LAND SUITABILITY MAP

CASSAVA

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

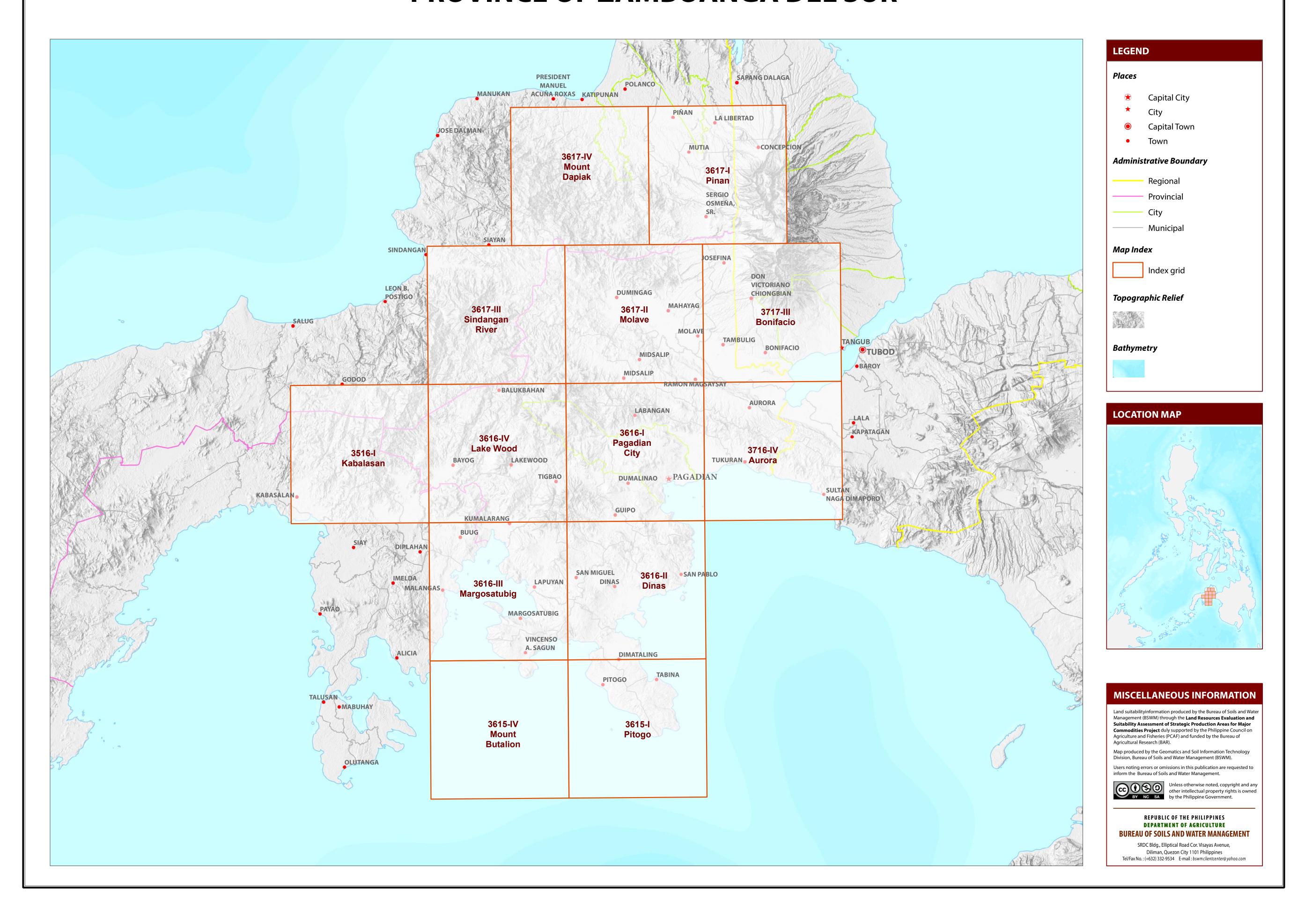
PROVINCE OF ZAMBOANGA DEL SUR





MAP INDEX

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



LAND SUITABILITY MAP FOR **CASSAVA**

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

ZAMBOANGA DEL SUR, REGION IX

EXTENT OF SUITABILITY FOR CASSAVA PRODUCTION BY MUNICIPALITY

				EXPANSION AREA (Ha)							CONFLICT RESOLUTION AREA (Ha)					TOTAL		
MUNICIPALITY	EXISTIN	IG CASSA	VA (Ha)	TOTAL EXISTING AREA (Ha)	Coco	onut	Shrubl unmana	,	Grass unman	,	Co	rn	Mango	Ва	nana	Other c	rops	POTENTIAL EXPANSION
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1 S2	S1	S2	S1	S2	AREA (Ha)
AURORA	-	-	-	-	3,053	3,852	6	100	28	269	460	701	-	-		-	-	8,469
BAYOG	-	-	-	-	79	587	29	206	337	3,123	650		-	-		-	-	5,430
DIMATALING	-	-	-	-	1,915	3,636	60	227	-	-	257	185	7	1		-	-	6,288
DINAS	-	-	-	-	3,372	5,143	23	218	85	59	533	852	3	3		2	3	10,296
DUMALINAO	-	-	-	-	687	2,907	-	9	16	387	873	1,983	-	-		-	-	6,862
DUMINGAG	-	-	-	-	25	257	12	121	549	7,255	1,051	176	-	-		-	-	9,447
GUIPOS	-	-	_	-	118	835	-	8	44	386	780	1,600	-	-		-	-	3,772
JOSEFINA	-	-	_	-	-	692	-	34	-	24	42	703	-	-		-	-	1,495
KUMALARANG	-	-	-	-	361	1,679	1	9	1	128	474	523	-	-		-	-	3,176
LABANGAN	-	-		-	153	51	-	18	288	1,352	2,397	223	-	-		1	-	4,483
