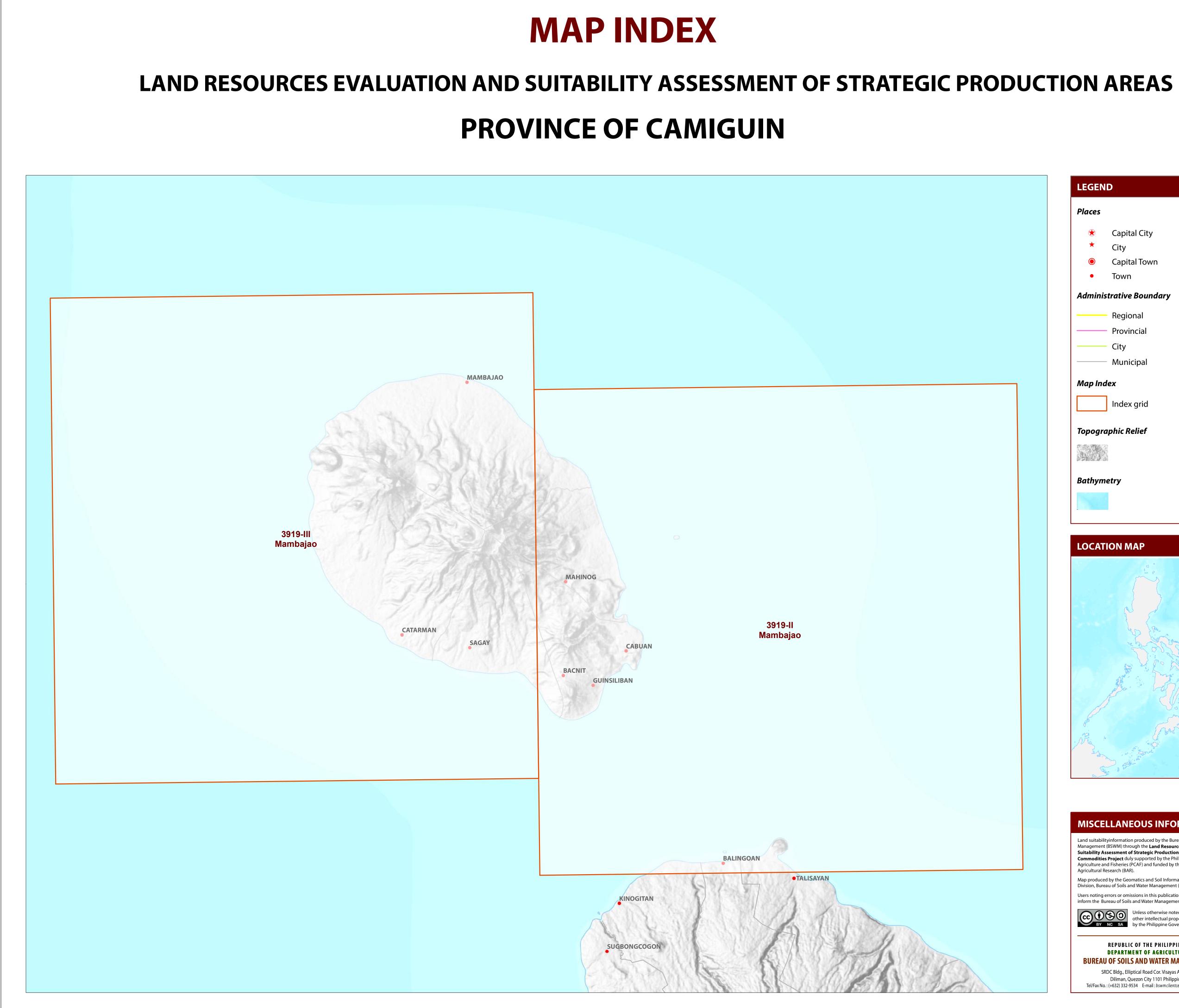
LAND RESOURCES EVALUATION AND SUITABILITY **ASSESSMENT OF STRATEGIC PRODUCTION AREAS**

PROVINCE OF CAMIGUIN



LAND SUITABILITY MAP

NATURAL RUBBER



LEGEN	D
Places	
۲	Capital City
*	City
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•	Town
Adminis	strative Boundary
	- Regional
	- Provincial
	City
	Municipal
Map Ind	lex
	Index grid
Topogra	aphic Relief
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LAND SUITABILITY MAP FOR **RUBBER**

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS CAMIGUIN, REGION X

EXTENT OF SUITABILITY FOR RUBBER PRODUCTION BY MUNICIPALITY

						EX	PANSION	AREA (Ha	ı)			CONFLIC	CT RESOLUTION AREA (Ha)				TOTAL	
MUNICIPALITY	EXISTIN	IG RUBBE	R (Ha)	TOTAL EXISTING AREA (Ha)	Сосо	onut	Shrub unman		Grassl unmana	-	Cor	'n		Paddy rice, non-irrigated		crops	POTENTIAL EXPANSION AREA (Ha)	
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S 2	ΑκέΑ (Πά)	
CATARMAN	-	-	-	-	580	1,849	-	-	7	9	-	-	-	-	-	-	2,444	
GUINSILIBAN	-	-	-	-	104	483	-	-	-	34	-	-	-	-	-	-	621	
MAHINOG	-	-	-	-	183	629	-	-	12	12	25	-	-	-	-	-	862	
MAMBAJAO	-	-	-	-	1,233	1,778	-	-	17	32	40	73	-	-	-	-	3,172	
SAGAY	-	-	-	-	137	788	-	-	3	55	29	3	-	-	-	-	1,015	
TOTAL	-	-	-	-	2,236	5,529	-	-	39	142	93	76	-	-	-	-	8,115	

