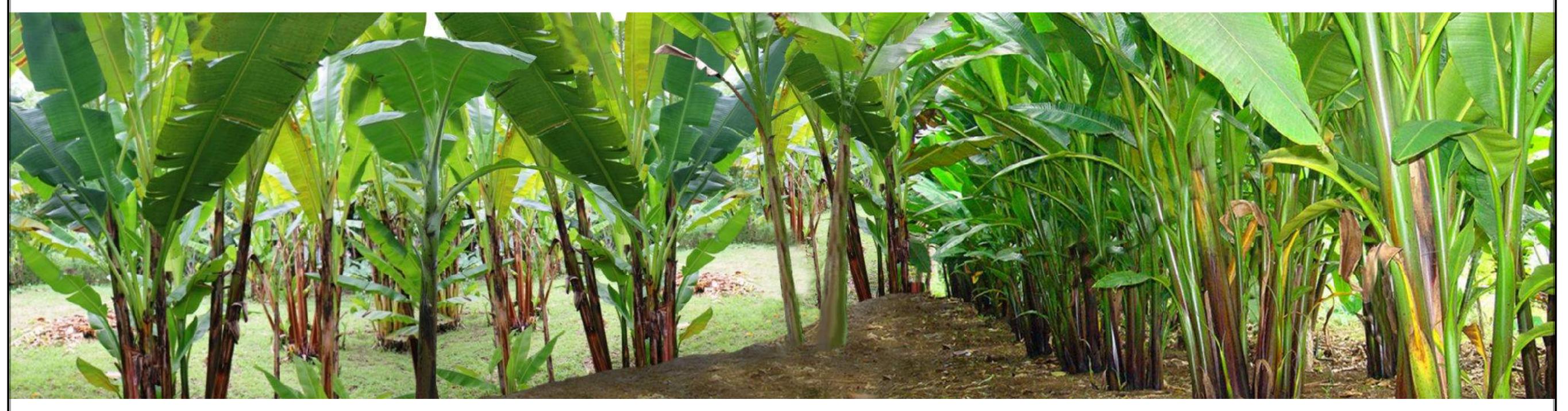
LAND SUITABILITY MAP

ABACA

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

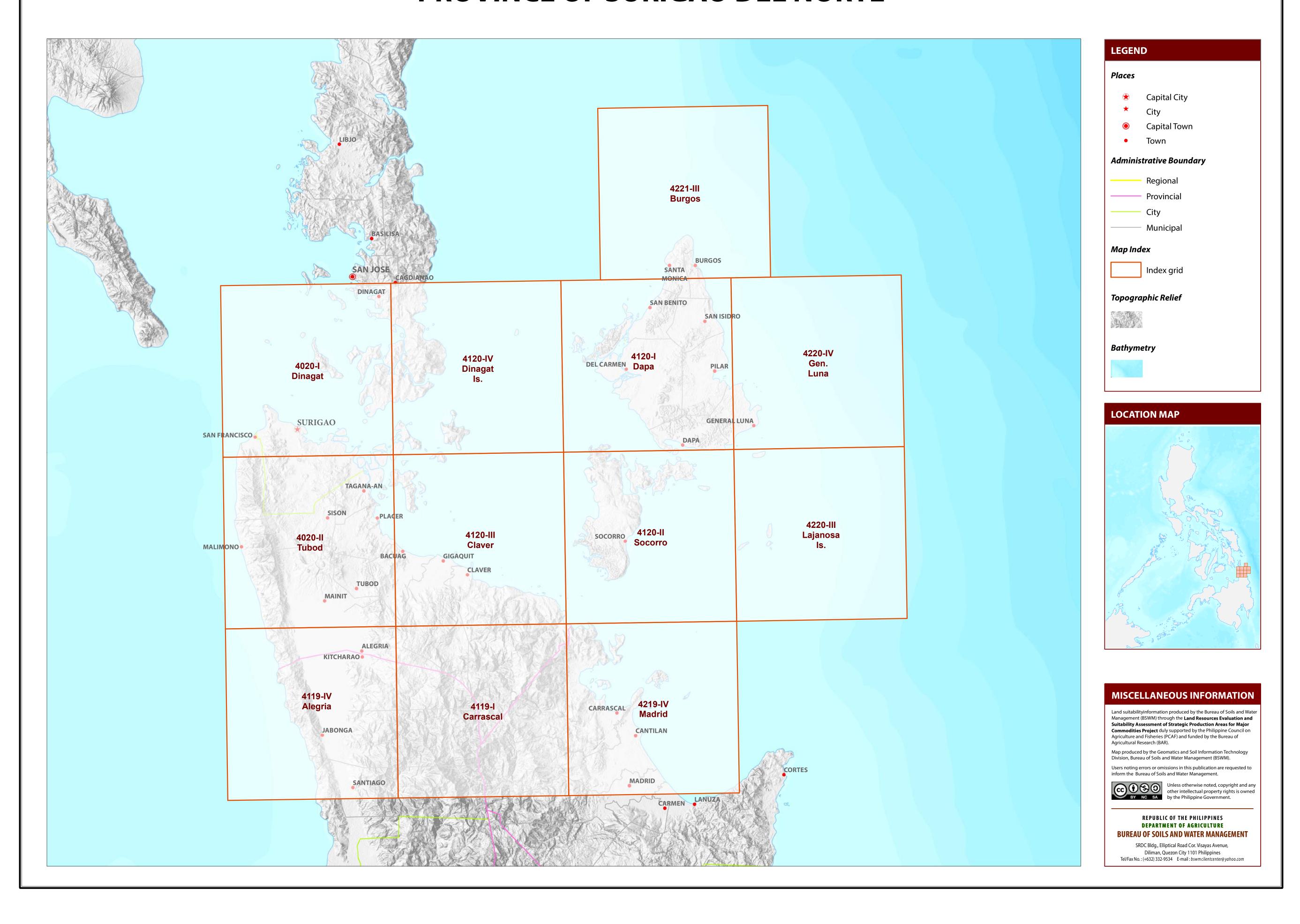
PROVINCE OF SURIGAO DEL NORTE





MAP INDEX

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS PROVINCE OF SURIGAO DEL NORTE



LAND SUITABILITY MAP FOR **ABACA**

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS SURIGAO DEL NORTE, REGION XIII

EXTENT OF SUITABILITY FOR ABACA PRODUCTION BY MUNICIPALITY

	EXISTING ABACA (Ha)			TOTAL EXISTING	EXPANSION AREA (Ha)						CONFLICT RESOLUTION AREA (Ha)					TOTAL	
MUNICIPALITY					Coconut		Shrubland,		Grassland,		Corn		Paddy rice,		Other crops		POTENTIAL
	S1	S2	S 3	AREA (Ha)	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	EXPANSION
ALEGRIA	-	1	-	•	558	829	-	28	6	-	374	8	-	-	-	-	1,802
BACUAG	-	-	-	-	324	1,029	-	71	139	242	460	74	-	-	-	-	2,339
BURGOS	-	-	-	-	288	574	54	137	-	-	118	89	-	-	-	-	1,258
CLAVER	-	-	-	-	84	1,166	8	214	40	1,486	176	280	-	-	-	-	3,455
DAPA	-	1	-	•	1,204	1,127	31	165	63	284	88	216	-	-	-	-	3,179
