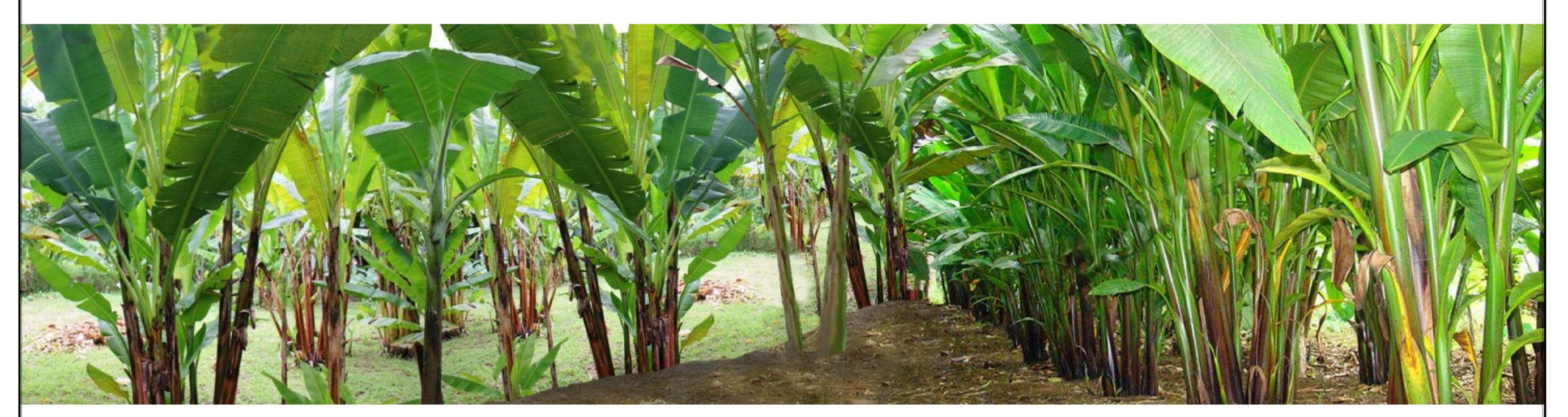
LAND SUITABILITY MAP

ABACA

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

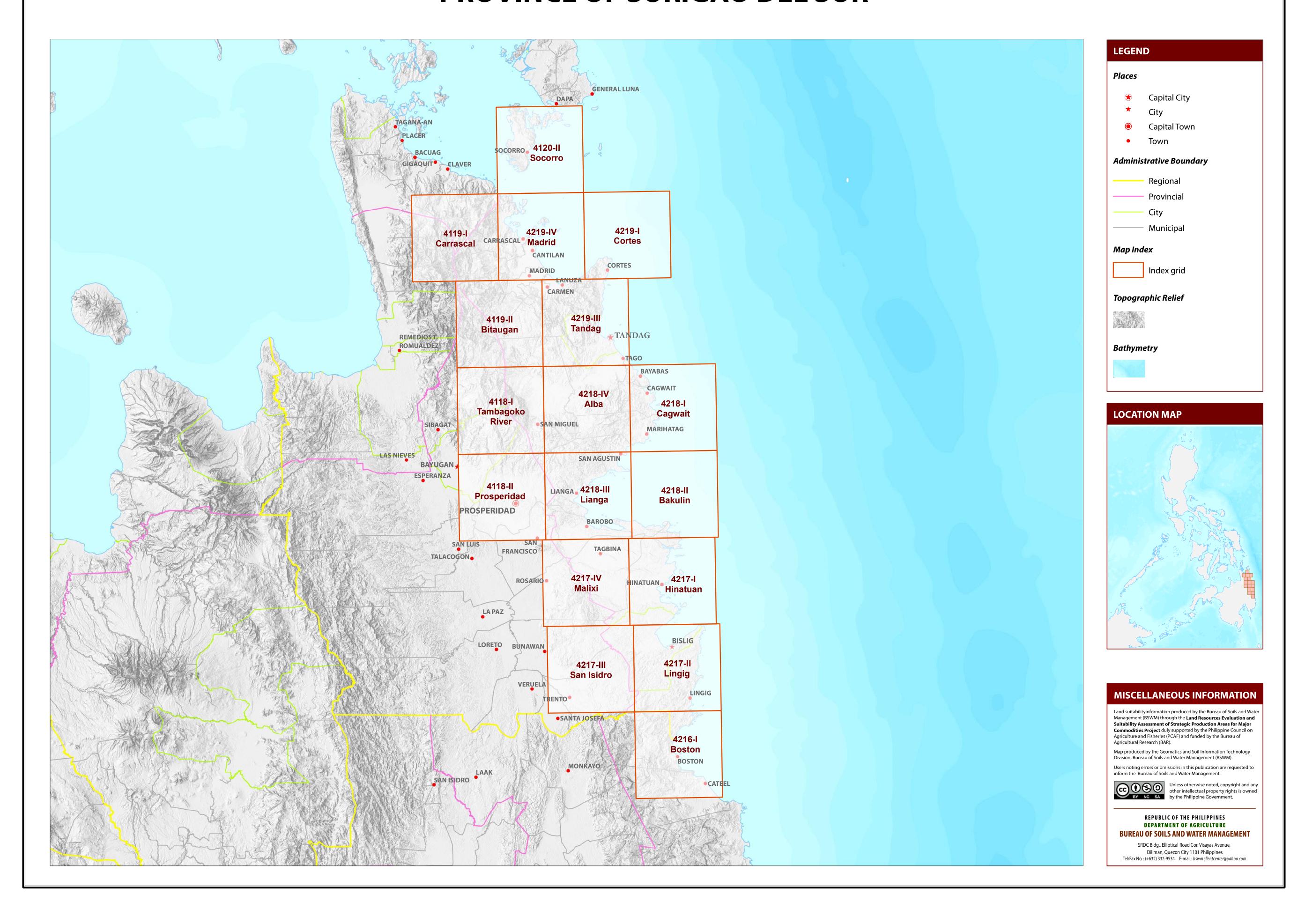
PROVINCE OF SURIGAO DEL SUR





MAP INDEX

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



LAND SUITABILITY MAP FOR **ABACA**

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

EXTENT OF SUITABILITY FOR ABACA PRODUCTION BY MUNICIPALITY

						EXI	PANSION A	AREA (Ha	a)		(CONFLIC	T RESOL	UTION A	REA (Ha)		TOTAL
MUNICIPALITY	EXIST	ING ABAC	CA (Ha)	TOTAL EXISTING AREA (Ha)	Cocc	onut	Shrubl unmana		Grassla unmana		Cor	n		y rice, rigated	Other	crops	POTENTIAL EXPANSION
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	AREA (Ha)
BAROBO	-	-	-	-	7,521	6,371	118	622	33	39	461	98	-	_	-	-	15,264
BAYABAS	-	-	-	-	394	1,262	-	140	-	-	186	117	-	-	-	-	2,100
CAGWAIT	-	-	-	-	350	2,559	-	65	-	-	204	119	_	-	-	-	3,296
CANTILAN	-	-	-	-	791	420	29	81	38	100	1,808	143	-	-	-	-	3,409
CARMEN	_	-	-	-	635	54	39	198	23	94	273	17	-	_	-	-	1,334
