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

PROVINCE OF TAWITAWI





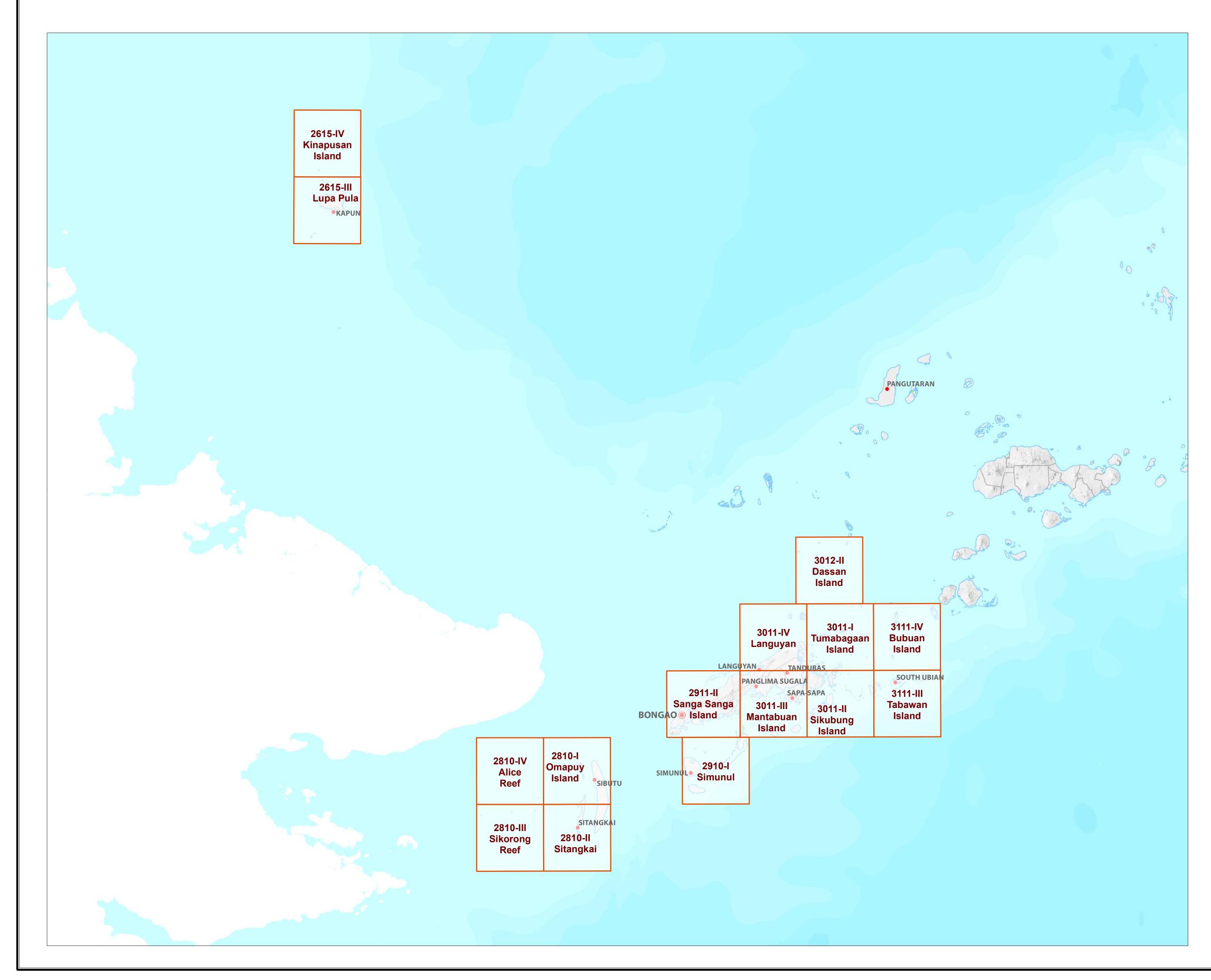
LAND SUITABILITY MAP

ARABICA COFFEE



REPUBLIC OF THE PHILIPPINES 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 PROVINCE OF TAWITAWI



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Diliman, Quezon City 1101 Philippines Tel/Fax No.: (+632) 332-9534 E-mail: bswmclientcenter@yahoo.com

