LAND SUITABILITY MAP

NATURAL RUBBER

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

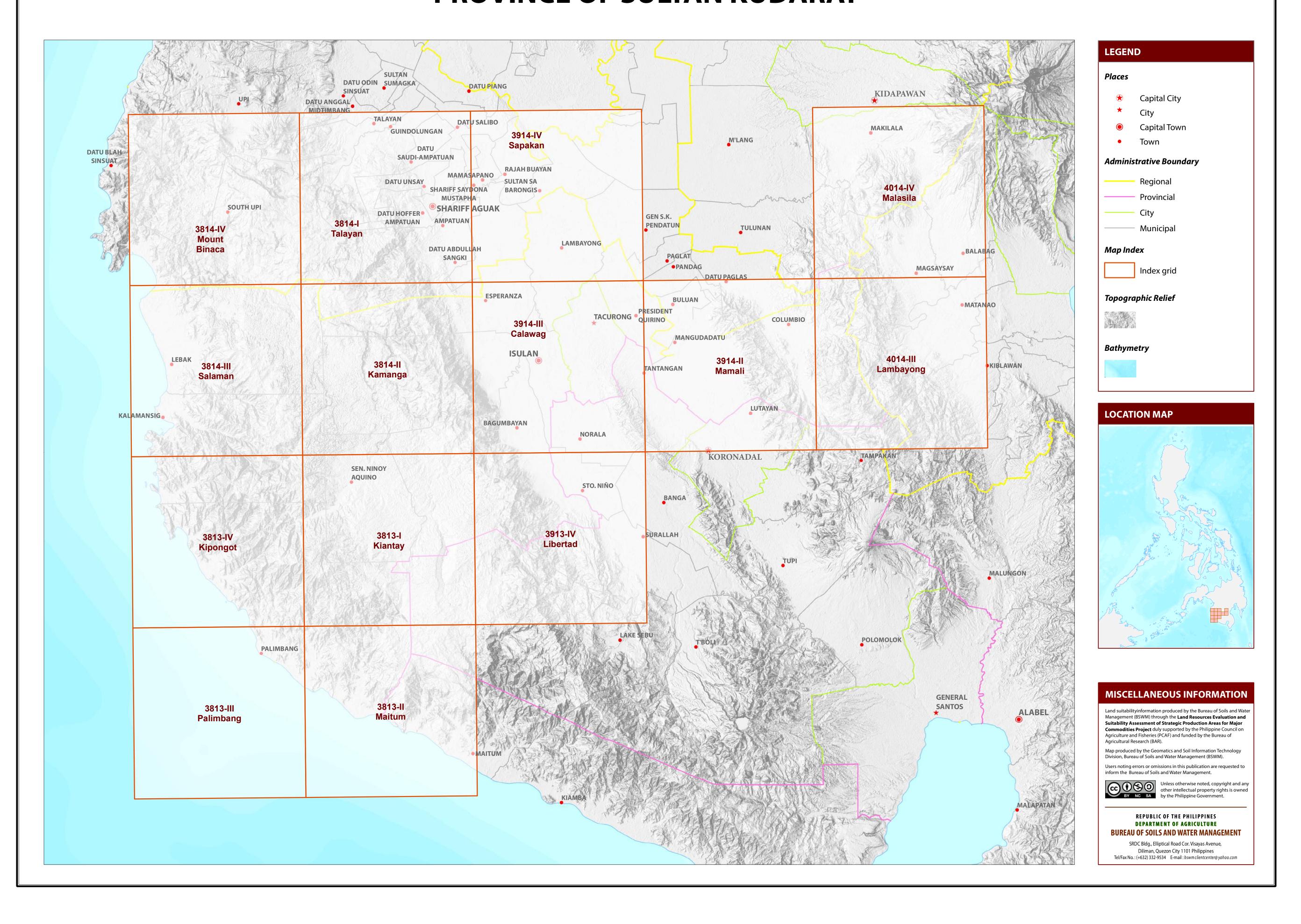
PROVINCE OF SULTAN KUDARAT





MAP INDEX

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS PROVINCE OF SULTAN KUDARAT



LAND SUITABILITY MAP FOR RUBBER

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS SULTAN KUDARAT, REGION XII