LAKEWOOD	-	-		-	214	1,994	-	127	97	741	152	388	-	-		-	3	3,717
LAPUYAN	-	-		-	1,423	5,938	66	347	26	164	532	624	-	-		-	-	9,120
MAHAYAG	-	-		-	1,435	1,026	75	52	249	423	1,553	1,096	-	-	6 2	2	-	5,920
MARGOSATUBIG	-	-		-	801	3,484	19	171	4	20	157	357	-	-		-	-	5,014
MIDSALIP	-	-		-	6	63	83	72	547	3,599	589	307	-	-		-	-	5,265
MOLAVE	-	-		-	488	1,389	77	195	-	1	965	2,999	-	-		-	-	6,114
PAGADIAN CITY	-	-		-	1,242	3,048	34	173	185	808	1,810	2,895	-	-		-	-	10,196
PITOGO	-	-	_	-	2,133	3,590	-	-	-	-	194	84	-	-		-	-	6,003
RAMON MAGSAYSAY	-	-	_	-	1,479	2,613	6	43	235	209	646	705	-	-		-	-	5,938
SAN MIGUEL	-	-	_	-	1,147	2,905	4	109	12	124	420	767	-	-		-	-	5,487
SAN PABLO	-	-	_	-	761	3,763	-	-	-	28	332	659	-	2		-	-	5,545
SOMINOT	-	-	_	-	254	1,468	12	56	617	2,022	159	482	-	-		-	-	5,070
TABINA	-	-	_	-	746	4,945	-	-	-	-	8	65	-	-	- 2	5	_	5,772
TAMBULIG	-	-	_	-	172	2,518	-	1	20	46	1,334	954	-	-		-	-	5,046
TIGBAO	-	-	_	-	136	1,523	-	71	3	154	363		1	0		1	2	3,063
TUKURAN	-	-	_	-	84	363	7	100	536	3,110	623		-	-	3 -	-	_	5,245
VINCENZO A. SAGUN	-	-		-	904	3,381	-	-	-	25	68		-	1		-	-	4,460
TOTAL	-	-		-	23,189	63,651	514	2,468	3,878	24,458	17,423	21,056	10	7	9 4	13	7	156,688

Note: Delivery of cassava planting materials must be started on the onset of rainy season. *establishment of shade trees prior to planting of cassava.