LAND SUITABILITY MAP FOR **ARABICA COFFEE**

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

EXTENT OF SUITABILITY FOR ARABICA COFFEE PRODUCTION BY MUNICIPALITY

						EX	KPANSIO	NAREA (H	la)			CONI	FLICT RES	SOLUTION	N (Ha)		тота
MUNICIPALITY	EXISTI	NG COFFI	EE (Ha)	TOTAL EXISTING AREA (Ha)	Coc	onut		oland, naged*		sland, naged*	Co	orn		y rice, rigated	Other	crops	TOTAL POTENTIAL EXPANSION AREA (Ha)
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	AREA (IIa)
BONGAO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LANGUYAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAPUN	-	-	-	-	-	-	-	-	-	-	-	· -	-	-	-	-	-
PANGLIMA SUGALA	-	-	-	-	-	-	-	-	-	-	-	· -	-	-	-	-	-
SAPA-SAPA	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
SIBUTU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIMUNUL	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
SITANGKAI	-	-	-	-	-	-	-	-	-	-	-	· -	-	-	-	-	-
SOUTH UBIAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TANDUBAS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Area (Ha)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0

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

9 T2-El3-E3-Rc2

10 T2-El3-E3-Rc3

19 T3-El3-E3-Rc2

20 T3-El3-E3-Sh2-Rc3 30 T3-El3

29 T3-El3-F3-D2

AGRONOMIC REQUIREMENT OF ARABICA COFFEE PRODUCTION

LAND UTILIZATION TYPE	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	TYPEI: T t
	S1	<8	>100	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD	5.6 -7.2	high	none-slight	none-slight	none-few	1000-2000	2001-4500	I, III, IV	
Coffee (Arabica)	S2	8 - 30	30 - 100	FSL, L, SiL	SPD,PD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	500-1000 2000-2500	1000-2000	I, II	TYPE III : 1
	S3	>30	<30	S, LS, CSL, SL	VPD,ED	<5.0 - > 7.9	low	severe	severe	many	<500 >2500	<1000 >4500		s
SLOPE (%)		ł	SOIL DRAIN	VAGE		SOIL REACTIO	N (pH)	1	SOIL TEXT	ΓURE	I		1	l a
	vel to gently slopin	g		excessively drained			remely acid		Coarse			Fine		
-	ntly sloping to und	-		well drained			y strongly acid		S	- sand			ndy clay	
	dulating to rolling			moderately well draine			ongly acid			- loamy sand			lty clay	
	lling to moderately	v steep		somewhat poorly drain	ned		dium acid			- coarse sandy loam		C - cla	=	
30 - 50 - ste	•			poorly drained		-	htly acid		SL	- sandy loam		HC - he	eavy clay	Tawa-tawi is
>50 - ve	ry steep		VPD -	very poorly drained		6.6 - 7.2 - neu			Medium	fine condule on				
	>						dly alkaline		FSL	- fine sandy loam				
SOIL DEPTH (-			MPEDIMENT			derately alkalin	e	L	- loam				
	ry shallow allow		ROCK OUTCI < 10% -			> 8.5 - stro	ongly alkaline		SiL	- silt loam - clay loam				
	oderately deep		< 10% - 10 - 30% -	none - few					CL SiCL	- silty clay loam				
	ep to very deep			many					SCL	- sandy clay loam				
				-										524-543311 ⁻¹
														1000
														900
														800
														700
														600
LAND LI	MITATION	S DESCRII	PTION AN	ID COMBINA	TIONS									
ELEVATION			SOIL DRAI	NACE		S	OIL DEPTH			SOIL EROSION				500
	000m or 2000 - 250	00m		newhat poorly drained	to poorly drained			o moderately deep	(30 - 100cm)		te erosion			400
	or > 2500m			y poorly drained or exc				low (< 30cm)		E3 - Severe				
				51-55-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5	, , , , , , , , , , , , , , , , , , ,	_	, i i j i i							300
SLOPE/TOPOG	GRAPHY		SOIL TEXT			_								200
				URE		R	OCK OUTCROF	PS		FLOODING				200
=	ting to moderately	steep	Tc - Coa				OCK OUTCROF c2 - Common				ite seasonal floodi	ing		
T2 - Undulat	ting to moderately o very steep	steep				R				F2 - Modera	ite seasonal floodi seasonal flooding	0		100
T2 - Undulat	•	steep				R	c2 - Common			F2 - Modera		0		100
T2 - Undulat T3 - Steep to	o very steep	-			ΓΙΟΝ	R	c2 - Common			F2 - Modera		0		100
T2 - Undulat T3 - Steep to	o very steep	CODE LIN	Tc - Coa	arse texture		R	c2 - Common c3 - Many CODE		gated	F2 - Modera		0		100
T2 - Undulat T3 - Steep to CODE LI	MITATION	CODE LIN 11 T2-El3-	Tc - Coa	CODE LIMITA	13-Rc2	R	c2 - Common c3 - Many CODE 2 F	LANDUSE	gated	F2 - Modera		0		100
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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.