EXTENT OF SUITABILITY FOR RUBBER PRODUCTION BY MUNICIPALITY

						EXF	ANSION	AREA (H	la)				CO	NFLICT	AREA (Ha	1)			TOTAL
MUNICIPALITY	EXISTI	NG RUBB	ER (Ha)	TOTAL EXISTING AREA (Ha)	Coco	onut	Shrub unman		Grassl unmana		Co	orn	Oil pa	alm	Bana	ana	Other	crops	POTENTIAL EXPANSION AREA (Ha)
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	АКЕА (Па)
BAGUMBAYAN	-	-	-	-	1,680	1,369	9	49	20	5,624	3,104	11,411	77	31	-	-	-	-	23,374
CITY OF TACURONG	-	-	-	-	154	9	4	-	1,478	1,485	3,137	37	1,809	-	9	-	-	-	8,122
COLUMBIO	_	-	-		32	9	-	22	1,139	3,410	1,767	175	-	-	-	-	_	-	6,555
ESPERANZA	_	-	-	-	573	723	-	31	4	121	3,280	2,178	-	-	-	-	-	-	6,910
ISULAN	_	-	-	-	430	310	-	207	-	1,317	4,324	1,994	1,556	146	-	-	-	-	10,285
KALAMANSIG	-	-	-	-	1,920	595	28	353	-	173	73	4	-	-	-	-	-	-	3,147
LAMBAYONG	-	-	-	-	152	-	-	-	-	-	4,243	29	-	-	-	_	-	-	4,425
LEBAK	_	-	-	-	3,594	2,898	1	195	101	156	411	2,368	-	-	1	-	-	-	9,723
LUTAYAN	-	-	-	-	848	72	318	12	115	523	3,793	65	-	-	-	_	-	-	5,746
PALIMBANG	-	-	-	-	5,552	1,908	-	753	-	1,447	1,219	1,726	-	-	-	_	_	-	12,606
PRESIDENT QUIRINO	-	-	-	-	1,271	7	-	-	-	_	3,587		-	-	-	_	-	-	4,868
SEN. NINOY AQUINO	-	-	-	-	-	-	-	-	-	3,208	-	12,607	-	-	-	_	_	-	15,815
TOTAL	-		_	-	16,206	7,899	360	1,623	2,857	17,465	28,938	32,598	3,442	177	10		_	_	111,575

Note: Delivery of rubber planting materials must be started on the onset of rainy season.

- deep to very deep

AGRONOMIC REQUIREMENT OF RUBBER PRODUCTION

LAND UTILIZATI TYPE	ON 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	>100	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD, SPD	5.6 -7.2	high	none-slight	none-slight	none-few	<500	1000-2000	III, IV
Rubber Tr	ee S2	8 - 30	30 - 100	FSL, L, SiL, SL	PD,VPD	4.5 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	500-1000	2001-4500	I, II, III
	S3	>30	<30	S, LS, CSL	ED	<4.5 - > 7.9	low	severe	severe	many	>1000	<1000 >4500	
SLOPE (%)			SOIL DRAINAG	GE		SOIL REACTION	ON (pH)		SOIL TEXT	URE	•		
0 - 3 -	level to gently slopin	ıg	ED - ex	cessively drained		< 4.5 - ex	tremely acid		Coarse			Fine	
3-8 -	gently sloping to und	lulating	WD - we	ell drained		4.5 - 5.0 - ve	ery strongly acid		S -	sand		SC - sar	ndy clay
8 - 18 -	undulating to rolling		MWD - mo	oderately well dra	ined	5.1 - 5.5 - st	rongly acid		LS -	loamy sand		SiC - silt	y clay
18 - 30 -	rolling to moderately	y steep	SPD - so	mewhat poorly di	rained	5.6 - 6.0 - m	edium acid		CSL -	coarse sandy loam		C - cla	y
30 - 50 -	steep		PD - po	orly drained		6.1 - 6.5 - sl	ightly acid		SL -	sandy loam		HC - hea	avy clay
> 50 -	very steep		VPD - ve	ry poorly drained		6.6 - 7.2 - ne	eutral		Medium				
						7.3 - 7.8 - m	ildly alkaline		FSL -	fine sandy loam			
SOIL DEPTI	H (cm)		SURFACE IMP	EDIMENT		7.9 - 8.4 - m	oderately alkaline		L -	·loam			
0 - 30 -	very shallow		ROCK OUTCRO	PS		> 8.5 - st	rongly alkaline		SiL -	· silt loam			
	shallow		< 10% - no	ne - few						· clay loam			
50 - 100 -	moderately deep		10 - 30% - co	mmon					SiCL -	silty clay loam			

