Chapter 2
PARTICIPATORY COASTAL RESOURCE ASSESSMENT

Participatory coastal resource assessment, or PCRA, is a method of assessing the status of the resources with extensive participation and contribution from the local resource users (Walters *et al*. 1998). Through this process, the local communities and outside facilitators are able to get a general picture of the area for making plans and programs for the sustainable use and management of the coastal and fisheries resources.

In the profile area, prior to the conduct of PCRA, CRM trainers in each of the municipality and city were identified. The CRM trainers are composed of representatives from the Municipal/City Planning Development Offices, representatives from the *barangay* councils, *Bantay Dagat*, fishers' organizations, NGOs, provincial and national government agencies were chosen by the respective *Sangguniang Bayan* and *Panlungsod* of the LGUs concerned.

The initial task of the CRM trainers was the facilitation of PCRA in their respective municipality and city. A training on PCRA was conducted for them. After a thorough preparation by the trainers, PCRA was conducted in the pilot *barangays*.

IDENTIFICATION OF PILOT *BARANGAYS* FOR THE CONDUCT OF PCRA

Based on a guideline and eligibility criteria prepared by the CRMP and the LGUs shown in Table 2.1, the following were chosen as pilot PCRA *barangays*:

Manjuyod (Campuyo and Bolisong)
Bais (Okiot and Capiñahan)
Tanjay (Polo and Luca)
Amlan (Jugno and Tandayag)

Sibulan (Agan-an and Cangmating)
Dumaguete (Banilad and Bantayan)
Bacong (Buntis and San Miguel)
Dauin (Bulak and Apo Island/Lipayo)

During the PCRA, the municipal trainers conducted resource mapping, group interviews, and habitat assessment.

RESOURCE MAPPING AND THE PCRA PROCESS

Resource mapping involves indicating vital data on a 1:20,000 scale map of each municipality and city. Four types of data were indicated on the map: location of habitats, resources, uses, and issues. Habitats were drawn in the map using color codes: yellow for sandy beaches, brown for rocky shoreline, orange for inshore flats, dark green for mangroves, blue for estuary, dark blue for passes or channels, light green for seagrass, and red for coral reefs (Figure 2.1).

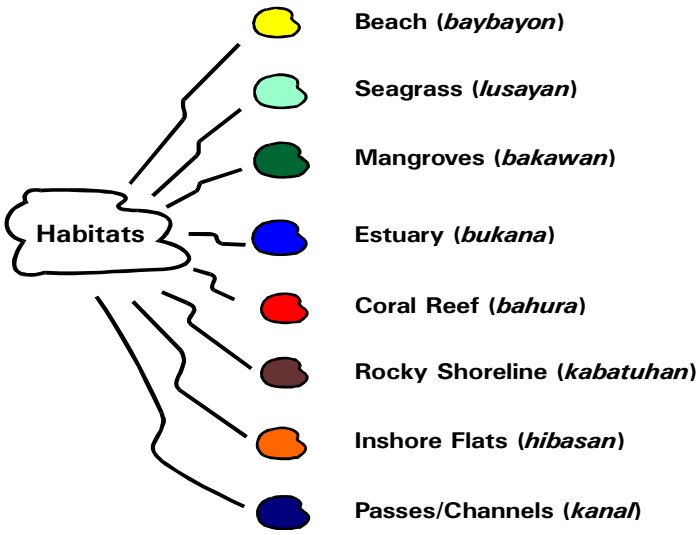

Figure 2.1. Habitats identified by the PCRA participants in the profile area.

Most abundant fish and other important resources found in the coastal area were also located in the map. The species of fish, invertebrates, seaweeds, and seagrasses were indicated in the map using number codes (Figure 2.2).

Pressing and relevant issues on the use and management of the coastal and fisheries resources were also mapped. Letters were used as code and placed on the map where such issues occurred.

Table 2.1. Guideline and eligibility criteria for the selection of participating *barangays* and fishers.