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 UTILIZATION TYPE	SUITABILITY RATING	SLOPE (%)	SOIL DEPTH (cm)	SOIL TEXTURE	SOIL DRAINAGE	SOIL REACTION (pH)	INHERENT FERTILITY	FLOOD ING 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 REACT	ION (pH)		SOIL TEXT	TURE			
	el to gently sloping	5	ED - ex	cessively drained			extremely acid		Coarse			Fine	
	tly sloping to undu	ulating	WD - w	ell drained		4.5 - 5.0 - v	very strongly acid		S	- sand			andy clay
	ulating to rolling			oderately well dra			strongly acid			- loamy sand			ilty clay
	ing to moderately	steep		mewhat poorly dr	ained		nedium acid			- coarse sandy loam			lay
30 - 50 - steej	-		-	oorly drained			slightly acid			- sandy loam		HC - ł	neavy clay
> 50 - very	y steep		VPD - ve	ery poorly drained			neutral		Medium				
							nildly alkaline			- fine sandy loam			
SOIL DEPTH (cn	-		SURFACE IME				noderately alkaline	2		- loam			
	y shallow		ROCK OUTCRO			> 8.5 - 9	strongly alkaline			- silt loam			
30 - 50 - shall				one - few						- clay loam			
	derately deep		10 - 30% - co	ommon					SiCL	- silty clay loam			
	p to very deep			any						- sandy clay loam			
> 100 - deep LAND LIM ELEVATION	p to very deep		> 30% - m TION ANI SOIL DRAINA	any D COMBINA Age		od	SOIL DEPTH	n moderately deer	SCL	- sandy clay loam SOIL EROSION			
> 100 - deep LAND LIM ELEVATION El2 - 500 - 100	p to very deep IITATIONS		> 30% - m TION ANI SOIL DRAINA D2 - Some	any D COMBINA AGE what poorly draine	ed to poorly draine		Sh2 - Shallow to	o moderately deep ow (< 30cm)	SCL	- sandy clay loam SOIL EROSION E2 - Modera	te erosion		
> 100 - deep LAND LIM ELEVATION E12 - 500 - 100	p to very deep IITATIONS		> 30% - m TION ANI SOIL DRAINA D2 - Some	any D COMBINA Age	ed to poorly draine		Sh2 - Shallow to	o moderately deep ow (< 30cm)	SCL	- sandy clay loam SOIL EROSION	te erosion		
> 100 - deep LAND LIM ELEVATION E12 - 500 - 100	p to very deep IITATIONS 00m or 2000 - 250 or > 2500m		> 30% - m TION ANI SOIL DRAINA D2 - Some	any D COMBINA AGE what poorly drained poorly drained or e	ed to poorly draine		Sh2 - Shallow to	ow (< 30cm)	SCL	- sandy clay loam SOIL EROSION E2 - Modera	te erosion		
> 100 - deep LAND LIM ELEVATION El2 - 500 - 100 El3 - < 500m or SLOPE/TOPOGR F2 - Undulatin	p to very deep IITATIONS 00m or 2000 - 250 or > 2500m RAPHY ng to moderately s	0m	> 30% - m TION ANI SOIL DRAINA D2 - Some D3 - Very j SOIL TEXTU	any D COMBINA AGE what poorly drained poorly drained or e	ed to poorly draine		Sh2- Shallow toSh3- Very shallowROCK OUTCROPSRc2- Common	ow (< 30cm)	SCL	- sandy clay loam SOIL EROSION E2 - Modera E3 - Severe of FLOODING F2 - Modera	te erosion erosion te seasonal floodin	ng	
> 100 - deep LAND LIM ELEVATION E12 - 500 - 100 E13 - < 500m of SLOPE/TOPOGR F2 - Undulatin	p to very deep IITATIONS 00m or 2000 - 250 or > 2500m RAPHY ng to moderately s	0m	> 30% - m TION ANI SOIL DRAINA D2 - Some D3 - Very j SOIL TEXTU	any DCOMBINA AGE what poorly draine poorly drained or e RE	ed to poorly draine		Sh2- Shallow toSh3- Very shallowROCK OUTCROPS	ow (< 30cm)	SCL	- sandy clay loam SOIL EROSION E2 - Modera E3 - Severe of FLOODING F2 - Modera	te erosion erosion	ng	
 > 100 - deep LAND LIM ELEVATION El2 - 500 - 100 El3 - < 500m or SLOPE/TOPOGR F2 - Undulatin F3 - Steep to v 	p to very deep IITATIONS 200m or 2000 - 250 or > 2500m RAPHY ng to moderately so very steep	0m steep	> 30% - m TION ANI SOIL DRAINA D2 - Some D3 - Very SOIL TEXTU Tc - Coars	any DCOMBINA AGE what poorly draine poorly drained or e RE	ed to poorly draine		Sh2- Shallow toSh3- Very shallowROCK OUTCROPSRc2- CommonRc3- Many	ow (< 30cm) S	SCL	- sandy clay loam SOIL EROSION E2 - Modera E3 - Severe of FLOODING F2 - Modera	te erosion erosion te seasonal floodin	ng	
 > 100 - deep LAND LIM ELEVATION El2 - 500 - 100 El3 - < 500m or SLOPE/TOPOGR F2 - Undulatin F3 - Steep to v 	p to very deep IITATIONS 00m or 2000 - 250 or > 2500m RAPHY ng to moderately s very steep IITATION (0m steep	> 30% - m TION ANI SOIL DRAINA D2 - Some D3 - Very 1 SOIL TEXTUAN Tc - Coarse TATION C	any D COMBINA AGE what poorly drained poorly drained or e RE e texture	ed to poorly draine excessively drained	1	Sh2- Shallow toSh3- Very shallowROCK OUTCROPSRc2- CommonRc3- Many	ow (< 30cm) S SE	SCL	- sandy clay loam SOIL EROSION E2 - Modera E3 - Severe (FLOODING F2 - Modera	te erosion erosion te seasonal floodin	ng	
> 100 - deep LAND LIM ELEVATION El2 - 500 - 100 El3 - < 500m of SLOPE/TOPOGR T2 - Undulatin T3 - Steep to v CODE LIM	p to very deep IITATIONS 00m or 2000 - 250 or > 2500m RAPHY ng to moderately s very steep IITATION (10m steep CODE LIMI'	> 30% - m TION ANI SOIL DRAINA D2 - Some D3 - Very SOIL TEXTUR Tc - Coars TATION C	AGE what poorly drained poorly drained or e RE e texture ODE LIMITA	ed to poorly draine excessively drained	1	Sh2 - Shallow to Sh3 - Very shallow RC2 - Common RC3 - Many LANDUS Paddy rice, irrigation	ow (< 30cm) S SE ated	SCL	- sandy clay loam SOIL EROSION E2 - Modera E3 - Severe (FLOODING F2 - Modera	te erosion erosion te seasonal floodin	ng	
100 - deep LAND LIM ELEVATION 12 - 500 - 100 13 - < 500m of ELOPE/TOPOGR 2 - Undulatin 3 - Steep to v CODE LIM 1 El2-Sh2-	p to very deep IITATIONS 200m or 2000 - 250 or > 2500m RAPHY ng to moderately solvery steep IITATION -Rc2	0m steep CODE LIMI' 11 T3	> 30% - m TION ANI SOIL DRAINA D2 - Some D3 - Very 1 SOIL TEXTUR Tc - Coarse TATION C	AGE what poorly drained poorly drained or e RE e texture DDE LIMITA 21 T3-EI3-E3-S	ed to poorly draine excessively drained	1	Sh2- Shallow toSh3- Very shallowROCK OUTCROPSRc2- CommonRc3- Many	ow (< 30cm) S SE ated	SCL	- sandy clay loam SOIL EROSION E2 - Modera E3 - Severe (FLOODING F2 - Modera	te erosion erosion te seasonal floodin	ng	