- sandy clay loam

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

> 30% - many

ELEVATION	SOIL DRAINAGE	SOIL DEPTH	SOIL EROSION
El2 - 500 - 1000m or 2000 - 2500m	D2 - Somewhat poorly drained to poorly draine	ed Sh2 - Shallow to moderately deep (30 - 100c	cm) E2 - Moderate erosion
El3 $-<500$ m or >2500 m	D3 - Very poorly drained or excessively drained	d Sh3 - Very shallow (< 30cm)	E3 - Severe erosion
SLOPE/TOPOGRAPHY	SOIL TEXTURE	ROCK OUTCROPS	FLOODING
T2 - Undulating to moderately ste	ep Tc - Coarse texture	Rc2 - Common	F2 - Moderate seasonal flooding
T3 - Steep to very steep		Rc3 - Many	F3 - Severe seasonal flooding

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	El2	11	T2-E3-Rc2	21	T2-El2-Sh2-Rc3	31	T3-E3	41	T3-El3-E3-Sh3-Rc2	51	T3-El2-E3-Sh3-Rc3
2	El2-E2-Sh2-Rc3	12	T2-E3-Sh2-Rc2	22	T2-El3	32	T3-E3-Rc2	42	T3-El3-E3-Sh3-Rc3	<i>52</i>	T3-El3-E3
3	El2-Sh2-Rc2	13	T2-E3-Sh2-Rc3	23	T2-El3-E3	33	T3-E3-Sh3-Rc2	43	T3-F3-D2	53	T3-El3-E3-Sh3-Rc3
4	F2-D2	14	T2-El2	24	T2-El3-E3-Sh2-Rc2	34	T3-E3-Sh3-Rc3	44	T3	54	T3-El3
5	F3-D2	15	T2-El2-E3	25	T2-El3-E3-Sh2-Rc3	35	T3-El2	45	T3-E3	<i>55</i>	Тс
6	Sh2	16	T2-El2-E3-Rc2	26	T2-El3-Sh2-Rc2	36	T3-El2-E3	46	T3-E3-Rc3		
7	Sh2-Rc2	17	T2-El2-E3-Sh2-Rc2	27	T2-F2-D2	37	T3-E12-E3-Rc2	47	T3-E3-Sh3-Rc3		
8	T2	18	T2-El2-E3-Sh2-Rc3	28	T2-F3-D2	38	T3-El2-E3-Sh3-Rc2	48	T3-E12		
9	T2-E2-Sh2-Rc2	19	T2-El2-Rc2	29	T2-Sh2-Rc2	39	T3-El2-E3-Sh3-Rc3	49	T3-E12-E3		
10	T2-E3	20	T2-El2-Sh2-Rc2	30	Т3	40	T3-El3-E3	<i>50</i>	T3-El2-E3-Rc3		

CODE	LANDUSE
4	Corn
81	Coffee
82	Cacao
91	Banana
116	Coconut
119	Oil palm
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.

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.

Marginally Suitable (S3)

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

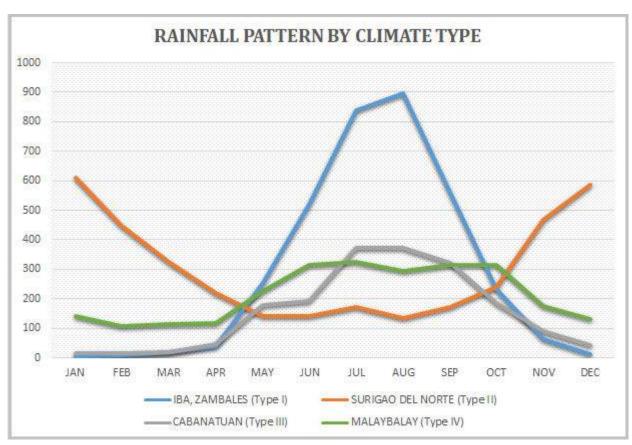
TYPE I: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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.

The Eastern part of Sultan Kudarat is classified as climatic Type III and the Southern part lies to 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.

^{*}establishment of shade trees prior to planting of rubber.

