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

# **MOUNTAIN PROVINCE**





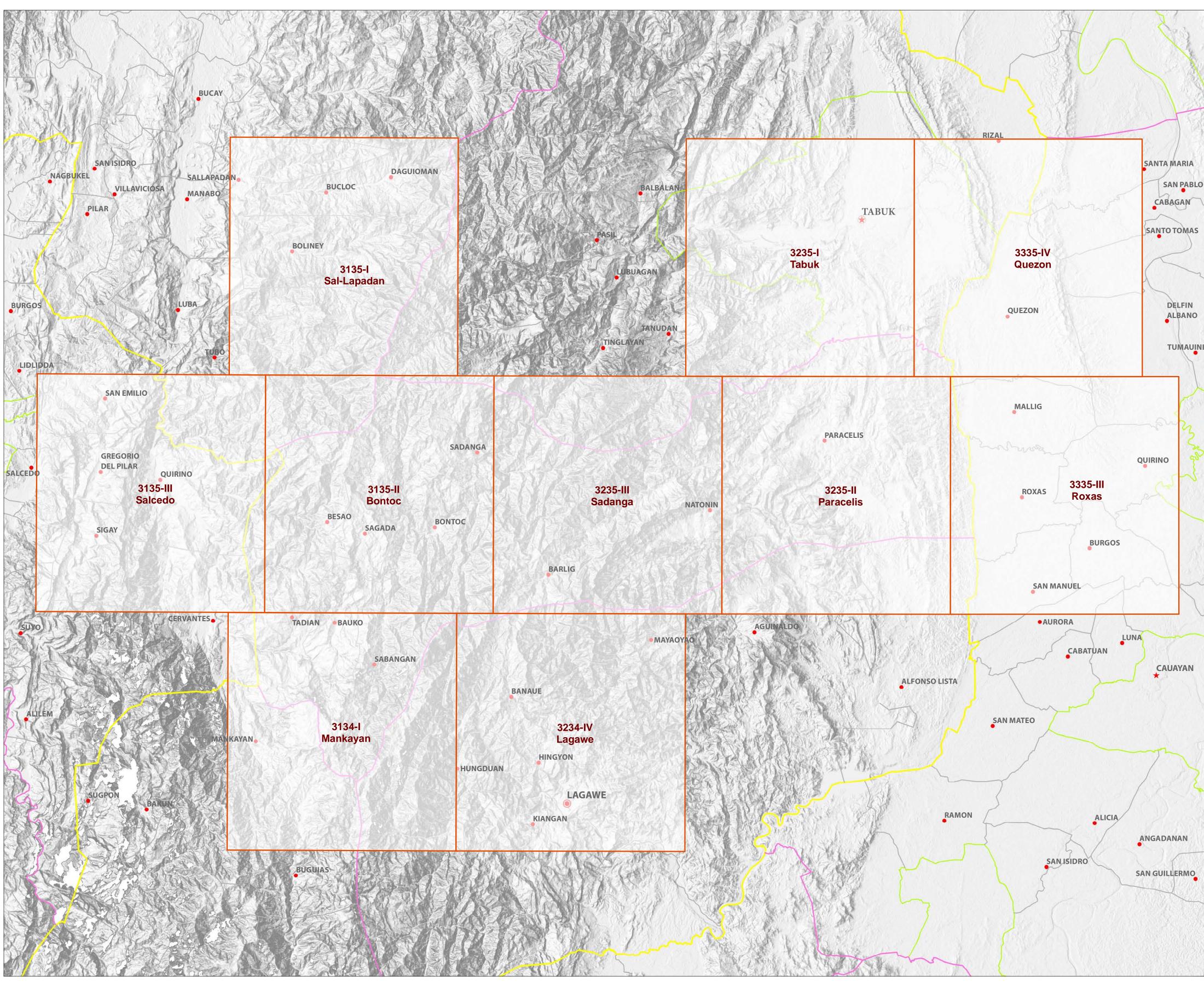
# LAND SUITABILITY MAP

CACAO



DEPARTMENT OF AGRICULTURE **BUREAU OF SOILS AND WATER MANAGEMENT** SRDC Bldg., Elliptical Road Cor. Visayas Avenue, Diliman, Quezon City 1101 Tel/Fax No.: (+632) 332-9534 E-mail: bswmclientcenter@yahoo.com

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



# MAP INDEX

LEGEI	ND
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	Capital City
*	City
۲	Capital Town
•	Town
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	Regional
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Map I	ndex
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# LAND SUITABILITY MAP FOR CACAO

## LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS **MOUNTAIN PROVINCE, CAR**

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

						EX	PANSION	I AREA (H	la)			CONF	LICT RES	OLUTION	I (Ha)		тота
MUNICIPALITY	EXISTI	NG CACA	0 (Ha)	TOTAL EXISTING AREA (Ha)	Coco	onut	Shrut unmar		Grass unmar		Со	rn	Rice p non-iri	oaddy, rigated	Other	crops	TOTAL POTENTIAL EXPANSION AREA (Ha)
	<b>S1</b>	<b>S2</b>	<b>S</b> 3		<b>S1</b>	<b>S2</b>	<b>S1</b>	S2	<b>S1</b>	<b>S2</b>	<b>S1</b>	S2	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	AREA (IId)
BARLIG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BAUKO	-	-	-	-	-	-	-	39	-	74	-	212	-	1	-	-	325
BESAO	-	-	-	-	-	-	-	-	-	22	-	11	-	-	-	-	33
BONTOC	-	-	-	-	-	-	-	12	-	13	-	43	-	-	-	-	68
NATONIN	-	-	-	-	-	-	411	192	59	6	139	279	7	-	-	-	1,093
PARACELIS	4	-	11	15	385	286	3,284	53	4,235	78	6,097	99	2,050	49	-	-	16,617
SABANGAN	-	-	-	-	-	-	-	10	-	23	-	25	-	-	-	-	58
SADANGA	-	-	-	-	-	-	-	-	-	3	-	21	-	3	-	-	27
SAGADA	-	-	-	-	-	-	-	1	-	1	-	119	-	-	-	-	120
TADIAN	-	-	13	13	-	_	-	7	-	18	-	101	-	13	-	-	139
TOTAL	4	-	24	28	385	286	3,695	314	4,295	238	6,237	909	2,057	66	-	-	18,480

n the onset of rainy \*establishment of shade trees prior to planting of cacao.

