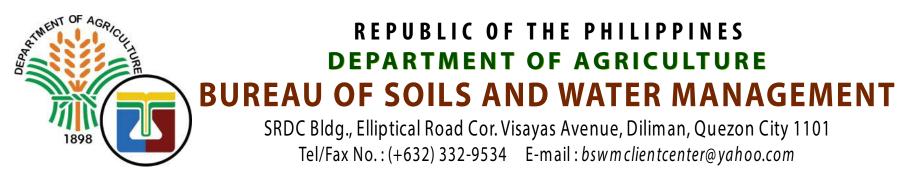
LAND SUITABILITY MAP

NATURAL RUBBER

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

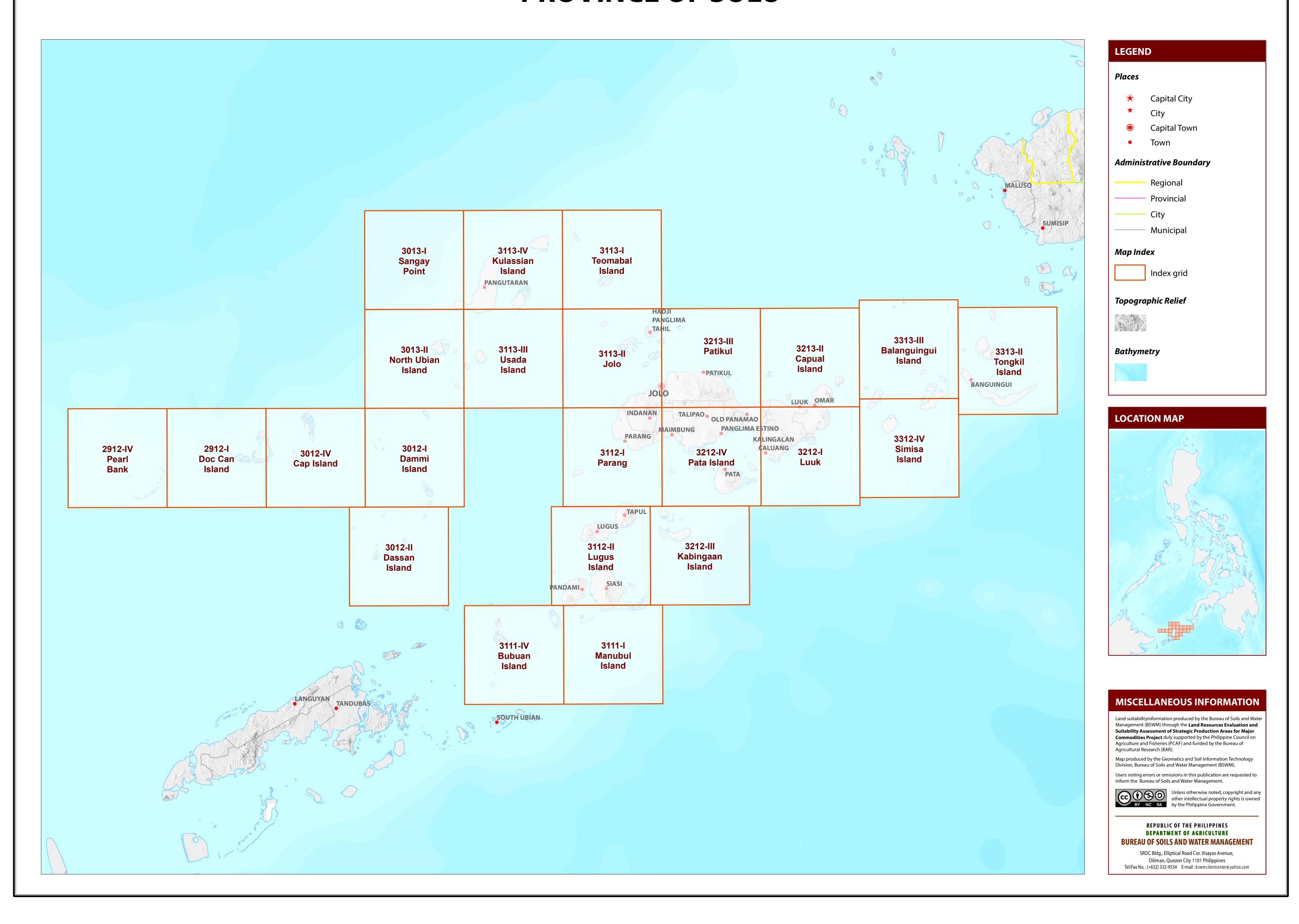
PROVINCE OF SULU





MAP INDEX

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



LAND SUITABILITY MAP FOR RUBBER

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

EXTENT OF SUITABILITY FOR RUBBER PRODUCTION BY MUNICIPALITY

MUNICIPALITY	EXISTING RUBBER (Ha)			TOTAL EXISTING AREA (Ha)	EXPANSION AREA (Ha)						CONFLICT RESOLUTION (Ha)					TOTAL	
					Coconut		Shrubland, unmanaged*		Grassland, unmanaged*		Corn		Paddy rice, non-irrigated		Other crops		POTENTIAL EXPANSION
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	AREA (Ha)
HADJI PANGLIMA TAHIL	-	-	-	-	-	-	-	-	64	-	-	-	-	-	-	-	64
INDANAN	-	-	-	-	3,173	3,274	-	6	137	723	126	20	-	-	-	-	7,459
JOLO	ı	•	-	-	9	2	-	-	-	-	-	-	-	-	-	-	11
KALINGALAN CALUANG	-	-	-	-	2,187	1,378	-	-	930	917	-	-	-	-	-	-	5,411