Municipality of Bacong	POINTS	Banilad	Sacsac	North Poblacion	South Poblacion	Buntis	San Miguel
CRITERIA	**Barangays**						
1. Must have marine habitats							
a. coastal forests	1						
b. beach	1						
c. tidal flat	1						
d. seagrass bed	1						
e. coral reef	1						
f. deep water	1						
2. Must have existing CRM initiative/activities							
a. marine sanctuary	1						
b. artificial reef	1						
c. mangrove reforestation/management	1						
d. aquaculture/seafarming	1						
3. Number of municipal fishers							
a. 251 - Above	6						
b. 201 - 250	5						
c. 151 - 200	4						
d. 101 - 150	3						
e. 50 - 100	2						
f. 1 - 49	1						
4. Has *Bantay-Dagat* organization							
a. active	2						
b. inactive	1						
5. Has fishers' association							
a. active	2						
b. inactive	1						
6. Has resource use issues/problems							
a. encroachment of commercial fishing	1						
b. destructive/illegal fishing	1						
c. squatting	1						
d. water pollution	1						
e. sand and water extraction	1						
f. siltation	1						
7. Interest/willingness to participate	1						
8. LGU priority	4						
9. Has proposed agro-industrial tourism, infrastructure development activities							
a. agro-industrial	1						
b. tourism	1						
c. squatting	1						
d. housing	1						
e. transport	1						
HIGHEST POSSIBLE SCORE	37						
RANK							

continued

Table 2.1. continued

Municipality of Bacong	POINTS										
CRITERIA	**NAME OF FISHER**										
FISHERFOLK											
1. Fishers											
a. full-time	2										
b. part-time	1										
2. Involvement in *Bantay Dagat*											
a. president	3										
b. officer	2										
c. member	1										
3. Involvement in fishers' association											
a. president	3										
b. officer	2										
c. member	1										
4. Involvement in CRM activities											
a. marine sanctuary	1										
b. artificial reefs	1										
c. mangrove reforestation/management	1										
d. aquaculture/seafarming	1										
5. Capability/potential to become a trainor	1										
6. Willingness to participate	1										
7. LGU priority	3										
HIGHEST POSSIBLE SCORE	17										
RANK											

DATE EVALUATED:
EVALUATED BY:

NAME (print):	POSITION:	SIGNATURE:
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APPROVED BY:

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CITY/MUNICIPAL MAYOR

DATE APPROVED: _____

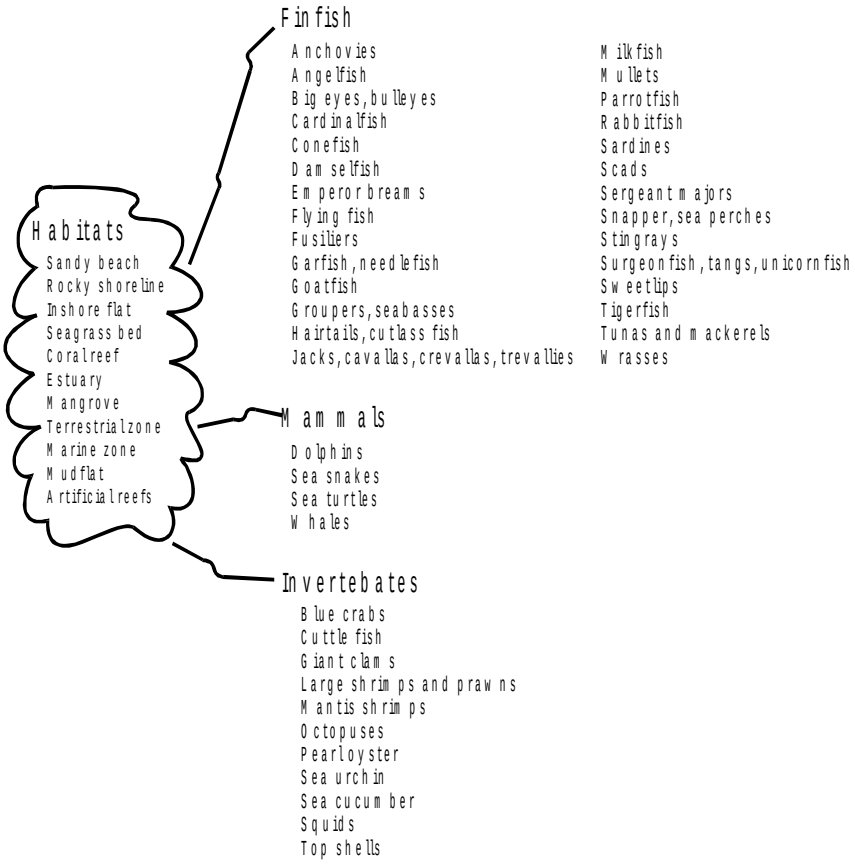

Figure 2.2. Coastal resources identified by the PCRA participants in the profile area.

