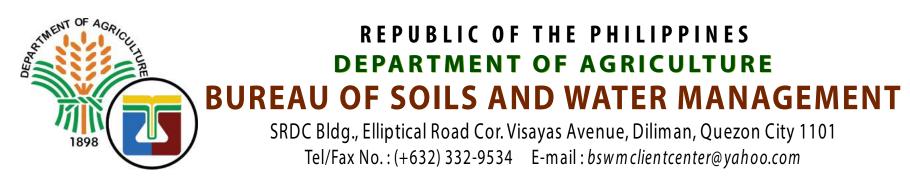
LAND SUITABILITY MAP

ROBUSTA, LIBERICA AND EXCELSA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

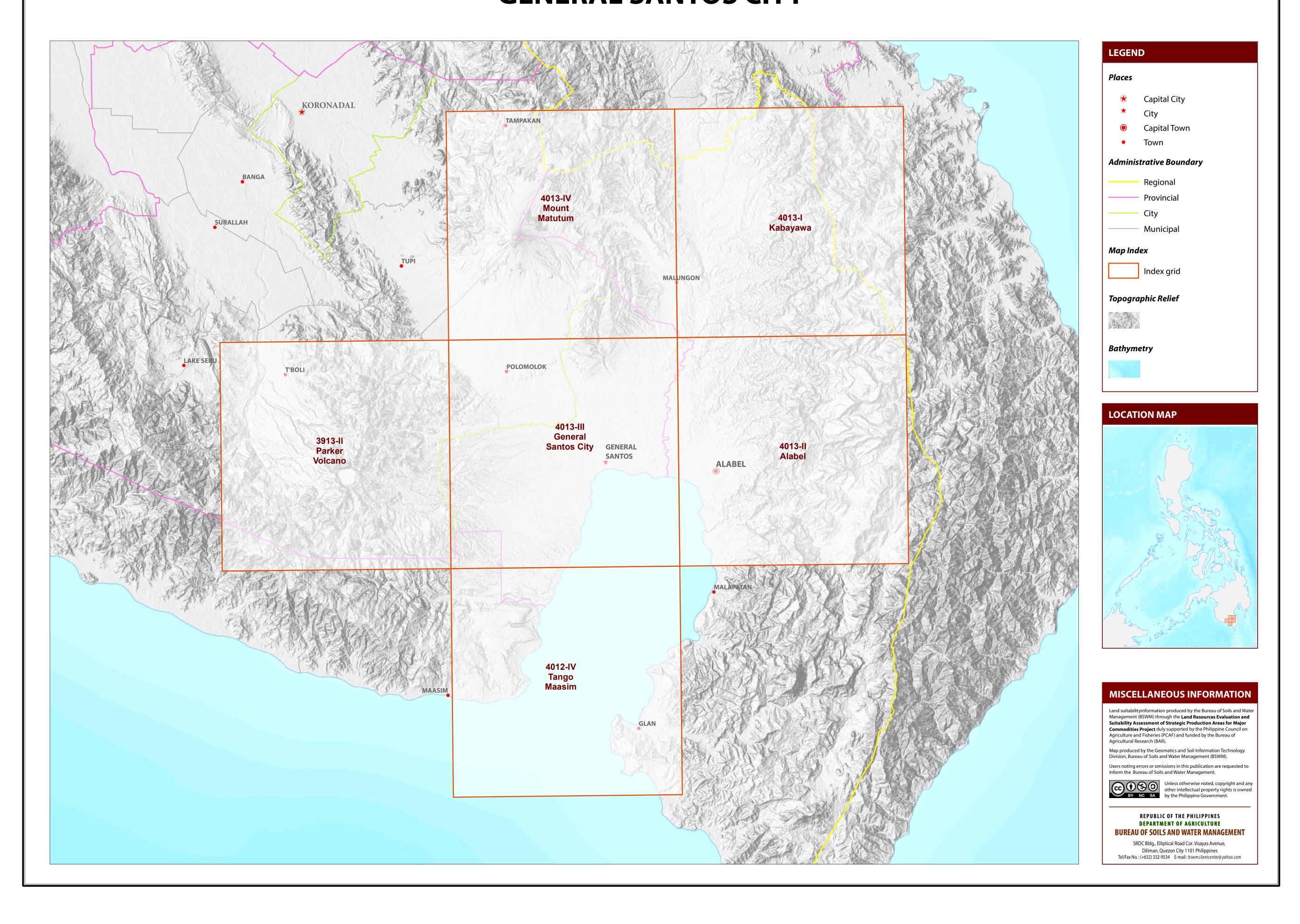
GENERAL SANTOS CITY





MAP INDEX

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



LAND SUITABILITY MAP FOR ROBUSTA, LIBERICA AND EXCELSA COFFEE

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

- sandy clay

- silty clay

heavy clay

- clay

EXTENT OF SUITABILITY FOR ROBUSTA, LIBERICA AND EXCELSA COFFEE PRODUCTION BY MUNICIPALITY

						EXI	PANSION	AREA (H	a)			CONFLIC	T RESOL	UTION AI	REA (Ha)		TOTAL
MUNICIPALITY	EXISTIN	G ROBUS	ТА (На)	TOTAL EXISTING AREA (Ha)	Coco	nut	Shrubl unmana		Grass unman	,	Coi	rn	Pinea	ipple	Other	crops	POTENTIAL EXPANSION AREA (Ha)
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	АКЕА (Па)
GENERAL SANTOS CITY	-	-	-	-	2,785	51	593	29	4001	3,388	7,296	1,826	99	12	3	-	20,084
TOTAL	_	-	-	-	2,785	51	593	29	4001	3,388	7,296	1,826	99	12	3	_	20,084

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

AGRONOMIC REQUIREMENT OF ROBUSTA, LIBERICA AND EXCELSA COFFEE PRODUCTION

- excessively drained

- moderately well drained

- somewhat poorly drained

D2 - Somewhat poorly drained to poorly drained

D3 - Very poorly drained or excessively drained

very poorly drained

- well drained

- poorly drained

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
Coffee	S1	<8	>100	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD	5.6 -7.2	high	none-slight	none-slight	none-few	<1000	2001-4500	I, III, IV
(Robusta, Excelsa,	S2	8 - 30	30 - 100	FSL, L, SiL	SPD,PD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	1000-2000	1000-2000	I, II
Liberica)	S3	>30	<30	S, LS, CSL, SL	VPD,ED	<5.0 -> 7.9	low	severe	severe	many	>2000	<1000 >4500	

	%)
0 - 3	- level to gently sloping
3 - 8	- gently sloping to undulating
