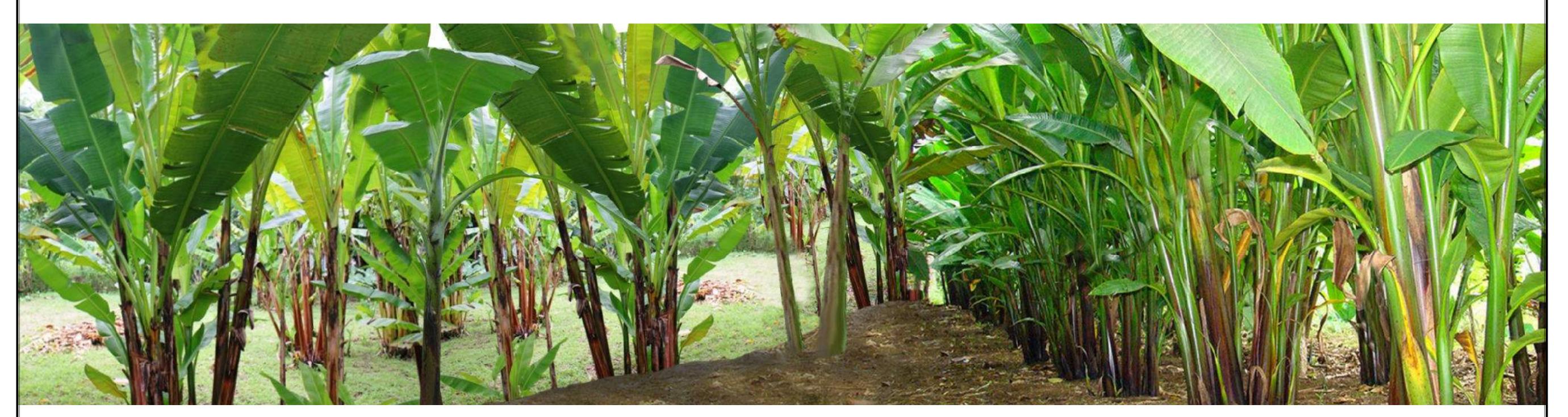
## LAND SUITABILITY MAP

### **ABACA**

## LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

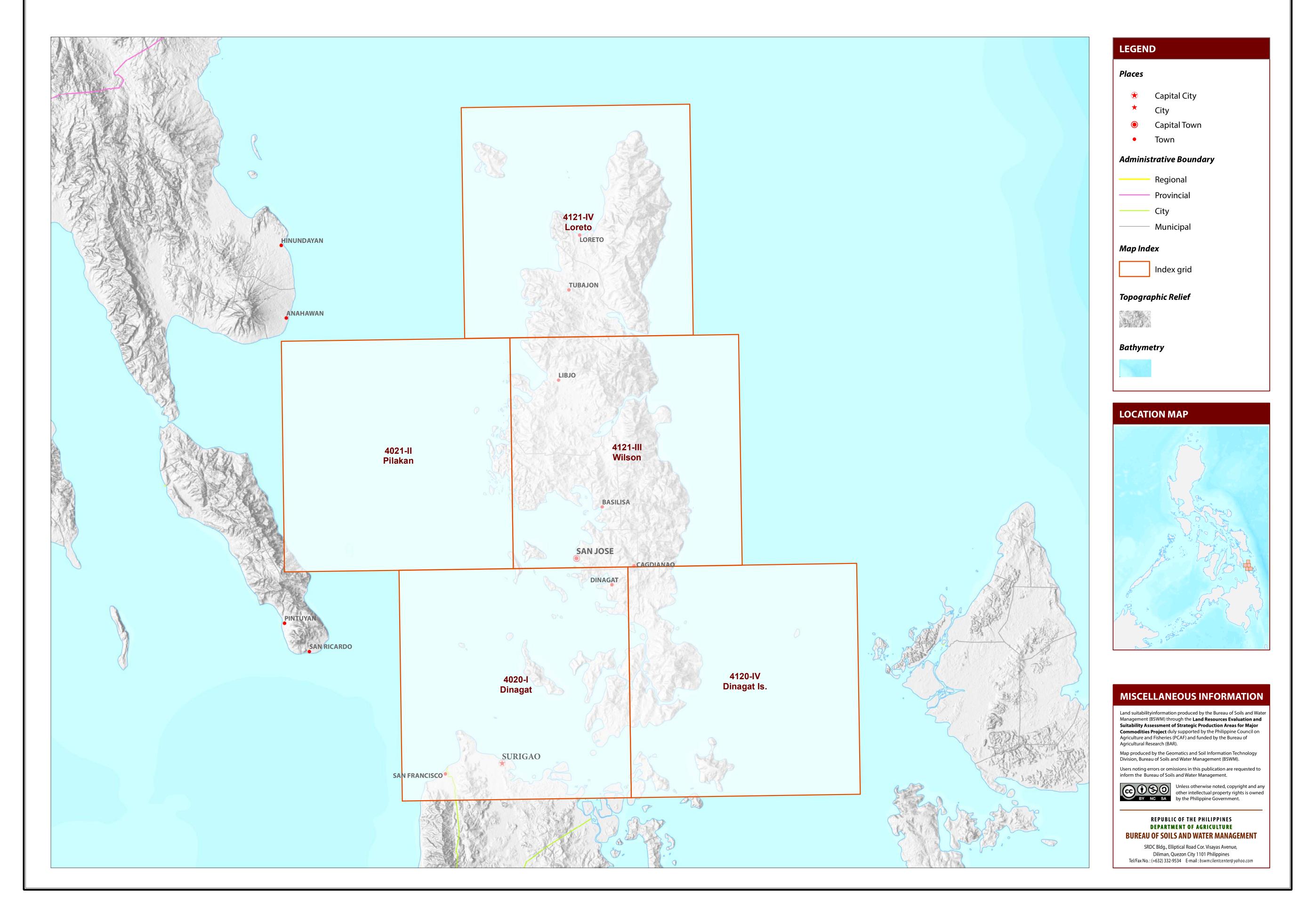
### PROVINCE OF DINAGAT ISLANDS





### **MAP INDEX**

## LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS PROVINCE OF DINAGAT ISLANDS



# LAND SUITABILITY MAP FOR ABACA

## LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS DINAGAT ISLAND, REGION XIII

- clay

**SOIL EROSION** 

**FLOODING** 

E3 - Severe erosion

- Moderate erosion

F2 - Moderate seasonal flooding

F3 - Severe seasonal flooding

heavy clay

#### **EXTENT OF SUITABILITY FOR ABACA PRODUCTION BY MUNICIPALITY**

						EXF	ANSION A	AREA (Ha	a)			CONFLIC	T RESOL	UTION AI	REA (Ha)		TOTAL
MUNICIPALITY	EXISTI	NG ABAC	А (На)	TOTAL EXISTING AREA (Ha)	Coco	nut	Shrubl unmana	•	Grassl unmana		Coi	rn	Paddy non-iri	rice, rigated	Other	crops	POTENTIAL EXPANSION AREA (Ha)
	<b>S1</b>	<b>S2</b>	<b>S</b> 3		S1	S2	<b>S1</b>	<b>S2</b>	S1	<b>S2</b>	S1	<b>S2</b>	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	AREA (IIa)
BASILISA	-	-	-	-	42	718	19	531	7	1,356	38	109	-	-	-	-	2,819
CAGDIANAO	-	-	1	-	11	659	13	464	1	1,533	30	298	-	-	-	-	3,008
DINAGAT	-	-	ı	-	14	906	-	9	-	266	5	91	-	-	1	-	1,289
LIBJO	-	-	1	-	31	412	23	1,065	50	3,030	11	467	-	-	-	-	5,090
LORETO	-	-	ı	-	274	693	40	412	63	794	204	303	-	-	1	-	2,783