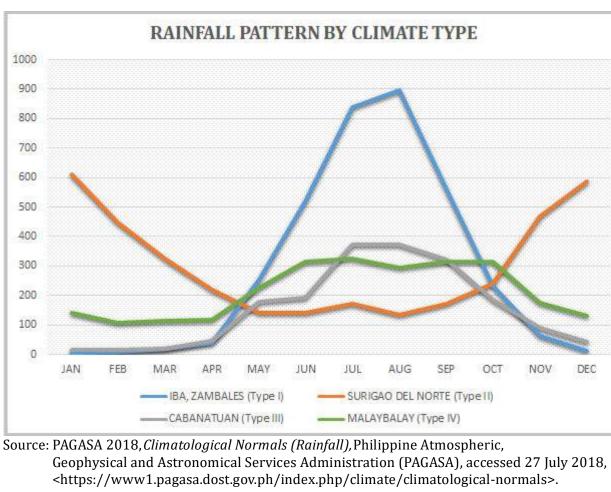
Moderately Suitable (S2)

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

- 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
- 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.

s classified as climate type IV

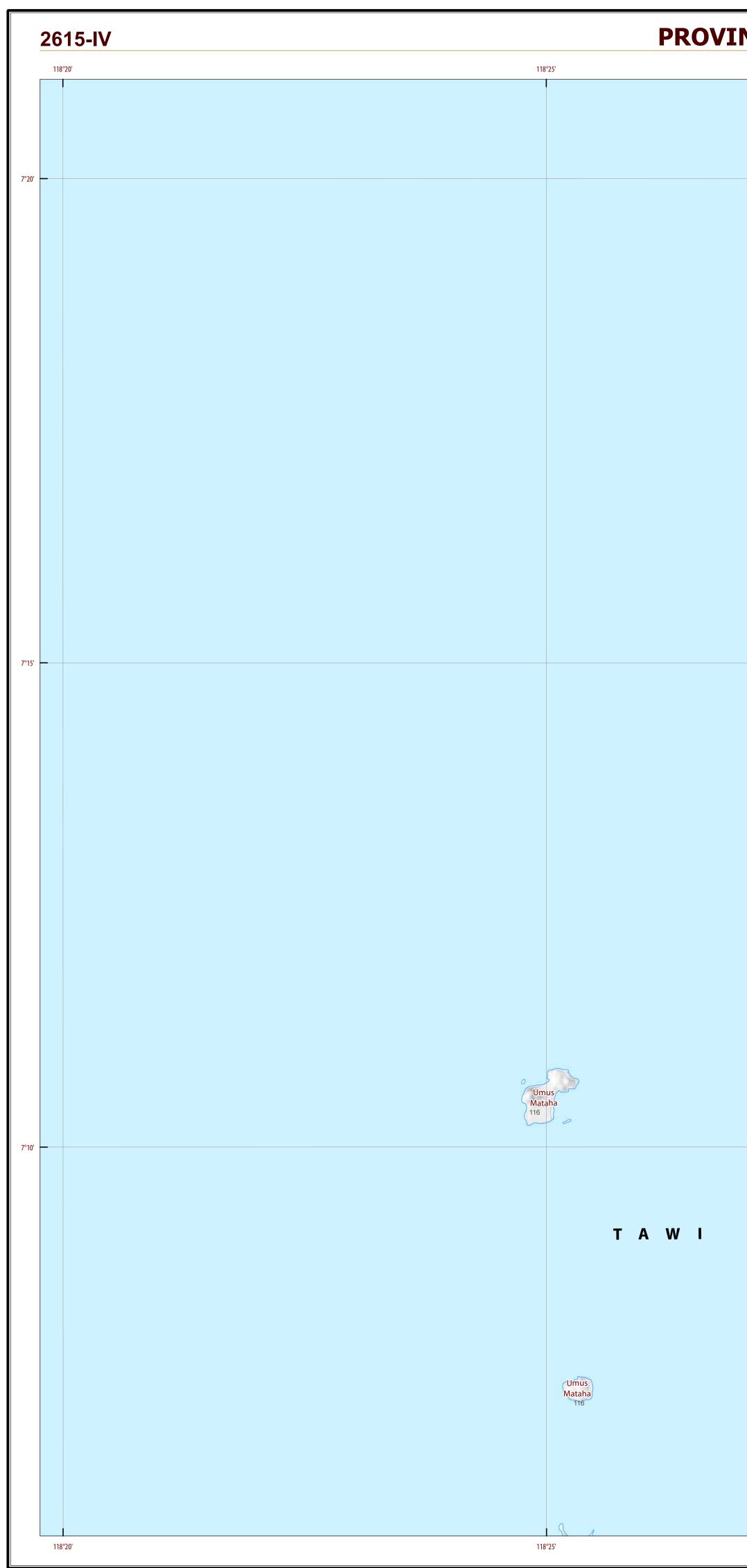


Marginally Suitable (S3) Land having limitations which in aggregate are severe for sustained application of a given use and will so reduce productivity or benefits, or increase required inputs, that this expenditure will be only marginally justified.

