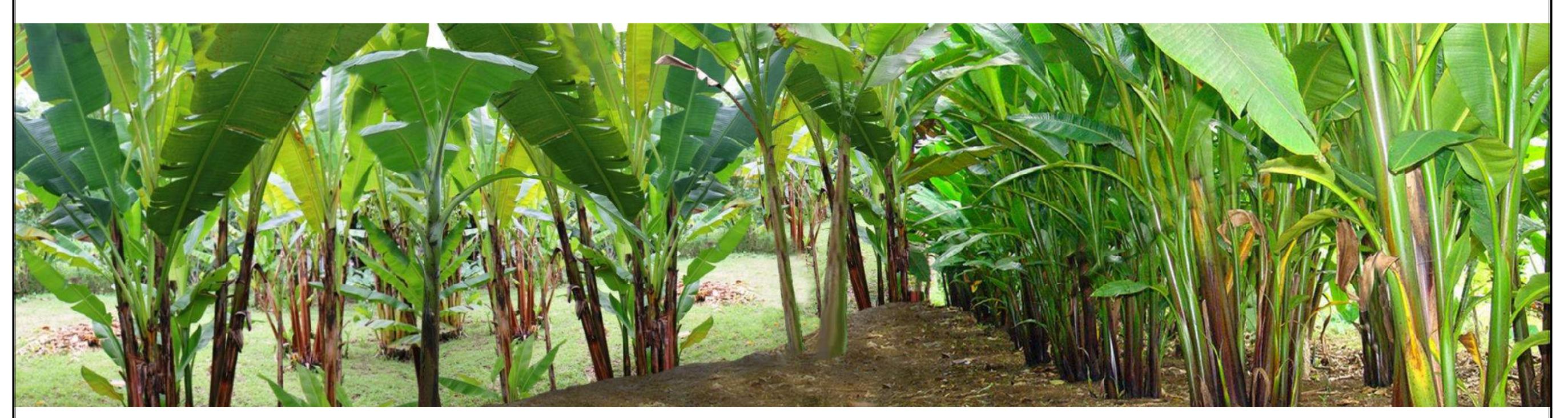
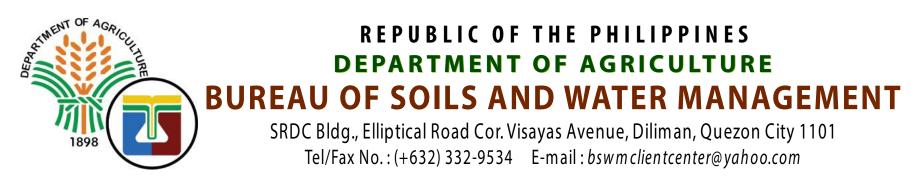
LAND SUITABILITY MAP