SAN JOSE	-	-	1	-	-	508	-	100	-	80	5	39	-	-	-	-	731
TUBAJON	-	-	-	-	37	546	-	156	134	1,850	44	95	-	-	-	_	2,862
TOTAL	-	-	-	-	409	4,442	95	2,736	256	8,908	336	1,401	-	-	-	_	18,583

Note: Delivery of abaca planting materials must be started on the onset of rainy season.

\*establishment of shade trees prior to planting of abaca.

### AGRONOMIC REQUIREMENT OF ABACA PRODUCTION

LAND UTILIZATIO TYPE	SUITABILITY RATING	SLOPE (%)	SOIL DEPTH (cm)	SOIL TEXTURE	SOIL DRAINAGE	SOIL REACTION (pH)	INHERENT FERTILITY	FLOODING CLASS	EROSION CLASS	ROCK OUTCROPS	ELEVATION (masl)	ANNUAL RAINFALL (mm)	CLIMATIC TYPE
	S1	<8	>50	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD, SPD	5.6 -7.2	high	none-slight	none-slight	none-few	<500	2001-4500	II, III, IV
Abaca	S2	8 - 30	30 - 50	FSL, L, SiL, SL	PD,VPD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	500-1500	1000-2000	I, II
	S3	>30	< 30	S, LS, CSL	ED	<5.0 - > 7.9	low	severe	severe	many	>1500	<1000 >4500	
SLOPE (%)			SOIL DRAINA	AGE		SOIL REACTION	N (pH)		SOIL TEXTU	RE			
0-3 -	0 - 3 - level to gently sloping ED		ED - e	xcessively drained	< 4.5 - ext		- extremely acid		Coarse			Fine	
3 - 8 -	gently sloping to und	lulating	WD - v	vell drained		4.5 - 5.0 - ver	y strongly acid		S - s	and		SC - sai	ndy clay
8 - 18 -	undulating to rolling		MWD - n	noderately well drain	ed	5.1 - 5.5 - stro	ongly acid		LS -l	oamy sand		SiC - sil	ty clay

