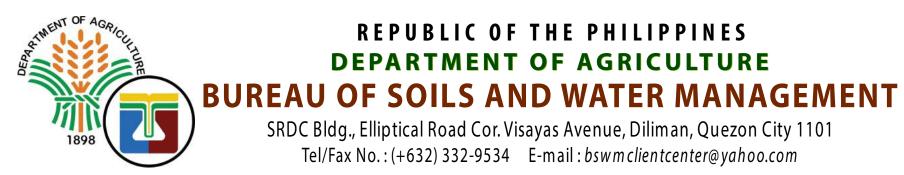
LAND SUITABILITY MAP

CASSAVA

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

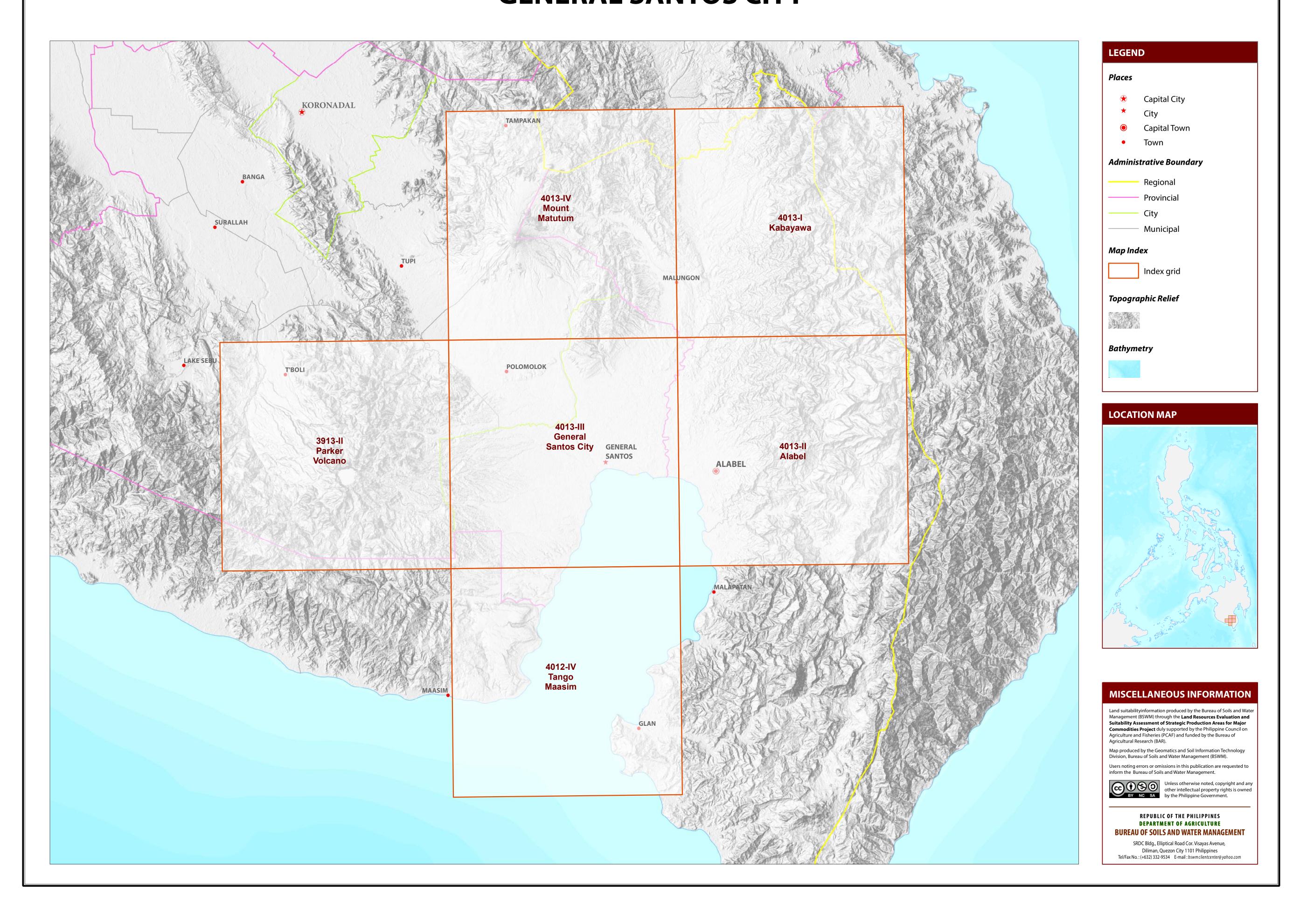
GENERAL SANTOS CITY





MAP INDEX

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS GENERAL SANTOS CITY



LAND SUITABILITY MAP FOR **CASSAVA**

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS GENERAL SANTOS CITY, REGION XII

