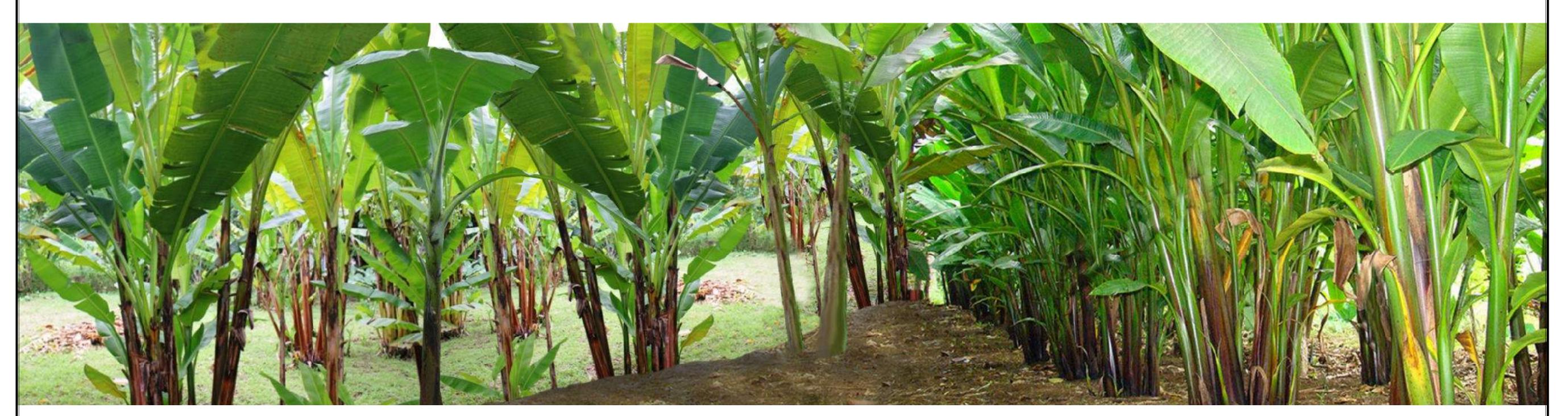
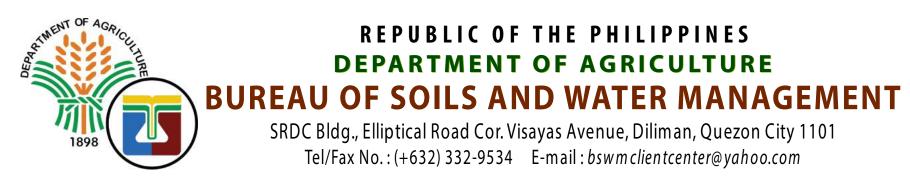
LAND SUITABILITY MAP

