Chapter 5
THINGS YOU CAN FIND ON THE SAN VICENTE COASTLINE
(Geography and Environmental Features)

San Vicente lies on the west coast of Palawan, on the shores of the South China Sea. It is sandwiched between Puerto Princesa City to the south and the municipality of Taytay to the north, and bounded by the municipality of Roxas to the east.

San Vicente has a narrow coastline of sandy beaches, mangrove forests, coves and rocky outcrops stretching 170 kms on the mainland.

It has 10 barangays, including 24 islands. The terrain in the mainland is generally rugged, with the scant lowland areas embraced by the vast Pagdanan and Central mountain ranges. A narrow coastline of sandy beaches, mangrove forests, coves, and rocky outcrops stretches 170 kilometers on the mainland. Steep slopes (18 degrees and above) cover 82% of the municipality, with the highest elevation recorded at 703 meters in the Pagdanan Range. Four types of soil are found here: Sibuyan silty clay, silty clay loam, Coron clay loam, and the dominant mountain soil.

Land use classification is not clearly defined, and there are differences between the Department of Environment and Natural Resources (DENR) and municipal figures (Table 5.1). The DENR places the town's total land area at

79,303.76 hectares, 68,834.13 hectares of which are forest reserves and the rest alienable and disposable land (meaning titles can be awarded to private claimants). The municipal government, on the other hand, approved a Land and Water Use Map in 1994 which placed the total land area at 82,057 hectares.

CLASSIFICATION

Table 5.1. Land and water use classification of San Vicente (SEP-SVP 1994).

Seven bays	**AREA (in hectares)**	**PERCENTAGE OF LAND AREA**
A. Land Use		
Settlement Zone	890.00	1.08
Agricultural Development Zone	7,844.00	9.56
Forest Zone	42,823.75	52.19
Watershed Area	8,663.25	10.56
Wilderness Area/Protected Zone	3,638.00	4.43
Communal Forest	5,000.00	6.09
Tourist Development Zone	447.50	.55
Industrial Zone	451.50	.55
Mangrove Forest	1,538.00	1.88
TOTAL	**82,057.00**	**100.00**
B. Water Use		
Municipal Fishing Grounds	155,701.99	95.05
Coral Reef Protection Zone	3,377.74	2.06
Marine Recreation Zone	4,490.00	2.74
Marine Sanctuary	235.77	.15
TOTAL	**163,865.50**	**100.00**

serve as the main fishing grounds in the municipality: Jibboom Bay, Sta. Cruz Bay, Mayday Bay, Queen's Bay, Pagdanan Bay, Kemdeng Bay, and Imuruan Bay. The town's 24 islands are shown in Table 5.2.

One of the unique geological features of San Vicente's landscape is the blowhole on Garcia Island in Caruray, which produces an audible hissing sound when waves crash into the island's rocky shore and rush back to the sea. At the northern tip of the

Table 5.2. Islands in San Vicente.

BARANGAY	NAME OF ISLAND	SIZE (in hectares)
Binga	Imuruan	136.05
	Manambarao	5.00
New Canipo	Lampiligan	14.14
Poblacion	Boayan	1,327.31
	Niaporay	19.43
	Talontonen	13.18
	Mayakli	4.71
	Mialbok	24.34
Port Barton	Albaguen	175.62
	Cagnipa	507.94
	Exotic	6.41
	Capsalay	79.32
	Inoladoan	17.24
	Malindag	3.94
	Bongot	10.55
	Ibalalon	38.39
	Kayoya	20.72
	Moraday	18.23
	Paradise	5.00
	Ranged	4.00
New Villafria	Tandan	4.28
Caruray	Catalat	261.12
	Caclobo	80.31
	Bay Island	80.00

municipality, Wedge Island stands as a lonely beacon offshore and is a favorite site of illegal fishers due to the rich marine resources surrounding the rocky islet.

CLIMATE AND RAINFALL

San Vicente enjoys equal parts of rain and sunshine. December to May provides six months of generally dry weather, while June to November is usually wet.

Monsoon winds determine the fate of most fishing villages. When the northeast winds (*amihan*) start blowing in November, most fishers say they do not brave the seas as strong waves can last for days. The southwest monsoon (*habagat*), which visits in June, can bring really bad weather especially when there is a storm, but this type of wind is short-lived and allows a respite for fishers to go out to sea. In addition, fishers in San Vicente talk of two other types of wind that can affect the weather: *salatan,* which comes from the south, and *daplak,* which comes from the north. Local residents also have a term for squalls, which they call *subasko*.

