals support the Brgy. Resolutions and Municipal Ordinances that protect, conserve, and rehabilitate the coastal resources, refrain from disposing waste materials like plastics, food waste, toilet waste, and the related items in the sea, and they also join in organizations that promote the protection and conservation of the coastal resources.

Among all the statements, locals are least participative in joining the organizations that promote the protection and conservation of the coastal resources whereby 76 (96%) for Zone 1, 45 (57%) for Zone 2 and 102 (86%) for Zone 3 out of the 277 total respondents.

The statement “I refrain from disposing my waste material like plastic, food waste, toilet waste, and rehabilitate the coastal resources,” is decreasing from Zone 1 to Zone 3 in terms of frequency of participation.

On the other hand, participation of the locals on CRM in Zones 1 and 2 on abiding the laws which have a strong advocacy on the genuine principles of coastal resource management are of the same frequency consisting of 78 (99%) out of the 79 respondents. Table 4 shows the result.

Table 4. Participation of the locals on CRM when classified according to zone (N = 277)

Statement	Zone 1 (N = 79)						Zone 2 (N = 79)						Zone 3 (N = 119)					
	Yes			No			Yes			No			Yes			No		
	f	%	r	f	%	r	f	%	r	f	%	r	f	%	r	f	%	r
I join the organizations that promote the protection and conservation of the coastal resources.	76	96	5	3	4	1	45	57	5	34	43	1	102	86	5	17	14	1
I refrain from disposing my waste materials like plastics, food waste, toilet waste, and the related items in the sea.	79	100	1.5	0	0	4.5	75	95	2	4	5	4	112	94	4	7	6	2
I support the Brgy. Resolutions and Municipal Ordinances that protect, conserve, and rehabilitate the coastal resources.	78	99	3.5	1	1	2.5	72	91	4	7	9	2	119	100	2	0	0	4
I support government projects and programs which foster CRM.	79	100	1.5	0	0	4.5	74	94	3	5	6	3	119	100	2	0	0	4
I abide by the laws that have a strong advocacy on the genuine principles of coastal resource management.	78	99	3.5	1	1	2.5	78	99	1	1	1	5	119	100	2	0	0	4

Meanwhile, zonation showed significant difference in the level of awareness, $F = 4.673$, $p = .010$ and participation on CRM, $F = 20.953$, $p = .000$.

Table 5 shows the result.

Table 5. Significant difference in the awareness of the locals on CRM in terms of zonation

Variables	F-value	Sig (2-tailed)
Awareness on CRM	4.673*	.010
Participation on CRM	20.953*	.000

Note. Asterisk (*) means significant at .05 level of probability.

Table 6 shows that there is a significant relationship in the level of awareness and participation of locals on CRM, $r = .292$, $p = .000$.

Table 6 shows the result.

Table 6. Significant relationship awareness and participation of locals on CRM

Variables	N	Pearson Correlation	Sig. (2-tailed)
Awareness and participation in CRM	277	.292**	.000

Note. Double asterisks (**) means that correlation is significant at the .01 level of probability (2-tailed).

This survey only included zonation as a variable and did not include other variables. This is only to compare Zones 1 to 3 in terms of their awareness and participation.

CONCLUSIONS

The awareness of locals on CRM when taken as an entire group was “high” while the participation on CRM was more focused in abiding by the laws with a strong advocacy on CRM. This implies that generally, locals are more knowledgeable on the activities on CRM and follow the law with implications to CRM.

Meanwhile, a significant difference was observed in zonation for the awareness and participation on CRM. On the other hand, there was a significant

relationship observed in the awareness and participation on CRM among the locals.

It is recommended that the locals and the local government should collaborate and unify their efforts in managing the coastal resources of Sto. Niño Sur, Arevalo, Iloilo City, Philippines. Furthermore, the local government unit (LGU) should device a monitoring system of the locals in terms of their coastal resource management and should strictly implement this to properly address the wastes scattered beneath the shore and finally, educate the people. In this way, greater impact will be done to help minimize environmental degradation due to anthropogenic activities.

TRANSLATIONAL RESEARCH

The outcome of this study will be given to the Department of Environment and Natural Resources (DENR) Region 6 and local government unit (LGU) to disseminate the results through posters and leaflets.

LITERATURE CITED

- Fazi, S., & Flewwelling, P. (2000). Coastal resources management, Ulugan Bay, Palawan Island, The Philippines, Vol I. Ecology, culture and socio-economics. Retrieved on November 10, 2014 from <http://goo.gl/itlQth>
- Jin, J., Ran, S., and Zhang, L. (2002). A study on the cost of coastal zone resources (in Chinese with English abstract). *Marine Environment Science*, 21 (1), 63-67. Retrieved on November 10, 2014 from <http://goo.gl/QIQdc2>
- La Viña, A. G. (2002). Community-based approaches to marine and coastal resources management in the Philippines: a policy perspective. *Institutional Issues and Perspectives in the Management of Fisheries and Coastal Resources in Southeast Asia*, 91-142. Retrieved on November 11, 2014 from <http://goo.gl/77NRQg>
- Parras, D. A. (2001). Coastal resource management in the Philippines: a case study in the central Visayas region. *Journal of Environment and Development*, 10 (1), 80-103. Retrieved on November 11, 2014 from <http://goo.gl/KmT58v>

- Pomeroy, R. S., & Ahmed, M. (2006). Fisheries and coastal resources co-management in Asia: selected results from a regional research project. *WorldFish Center Studies and Reviews*, 30, 240 p. Retrieved on November 12, 2014 from <http://goo.gl/FyC0YA>
- Pomeroy, R. S., & Carlos, M. B. (1997). Community-based coastal resource management in the Philippines: a review and evaluation of programs and projects, 1984–1994. *Marine Policy*, 21 (5), 445-464. Retrieved on November 12, 2014 from <http://goo.gl/ni1Uun>
- Walters, J. (1998). A Participatory Coastal Resource Assessment: A handbook for Community Workers and Coastal Resource Managers. *Silliman University, Cebu City, Philippines*. Retrieved on November 13, 2014 from <http://goo.gl/MMPfgS>

Indexed by:

