### LAND SUITABILITY MAP

### NATURAL RUBBER

## LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

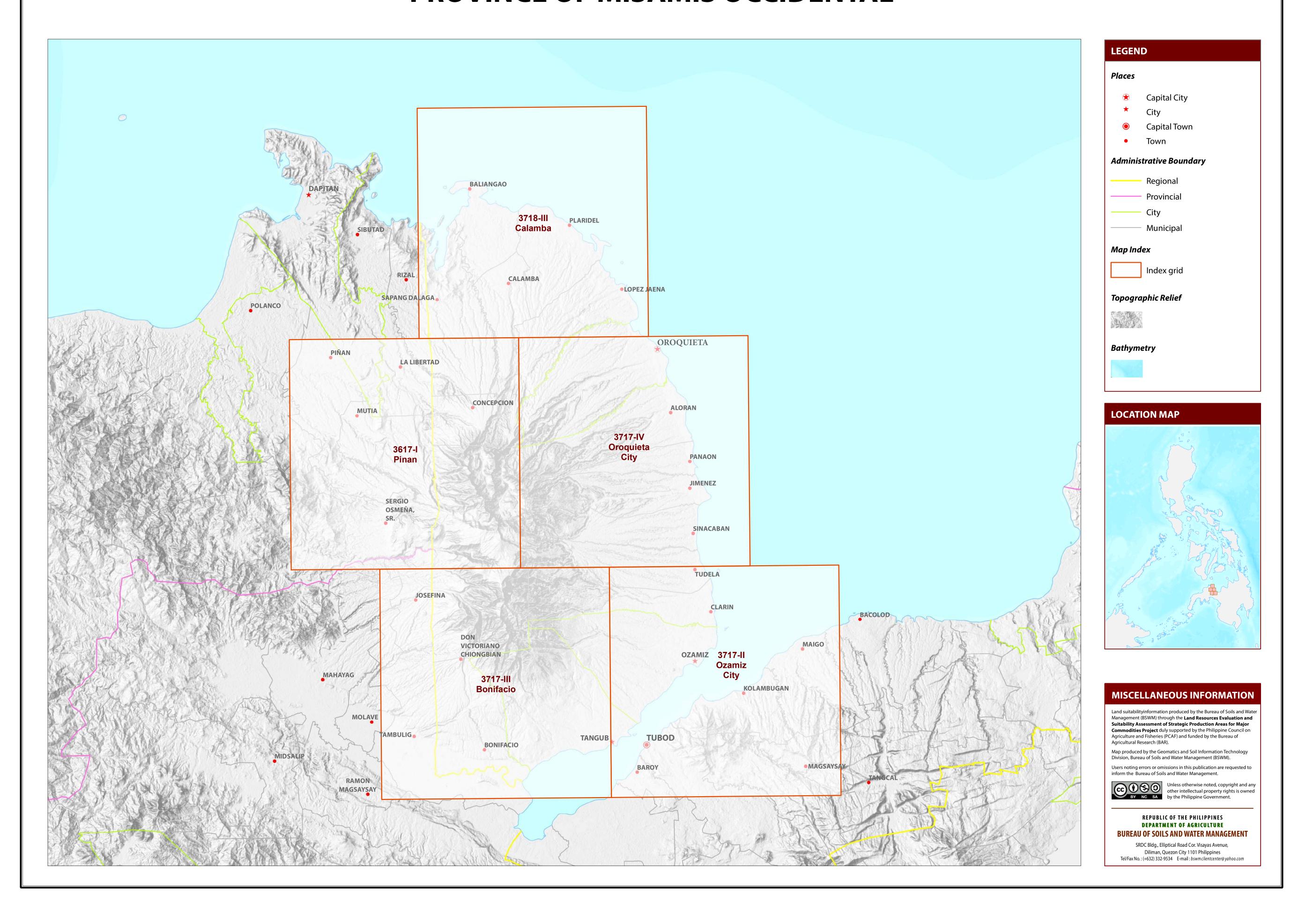
### PROVINCE OF MISAMIS OCCIDENTAL





### **MAP INDEX**

# LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS PROVINCE OF MISAMIS OCCIDENTAL



## LAND SUITABILITY MAP FOR RUBBER

### LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS MISAMIS OCCIDENTAL, REGION X

#### **EXTENT OF SUITABILITY FOR RUBBER PRODUCTION BY MUNICIPALITY**

					EXPANSION AREA (Ha)						CONFLICT RESOLUTION (Ha)					TOTAL	
MUNICIPALITY	EXISTING RUBBER (Ha)		TOTAL EXISTING AREA (Ha)	EXISTING Coconut		•		Grassl unmana		Corn		Rice paddy, non-irrigated		Other crops		POTENTIAL EXPANSION	
	S1	<b>S2</b>	<b>S</b> 3		S1	<b>S2</b>	<b>S1</b>	S2	S1	<b>S2</b>	S1	<b>S2</b>	<b>S1</b>	S2	<b>S1</b>	<b>S2</b>	AREA (Ha)
ALORAN	-	-	-	-	1,914	2,019	-	65	-	-	88	4	-	-	-	-	4,090
BALIANGAO	-	-	-	-	3,447	476	-	-	-	-	537	7	-	-	-	-	4,467
BONIFACIO	-	-	-	-	927	2,874	14	35	10	-	658	1,625	-	-	-	-	6,143
CALAMBA	-	-	-	-	2,533	1,810	-	-	293	199	164	-	-	-	-	-	5,000
CLARIN	-	-	-	-	2,229	729	-	3	-	66	195	79	-	-	-	-	3,302
CONCEPCION	-	-	-	-	-	637	-	-	-	340	-	793	-	-	-	-	1,770
DON VICTORIANO CHIONGBIAN	-	-	-	-	-	561	-	146	-	87	-	567	-	-	-	-	1,362
JIMENEZ	-	-	-	-	958	1,828	1	8	17	84	96	1	-	-	-	-	2,993
LOPEZ JAENA	-	-	-	-	1,762	5,269	-	48	-	35	147	133	-	-	-	-	7,394
OROQUIETA CITY	-	-	-	-	3,427	4,656	-	-	-	-	99	18	-	-	-	-	8,201
OZAMIS CITY	-	-	-	-	5,355	3,735	-	1	33	18	1,005	920	-	-	-	-	11,067
PANAON	-	-	-	-	952	1,504	-	-	-	-	81	7	-	-	-	-	2,544
PLARIDEL	-	-	-	-	2,688	2,290	-	-	-	-	633	413	-	-	-	-	6,024