DEL CARMEN	-	1	-	-	2,848	1,402	556	350	121	126	1,245	189	-	-	-	-	6,839
GENERAL LUNA	-	1	-	-	681	660	201	604	-	-	820	486	-	-	-	-	3,453
GIGAQUIT	-	-	-	-	213	1,505	-	226	47	16	529	307	-	-	-	-	2,843
MAINIT	-	-	-	-	998	3,252	-	52	45	102	1,154	146	-	-	-	-	5,749
MALIMONO	-	-	-	-	260	639	-	12	14	189	35	20	-	-	-	-	1,169
PILAR	-	1	-	-	1,721	676	161	267	1	17	1,017	551	-	-	-	-	4,411
PLACER	-	-	-	-	319	2,262	-	19	23	206	122	141	-	-	-	-	3,092
SAN BENITO	-	-	-	-	523	627	303	218	-	10	69	19	-	-	-	-	1,770
SAN FRANCISCO	-	-	-	-	254	408	-	-	29	32	133	14	-	-	-	-	871
SAN ISIDRO	-	-	-	-	1,506	475	361	284	-	-	1,087	197	-	-	-	-	3,910
SANTA MONICA	-	-	-	-	646	1,074	20	48	-	4	206	174	-	-	-	-	2,173
SISON	-	1	-	-	357	3,099	-	62	59	151	327	285	-	-	-	-	4,341
SOCORRO	-	1	-	-	44	813	1	650	5	1,695	61	1,604	-	-	-	-	4,872
SURIGAO CITY	-	-	-	-	318	4,481	18	516	185	2,938	1,475	1,441	-	-	-	-	11,372
TAGANA-AN	-	-	-	-	205	1,654	-	7	3	29	76	80	-	-	-	-	2,053
TUBOD	-	-	-	-	178	1,069	-	47	4	16	208	108	-	-	-	-	1,630
TOTAL	_	-	-		13,525	28,821	1,713	3,978	786	7,543	9,783	6,432	_	-	_	-	72,581