SOIL DEPTH

**ROCK OUTCROPS** 

Rc2 - Common

Rc3 - Many

Sh2 - Shallow to moderately deep (30 - 100cm)

Sh3 - Very shallow (< 30cm)

5.6 - 6.0 - medium acid - rolling to moderately steep - somewhat poorly drained - coarse sandy loam PD 30 - 50 - poorly drained 6.1 - 6.5 - slightly acid - sandy loam 6.6 - 7.2 - neutral VPD very poorly drained > 50 very steep 7.3 - 7.8 - mildly alkaline - fine sandy loam SOIL DEPTH (cm) **SURFACE IMPEDIMENT** - moderately alkaline - loam very shallow ROCK OUTCROPS - strongly alkaline - silt loam 30 - 50 - none - few - clay loam SiCL - silty clay loam moderately deep 10 - 30% - common - deep to very deep > 30% - sandy clay loam

#### LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

ELEV	VATION	SOII	DRAINAGE
El2	- 500 - 1000m or 2000 - 2500m	D2	- Somewhat poorly drained to poorly drained
El3	- < 500m or > 2500m	D3	- Very poorly drained or excessively drained

<b>SLUP</b>	E/TUPUGKAPHY	SOIL	IEXIURE
T2	- Undulating to moderately steep	Tc	- Coarse texture
Т3	- Steep to very steep		

CODE	LIMITATION	CODE	LIMITATION
1	F2-D2	11	T2-F2-D2
2	F2-Tc	12	T2-F3-D2
3	F3-D2	13	T3
4	Sh2	14	T3-E3
5	Sh2-Rc2	15	T3-E3-Sh2-Rc3
6	T2	16	T3-F3-D2
7	T2-E2	17	T3
8	T2-E2-Sh2-Rc2	18	T3-E3-Sh3-Rc3
9	T2-E3	19	T3-El3
10	T2-E3-Rc3	20	Тс

CODE	LANDUSE
4	Corn
82	Cacao
116	Coconut
126	Grassland
134	Shrubs, unmanaged

#### **SUITABILITY CLASSES:**

Highly Suitable (S1)
Land having no significant limitation to sustained application of a given use, or only minor limitations that will not significantly reduce productivity or benefits and will not raise inputs above an acceptable level.

Moderately Suitable (S2)
Land having limitation which in aggregate are moderately severe for sustained application of a given use; the limitation will reduce productivity or benefits and increase required inputs to the extent that the overall advantage to be gained from the use, although still attractive, will be appreciably inferior to that expected on class S1 land.

Land having limitations which in aggregate are severe for sustained application of a given use and will so reduce productivity or benefits, or increase required inputs, that this expenditure will be only marginally justified.

Marginally Suitable (S3)

Not Suitable / Not Relevant
Land having limitations which may be surmountable in time but which cannot be corrected with existing knowledge at currently acceptable cost; the limitations are so severe as to preclude successful sustained use of the land in the given manner. Existing forest, shrubland greater than 18% slope, irrigated paddy rice and miscellaneous land types such as built up areas, roads, etc are considered as not relevant.

### **CLIMATE TYPE**

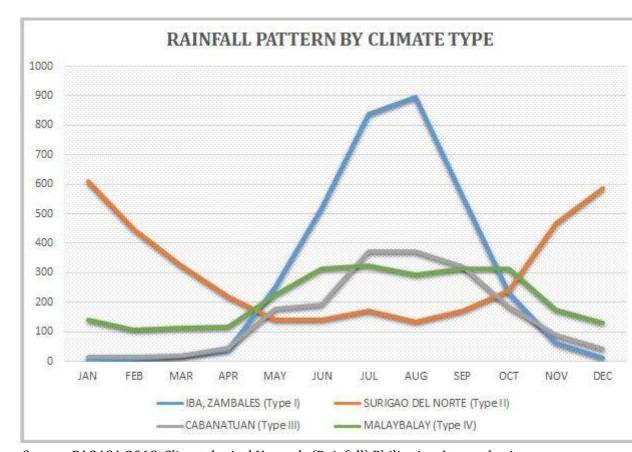
**TYPE I**: Two pronouced season, dry from November to April and wet during the rest of the year. Maximum rain period is from June to September

**TYPE II**: No dry season with a very pronounced maximum rain period from December to February. There is not a single dry month. Maximum monthly rainfall occurs during the period from March to May.

**TYPE III:** No very pronounced maximum rain period, with a dry season lasting only from one to three months, either during the period from December to February or from March to May. This type resembles Type I since it has a short dry season.

**TYPE IV:** Rainfall is more or less evenly distributed throughout the year. This type resembles Type II since it has no dry season.

The whole of Dinagat Island is classified as climatic Type II.



Source: PAGASA 2018, Climatological Normals (Rainfall), Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), accessed 27 July 2018, <a href="https://www1.pagasa.dost.gov.ph/index.php/climate/climatological-normals">https://www1.pagasa.dost.gov.ph/index.php/climate/climatological-normals</a>.