SAPANG DALAGA	146	141	54	341	3,506	4,126	1	2	53	104	44	59	-	-	-	-	7,895
SINACABAN	-	_	-	-	1,417	2,591	-	-	21	114	24	7	-	-	_	-	4,174
TANGUB CITY	-	-	-	-	2,757	3,705	-	55	11	89	1,840	1,430	-	-	-	-	9,888
TUDELA	-	-	-	-	1,570	3,290	-	-	-	26	15	29	-	-	-	-	4,930
TOTAL	146	141	54	341	35,442	42,101	16	365	438	1,163	5,626	6,092	-	-	-	-	91,242

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

#### \*establishment of shade trees prior to planting of rubber.

moderately deep

- deep to very deep

### AGRONOMIC REQUIREMENT OF RUBBER PRODUCTION

LAN UTILIZA TYP	ATION	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	Tree	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 DRAINA	GE		SOIL REACTI	ON (pH)		SOIL TEXT	URE			
0 - 3	- leve	l to gently sloping	g		ED - ex	cessively drained		< 4.5 - ex	xtremely acid		Coarse			Fine	
3 - 8	- gent	ly sloping to und	ulating		WD - we	ell drained		4.5 - 5.0 - v	ery strongly acid		S	- sand		SC - s	andy clay
8 - 18	- undı	ulating to rolling			MWD - mo	oderately well dra	ined	5.1 - 5.5 - st	trongly acid		LS	- loamy sand		SiC - s	ilty clay
18 - 30	- rolli	ng to moderately	steep		SPD - so	mewhat poorly dr	ained	5.6 - 6.0 - m	nedium acid		CSL	- coarse sandy loam		C - c	lay
30 - 50	- steej	р			PD - po	orly drained		6.1 - 6.5 - sl	lightly acid		SL	- sandy loam		HC - h	eavy clay
> 50	- very	steep			VPD - ve	ry poorly drained		6.6 - 7.2 - n	eutral		Medium				
								7.3 - 7.8 - m	nildly alkaline		FSL	- fine sandy loam			
SOIL DE	PTH (cn	n)			SURFACE IMP	EDIMENT		7.9 - 8.4 - m	noderately alkaline	!	L	- loam			
0 - 30	- very	shallow			ROCK OUTCRO	PS		> 8.5 - st	trongly alkaline		SiL	- silt loam			

#### LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

L DEPTH - Shallow to moderately deep (30 - 100cm)	SOIL EROSION E2 - Moderate erosion
- Shallow to moderately deep (30 - 100cm)	F2 Moderate eregion
	EZ - Mouerate erosion
- Very shallow (< 30cm)	E3 - Severe erosion
CK OUTCROPS	FLOODING
- Common	F2 - Moderate seasonal flood
- Many	F3 - Severe seasonal flooding
	- Very shallow (< 30cm)  CK OUTCROPS  - Common

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	El2	11	T2-E3-Sh2-Rc3	21	Т3	31	T3-E3
2	F2-D2	12	T2-El2	22	T3-E3	32	T3-E3-Sh3-Rc3
3	F3-D2	13	T2-E12-E3	23	T3-E3-Sh3-Rc2	33	T3-El2
4	Sh2	14	T2-El2-E3-Sh2-Rc2	24	T3-El2	34	T3-El2-E3
5	Sh2-Rc2	15	T2-El2-Sh2-Rc2	25	T3-El2-E3	35	T3-El2-E3-Sh3-Rc3
6	T2	16	T2-El3	26	T3-El2-E3-Sh3-Rc2	36	T3-El3
7	T2-E2-Sh2-Rc2	17	T2-El3-E3-Sh2-Rc2	27	T3-El3	37	T3-El3-E3-Sh3-Rc3
8	T2-E3	18	T2-El3-Sh2-Rc2	28	T3-El3-E3-Sh3-Rc2	38	T3-El3
9	T2-E3-Rc2	19	T2-F2-D2	29	T3-F3-D2	39	T3-El3-F3-D2
10	T2-E3-Sh2-Rc2	20	T2-F3-D2	30	T3		

- none - few

10 - 30% - common

> 30%

CODE	LANDUSE
4	Corn
81	Coffee
82	Cacao
116	Coconut
126	Grassland
134	Shrubs, unmanaged
137	Rubber

- clay loam

- silty clay loam

- sandy clay loam

SiCL

#### **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.

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.

Land having limitations which in aggregate are

#### **CLIMATE TYPE**

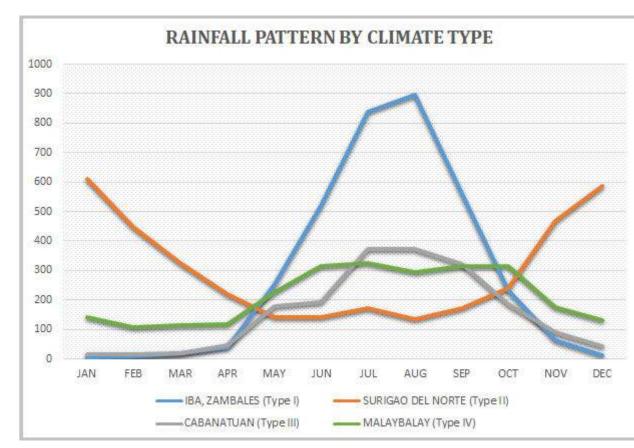
**TYPE I**: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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

Almost whole part of Misamis Occidental classified as climatic Type III and small part in the Western side is climate Type IV.



Source: PAGASA 2018, Climatological Normals (Rainfall), Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), accessed 27 July 2018, <a href="https://www1.pagasa.dost.gov.ph/index.php/climate/climatological-normals">https://www1.pagasa.dost.gov.ph/index.php/climate/climatological-normals</a>.

