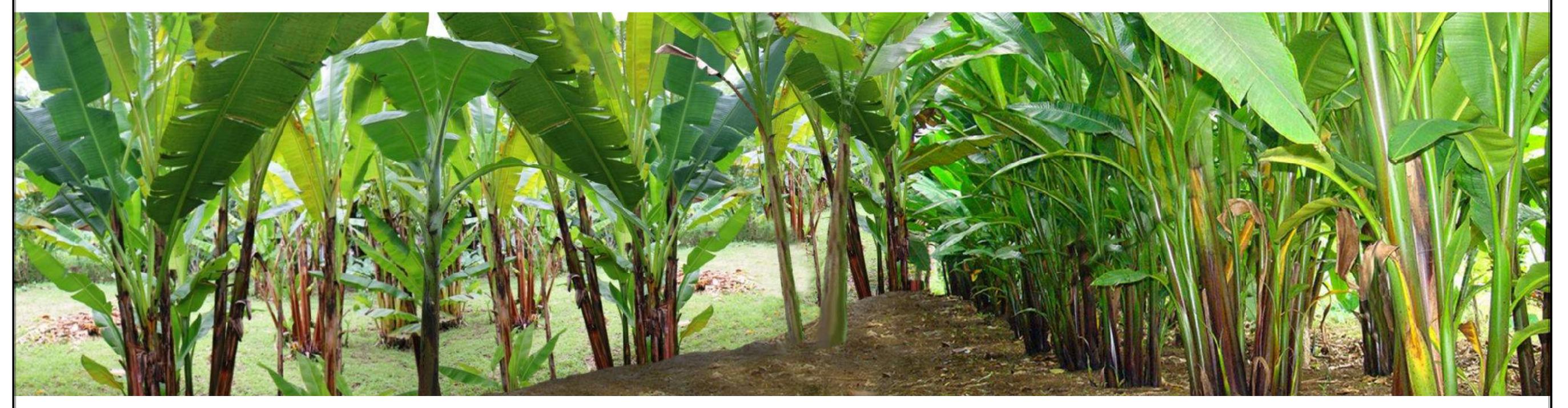
LAND SUITABILITY MAP

ABACA

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

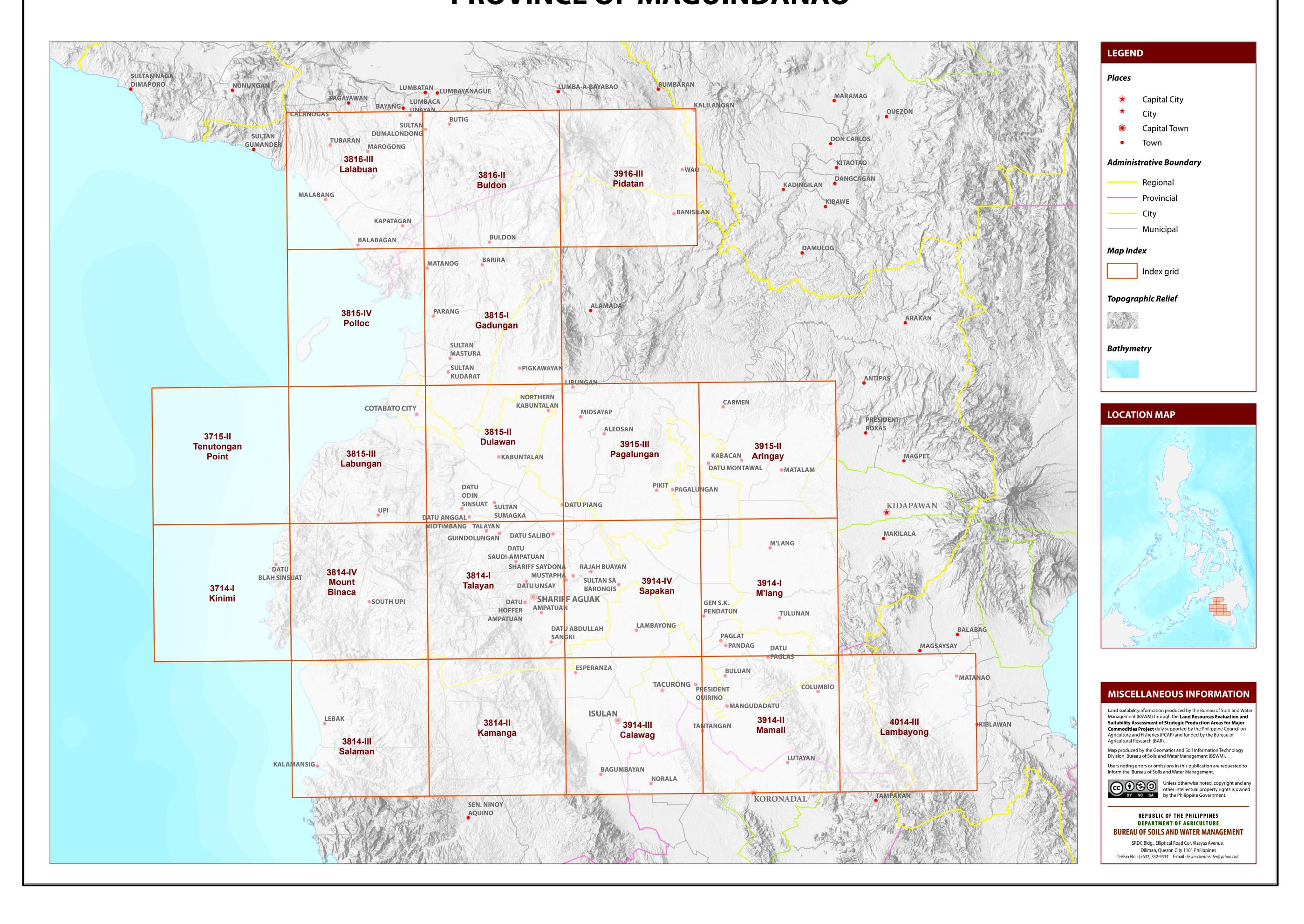
PROVINCE OF MAGUINDANAO





MAP INDEX

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



LAND SUITABILITY MAP FOR **ABACA**

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS PROVINCE OF MAGUINDANAO, ARMM

EXTENT OF SUITABILITY FOR ABACA PRODUCTION BY MUNICIPALITY

						EXPANSION AREA (Ha)						CONF	LICT RESC	DLUTION	(Ha)		TOTAL
MUNICIPALITY	EXISTING ABACA (Ha)		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	
AMPATUAN	-	-	-	-	250	57	-	39	44	1,239	1,834	1,234	-	-	-	<u> </u>	4,690
BARIRA	-	-	-	-	2,850	6,622	-	177	-	-	972	697	-	-	-	-	11,318
BULDON	-	-	-	-	2,248	3,846	3	108	186	982	665	690	-	-	-	-	8,729
BULUAN		-	-	_	1,000	-	-	-	1	-	2,578	4	-	-	-	-	3,584
DATU ABDULLAH SANGKI	-	-	-	-	582	66	-	-	-	-	3,124	159	-	-	-		3,933
DATU ANGGAL MIDTIMBANG	-	-	-	-	864	87	-	2	-	6	357	37	-	-	-		1,353
DATU BLAH T. SINSUAT	-	-	-	-	1,916	1,166	13	206	49	953	57	78	-	-	-		4,438
DATU HOFFER AMPATUAN	-	-	-	-	189	2	-	-	17	1,207	114	417	-	-	-		1,946
DATU ODIN SINSUAT	_	-	_	-	2,747	1,007	60	1,969	31	4,343	591	1,599	-	-	-		12,347
DATU PAGLAS	_	-	-	_	449	73	2	41	337	1,359	2,847	142	-	-	-	-	5,251
DATU PIANG	_	-	_	-	694	21	60	84	-	-	1,234	17	-	-	_		2,110
DATU SALIBO	_	-	_	_	120	-	-	-	-	-	591	5	-	-	_		710
DATU SAUDI-AMPATUAN	_	-	_	-	196	15	13	140	20	64	1,356	2	-	-	_		1,800
