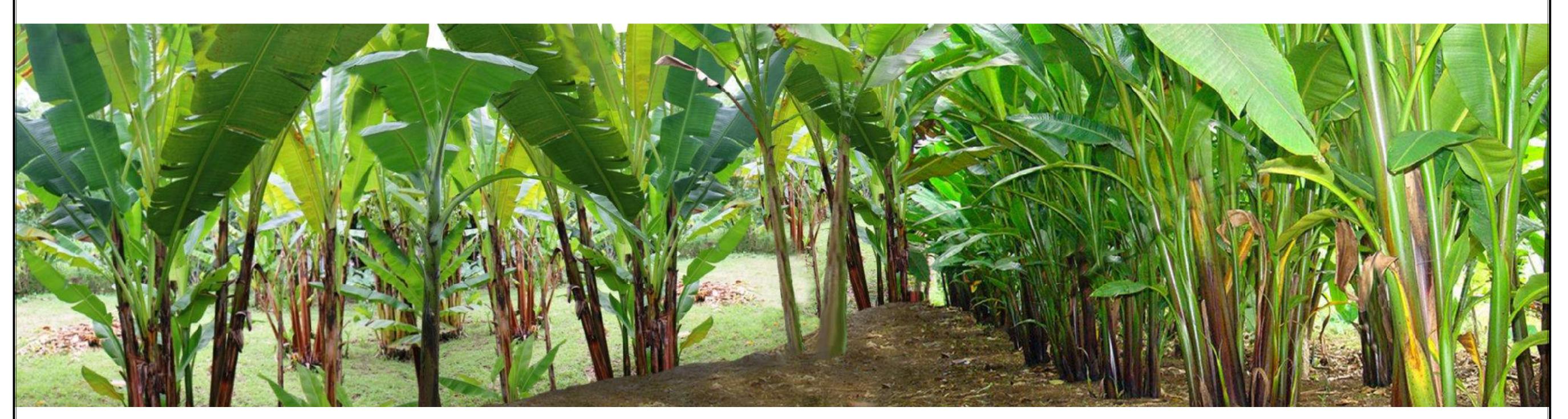
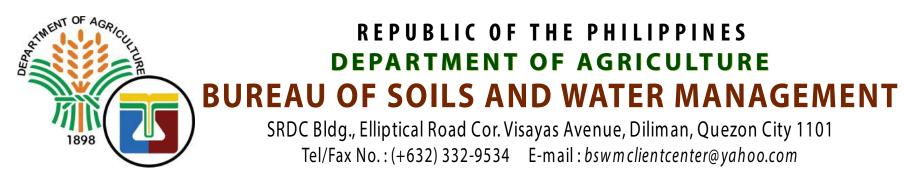
LAND SUITABILITY MAP