Transect diagrams were also prepared to indicate the resources, uses, and issues in relation to the habitats found in the area (Figure 2.3). Calendar maps that show the monthly rainfall and wind patterns and the seasonal use of fishing gear were also prepared (Figure 2.4). Trend maps indicating the fish catch through a period of time were also prepared in each of the pilot *barangays* within the profile area (Figure 2.5).

To get critical information, such as socioeconomic and demographic, sociopolitical dynamics and livelihood activities, interview is the most effective tool. However, because of limited time, the municipal trainers conducted the group interviews. The group interviews became an avenue to gain in-depth analysis of sociopolitical activities as well as issues in the community.

Habitat assessment was conducted to evaluate the 4 coastal habitats in the municipalities and cities based on a simplified set of criteria (Figure 2.6). Other members of the communities were also involved in the habitat assessment.

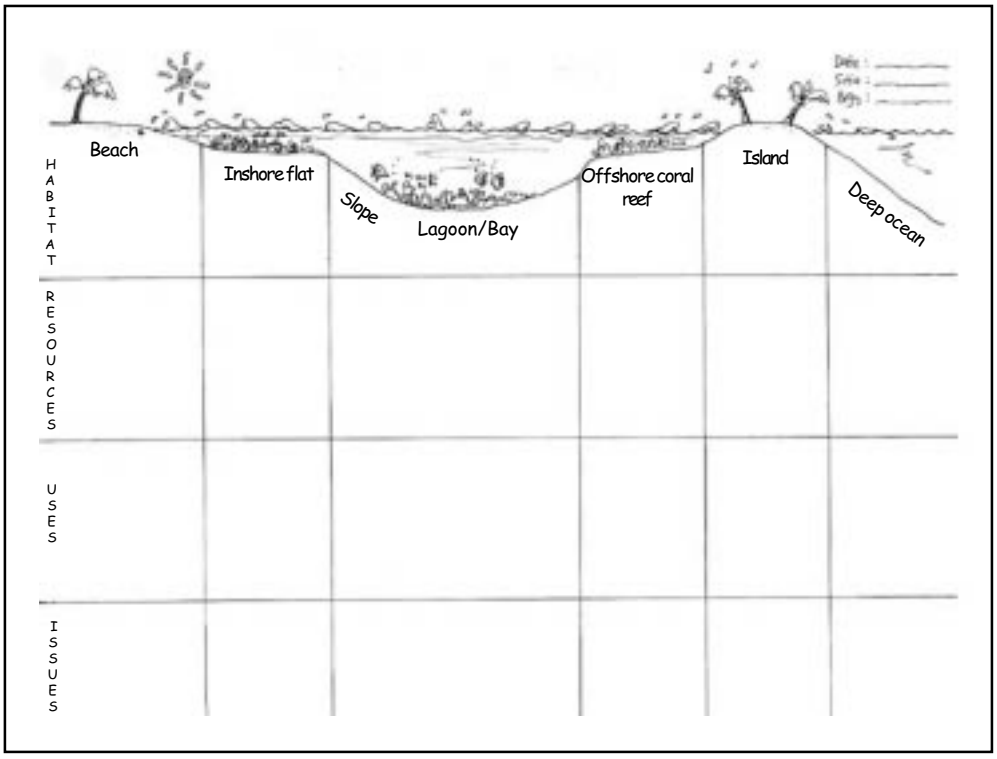

Figure 2.3. Transcect diagram.