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 UTILIZATION 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 RAINFALI (mm)	(I.IIVI A T T (
	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 DRAINAGE				SOIL REACTION (pH)			SOIL TEXTURE						
0 - 3 - le	vel to gently slopin	g	ED - e	excessively drained		< 4.5 - ext	remely acid		Coarse			Fine	
3 - 8 - gently sloping to undulating WD - well drained			4.5 - 5.0 - very strongly acid			S -	- sand		SC -	- sandy clay			
8 - 18 - undulating to rolling MWD - moderately well drained		ed	5.1 - 5.5 - strongly acid		LS -	- loamy sand		SiC -	- silty clay				
18 - 30 - rolling to moderately steep SPD - somewhat poorly drained		ned	5.6 - 6.0 - medium acid			CSL -	- coarse sandy loam		С -	- clay			
30 - 50 - steep PD - poorly drained			6.1 - 6.5 - slightly acid		SL -	sandy loam		HC -	- heavy clay				
> 50 - very steep VPD - very poorly drained				6.6 - 7.2 - neutral			Medium	Medium					

7.3 - 7.8 - mildly alkaline

- moderately alkaline

- strongly alkaline

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

SOIL DEPTH (cm)

30 - 50

very shallow

- deep to very deep

- shallow

50 - 100 - moderately deep

ELEVATION	SOIL DRAINAGE	SOIL DEPTH	SOIL EROSION
El2 - 500 - 1000m or 2000 - 2500m	D2 - Somewhat poorly drained to poorly drained	Sh2 - Shallow to moderately deep (30 - 100cm)	E2 - Moderate erosion
El3 $-<500 \text{m or} > 2500 \text{m}$	D3 - Very poorly drained or excessively drained	Sh3 - Very shallow (< 30cm)	E3 - Severe erosion
SLOPE/TOPOGRAPHY	SOIL TEXTURE	ROCK OUTCROPS	FLOODING
T2 - Undulating to moderately steep	Tc - Coarse texture	Rc2 - Common	F2 - Moderate seasonal flooding
T3 - Steep to very steep		Rc3 - Many	F3 - Severe seasonal flooding

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	El2-Sh2-Rc2	11	T2-E3-Rc2	21	T2-Sh2-Rc2	31	T3-F3-D2
2	F2-D2	12	T2-E3-Rc3	22	T3	32	T3
3	F2-Tc	13	T2-E3-Sh2-Rc2	23	T3-E3	33	T3-E3
4	F3-D2	14	T2-E3-Sh2-Rc3	24	T3-E3-Rc2	34	T3-E3-Rc3
5	Sh2	15	T2-El2-E3	25	T3-E3-Sh2-Rc3	35	T3-E3-Sh3-Rc3
6	Sh2-Rc2	16	T2-El2-E3-Rc3	26	T3-E3-Sh3-Rc2	36	T3-El2-E3-Sh3-Rc3
7	T2	17	T2-El2-E3-Sh2-Rc2	27	T3-E3-Sh3-Rc3	37	T3-F3-D2
8	T2-E2	18	T2-El2-Sh2-Rc2	28	T3-El2-E3-Sh2-Rc3	38	T3-El3
9	T2-E2-Sh2-Rc2	19	T2-F2-D2	29	T3-El2-E3-Sh3-Rc2	39	Тс
10	T2-E3	20	T2-F3-D2	30	T3-F2-D2		

SURFACE IMPEDIMENT

< 10% - none - few

10 - 30% - common

ROCK OUTCROPS

> 30% - many

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

- fine sandy loam

- silty clay loam

- sandy clay loam

- loam

- silt loam

- clay loam

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.

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)

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.

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

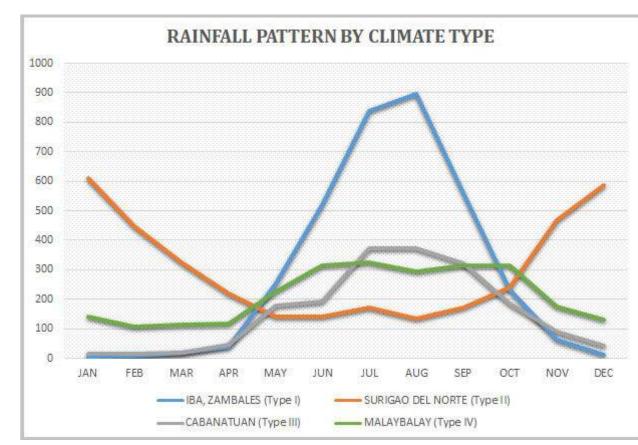
TYPE I: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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.

Surigao Del Norte is classified as climatic Type II



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