ABACA

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

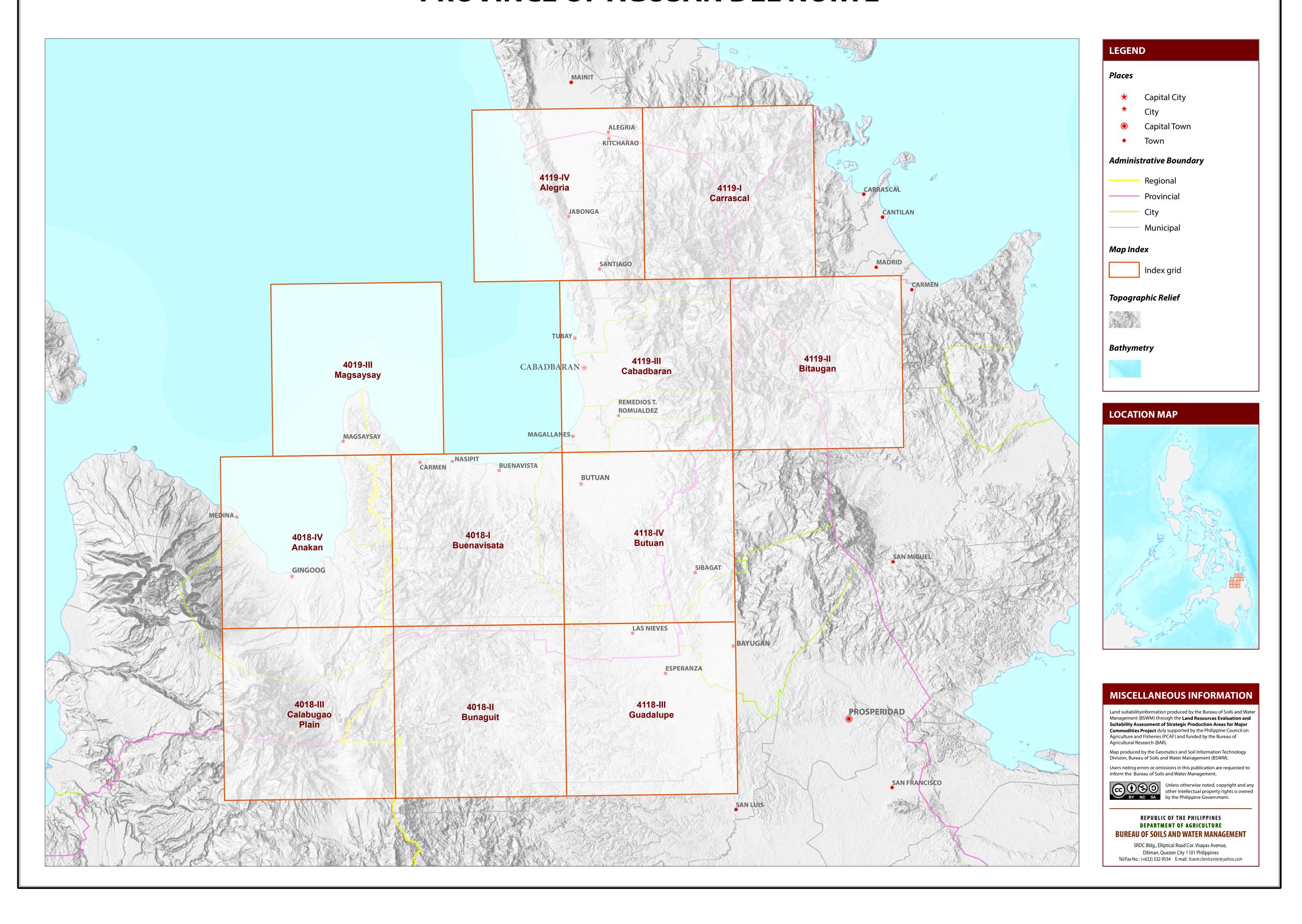
PROVINCE OF AGUSAN DEL NORTE





MAP INDEX

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



LAND SUITABILITY MAP FOR **ABACA**

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

EXTENT OF SUITABILITY FOR ABACA PRODUCTION BY MUNICIPALITY

	EXISTING ABACA (Ha)				EXPANSION AREA (Ha)						CONFLICT RESOLUTION AREA (Ha)					TOTAL	
MUNICIPALITY				TOTAL EXISTING AREA (Ha)	Coconut		Shrubland, unmanaged*		Grassland, unmanaged*		Corn		Paddy rice, non-irrigated		Other crops		POTENTIAL EXPANSION AREA (Ha)
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	AREA (IIa)
BUENAVISTA	-	ı	-	-	1931	6069	33	528	169	803	449	231	-	ı	_	1	10,215
BUTUAN CITY	-	-	-	-	7064	13520	2	250	10	190	6009	1136	102	8	-	-	28,291
CARMEN	-	ı	1	-	326	1539	-	-	57	306	129	12	1,563	1,256	17	55	5,261
CITY OF CABADBARAN	-	ı	1	-	3142	561	-	-	113	86	2913	61	1	ı	10	2,254	9,140
JABONGA	-	-	-	-	645	620	-	-	24	101	812	9	-	ı	-	26	2,236
KITCHARAO	-	-	-	-	444	623	-	16	-	31	297	10	-	1	-	27	1,447
LAS NIEVES	-	-	-	-	907	5804	43	407	4	315	810	578	43	1	1	11	8,924
MAGALLANES	-	-	-	-	799	15	-	-	-	-	142	41	-	-	-	63	1,060
NASIPIT	-	ı	1	-	458	740	-	-	198	447	173	247	33	ı	-	-	2,295
REMEDIOS T. ROMUALDEZ	-	ı	1	-	429	445	-	-	-	-	497	46	1	1	1	109	1,529
SANTIAGO	-	-	-	-	1060	357	-	-	56	106	447	13	-	-	75	887	3,002
TUBAY	-	-	-	-	1804	531	-	-	7	241	443	2	15	56	-	-	3,100
TOTAL	-	-	-	-	19,009	30,826	79	1,201	638	2,626	13,120	2,384	1,757	1,323	105	3,432	76,499

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

*establishment of shade trees prior to planting of abaca.