ABACA

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

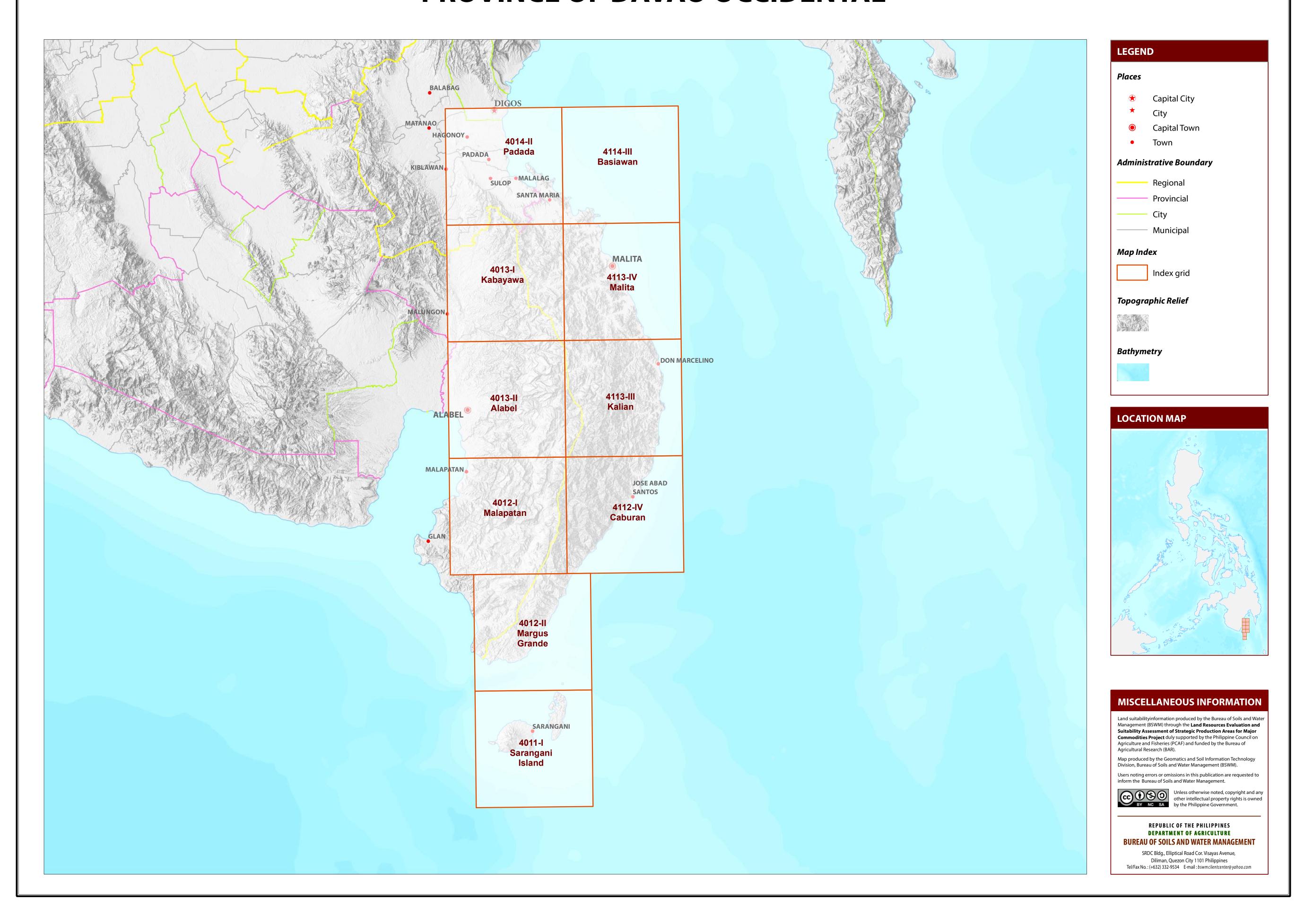
PROVINCE OF DAVAO OCCIDENTAL





MAP INDEX

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS PROVINCE OF DAVAO OCCIDENTAL



LAND SUITABILITY MAP FOR **ABACA**

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS DAVAO OCCIDENTAL, REGION XI

EXTENT OF SUITABILITY FOR ABACA PRODUCTION BY MUNICIPALITY

					EXPANSION AREA (Ha)							CONFLICT RESOLUTION AREA (Ha)					
MUNICIPALITY	EXIST	ING ABAC	CA (Ha)	TOTAL EXISTING AREA (Ha)	Coconut		Shrubland, unmanaged*		Grassland, unmanaged*		Banana		Corn		Other crops		POTENTIAL EXPANSION
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	AREA (Ha)
DON MARCELINO	-	_	-	-	27	1,423	1	2	4	118	-	80	-	-	-	-	1,656
JOSE ABAD SANTOS	-	_	-	-	192	2,814	-	-	44	676	-	1	1	20	-	1	3,748
MALITA	-	_	-	-	589	5,509	-	5	19	887	11	479	-	80	6	147	7,732
SANTA MARIA	-	_	-	-	3,474	1,653	1	47	23	345	-	-	-	-	16	1	5,560
SARANGANI	-	_	13	13	112	2,199	-	-	-	-	-	-	-	-	-	-	2,311
TOTAL	-	_	13	13	4,394	13,598	2	54	90	2,025	11	561	1	100	21	149	21,007

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

- deep to very deep

AGRONOMIC REQUIREMENT OF ABACA PRODUCTION

LAND UTILIZAT TYPE	TION SUITABILITY	SLOPE (%)	SOIL DEPTH (cm)	SOIL TEXTURE	SOIL DRAINAGE	SOIL REACTI (pH)	ION INHE	RENT	FLOODING CLASS	EROSION CLASS	ROCK OUTCROPS	ELEVATION (masl)	ANNUA RAINFAL (mm)	LL CLIMATIC TYPE
	S1	<8	>50	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD, SPD	5.6 -7.	2 hi	gh	none-slight	none-slight	none-few	<500	2001-450	00 II, III, IV
Abaca	S2	8 - 30	30 - 50	FSL, L, SiL, SL	PD,VPD	5.1 - 5. 7.3 - 7.	l med	lium	moderate	moderate	common	500-1500	1000-200	00 I, II
	S3	>30	< 30	S, LS, CSL	ED	<5.0 ->	7.9 lc	W	severe	severe	many	>1500	<1000 >4500	
SLOPE (%	SLOPE (%) SOIL DRAINAGE				,	SOIL REACTION (pH)			SOIL TEXTURE					
0 - 3	- level to gently sloping ED - excessively drained					< 4.5 - extremely acid			Coarse			Fine		
3 - 8	- gently sloping to un	dulating	lulating WD - well drained			4.5 - 5.0 - very strongly acid			S	- sand		SC	- sandy clay	
8 - 18	- undulating to rolling			ed	5.1 - 5.5 - strongly acid			LS	- loamy sand		SiC	- silty clay		
18 - 30	- rolling to moderatel	- 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 alkal	ine		FSL	- fine sandy loam			
SOIL DEP	ГН (ст)		SURFACE IM	IPEDIMENT		7.9 - 8.4	- moderately	alkaline		L	- loam			
0 - 30	- very shallow		ROCK OUTCH	ROPS		> 8.5	- strongly alk	aline		SiL	- silt loam			
30 - 50	- shallow		< 10% -	none - few						CL	- clay loam			
50 - 100	- moderately deep		10 - 30% -	common						SiCL	- silty clay loam			