### AGRONOMIC REQUIREMENT OF CACAO PRODUCTION

LAND UTILIZATION TYPE	SUITABILITY RATING	SLOPE (%)	SOIL DEPTH (cm)	SOIL TEXTURE	SOIL DRAINAGE	SOIL REACTIO (pH)	N INHERENT FERTILITY	FLOOD ING CLASS	EROSION CLASS	ROCK OUTCROPS	ELEVATION (masl)	ANNUAL RAINFALL (mm)	CLIMATI TYPE
	S1	<8	>100	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD	5.6 -7.2	high	none-slight	none-slight	none-few	<1000	2001-4500	I, III, IV
Cacao	S2	8 - 30	50 - 100	FSL, L, SiL	SPD,PD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	1000-1500	1000-2000	I, II
	S3	>30	<50	S, LS, CSL, SL	VPD,ED	<5.0 - > 7.	9 low	severe	severe	many	>1500	<1000 >4500	
SLOPE (%)			SOIL DRAINA	GE		SOIL REACTI	ON (pH)	'	SOIL TEXTUR	3			1
	el to gently sloping	Ţ		cessively drained			xtremely acid		Coarse		F	ine	
	tly sloping to undu			ell drained			ery strongly acid		S - sai	nd		C - sandy	clay
-	lulating to rolling	C	MWD - m	oderately well drained			trongly acid		LS - loa	imy sand		iC - silty o	-
8 - 30 - roll	ing to moderately	steep	SPD - so	mewhat poorly draine	d	5.6 - 6.0 - n	nedium acid		CSL - co	arse sandy loam	C		-
0 - 50 - stee	ep		PD - po	oorly drained		6.1 - 6.5 - s	lightly acid		SL - sa	ndy loam	H	IC - heavy	' clay
50 - ver	y steep		VPD - ve	ery poorly drained		6.6 - 7.2 - n	eutral		Medium				
						7.3 - 7.8 - n	nildly alkaline		FSL - fin	e sandy loam			
OIL DEPTH (c	m)		SURFACE IMF	PEDIMENT		7.9 - 8.4 - n	noderately alkaline		L - loa	m			
- 30 - ver	y shallow		ROCK OUTCRC	)PS		> 8.5 - s	trongly alkaline		SiL - sil	loam			
0 - 50 - sha	llow		<10% - no	one - few						y loam			
0 - 100 - mo	derately deep		10 - 30% - co	ommon					SiCL - sil	y clay loam			
• 100 - dee	p to very deep		> 30% - m	any					SCL - sai	ndy clay loam			
<b>LAND LIN</b> ELEVATION El2 - 1000m - El3 - > 1500m	1500m	S DESCRII	<b>SOIL DRAIN</b> D2 - Some	D COMBINAT AGE what poorly drained to poorly drained or exce	poorly drained	l	<b>SOIL DEPTH</b> Sh2 - Moderately d Sh3 - Very shallow			SOIL EROSION E2 - Moderate E3 - Severe ero			
<b>ELEVATION</b> El2 - 1000m - El3 - > 1500m	1500m 1	S DESCRII	SOIL DRAINA D2 - Some D3 - Very	AGE what poorly drained to poorly drained or exce	poorly drained	l	Sh2 - Moderately d Sh3 - Very shallow			E2 - Moderate E3 - Severe ero			
ELEVATION El2 - 1000m - El3 - > 1500m SLOPE/TOPOG	1500m 1		SOIL DRAINA D2 - Some D3 - Very SOIL TEXTU	AGE what poorly drained to poorly drained or exce	poorly drained	l	Sh2 - Moderately d			<ul><li>E2 - Moderate</li><li>E3 - Severe ero</li><li>FLOODING</li></ul>		r	

CODE	LAND LIMITATION	CODE	LAND LIMITATION	CODE	LAND LIMITATION	CODE	LAND LIMITATION	CODE	LAND LIMITATION
1	El2	11	El3-Sh2-Rc2	21	T2-El2-E3-Sh2-Rc2	31	T3-E3-Rc2	41	T3-El2-E3-Sh3-Rc3
2	El2-E3-Rc3	12	El3-Sh2-Rc3	22	T2-El2-E3-Sh2-Rc3	32	T3-E3-Rc3	42	T3-El3
3	El2-E3-Sh2-Rc3	13	Sh2	23	T2-El3	33	T3-E3-Sh3-Rc2	43	T3-El3-E3
4	El2-Rc2	14	T2	24	T2-El3-E3	34	T3-E3-Sh3-Rc3	44	T3-El3-E3-Rc2
5	El2-Sh2-Rc2	15	Т2-ЕЗ	25	T2-El3-E3-Rc2	35	T3-El2	45	T3-El3-E3-Rc3
6	El2-Sh2-Rc3	16	T2-E3-Rc2	26	T2-El3-E3-Rc3	36	T3-El2-E3	46	T3-El3-E3-Sh2-Rc3
7	El3	17	T2-El2	27	T2-El3-E3-Sh2-Rc2	37	T3-El2-E3-Rc2	47	T3-El3-E3-Sh3-Rc2
8	El3-E3-Rc3	18	T2-El2-E3	28	T2-El3-E3-Sh2-Rc3	38	T3-El2-E3-Rc3	48	T3-El3-E3-Sh3-Rc3
9	El3-E3-Sh2-Rc3	19	T2-El2-E3-Rc2	29	Т3	39	T3-El2-E3-Sh2-Rc3		
10	El3-Rc2	20	T2-El2-E3-Rc3	30	ТЗ-ЕЗ	40	T3-El2-E3-Sh3-Rc2		

### **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)

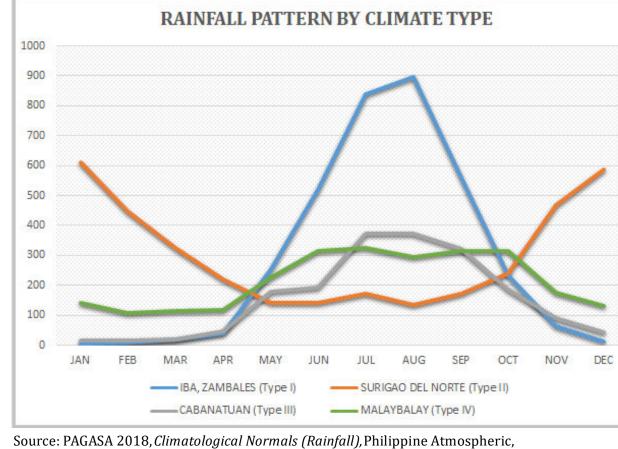
Land having limitation which in aggregate are moderately severe for sustained application of a given use; the limitation will reduce productivity or benefits and increase required inputs to the extent that the overall advantage to be gained from the use, although still attractive, will be appreciably inferior to that expected on class S1 land.