DATU UNSAY	-	-	_	_	315	31	1	113	0	1,814	364	371	-	-	_		3,009
GEN. S.K. PENDATUN	-	-	_	_	1,343	-	-	-	-	-	1,051	-	-	-	_		2,394
GUINDULUNGAN	-	-	_	_	773	181	98	845	336	2,159	1,345	173	-	-	_		5,910
KABUNTALAN	-	-	_	_	609	4	168	-	-	-	1,080	0	-	-	_		1,863
MAMASAPANO	-	-	_	-	667	17	-	-	-	-	1,037	43	-	-	-		1,764
MANGUDADATU	-	-	_	_	269	109	11	54	17	151	428	11	-	-	_		1,050
MATANOG	-	-	_	_	1,208	4,038	0	134	-	-	102	689	-	-	_		6,17
NORTHERN KABUNTALAN	-	-	_	_	58	-	-	-	-	-	3,720	-	-	-	_		3,778
PAGAGAWAN	-	-	_	_	2,032	3	-	-	-	-	4,465	-	-	-	_		6,500
PAGALUNGAN	-	-	_	_	2,638	4	-	-	-	-	975	2	-	-	_		3,620
PAGLAT	_	_	_	_	573	-	_	-	-	-	934	9	_	_	_		1,51
PANDAG	_	_	_	_	821	27	1	12	1	11		3	-	_	_		2,709
PARANG	_	_	_	_	1,855	4,012	_	-	655	2,254	338	103	-	_	_		9,218
RAJAH BUAYAN	_	_	_	_	515	11	381	379	-		3,315	44	_	_	_		4,64
SHARIFF AGUAK	_	-	_	_	203	2	_	_	23	65	670	15	_	-	_		978
SHARIFF SAYDONA MUSTAPHA	_	-	_	_	285	60	265	557		-	2,156	10	-	-	_		3,332
SOUTH UPI	_	_	_	_	0	2,349		324	_	1,072	1	6,812	_	_	_		10,557
SULTAN KUDARAT	_	_	_	_	6,470	2,327	30	-	411	1,169	2,319	51	_	_	_		12,777
SULTAN MASTURA	1 -	_	_	<u> </u>	2,167	273	-	_	273	649	895	5	_	_	_		4,263
SULTAN SA BARONGIS	<u> </u>	_	_	_	962		_	_		- 017	2,632	13	_		_		3,600
TALAYAN	<u> </u>	_	_	_	963	119	5	399	315	727	1,325	943	_				4,796
TALITAY	<u> </u>	_			891	35		- J J J	515	-	257	0					1,182
UPI	<u> </u>	_	_		1,207	3,898	20	340	63	3,387	575	5,996					15,486
Total Area (Ha)	 	<u> </u>		_	40,930	30,461	1,130	5,924		23,611		20,372	-				173,346