AGRONOMIC REQUIREMENT OF CASSAVA 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	FSL, L, SiL, CL, SiCL, SCL, SC, SiC, C	WD,MWD	5.6 -7.2	high	none-slight	none-slight	none-few	<500	1000-2000	I,II, III, IV
Cassava	S2	8 - 18	30 - 50	SL, HC	SPD, PD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	500-1500	2001-4500	II
	S3	18 - 30	<30	S, LS, CSL	VPD,ED	<5.0 - > 7.9	low	severe	severe	many	>1500	<1000 >4500	

					24300
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 DEF	РТН (ст)	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	

SOIL DEPTH

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

SOIL DRAINAGE

ELEVATION

El2 - 500 - 1000m or 2000 - 2500m	D2 - Somewhat poorly drained to poorly drained	Sh2 - Shallow to moderately deep (30 - 100cm)	E2 - Moderate erosion
El3 - < 500m or > 2500m	D3 - Very poorly drained or excessively drained	Sh3 - Very shallow (< 30cm)	E3 - Severe erosion
SLOPE/TOPOGRAPHY	SOIL TEXTURE	ROCK OUTCROPS	FLOODING
T2 - Undulating to moderately steep	The Committee of the Co	D-2	F2 Madausta assessal flooding
12 Chadading to moderately steep	Tc - Coarse texture	Rc2 - Common	F2 - Moderate seasonal flooding

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	El2	11	T2-El2-E3-Sh2-Rc3	21	T3-E3-Rc3	31	T3-El2-E3-Sh3-Rc2	41	T3-El2-E3-Sh3-Rc3
2	El2-Rc2	12	T2-El2-Rc2	22	T3-E3-Sh2-Rc2	32	T3-E12-E3-Sh3-Rc3	42	T3-El3
3	El2-Sh2-Rc2	13	T2-El2-Sh2-Rc2	23	T3-E3-Sh2-Rc3	33	T3-El3-E3-Sh3-Rc3		
4	F2-D2	14	T2-El2-Sh2-Rc3	24	T3-E3-Sh3-Rc2	34	T3-F2-D2		
5	F2-Tc	15	T2-F2-D2	25	T3-E3-Sh3-Rc3	35	T3-F3-D2		
6	F3-D2	16	T2-F3-D2	26	T3-E12	36	Т3		
7	Sh2-Rc2	17	T2-Sh2-Rc2	27	T3-E12-E3	37	Т3-Е3		
8	T2	18	T3	28	T3-E12-E3-Rc2	38	T3-E3-Sh3-Rc3		
9	T2-E2-Sh2-Rc2	19	Т3-Е3	29	T3-El2-E3-Sh2-Rc2	39	T3-E12		
10	T2-El2	20	T3-E3-Rc2	30	T3-E12-E3-Sh2-Rc3	40	T3-El2-E3		

CODE	LANDUSE	CODE	LANDUSE
4	Corn	131	Ipil ipil
47	Vegetable	134	Shrubs, unmanaged
81	Coffee	137	Rubber
82	Cacao		
85	Mango		
87	Jackfruit		
91	Banana		
105	Fruit trees, mixed		
116	Coconut		
126	Grassland		

SOIL EROSION

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

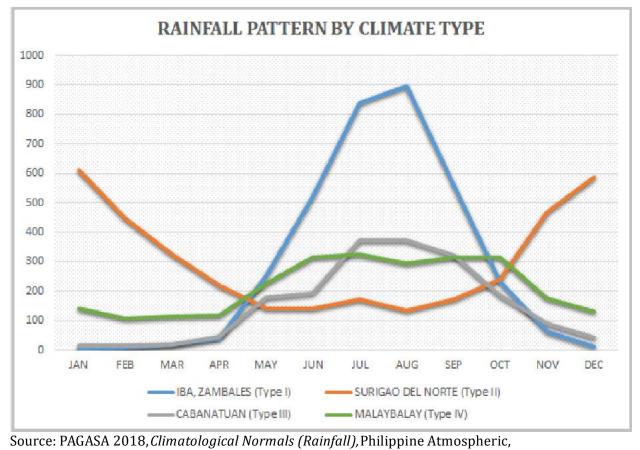
TYPE I: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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

Eastern part of Zamboanga Del Sur belongs to Type III climate classification and the rest on Wesstern part belongs to Type IV.



Geophysical and Astronomical Services Administration (PAGASA), accessed 27 July 2018, https://www1.pagasa.dost.gov.ph/index.php/climate/climatological-normals.