CODE	LAND USE
2	Rice paddy, non-irrigated
4	Corn
81	Coffee
82	Сасао
116	Coconut
126	Grassland
134	Shrubland, unmanaged

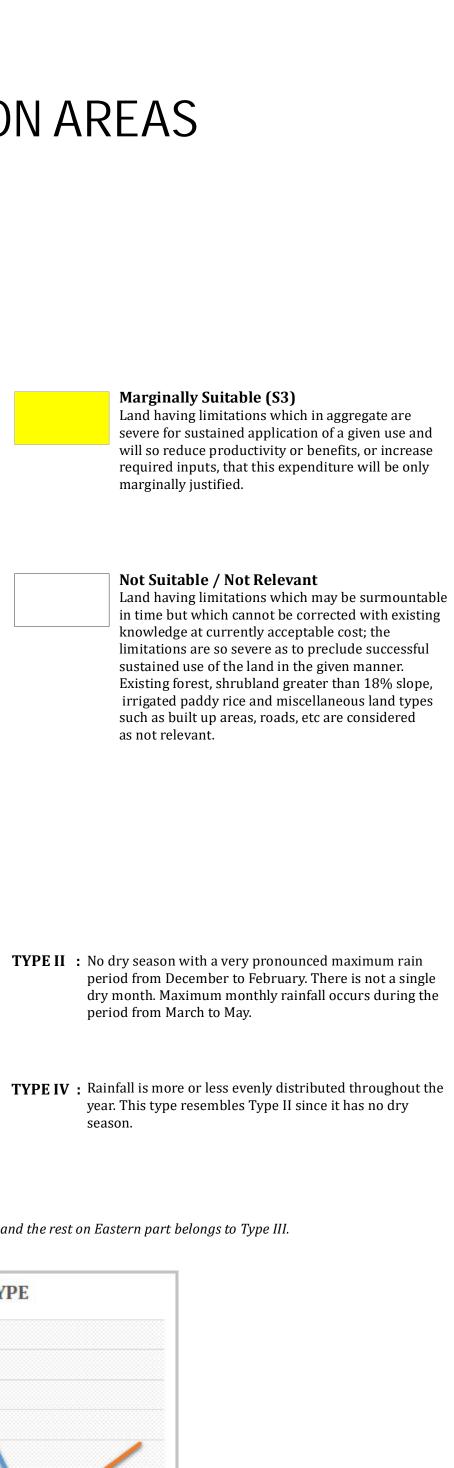
### **CLIMATE TYPE**

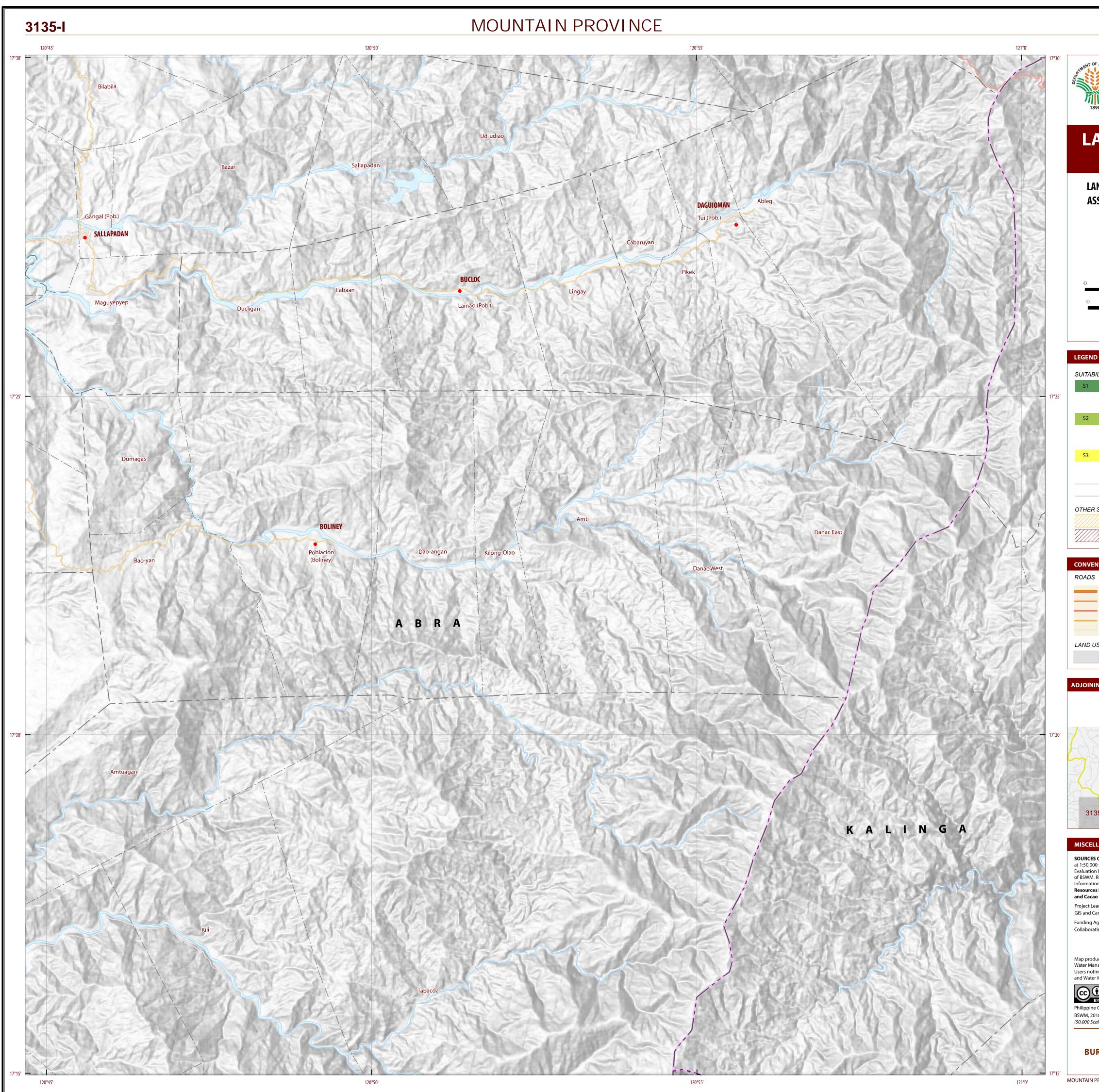
- **TYPE I** : Two pronouced season, dry from November to April and **TYPE II** : No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September
- **TYPE III**: No very pronounced maximum rain period, with a dry season lasting only from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

Western part of Mountain Province belongs to Type I climate classification and the rest on Eastern part belongs to Type III.