ABACA

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

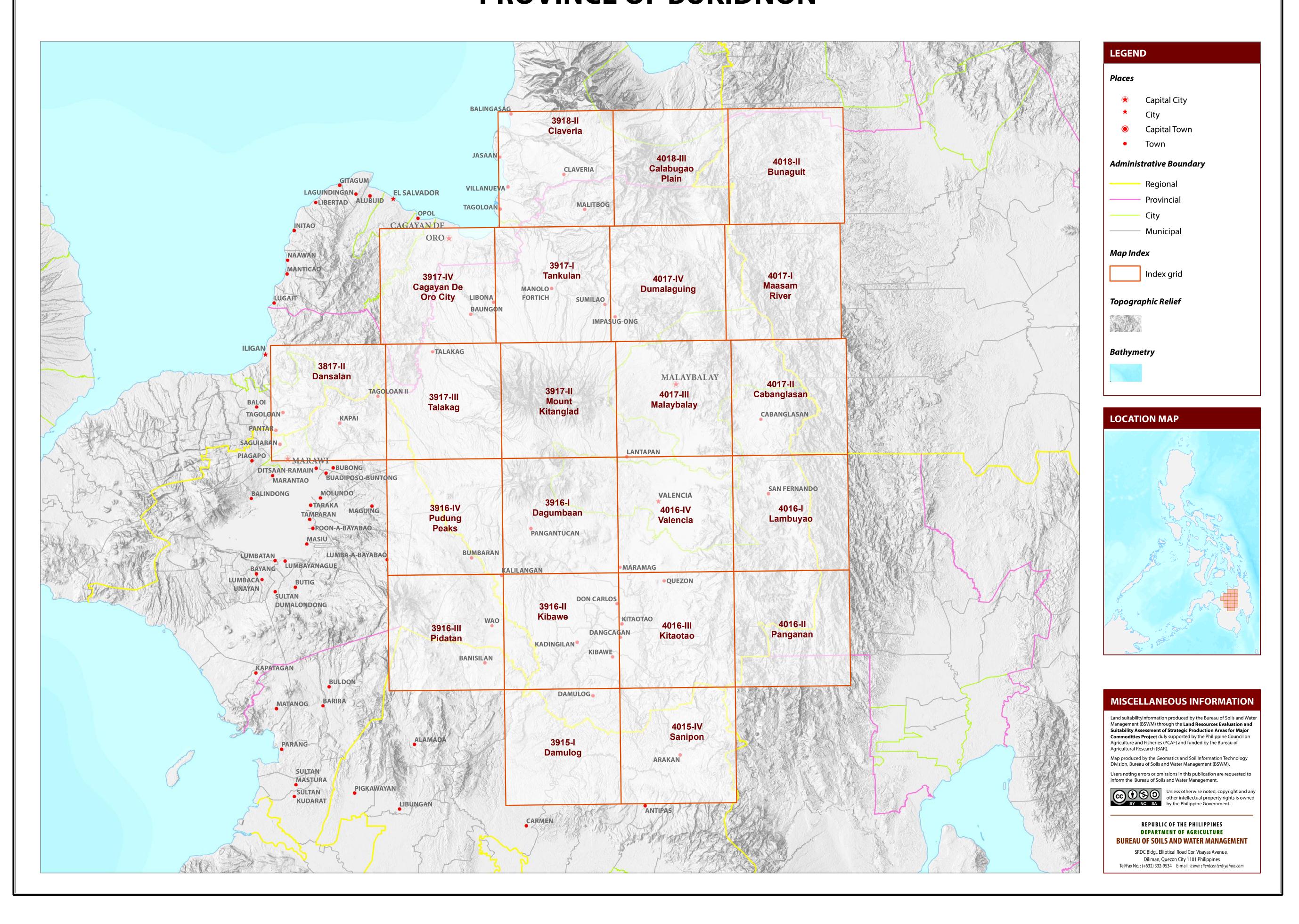
PROVINCE OF BUKIDNON





MAP INDEX

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS PROVINCE OF BUKIDNON



LAND SUITABILITY MAP FOR **ABACA**

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS BUKIDNON, REGION X

EXTENT OF SILITABILITY FOR ABACA PRODUCTION BY MUNICIPALITY

	EXPANSION AREA (Ha) CONFLICT RESOLUTION AREA (Ha)										TOTAL										
MUNICIPALITY	EXISTING ABACA (Ha)		TOTAL EXISTING AREA (Ha)	Coco	nut	Shrub unmar	•	Grass unman	•	Co	rn	Sugar	cane	Ban	ana	Vege	tables	Other	crops	POTENTIAL EXPANSION	
	S1	S2	S 3		S1	S2	S1	S2	S 1	S2	S1	S2	AREA (Ha)								
BAUNGON	-	-	ı	-	497	925	-	1	73	3,954	1,359	5,970	-	-	7	44	-	-	62	60	12,952
CABANGLASAN	-	-	1	-	-	-	45	369	5	293	1,414	5,318	1	-	-	-	-	-	69	71	7,586
CITY OF MALAYBALAY	-	-	-	-	-	175	19	148	146	3,420	1,128	7,352	-	-	1,273	12,473	-	-	-	-	26,134
CITY OF VALENCIA	-	-	-	-	5	4	31	794	39	1,057	1,956	5,788	1,502	882	1,563	3,031	-	-	17	55	16,724
DAMULOG	-	-	-	-	88	714	-	4	11	72	-	231	-	-	-	-	852	6,982	-	-	8,954
DANGCAGAN	-	-	-	-	60	355	-	-	-	-	3,185	1,422	4	-	-	-	-	26	-	-	5,052
DON CARLOS	-	-	•	-	1	94	14	191	-	102	1,244	1,056	6,249	4,762	-	-	-	27	485	25	14,249
IMPASUG-ONG	-	-	-	-	-	572	-	90	10	930	-	4,658	-	-	-	198	-	-	-	530	6,987
KADINGILAN	-	-	-	-	-	59	-	12	220	3,327	2,574	3,176	46	86	-	-	-	1	-	-	9,502
KALILANGAN	-	-	1	-	-	53	-	215	-	1	1,298	7,993	303	871	-	1	-	-	-	-	10,735
KIBAWE	-	-	1	-	214	1,230	-	46	-	46	2,209	2,122	126	1,800	43	-	508	1,352	1	2	9,699
KITAOTAO	-	-	1	-	43	394	-	ı	20	905	1,375	1,461	1,237	5,724	-	-	-	63	-	-	11,221
LANTAPAN	-	-	-	-	-	-	-	260	-	-	1,034	7,885	211	97	223	49	-	-	-	-	9,760