LUGUS	1	ı	-	-	716	951	-	-	581	532	-	-	-	-	-	-	2,779
LUUK	-	1	-	-	2,675	770	-	-	2,490	993	-	-	-	-	-	-	6,928
MAIMBUNG	-	-	-	-	2,430	433	-	-	162	125	795	117	-	-	-	-	4,062
OLD PANAMAO	-	1	-	-	2,914	806	4	27	860	562	383	150	-	-	-	-	5,706
OMAR	1	ı	-	-	1,801	746	569	384	1,492	709	84	59	-	-	-	-	5,844
PANDAMI	-	1	-	-	931	1,033	-	-	190	220	-	-	-	-	-	-	2,374
PANGLIMA ESTINO	-	-	-	-	795	140	1	11	158	290	702	149	-	-	-	-	2,245
PANGUTARAN	-	1	-	-	9,050	34	-	-	-	-	-	-	-	-	-	-	9,085
PARANG	-	-	-	-	3,826	1,878	-	-	2	41	143	224	-	-	-	-	6,114
PATA	-	-	-	-	111	1,626	-	-	704	1,638	-	-	-	-	-	-	4,080
PATIKUL	-	-	-	-	4,097	3,396	18	103	498	1,919	53	445	-	-	-	-	10,529
SIASI	-	_	_		1,233	2,904		_	525	1,012	-	_	_	-	-		5,675
TALIPAO	_	_	_	_	5,191	3,714	4	54	1,201	320	3,572	837	-	-	-	-	14,892
TAPUL	_	-	-	-	54	926	-	-	29	809	-	-	_	-	-	-	1,818
TONGKIL	_	_	_	_	_	656	-	140	_	26	-	52	-	-	-	-	873
Total Area (Ha)	-	-	-	-	41,193	24,667	596	725	10,022	10,836	5,858	2,051	-	-	-	-	95,949