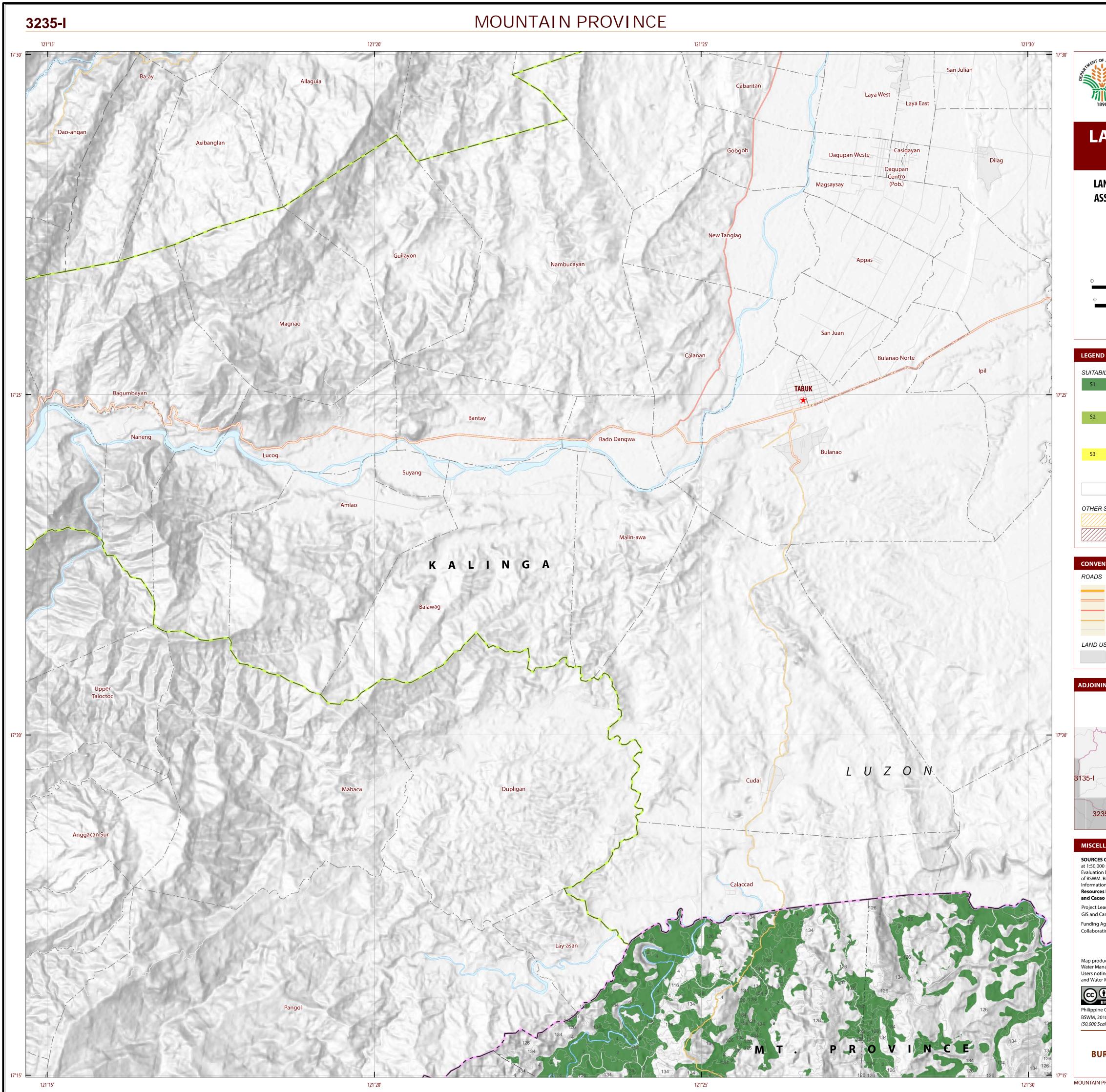


Geophysical and Astronomical Services Administration (PAGASA), accessed 27 July 2018, <a href="https://www1.pagasa.dost.gov.ph/index.php/climate/climatological-normals">https://www1.pagasa.dost.gov.ph/index.php/climate/climatological-normals</a>>.