CI	y steep		Jai se text	ure	
	CODE	LIMITATION	CODE	LIMITATION	
	11	Т3	21	T3-El3-E3-Sh3-Rc3	
	12	T3-E3-Sh3-Rc2	22	Тс	
	13	T3-E3-Sh3-Rc3			
	14	T3-El2			
	15	T3-El2-E3-Sh3-Rc2			
	16	T3-El3-E3-Sh3-Rc2			

5 T2-E2-Sh2-Rc2

6 T2-E3-Sh2-Rc2

7 T2-E3-Sh2-Rc3

10 T2-El2-Sh2-Rc2

9 T2-El2-E3-Sh2-Rc2

8 T2-El2

17 T3

19 T3-El2

18 T3-E3-Sh3-Rc3

20 T3-El2-E3-Sh3-Rc3

CODE	LANDUSE
1	Paddy rice, irrigated
2	Paddy rice, non-irrigated
4	Corn
82	Сасао
116	Coconut
126	Grassland
130	Bare areas, 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.

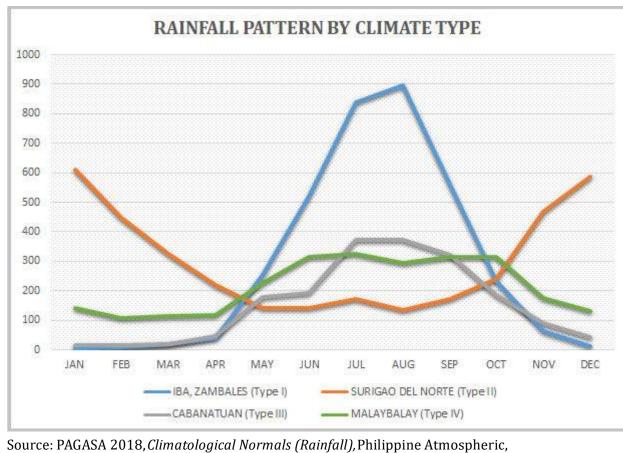
Moderately Suitable (S2)

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.

CLIMATE TYPE

- **TYPE I** : Two pronouced season, dry from November to April and wet during the rest of the year. Maximum rain period is from June to September
- **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.

Whole part of Camiguin is classified as climatic Type IV.