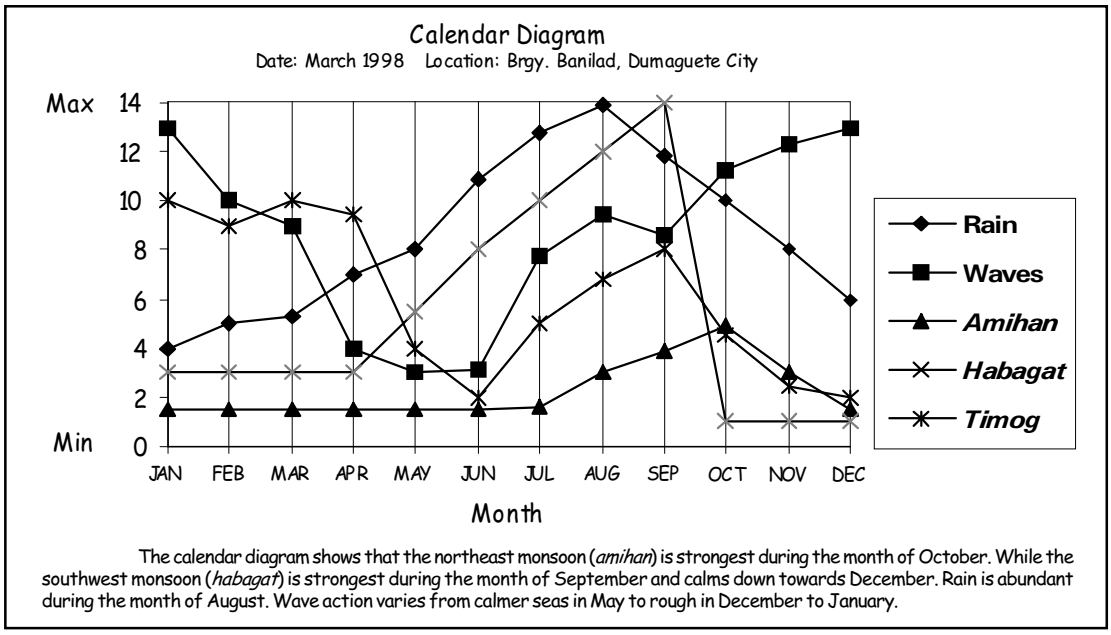

Figure 2.4. Calendar diagram for weather patterns in Barangay Banilad, Dumaguete City.

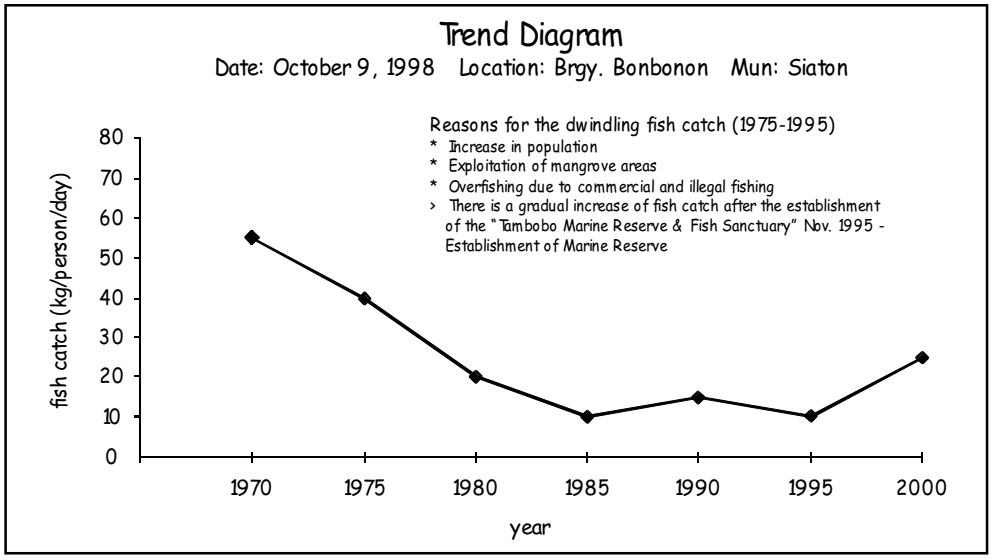

Figure 2.5. Trend diagram for Barangay Bonbonon, Siaton.

After the conduct of PCRA, feedback and validation sessions were conducted to ensure reliability of the data gathered. Copies of the results of the PCRA were given to the municipal trainers and the LGUs.

CONDITION	BEACH	SEAGRASS	CORAL REEF	MANGROVE
Excellent	Undisturbed wide beach	76-100% Live seagrass, no sediment	76-100% Live Coral Cover	76-100% No cutting or disturbance
Good	Undisturbed narrow beach	51-75% Suspended sediments only	51-75% Live Coral Cover	51-75% Cutting for firewood, poles
Fair	Some pollution, erosion, fallen trees	26-50% Seasonal sedimentation on bottom	26-50% Live Coral Cover	26-50% Fishponds
Poor/Low	Heavy pollution, seawalls, major erosion, modification	0-25% Permanent sedimentation on bottom	0-25% Live Coral Cover	0-25% Land or trees removed, reclamation

Figure 2.6. Simplified set of criteria for habitat assessment.