Calendar diagrams drawn by fishers as part of the PCRA activity show that bad

weather prevails in the months of August and September, when the southwest monsoon combines with the rainy season to spawn big waves that hamper fishing activities. April and May are the calmest months, when the monsoon winds have died down and the weather is generally dry. This is the time when the seas are almost glassy and smooth, and it also coincides with the season for squid which starts in March. Samples of calendar diagrams are shown in Figures 5.1 and 5.2.

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OCEANOGRAPHY

A study conducted by Silliman University in 1996 shows that ocean current patterns in San Vicente generally flow towards the northeast. The majority of the sites register slow speeds ranging from 0.039 to 0.144 meter/sec except in Pagdanan Pt. where current speeds reach 0.302 meter/sec. The general direction of ebb currents is still northeast, and no site shows reversal of current flow as the tide reverses. According to Silliman researchers, this indicates that tidal forces do not have an effect on current patterns, and that water transport from San Vicente to the northeastern sections of the Palawan mainland is efficient since water movement, regardless of tidal conditions, is always northeast, parallel to the coastline.

Water quality in San Vicente is found to be generally good, with low levels of coliform. Based on the criteria set by the DENR, all sites are safe for the propagation, survival, and harvesting of shellfish. Municipal waters also passed the requirement for establishment of tourist zones, national parks, and coral reef parks. Data on waste disposal correlated with the low counts of coliform, an indicator of human and domestic waste contamination. Most residents have water-sealed and Antipolo toilets (61.4%) and they either burn or bury their garbage.

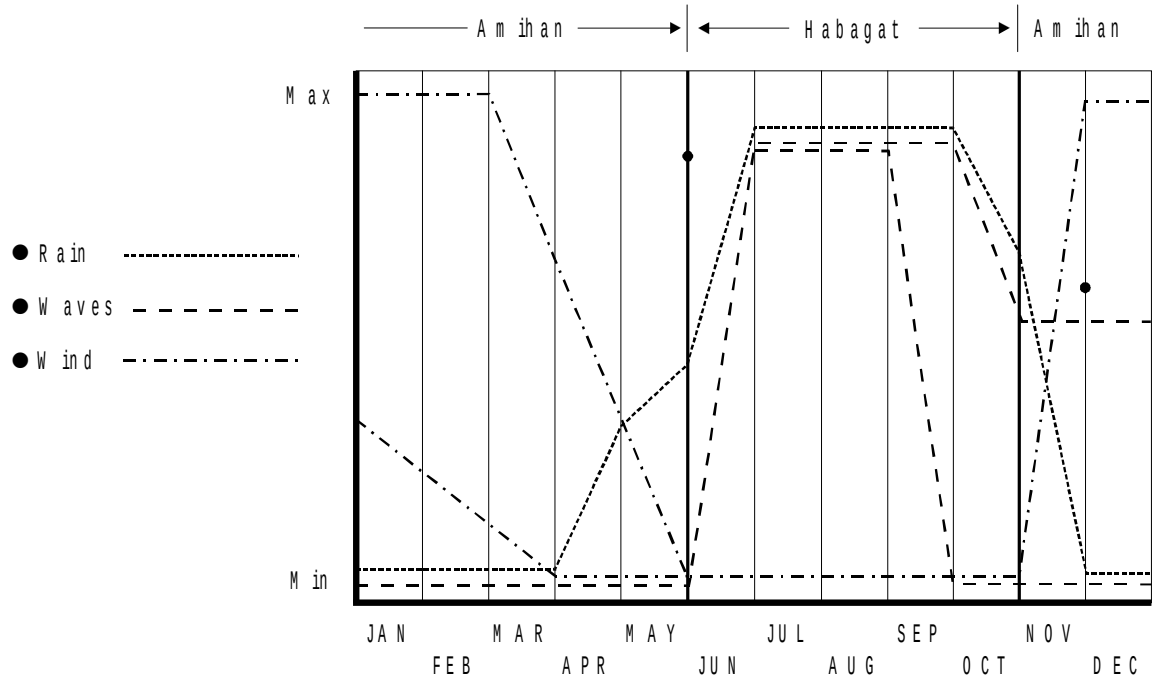

Figure 5.1. Calendar diagram for weather patterns in Sitio Boding and Proper, Binga, PCRA 1997.