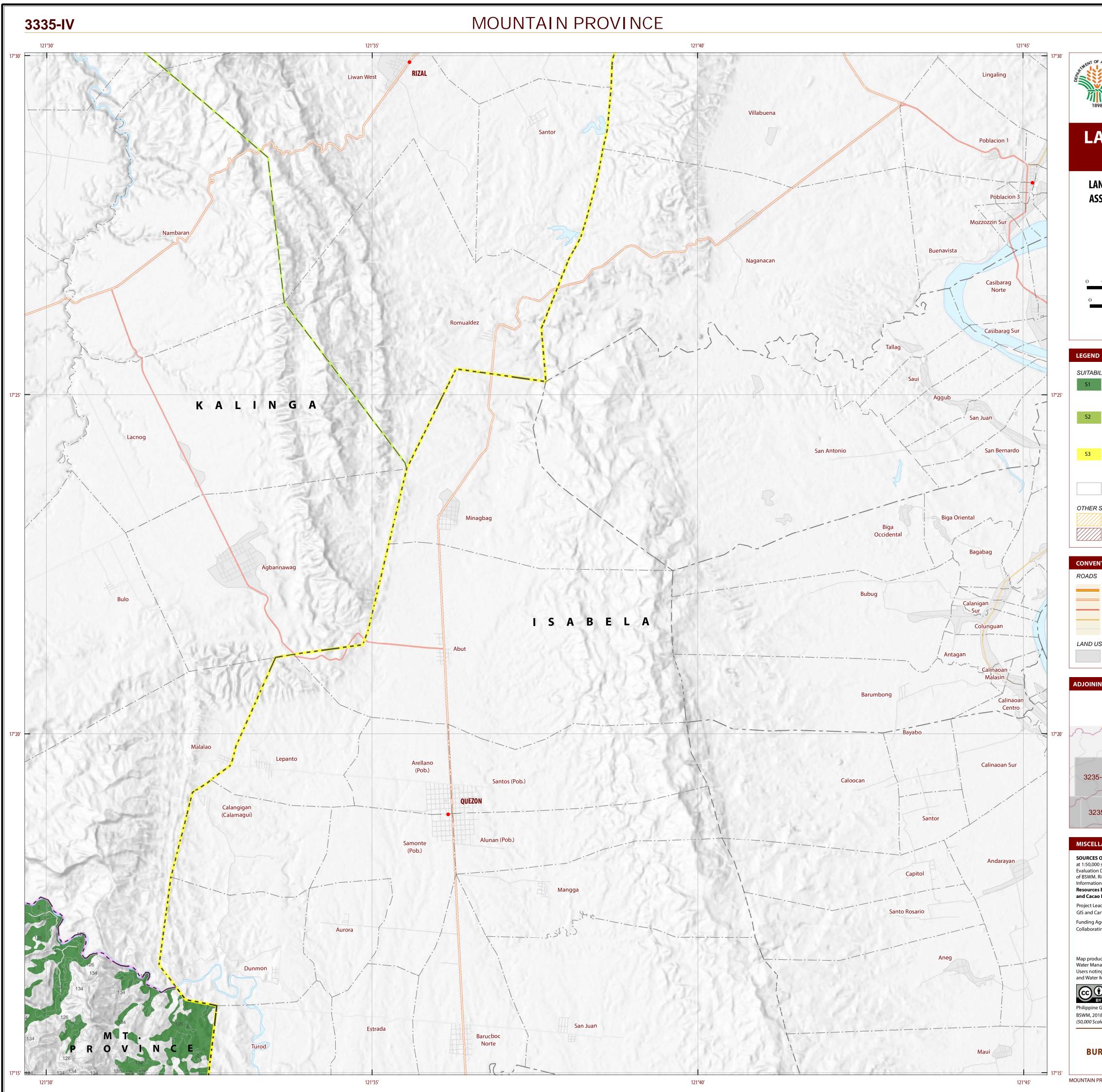




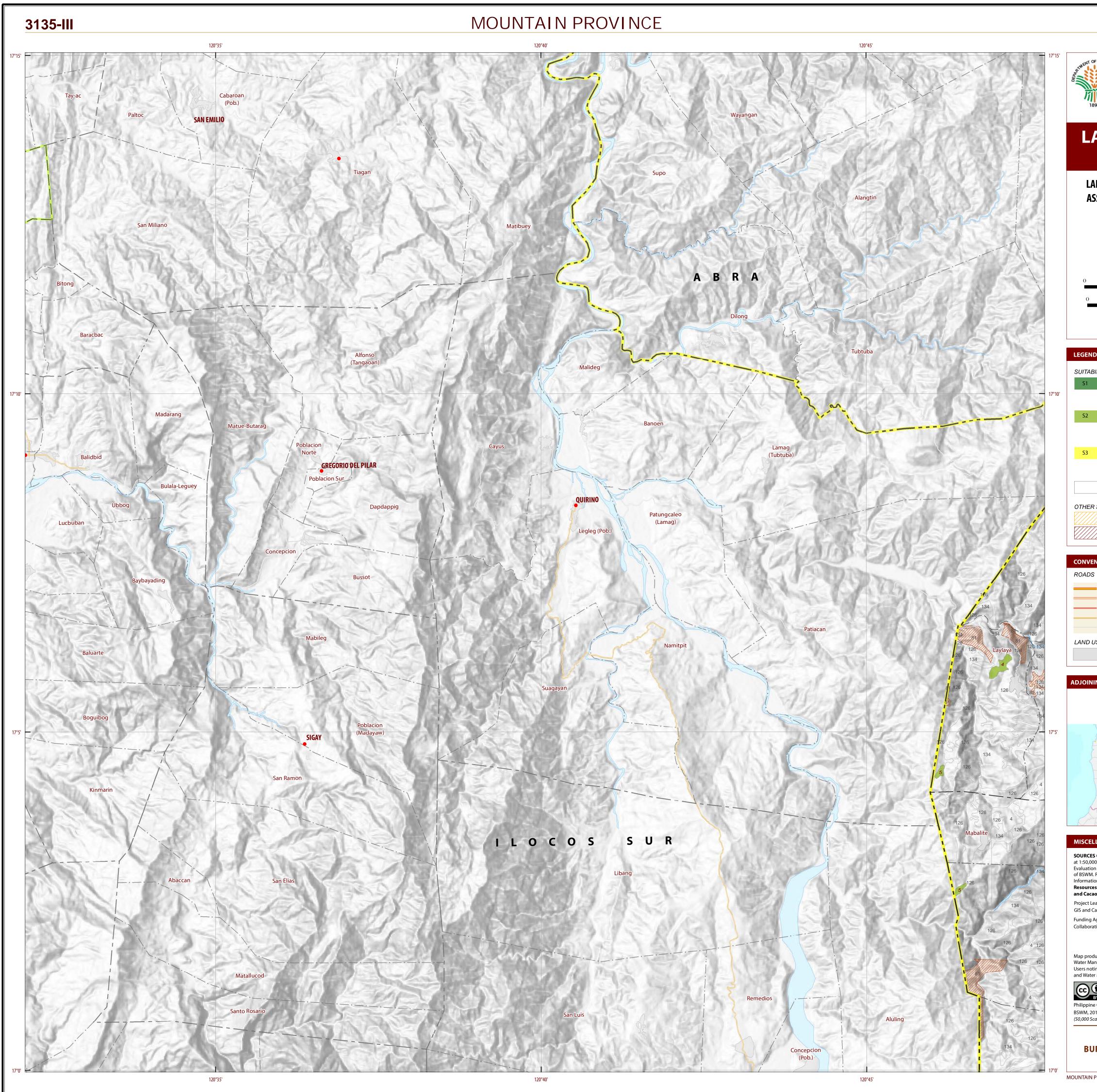
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ουπ-υρ	Fishpond	Mangrove	
Built-up	Fishpond	Mangrove	IAP
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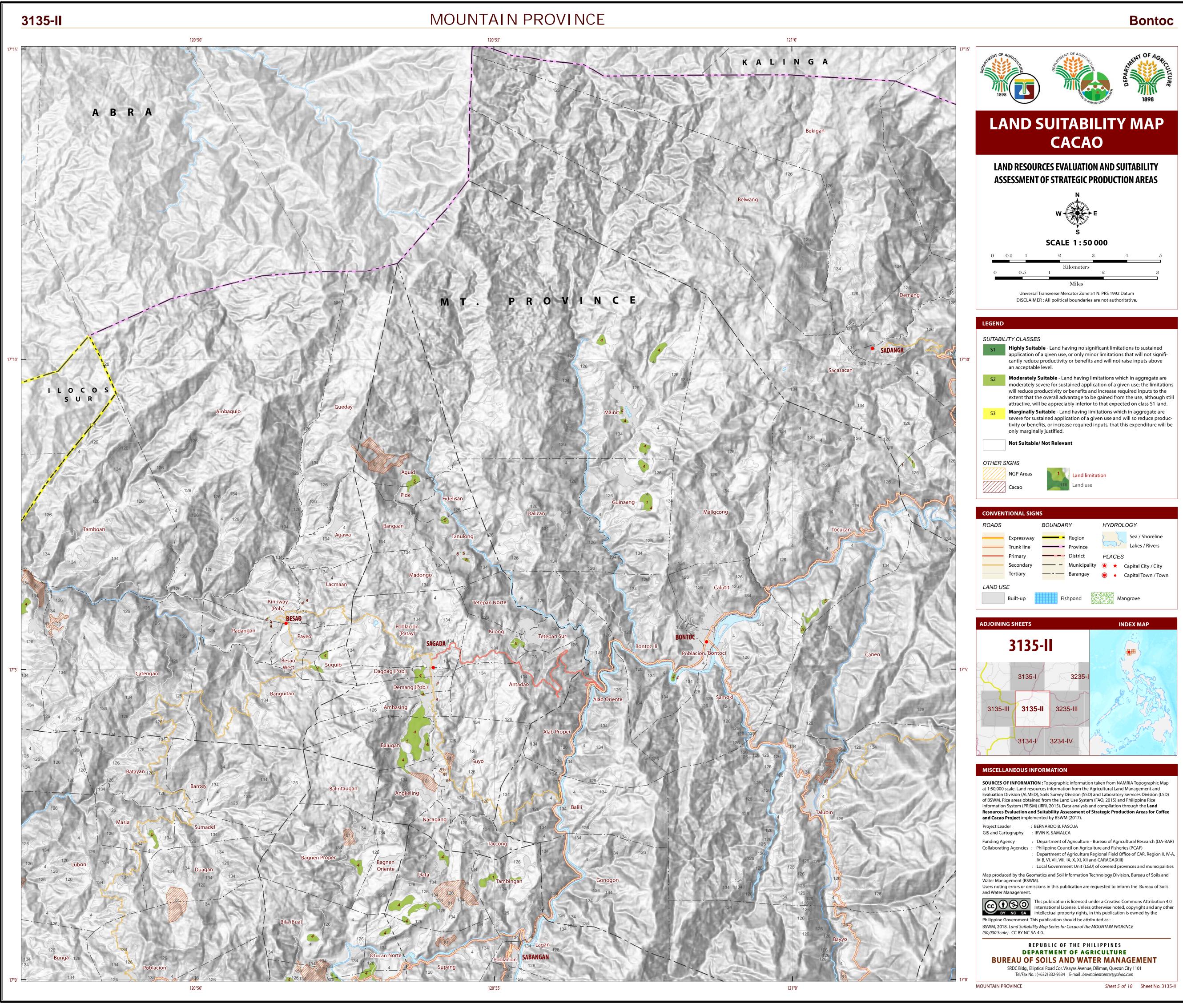
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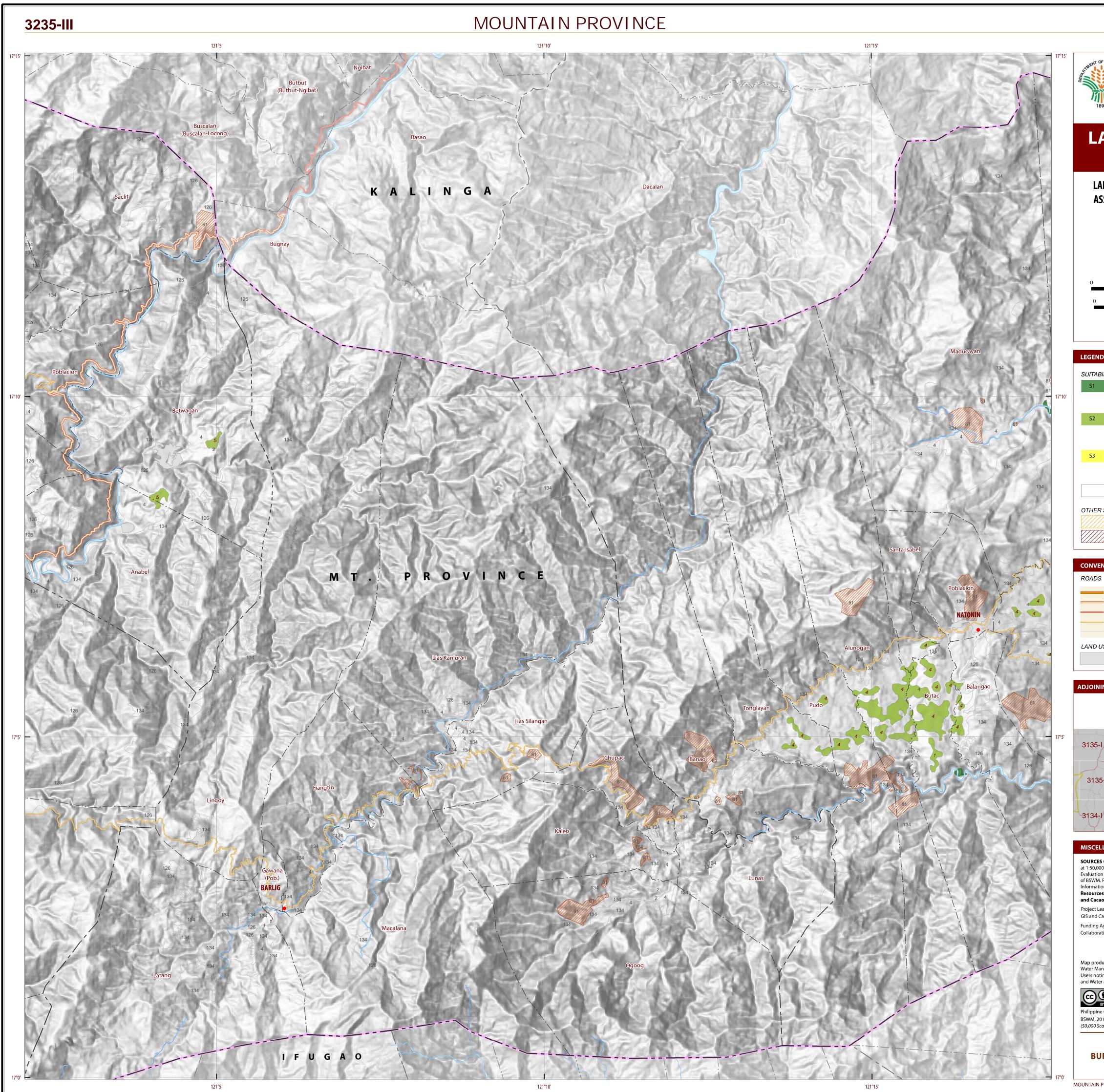