very shallow

moderately deep

- deep to very deep

30 - 50

6 Sh2

8 T2

7 Sh2-Rc2

9 T2-E2

10 T2-E2-Sh2-Rc2

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)	ANNUA RAINFA (mm)	LL 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	2001-45	00 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	1000-20	00 I, II
	S3	>30	< 30	S, LS, CSL	ED	<5.0 - > 7.9	low	severe	severe	many	>1500	<1000 >4500	
SLOPE (%) SOIL DRAINAGE					SOIL REACTI	ON (pH)		SOIL TEXTURE					
0-3 -1	level to gently slopin	g	ED - 6	excessively drained		< 4.5 - ex	xtremely acid		Coarse			Fine	
3 - 8 - gently sloping to undulating WD		WD - v	- well drained			4.5 - 5.0 - very strongly acid			sand		SC	- sandy clay	
8 - 18 - undulating to rolling		MWD - r	VD - moderately well drained			5.1 - 5.5 - strongly acid			loamy sand		SiC	- silty clay	
18 - 30 - 1	- 30 - rolling to moderately steep SPD - somewhat poorly drained		ned	5.6 - 6.0 - medium acid			CSL -	coarse sandy loam		С	- clay		
30 - 50 - 9	0 - steep PD - poorly drained			6.1 - 6.5 - slightly acid			SL -	sandy loam		HC	- heavy clay		
> 50	very steep		VPD - v	ery poorly drained		6.6 - 7.2 - n	eutral		Medium				
						7.3 - 7.8 - m	nildly alkaline		FSL -	fine sandy loam			
SOIL DEPTH (cm)			SURFACE IM	SURFACE IMPEDIMENT			noderately alkaline		L -	loam			

- strongly alkaline

- silt loam

- clay loam

- silty clay loam

- sandy clay loam

130 Bare areas, unmanaged

134 Shrubs, unmanaged

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

16 T2-El2

17 T2-El2-E3

18 T2-El2-E3-Rc2

19 T2-El2-E3-Rc3

20 T2-El2-E3-Sh2-Rc2

ROCK OUTCROPS

> 30%

10 - 30% - common

- none - few

26 T2-Sh2-Rc2

27 T3

28 T3-E3

29 T3-E3-Rc2

30 T3-E3-Sh2-Rc3

	TION 500 - 1000m or 2000 - 2 < 500m or > 2500m	500m		omewhat	poorly drained to poo y drained or excessive	-	Sh2					SOIL EROSION E2 - Moderate erosion E3 - Severe erosion		
SLOPE	/TOPOGRAPHY	SOIL TEX	KTURE		ROCK OUTCROPS						FLOODING			
T2 -	Undulating to moderatel	y steep	Tc - C	Tc - Coarse texture							F2 - Moderate seasonal flooding			
Т3 -	Steep to very steep						Rc3	Rc3 - Many				F3 - Severe seasonal flooding		
CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	Ī	CODE		LANDUSE	
1	E2-Rc3	11	T2-E3	21	T2-El2-Rc2	31	T3-E3-Sh3-Rc2	41	Т3-Е3		4	Corn		
2	El2-Sh2-Rc2	12	T2-E3-Rc2	22	T2-El2-Sh2-Rc2	32	T3-E3-Sh3-Rc3	42	T3-E3-Rc3		81	Coffee		
3	F2-D2	13	T2-E3-Rc3	23	T2-F2-D2	33	T3-El2	43	T3-E3-Sh3-Rc3		82	Cacao		
4	F2-Tc	14	T2-E3-Sh2-Rc2	24	T2-F3-D2	34	T3-El2-E3	44	T3-El2		116	Coconut		
5	F3-D2	15	T2-E3-Sh2-Rc3	25	T2-Rc2	35	T3-El2-E3-Rc2	45	T3-El2-E3		126	Grassland	 d	

36 T3-El2-E3-Sh2-Rc3

37 T3-El2-E3-Sh3-Rc2

38 T3-El2-E3-Sh3-Rc3

39 T3-F3-D2

40 T3

46 T3-El2-E3-Rc3

48 T3-El3

47 T3-El2-E3-Sh3-Rc3

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.

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.

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

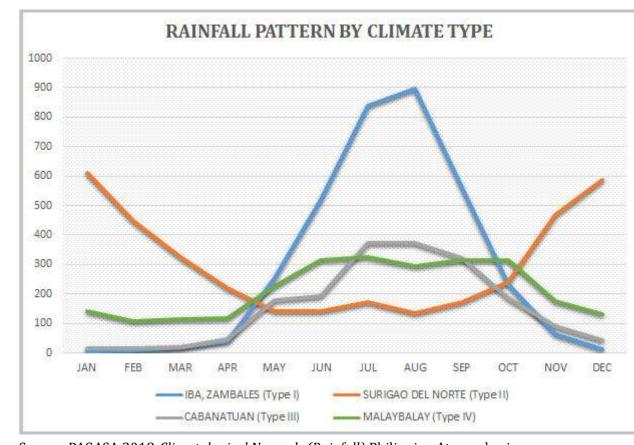
TYPE I: Two pronouced season, dry from November to April and wet during the rest of the year. Maximum rain period is from June to September

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.

Western part of Agusan Del Norte is classified as climatic Type IV and North Eastern part is 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.