- sandy clay loam

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

LAIN	DLIMITATIC	וע פאנ	COURTP HON	AND	COMBINAL	IONS							
ELEVA	TION		SOIL 1	DRAINA	GE			SOIL	DEPTH			SOII	LEROSION
El2 -	500 - 1000m or 2000 ·	2500m	D2	- Somew	hat poorly drained to	poorly drai	ned	Sh2	- Shallow	to moderat	ely deep (30 - 100cm)	E2	- Moderate erosion
El3 -	< 500m or > 2500m		D3	- Very p	oorly drained or exces	sively drain	ned	Sh3	- Very sha	allow (< 300	cm)	Е3	- Severe erosion
SLOPE,	TOPOGRAPHY		SOIL	ΓEXTUR	Е			ROCI	K OUTCRO)PS		FLO	ODING
T2 -	Undulating to modera	tely steep	Tc	- Coarse	texture			Rc2	- Commo	n		F2	- Moderate seasonal flooding
Т3 -	Steep to very steep							Rc3	- Many			F3	- Severe seasonal flooding
								_					
CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION			CODE	LANDUSE		
								T .					

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	El2-Sh2-Rc2	11	T2-E3-Rc3	21	T3	31	T3-F3-D2
2	F2-D2	12	T2-E3-Sh2-Rc2	22	Т3-Е3	32	T3
3	F2-Tc	13	T2-E3-Sh2-Rc3	23	T3-E3-Rc2	33	T3-E3
4	F3-D2	14	T2-El2-E3	24	T3-E3-Sh2-Rc3	34	T3-E3-Rc3
5	Sh2	15	T2-El2-E3-Rc3	25	T3-E3-Sh3-Rc2	35	T3-E3-Sh3-Rc3
6	Sh2-Rc2	16	T2-El2-E3-Sh2-Rc2	26	T3-E3-Sh3-Rc3	36	T3-E12-E3
7	T2	17	T2-El2-Sh2-Rc2	27	T3-El2-E3	37	T3-El2-E3-Sh3-Rc3
8	T2-E2-Sh2-Rc2	18	T2-F2-D2	28	T3-El2-E3-Sh2-Rc3	38	T3-El3
9	T2-E3	19	T2-F3-D2	29	T3-El2-E3-Sh3-Rc2	39	Тс
10	T2-E3-Rc2	20	T2-Sh2-Rc2	30	T3-F2-D2		

> 30% - many

CODE	LANDUSE
4	Corn
34	Diversified crops
85	Mango
89	Durian
91	Banana
107	Abaca
116	Coconut
126	Grassland
134	Shrubs, unmanaged
137	Rubber (T)
	*

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

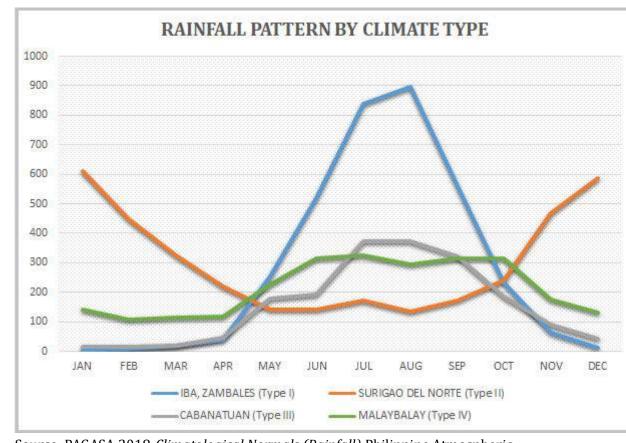
TYPE I: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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

Davao Occidental is classified as climatic Type IV.



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.

^{*}establishment of shade trees prior to planting of abaca.