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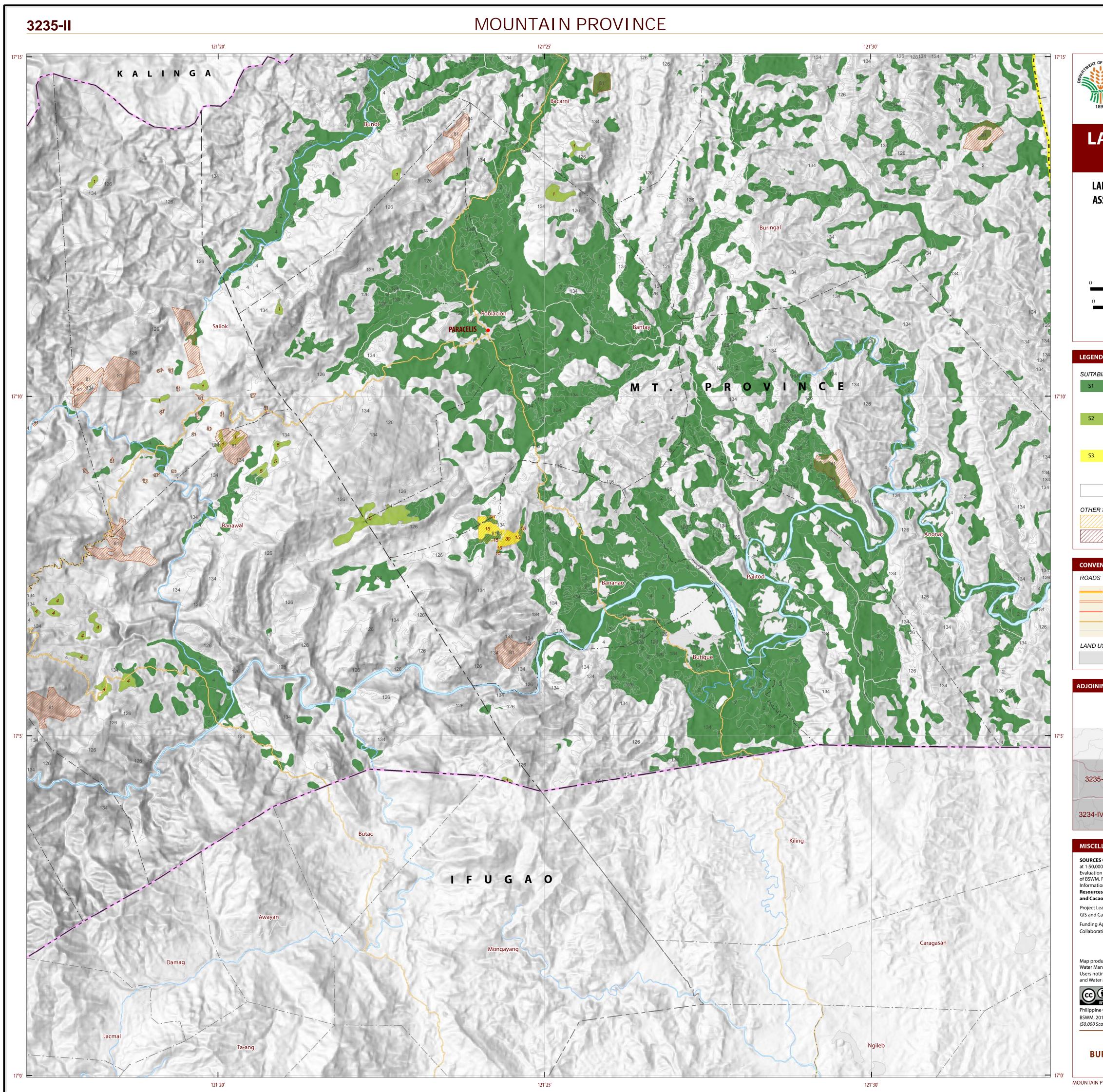