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

AGRONOMIC REQUIREMENT OF RUBBER PRODUCTION

LAND UTILIZAT TYPE	ION SUITABILITY	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 T	ree 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 DRAINAGE						SOIL REACTION	ON (pH)		SOIL TEXTURE					
0 - 3	0 - 3 - level to gently sloping			- excessively drained			< 4.5 - extremely acid					Fine		
3 - 8	3 - 8 - gently sloping to undulating			ell drained		4.5 - 5.0 - very strongly acid			S -	sand		SC - san	ıdy clay	
8 - 18	8 - 18 - undulating to rolling			oderately well dra	ined	5.1 - 5.5 - strongly acid			LS -	loamy sand		SiC - silt	y clay	
18 - 30 - rolling to moderately steep			SPD - so	mewhat poorly dr	rained	5.6 - 6.0 - medium acid			CSL -	- coarse sandy loam		C - cla	y	
30 - 50 - steep		PD - po	- poorly drained		6.1 - 6.5 - slightly acid		SL -	- sandy loam		HC - hea	nvy clay			
> 50	> 50 - very steep		VPD - ve	 very poorly drained 		6.6 - 7.2 - neutral			Medium	Medium				
						7.3 - 7.8 - m	ildly alkaline		FSL -	fine sandy loam				

7.9 - 8.4 - moderately alkaline

- strongly alkaline

- silt loam

- clay loam

- silty clay loam

- sandy clay loam

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

11 T3-E3-Sh3-Rc2

16 T3-E3-Sh3-Rc3

17 T3-El2-E3-Sh3-Rc3

13 T3-F3-D2

14 T3

15 T3-E3

18 T3-El3

19 Tc

12 T3-El2-E3-Sh3-Rc2

SOIL DEPTH (cm)

very shallow

- deep to very deep

1 F2-Tc

2 F3-D2

4 T2-E3

5 T2-E3-Sh2-Rc2

7 T2-E12-Sh2-Rc2

8 T2-F3-D2

9 T3

10 T3-E3

6 T2-El2-E3-Sh2-Rc2

3 T2

shallow

50 - 100 - moderately deep

SURFACE IMPEDIMENT

ROCK OUTCROPS

> 30% - many

< 10% - none - few

10 - 30% - common

DRAINAGE	SOIL DEPTH	SOIL EROSION		
- Somewhat poorly drained to poorly drained	Sh2 - Shallow to moderately deep (30 - 100cm)	E2 - Moderate erosion		
- Very poorly drained or excessively drained	Sh3 - Very shallow (< 30cm)	E3 - Severe erosion		
TEXTURE	ROCK OUTCROPS	FLOODING		
- Coarse texture	Rc2 - Common	F2 - Moderate seasonal flooding		
	Rc3 - Many	F3 - Severe seasonal flooding		
CODE LANDICE				
•	- Somewhat poorly drained to poorly drained - Very poorly drained or excessively drained TEXTURE	- Somewhat poorly drained to poorly drained - Very poorly drained or excessively drained TEXTURE - Coarse texture Sh2 - Shallow to moderately deep (30 - 100cm) Sh3 - Very shallow (< 30cm) ROCK OUTCROPS Rc2 - Common Rc3 - Many		

2 Paddy rice, non-irrigated

126 Grassland, unmanaged

134 Shrubs, unmanaged

4 Corn

116 Coconut

137 Rubber tree (T)

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

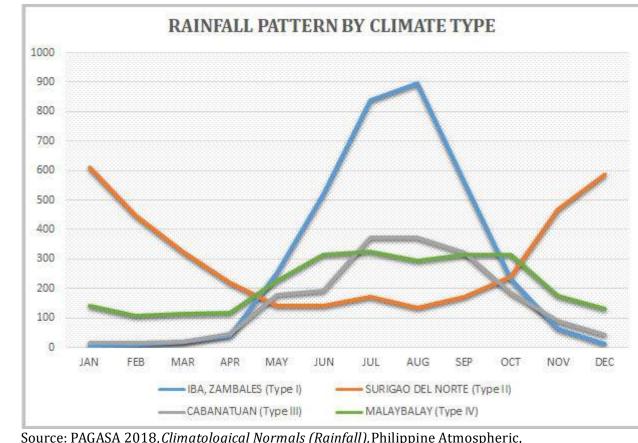
TYPE I: Two pronouced season, dry from November to April and TYPE II: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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

Province of Sulu is classified as climate 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>.