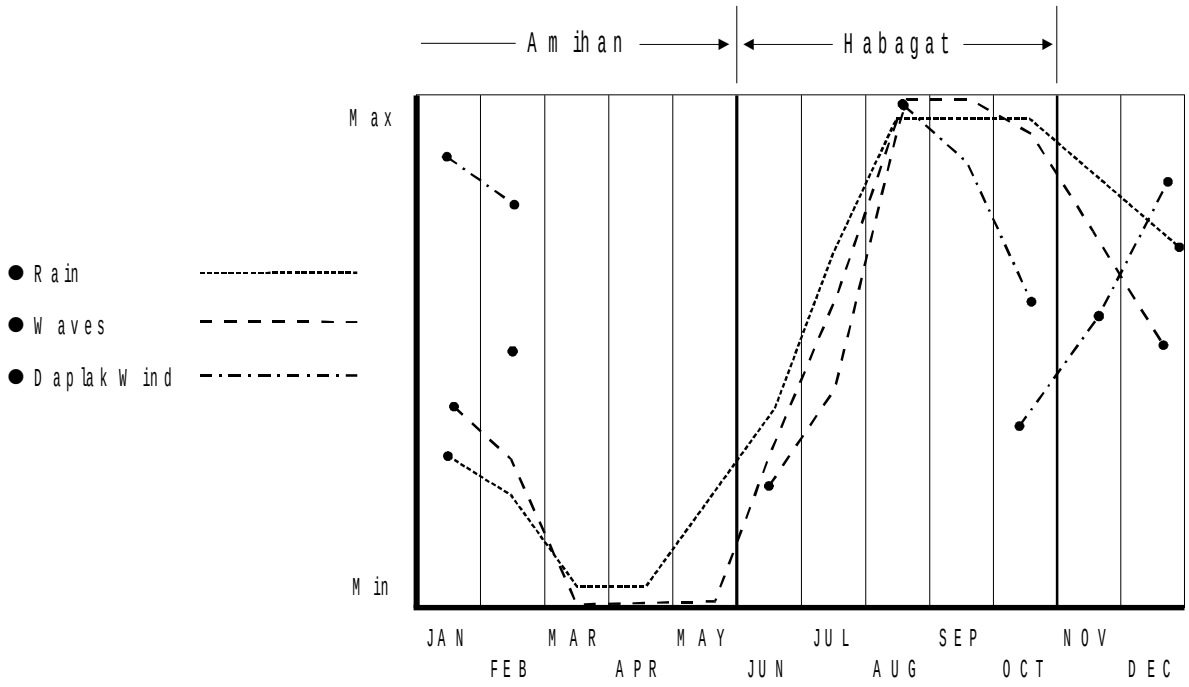

Figure 5.2. Calendar diagram for weather patterns in Sitio Gawid, Caruray, PCRA 1997.

Table 5.3. Coliform levels* in the waters of San Vicente (SUML 1996).

STATIONS	NEARSHORE	0.5 KM OFFSHORE	1 KM OFFSHORE
Port Barton	37	35	9
Poblacion	3	8	63
Boayan Island	4	17	3
New Agutaya	12	6	2
MEAN	**14**	**16.5**	**19.2**

CATEGORY	DESCRIPTION
Class SA (MPN = 70)	Suitable for propagation, survival and harvesting shellfish for commercial purposes. Suitable as tourist zones, establishment of national marine parks and coral reef parks.
Class SB (MPN = 1000)	Recreational Water Class I - Areas regularly used for public bathing, swimming, skin diving, etc. Fishery Water Class I - spawning areas for *Chanos chanos* (bangus) and similar species.
Class SC (MPN = 5000)	Recreational Water Class II - Boating, etc. Water Class II - commercial and sustenance fishing. Marshy and for mangrove areas are declared as fish and wildlife sanctuaries.

* The numbers represent the most probable number (MPN) of total coliform per 100 ml of seawater sampled in the four stations. Three samples were taken in each station. The DENR sets a maximum coliform level of 70 for water quality suitable for marine parks and tourist zones.