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

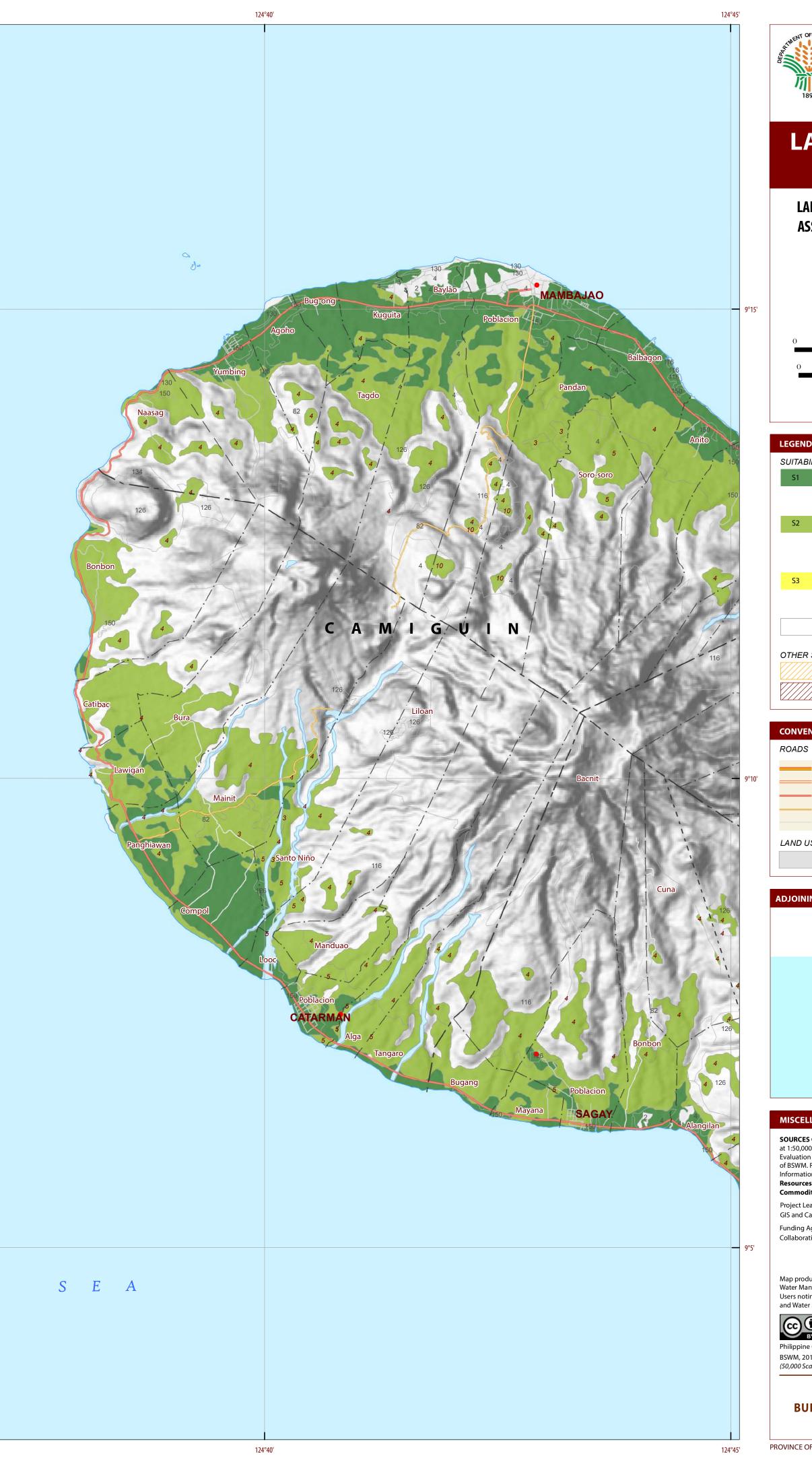
Marginally Suitable (S3) Land having limitations which in aggregate are severe for sustained application of a given use and will so reduce productivity or benefits, or increase required inputs, that this expenditure will be only marginally justified.

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.

- **TYPE II** : No dry season with a very pronounced maximum rain period from December to February. There is not a single dry month. Maximum monthly rainfall occurs during the period from March to May.
- **TYPE IV** : Rainfall is more or less evenly distributed throughout the year. This type resembles Type II since it has no dry season.

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9°10'										
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Built-up	Fishpond	Mangrove
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 BILITY CLASSES Highly Suitable - Land having no significant limitations 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 - Land having limitations 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 s attractive, will be appreciably inferior to that expected on class S1 land. Marginally Suitable - 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 only marginally justified. Not Suitable/Not Relevant 	ons still
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NTIONAL SIGNS	
BOUNDARY HYDROLOGY Expressway Region Trunk line Province Primary District Secondary Municipality Tertiary Barangay	1
JSE Built-up Fishpond Mangrove	
ING SHEETS INDEX MAP	
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S OF INFORMATION : Topographic information taken from NAMRIA Topographic Map 00 scale. Land resources information from the Agricultural Land Management and n Division (ALMED), Soils Survey Division (SSD) and Laboratory Services Division (LSD . Rice areas obtained from the Land Use System (FAO, 2015) and Philippine Rice on System (PRISM) (IRRI, 2015). Data analysis and compilation through the Land es Evaluation and Suitability Assessment of Strategic Production Areas for Major lities Project implemented by BSWM (2017). eader : BERNARDO B. PASCUA Cartography Kartography : IRVIN K. SAMALCA Agency : Department of Agriculture - Bureau of Agricultural Research (DA-B. Cartography) : Philippine Council on Agriculture and Fisheries (PCAF) : Department of Agriculture and Fisheries - ARMM, Department of Agriculture Regional Field Office of Region IX, X, XI, XII and XIII (Car : : Local Government Unit (LGU) of covered provinces and municipalit Huced by the Geomatics and Soil Information Technology Division, Bureau of Soils and) r AR) aga) ties
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r Management. This publication is licensed under a Creative Commons Attribution 4 International License. Unless otherwise noted, copyright and any otherwise noted, copyright and any otherwise and the copyright and any otherwise and the copyright and any otherwise and the copyright and any otherwise noted. This publication should be attributed as : D19. Land Suitability Map Series for Rubber of the PROVINCE OF CAMIGUIN	1.0