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
	S 3	>30	< 30	S, LS, CSL	ED	<5.0 - > 7.9	low	severe	severe	many	>1500	<1000 >4500	

								, ,	>450	00
SLOPE (%	%)		SOIL DRA	INAGE	SOIL REA	ACTION (pH)	SOIL TEXTU	JRE		
0 - 3	- level to gently sloping		ED	- excessively drained	< 4.5	- extremely acid	Coarse		Fine	
3 - 8	- gently sloping to undula	ating	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 st	teep	SPD	- somewhat poorly drained	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			
					7.3 - 7.8	- mildly alkaline	FSL -:	fine sandy loam		
SOIL DEF	PTH (cm)		SURFACE	IMPEDIMENT	7.9 - 8.4	- moderately alkaline	L -	loam		
0 - 30	- very shallow		ROCK OUT	CROPS	> 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					
El2	- 500 - 1000m or 2000 - 2500m	D2	- Somewhat poorly drained to poorly drained					
El3	- < 500m or > 2500m	D3	- Very poorly drained or excessively drained					

SLO	PE/TOPOGRAPHY	SOIL TEXTURE					
T2	- Undulating to moderately steep	Tc	- Coarse textur				
Т3	- Steep to very steep						

SOIL DEPTH Sh2 - Shallow to moderately deep (30 - 100cm) Sh3 - Very shallow (< 30cm)

ROCK OUTCROPS Rc2 - Common Rc3 - Many

SOIL EROSION E2 - Moderate erosion E3 - Severe erosion

FLOODING F2 - Moderate seasonal flooding F3 - Severe 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.

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

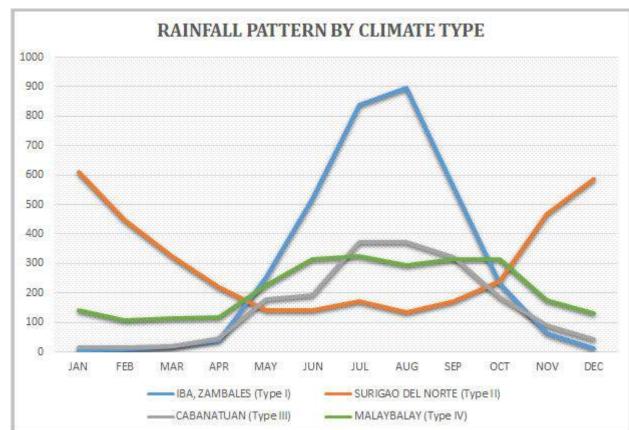
TYPE I: Two pronouced season, dry from November to April and TYPE II: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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 season.

Whole part of City of Isabela is classified as climatic Type IV.



ource: PAGASA 2018, Climatological Normals (Rainfall), Pl	hilippine Atmospheric,
Geophysical and Astronomical Services Administra	ation (PAGASA), accessed 27 July 2018
https://www1.pagasa.dost.gov.ph/index.php/cli	mate/climatological-normals>.

CODE	LANDUSE
2	Paddy rice, non-irrigated
4	Corn
116	Coconut
126	Grassland, unmanaged
134	Shrubs, unmanaged
144	Falcata

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