EXTENT OF SUITABILITY FOR CASSAVA PRODUCTION BY MUNICIPALITY

					EXPANSION AREA (Ha)							CONFLIC'	T RESOLU	тотат			
MUNICIPALITY	EXISTIN	EXISTING CASSAVA (Ha)		TOTAL EXISTING AREA (Ha)	Coconut		Shrubland, unmanaged*		Grassland, unmanaged*		Corn		Pineapple		Other crops		TOTAL POTENTIAL EXPANSION
	S1	S2	S 3	, ,	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	AREA (Ha)
GENERAL SANTOS CITY	-	-	1	1	2,427	410	190	415	1537	-	6,613	2,509	-	_	_	-	14,100
TOTAL	_	_	1	1	2.427	410	190	415	1537	_	6.613	2.509	_	_	_	_	14.100

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	

	33 18-30	<50 5, L5, C5L	VFD,ED <5.0->	7.9 IOW	Severe sev	vere	Illally	>1300	>4500	0	
SLOPE (%	(6)	SOIL DRAINAGE	SOIL REA	ACTION (pH)	SOII	SOIL TEXTURE					
0 - 3	- level to gently sloping	ED - excessively drained	d <4.5	- extremely acid	Coa	rse			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 dr	rained 5.1 - 5.5	- strongly acid	LS	- loamy	sand		SiC	- silty clay	
18 - 30	- rolling to moderately steep	SPD - somewhat poorly of	drained 5.6 - 6.0	- medium acid	CSL	- coarse	e 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 draine	ed 6.6 - 7.2	- neutral	Med	lium					
			7.3 - 7.8	- mildly alkaline	FSL	- fine sa	andy loam				
SOIL DEF	PTH (cm)	SURFACE IMPEDIMENT	7.9 - 8.4	- moderately alkaline	L	- loam					
0 - 30	- very shallow	ROCK OUTCROPS	> 8.5	- strongly alkaline	SiL	- silt loa	am				
30 - 50	- shallow	< 10% - none - few			CL	- clay lo	oam				
50 - 100	- moderately deep	10 - 30% - common			SiCL	- silty c	lay loam				
> 100	- deep to very deep	> 30% - many			SCL	- sandy	clay loam				

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

15 T3-E3-Sh2-Rc3

16 T3-E3-Sh3-Rc2

17 T3-E3-Sh3-Rc3

19 T3-El2-E3-Sh2-Rc2

20 T3-El2-E3-Sh3-Rc2

18 T3-El2

5 Sh2-Rc2

8 T2-El2

10 T2-F2-D2

7 T2-E2-Sh2-Rc2

9 T2-El2-Sh2-Rc2

6 T2

	ATION - 500 - 1000m or 2000 - 25 - < 500m or > 2500m	500m		mewhat	poorly drained to poorly y drained or excessively o			SOIL DEPTH Sh2 - Shallow to moderately deep (30 - 100cm) Sh3 - Very shallow (< 30cm)				SOIL EROSION E2 - Moderate erosion E3 - Severe erosion			
T2	E/TOPOGRAPHY - Undulating to moderately - Steep to very steep	y steep	SOIL TEX Tc - Co	TURE parse text	ure		ROCK OUTCROPS Rc2 - Common Rc3 - Many				FLOC F2 F3	DDING - Moderate seasonal flooding - Severe seasonal flooding			
CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	Ī	CODE		LANDUSE						
1	El2-Rc2	11	T2-F3-D2	21	T3-E3		4	Corn		*					
2	El2-Sh2-Rc2	12	Т3	22	T3-E3-Sh3-Rc3	<u> </u>	51	Cassava							
3	F2-D2	13	T3-E3	23	T3-El2-E3-Sh3-Rc3	Ť	84	Pineapp	ole						
4	F3-D2	14	T3-E3-Sh2-Rc2	24	T3-El3	-		Mango							
						Г	I I h	LLOCOPHI	Ī						

126 Grassland

134 Shrubs, unmanaged

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

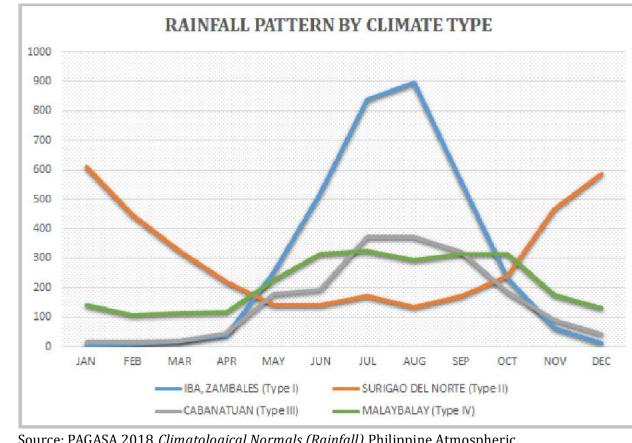
period from December to February. There is not a single dry month. Maximum monthly rainfall occurs during the period from March to May.

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.

General Santos City 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.