CARRASCAL	-	-	-	-	228	510	596	754	109	927	308	33	-	_	-	-	3,467
CITY OF BISLIG	_	-	-	-	5,770	8,713	338	2,204	381	251	1,170	116	-	-	-		18,943
CITY OF TANDAG	-	-	-	-	1,009	3,094	5	311	22	124	302	357	-	_	-	-	5,225
CORTES	-	-	-	-	711	1,643	1	39	-	-	91	43	-	-	-	-	2,529
HINATUAN	-	-	-	-	12,073	12,183	89	843	103	599	369	35	-	-	-	-	26,293
LANUZA	-	-	-	-	790	297	3	274	18	281	129	2	-	-	-	-	1,795
LIANGA	-	-	-	-	884	2,669	8	338	-	137	61	16	-	-	-	-	4,112
LINGIG	-	-	-	-	63	2,594	19	787	7	151	34	49	-	_	-	-	3,704
MADRID	-	-	-	-	658	492	12	47	43	20	1,594	38	-	-	-	-	2,904
MARIHATAG	_	-	-	-	1,124	3,467	23	623	-	73	699	112	-	-	-	-	6,120
SAN AGUSTIN	_	-	-	-	855	1,272	7	673	2	169	385	112	-	-	-	-	3,475
SAN MIGUEL	_	-	-	-	1,933	1,767	186	1,063	36	468	5,414	431	-	-	-	-	11,299
TAGBINA	_	-	-	-	19,311	12,016	295	164	422	993	160	65	-	-	-	-	33,427
TAGO	_	-	-	-	1,091	3,291	23	160	15	15	3,407	3,189	-	-	-	-	11,192
TOTAL	-	_	_	-	56,193	64,675	1,791	9,388	1,252	4,442	17,055	5,092	-	_	_		159,888