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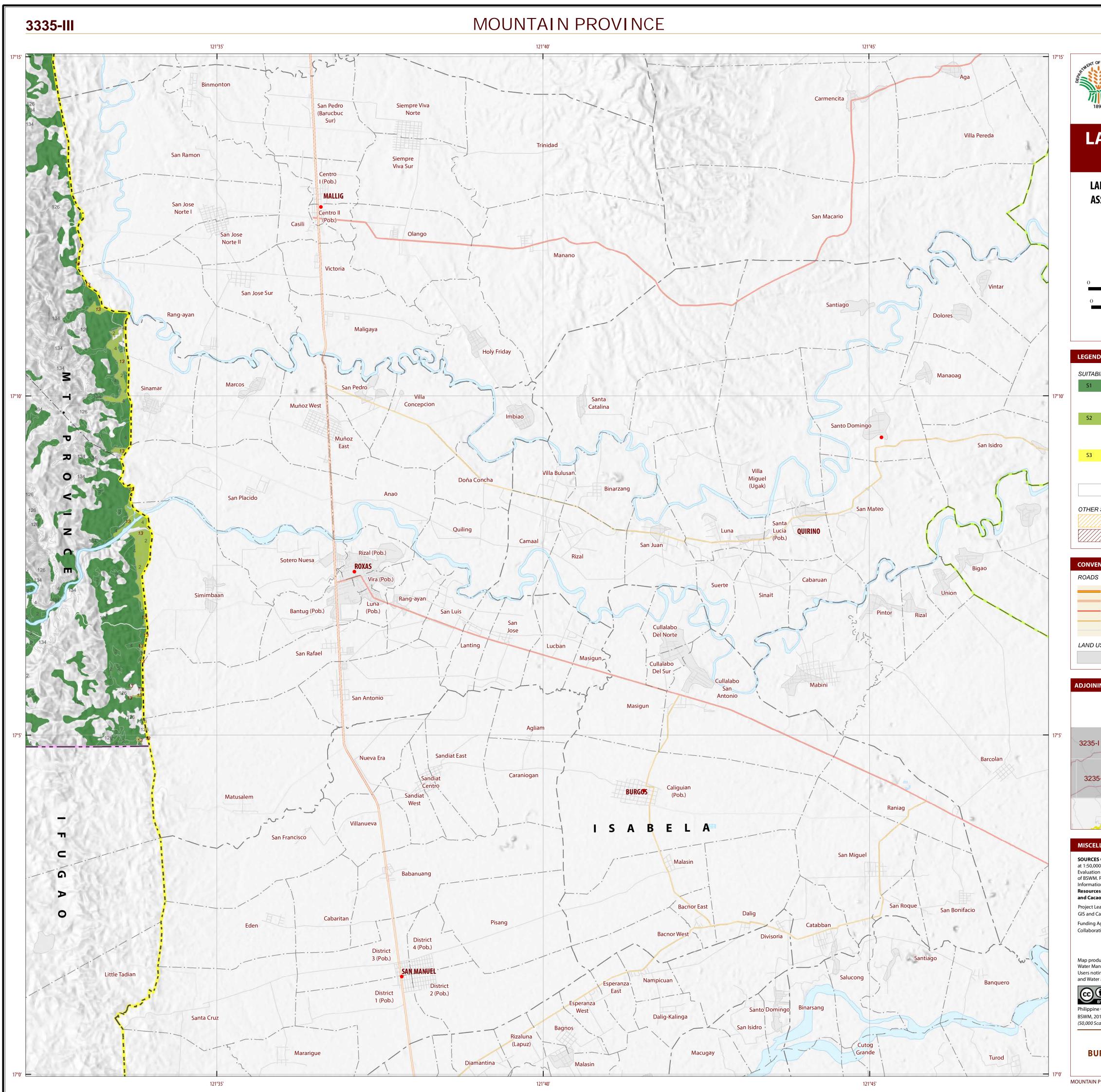




