LAND SUITABILITY MAP

NATURAL RUBBER

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

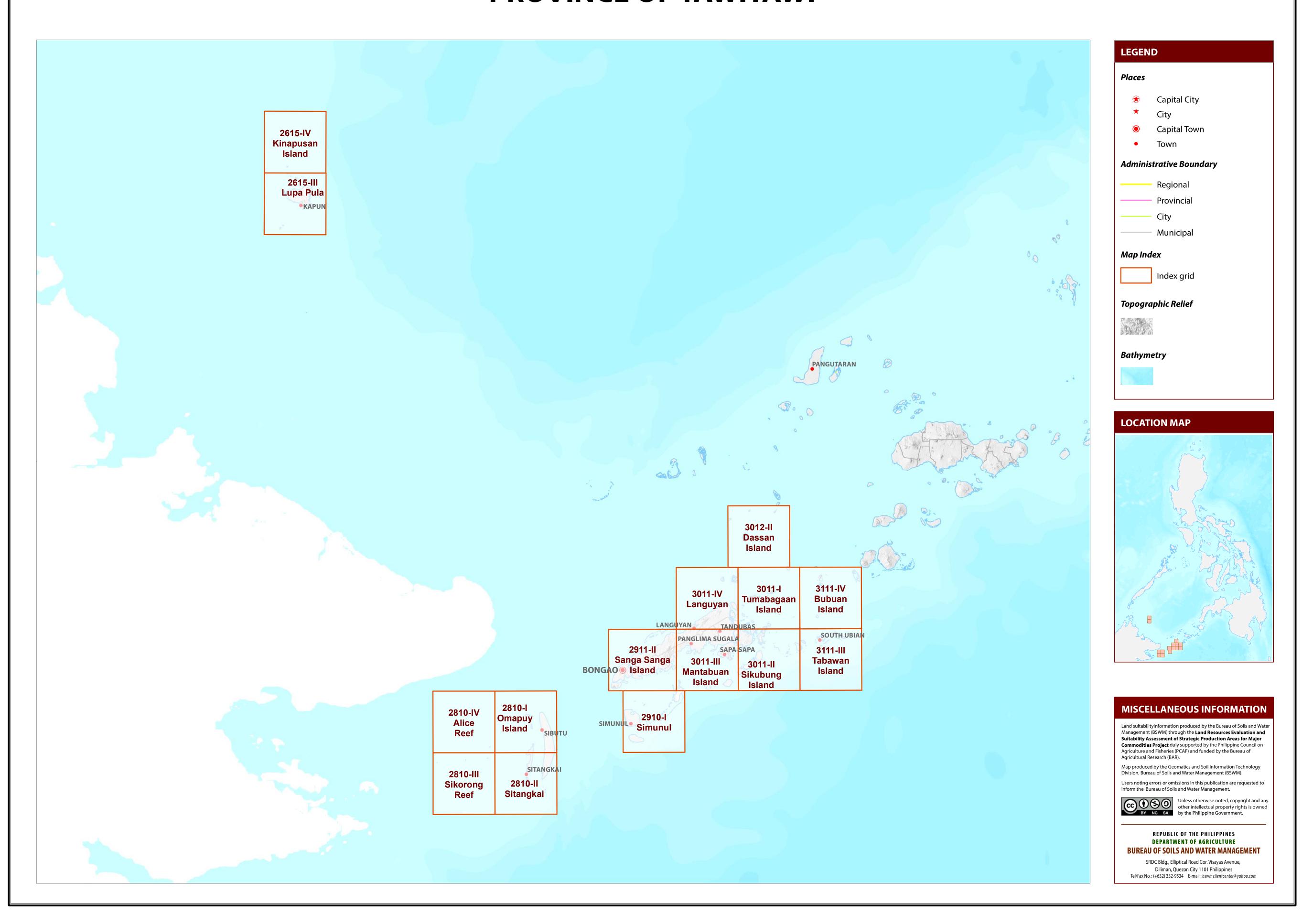
PROVINCE OF TAWITAWI





MAP INDEX

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



LAND SUITABILITY MAP FOR RUBBER

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

EXTENT OF SUITABILITY FOR RUBBER PRODUCTION BY MUNICIPALITY

					EXPANSION AREA (Ha)						CONFLICT RESOLUTION (Ha)						TOTAL
MUNICIPALITY	EXISTING RUBBER (Ha)			TOTAL EXISTING AREA (Ha)	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)
BONGAO	-	-	ı	-	2,640	5,425	310	84	16	55	5	7	-	-	-	-	8,542
LANGUYAN	-	-	-	-	38	3,593	4	1,186	-	580	-	289	-	-	-	-	5,690
MAPUN	-	-	ı	-	3,133	2,475	-	-	-	-	-	-	-	-	1	-	5,607
PANGLIMA SUGALA	-	-	ı	-	698	4,977	85	3,094	50	32	-	-	-	-	-	_	8,937
SAPA-SAPA	-	-	-	-	2,957	35	656	287	48	8	38	-	-	-	-	-	4,030
SIBUTU	-	-	ı	-	544	-	4,495	65	717	3	1,004	2	-	-	-	-	6,831
SIMUNUL	-	-	ı	-	3,621	38	1,791	49	20	1	-	-	-	-	1	-	5,520
SITANGKAI	-	-	ı	-	1,339	20	286	1	520	2	-	-	-	-	1	-	2,167
SOUTH UBIAN	-	-	-	-	1,583	91	122	102	2	-	-	-	-	-	-	-	1,900
TANDUBAS	-	-	-	-	1,018	878	874	4,610	779	726	-	-	-	-	-	-	8,886
Total Area (Ha)	_	-	-	-	17,570	17,532	8,622	9,479	2,154	1,407	1,048	298	-	-	-	-	58,109

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

*establishment of shade trees prior to planting of rubber.