LIBONA	-	-	1	-	450	279	17	673	10	1,380	281	481	-	-	83	10,543	-	-	-	-	14,197
MALITBOG	-	-	-	-	283	1,335	81	930	62	837	13	1,878	-	-	-	625	-	-	-	-	6,045
MANOLO FORTICH	-	-	-	-	333	636	45	708	91	1,163	2,797	10,582	-	-	-	288	-	-	242	649	17,533
MARAMAG	-	-	-	-	73	464	48	506	95	902	2,120	1,147	2,086	8,140	1	358	1	107	199	269	16,516
PANGANTUCAN	_	-	_	-	3	131	-	116	-	79	806	6,576	932	4,098	-	438	-	-	-	2	13,181
QUEZON	_	-	-	-	-	18	8	63	281	2,896	78	245	7,620	6,288	-	-	75	887	-	-	18,459
SAN FERNANDO	_	-	-	-	-	3	43	272	1,001	2,833	1,430	2,315	-	-	15	56	-	-	-	-	7,969
SUMILAO	-	-	-	-	-	-	25	487	-	1,022	199	844	-	-	-	42	-	-	95	5,144	7,857
TALAKAG	-	-	-	-	1,924	9,602	7	7,685	93	4,276	40	3,295	-	-	-	-	-	-	718	6,185	33,825
TOTAL	_	-	-	-	3,974	17,043	384	13,569	2,159	29,496	26,540	81,795	20,317	32,748	3,209	28,147	1,436	9,445	1,887	12,990	285,139

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	

					>4500
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 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	5.1 - 5.5 - strongly acid	LS - loamy sand	SiC - silty clay
18 - 30	- rolling to moderately steep	SPD - somewhat poorly drained	5.6 - 6.0 - medium acid	CSL - coarse sandy loam	C - 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	
			7.3 - 7.8 - mildly alkaline	FSL - fine sandy loam	
SOIL DEP	ТН (cm)	SURFACE IMPEDIMENT	7.9 - 8.4 - moderately alkaline	L - loam	
0 - 30	- very shallow	ROCK OUTCROPS	> 8.5 - strongly alkaline	SiL - silt loam	
30 - 50	- shallow	< 10% - none - few		CL - clay loam	
50 - 100	- moderately deep	10 - 30% - common		SiCL - silty clay loam	
> 100	- deep to very deep	> 30% - many		SCL - sandy clay loam	