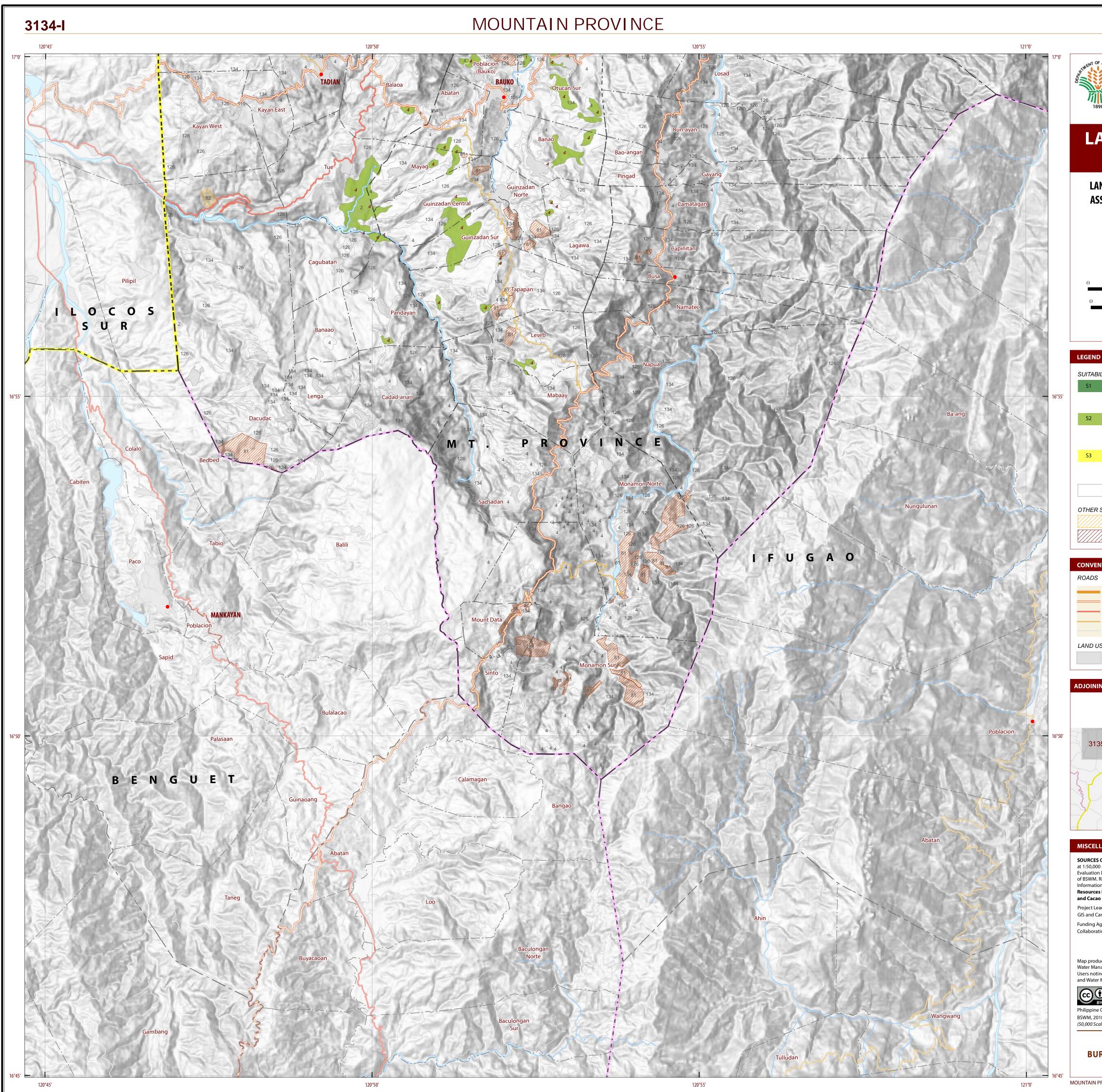
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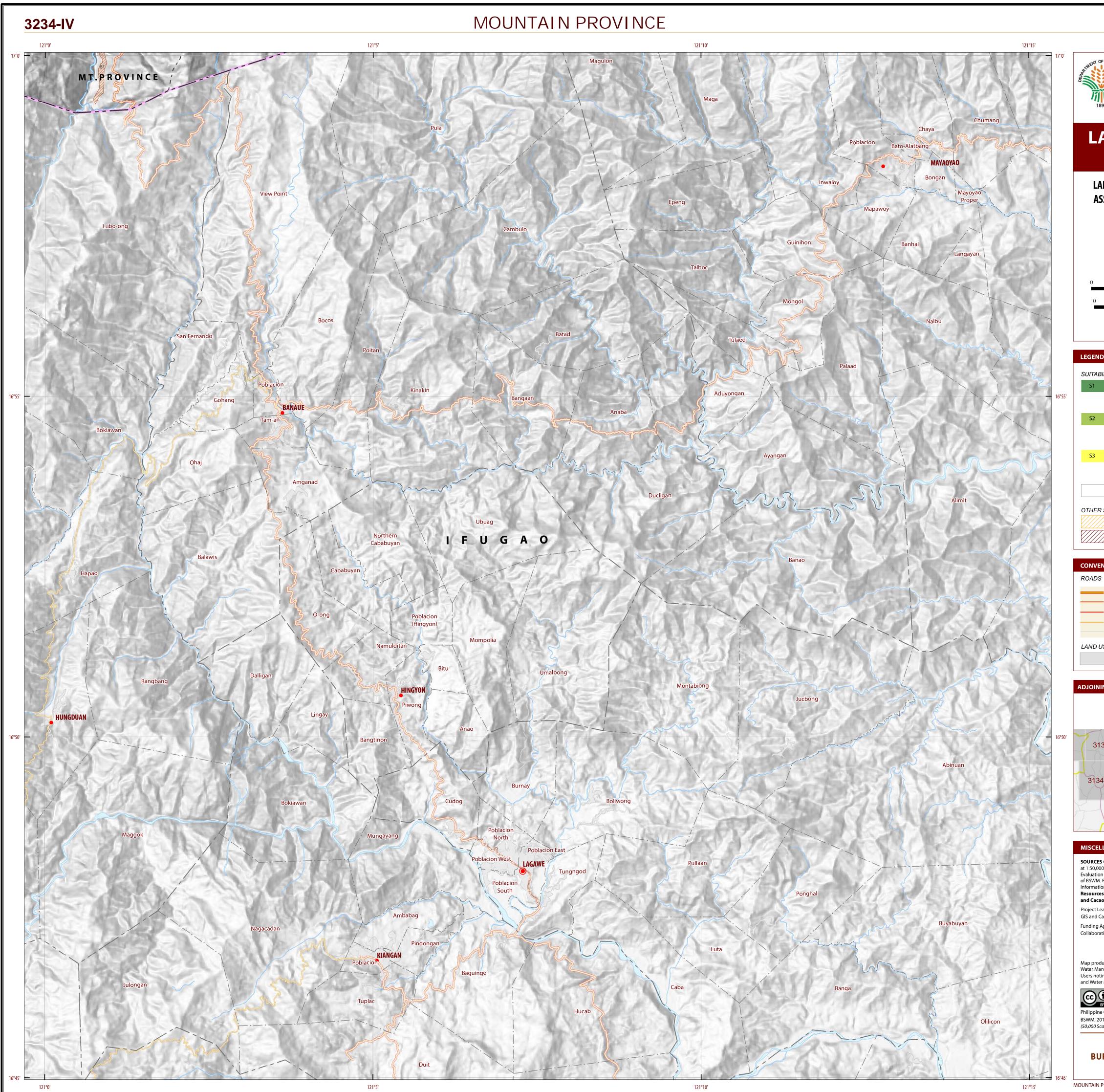
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