8 - 18	 undulating to rolling
18 - 30	- rolling to moderately steep
30 - 50	- steep
> 50	- very steep

SURFACE IMPEDIMENT ROCK OUTCROPS 0 - 30 very shallow 30 - 50 shallow < 10% - none - few 50 - 100 moderately deep 10 - 30% - common - deep to very deep > 30% - many

SOIL REACTION (pH)

- extremely acid very strongly acid 5.1 - 5.5 - strongly acid 5.6 - 6.0 - medium acid 6.1 - 6.5 slightly acid 6.6 - 7.2 - neutral 7.3 - 7.8 - mildly alkaline - moderately alkaline

- strongly alkaline

- sand loamy sand - coarse sandy loam - sandy loam

- fine sandy loam - loam - silt loam CL - clay loam - silty clay loam - sandy clay loam

SOIL TEXTURE

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

SOIL DRAINAGE

SOIL DRAINAGE

WD

El2	- 1000m - 2000m	
El3	->2000m	
SLOF	E/TOPOGRAPHY	

T3 - Steep to very steep

ELEVATION

SOIL TEXTURE T2 - Undulating to moderately steep Tc - Coarse texture

CODE	LIMITATION	CODE	LIMITATION
1	E2-Sh2-Rc2	11	T3-E3
2	F2-D2	12	T3-E3-Sh3-Rc2
3	F3-D2	13	T3-E3-Sh3-Rc3
4	Rc2	14	T3-E3
5	Sh2-Rc2	15	T3-E3-Sh3-Rc3
6	T2	16	T3-El3
7	T2-E3	17	Tc
8	T2-E3-Sh2-Rc2		
9	T2-E3-Sh2-Rc3		
10	T3		

LANDUSE CODE 4 Corn 51 Cassava 84 Pineapple 85 Mango 116 Coconut 126 Grassland 134 Shrubs, unmanaged

SOIL DEPTH

SOIL EROSION Sh2 - Shallow to moderately deep (30 - 100cm) Sh3 - Very shallow (< 30cm) E3 - Severe erosion

ROCK OUTCROPS Rc2 - Common Rc3 - Many

F2 - Moderate seasonal flooding F3 - Severe seasonal flooding

FLOODING

- Moderate 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.

> 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.

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.

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

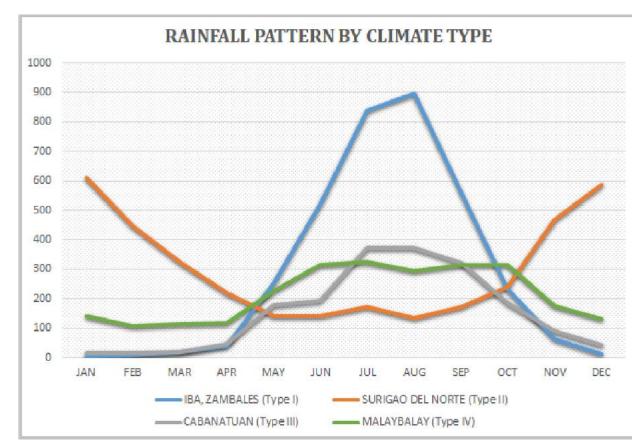
TYPE I: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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.