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

ELEVATION	SOIL DRAINAGE	SOIL DEPTH	SOIL EROSION
El2 - 500 - 1000m or 2000 - 2500m El3 - < 500m or > 2500m	D2 - Somewhat poorly drained to poorly drainedD3 - Very poorly drained or excessively drained	Sh2 - Shallow to moderately deep (30 - 100cm) Sh3 - Very shallow (< 30cm)	E2 - Moderate erosionE3 - Severe erosion
SLOPE/TOPOGRAPHY	SOIL TEXTURE	ROCK OUTCROPS	FLOODING
T2 - Undulating to moderately steepT3 - Steep to very steep	Tc - Coarse texture	Rc2 - Common Rc3 - Many	F2 - Moderate seasonal floodingF3 - Severe seasonal flooding

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	El2	11	T2-E3	21	T2-El2-E3-Sh2-Rc3	31	T2-Rc2	41	T3-E12-E3	51	T3-E3-Rc3
2	El2-E2-Sh2-Rc3	12	T2-E3-Rc2	22	T2-El2-Rc2	32	T2-Sh2-Rc2	42	T3-El2-E3-Rc2	<i>52</i>	T3-E3-Sh3-Rc3
3	El2-Sh2-Rc2	13	T2-E3-Rc3	23	T2-El2-Sh2-Rc2	33	T2-Sh2-Rc3	43	T3-El2-E3-Sh2-Rc3	<i>53</i>	T3-El2
4	El3-E2-Sh2-Rc3	14	T2-E3-Sh2-Rc2	24	T2-El2-Sh2-Rc3	34	Т3	44	T3-El2-E3-Sh3-Rc2	54	T3-El2-E3
5	El3-Sh2-Rc2	15	T2-E3-Sh2-Rc3	25	T2-El3-E3-Rc2	35	Т3-Е3	45	T3-El2-E3-Sh3-Rc3	<i>55</i>	T3-El2-E3-Rc3
6	F2-D2	16	T2-El2	26	T2-El3-E3-Sh2-Rc2	36	T3-E3-Rc2	46	T3-El3-E3-Rc2	56	T3-El2-E3-Sh3-Rc3
7	Rc2	17	T2-El2-E3	27	T2-El3-E3-Sh2-Rc3	37	T3-E3-Sh2-Rc3	47	T3-El3-E3-Sh3-Rc2	<i>57</i>	T3-El3-E3-Rc3
8	Sh2-Rc2	18	T2-El2-E3-Rc2	28	T2-El3-Rc2	38	T3-E3-Sh3-Rc2	48	T3-El3-E3-Sh3-Rc3	58	T3-El3-E3-Sh3-Rc3
9	T2	19	T2-El2-E3-Rc3	29	T2-El3-Sh2-Rc2	39	T3-E3-Sh3-Rc3	49	T3		
10	T2-E2-Sh2-Rc2	20	T2-El2-E3-Sh2-Rc2	30	T2-F2-D2	40	T3-E12	50	T3-E3		

CODE	LANDUSE	CODE	LANDUSE
4	Corn	119	Oil palm
81	Coffee	126	Grassland
82	Cacao	134	Shrubs, unmanaged
84	Pineapple	137	Rubber
85	Mango		
91	Banana		
105	Fruit trees, mixed		
112	Sugarcane		
115	Mixed crops		
116	Coconut		

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

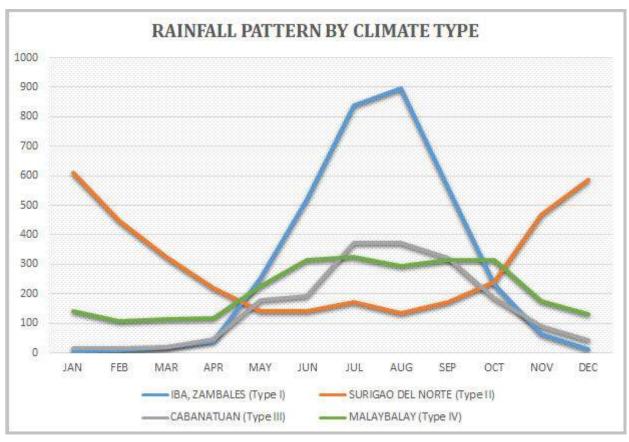
TYPE I: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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

Western part of Bukidnon is classified as climatic Type III and Northeastern part is 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.