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 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	IGE		SOIL REACTION	N (pH)		SOIL TEXTU	RE			

- level to gently sloping - extremely acid excessively drained WD 4.5 - 5.0 - very strongly acid - sandy clay 3 - 8 - gently sloping to undulating - well drained - sand - undulating to rolling - moderately well drained 5.1 - 5.5 - strongly acid loamy sand silty clay - rolling to moderately steep 18 - 30 - somewhat poorly drained 5.6 - 6.0 - medium acid - coarse sandy loam - clay 30 - 50 - poorly drained 6.1 - 6.5 slightly acid - sandy loam heavy clay > 50 6.6 - 7.2 - neutral very poorly drained 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 CL 30 - 50 - shallow < 10% - none - few - clay loam 10 - 30% - common 50 - 100 - moderately deep - silty clay loam - deep to very deep > 30% - sandy clay loam - many

SOIL DEPTH

ROCK OUTCROPS

Rc2 - Common

Rc3 - Many

Sh3 - Very shallow (< 30cm)

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

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

ELEVATION	SOIL DRAINAGE					
El2 - 500 - 1000m or 2000 - 2500m	D2 - Somewhat poorly drained to poorly drained					
El3 $-<500 \text{m or} > 2500 \text{m}$	D3 - Very poorly drained or excessively drained					

SLOPE/TOPOGRAPHY **SOIL TEXTURE** T2 - Undulating to moderately steep Tc - Coarse texture T3 - Steep to very steep

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	E2-Sh2-Rc3	11	T2-E3-Rc2	21	T2-El2-Sh2-Rc3	31	T3-E3-Sh3-Rc2	41	Т3-Е3
2	El2-Sh2-Rc2	<i>12</i>	T2-E3-Rc3	22	T2-F2-D2	32	T3-E3-Sh3-Rc3	42	T3-E3-Sh3-Rc3
3	F2-D2	<i>13</i>	T2-E3-Sh2-Rc2	23	T2-F3-D2	33	T3-El2	43	T3-El2
4	F2-Tc	14	T2-E3-Sh2-Rc3	24	T2-Rc2	34	T3-El2-E3-Rc2	44	T3-El2-E3-Rc3
5	F3-D2	<i>15</i>	T2-El2	25	T2-Sh2-Rc2	35	T3-El2-E3-Sh2-Rc3	45	T3-El2-E3-Sh3-Rc3
6	Sh2	16	T2-El2-E3-Rc2	26	T2-Sh2-Rc3	36	T3-El2-E3-Sh3-Rc2	46	T3-El3
7	Sh2-Rc2	<i>17</i>	T2-El2-E3-Rc3	27	T3	37	T3-El2-E3-Sh3-Rc3	47	Tc
8	T2	18	T2-El2-E3-Sh2-Rc2	28	T3-E3	38	T3-F2-D2		
9	T2-E2-Sh2-Rc2	19	T2-El2-E3-Sh2-Rc3	29	T3-E3-Rc2	39	T3-F3-D2		
10	T2-E3	20	T2-El2-Sh2-Rc2	30	T3-E3-Sh2-Rc3	40	Т3		

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

SOIL EROSION

FLOODING

E3 - Severe erosion

E2

- Moderate erosion

F3 - Severe seasonal flooding

- Moderate seasonal flooding

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.

Marginally Suitable (S3) 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.

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

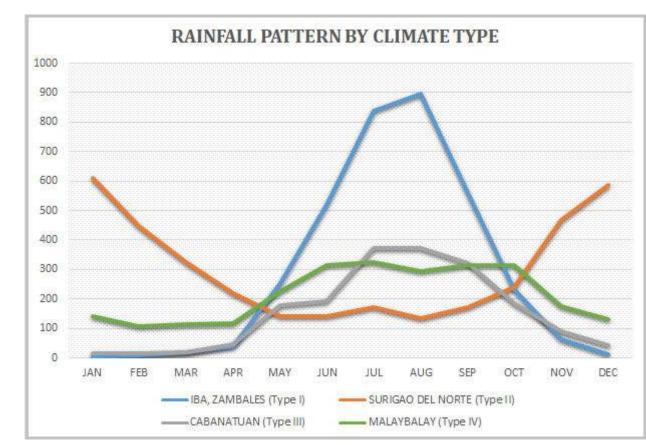
TYPE I: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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 Sur 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.