- deep to very deep

AGRONOMIC REQUIREMENT OF RUBBER PRODUCTION

LAND UTILIZAT TYPE	TION SUITABIL		SLOPE (%)	SOIL DEP'	ТН	SOIL TEXTURE	SOIL DRAINAGE	SOIL REACTI((pH)	ON	INHERENT FERTILITY	FLOODING CLASS	EROSION CLASS	ROCK OUTCROPS	ELEVATION (masl)	ANNI RAINI (mr	FALL	CLIMATIC TYPE
	S1		<8	>100		CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD, SPD	5.6 -7.2	2	high	none-slight	none-slight	none-few	<500	1000-2	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	2001-4	4500	I, II, III
	S3		>30	<30		S, LS, CSL	ED	<4.5 - > 7	'.9	low	severe	severe	many	>1000	<100 >450		
SLOPE (%)			SOIL DRA	INAG	E		SOIL REA	ACTIC	ON (pH)		SOIL TEXT	TURE				
0 - 3	- level to gently slo	ping		ED	- exc	essively drained		< 4.5	- ex	xtremely acid		Coarse			Fine		
3 - 8	- gently sloping to	undu	lating	WD	- we	ll drained		4.5 - 5.0	- ve	ery strongly acid		S	- sand		SC	- sand	y clay
8 - 18	- undulating to rol	ling		MWD	- mo	derately well dra	nined	5.1 - 5.5	- str	rongly acid		LS	- loamy sand		SiC	- silty	clay
18 - 30	- rolling to modera	ately s	steep	SPD	- son	newhat poorly dr	rained	5.6 - 6.0	- me	edium acid		CSL	- coarse sandy loam		С	- clay	
30 - 50	- steep			PD	- poo	orly drained		6.1 - 6.5	- sli	ightly acid		SL	- sandy loam		HC	- heav	y clay
> 50	- very steep			VPD	- ver	y poorly drained	l	6.6 - 7.2	- ne	eutral		Medium					
								7.3 - 7.8	- mi	ildly alkaline		FSL	- fine sandy loam				
SOIL DEPT	ГН (ст)			SURFACE	IMPE	EDIMENT		7.9 - 8.4	- m	oderately alkaline		L	- loam				
0 - 30	- very shallow			ROCK OUT	'CROF	PS		> 8.5	- str	rongly alkaline		SiL	- silt loam				
30 - 50	- shallow			< 10%	- nor	ne - few				-		CL	- clay loam				
50 - 100	- moderately deep			10 - 30%	- cor	nmon						SiCL	- silty clay loam				
400	, ,			0007								0.01	, , ,				

- sandy clay loam

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

> 30%

ELEVATION El2 - 500 - 1000m or 2000 - 2500m El3 - < 500m or > 2500m	 SOIL DRAINAGE D2 - Somewhat poorly drained to poorly drained D3 - Very poorly drained or excessively drained 	SOIL DEPTH Sh2 - Shallow to moderately deep (30 - 100cm) Sh3 - Very shallow (< 30cm)	SOIL EROSION E2 - Moderate erosion E3 - Severe erosion
SLOPE/TOPOGRAPHYT2 - Undulating to moderately steepT3 - Steep to very steep	SOIL TEXTURE Tc - Coarse texture	ROCK OUT CROPS Rc2 - Common Rc3 - Many	FLOODINGF2 - Moderate seasonal floodingF3 - Severe seasonal flooding

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	F2-D2	11	T2-F2-D2	21	T3-F3-D2
2	F3-D2	12	T2-F3-D2	22	Т3
3	Sh2-Rc2	13	T2-Sh2-Rc2	23	T3-E3
4	T2	14	Т3	24	T3-E3-Rc3
5	T2-E2-Sh2-Rc2	15	Т3-Е3	25	T3-E3-Sh3-Rc3
6	Т2-Е3	16	T3-E3-Rc2	26	T3-El2-E3-Sh3-Rc3
7	T2-E3-Rc2	17	T3-E3-Sh2-Rc3	27	T3-F3-D2
8	T2-E3-Rc3	18	T3-E3-Sh3-Rc2	28	T3-El3
9	T2-E3-Sh2-Rc2	19	T3-E3-Sh3-Rc3	29	Тс
10	T2-E3-Sh2-Rc3	20	T3-El2-E3-Sh3-Rc2		

CODE	LANDUSE
2	Paddy rice, non-irrigated
4	Corn
137	Rubber tree (T)
116	Coconut
126	Grassland, unmanaged
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

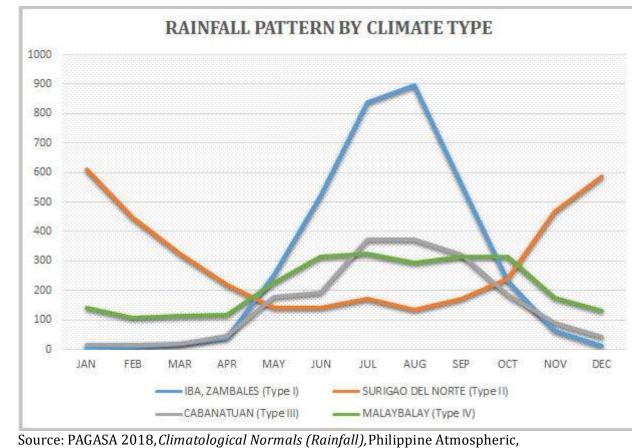
TYPE I: Two pronouced season, dry from November to April and TYPE II: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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

Tawa-tawi is classified as climate type IV



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