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.

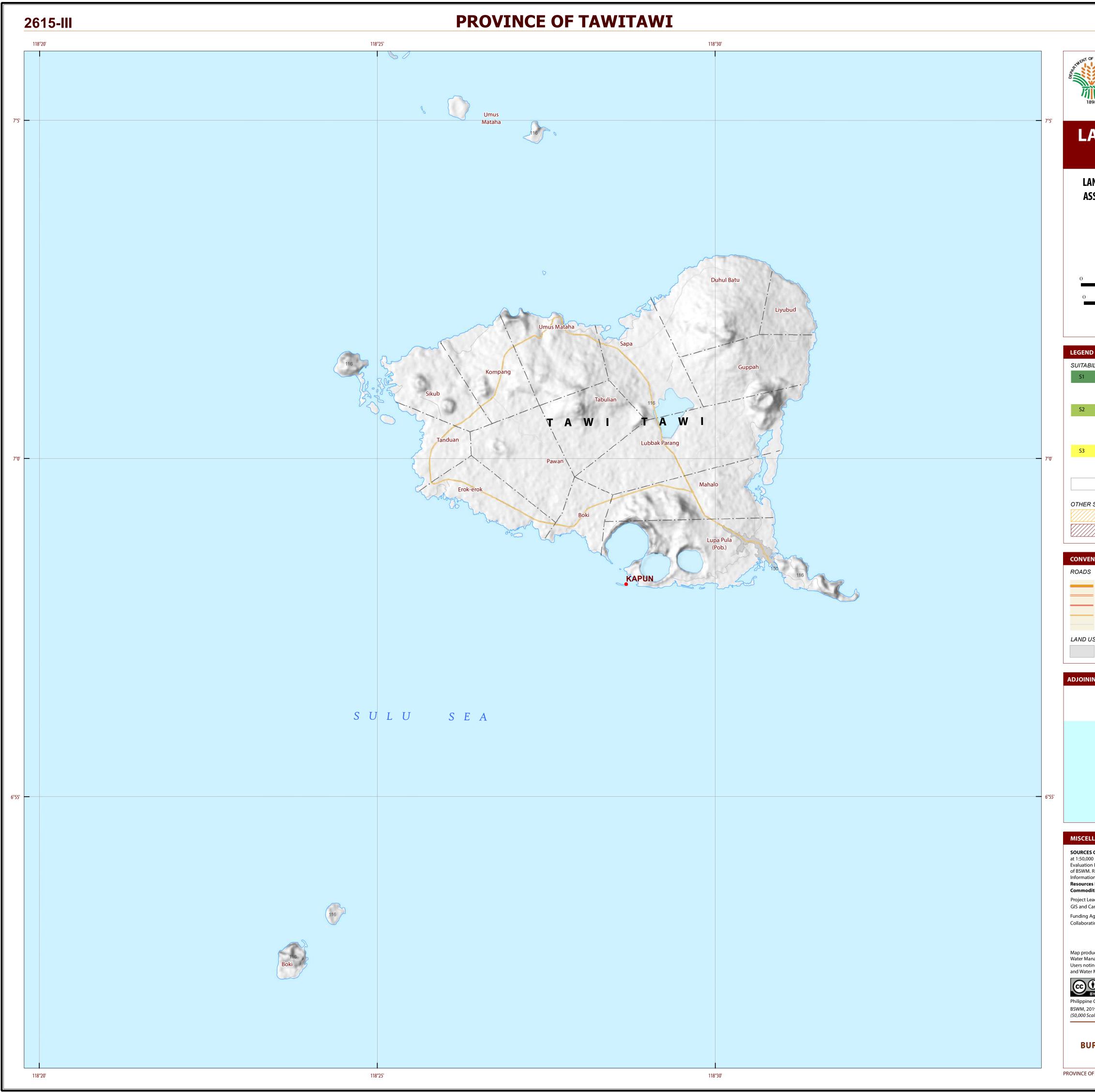
- period from December to February. There is not a single dry month. Maximum monthly rainfall occurs during the period from March to May.
- **TYPE IV** : Rainfall is more or less evenly distributed throughout the year. This type resembles Type II since it has no dry season.



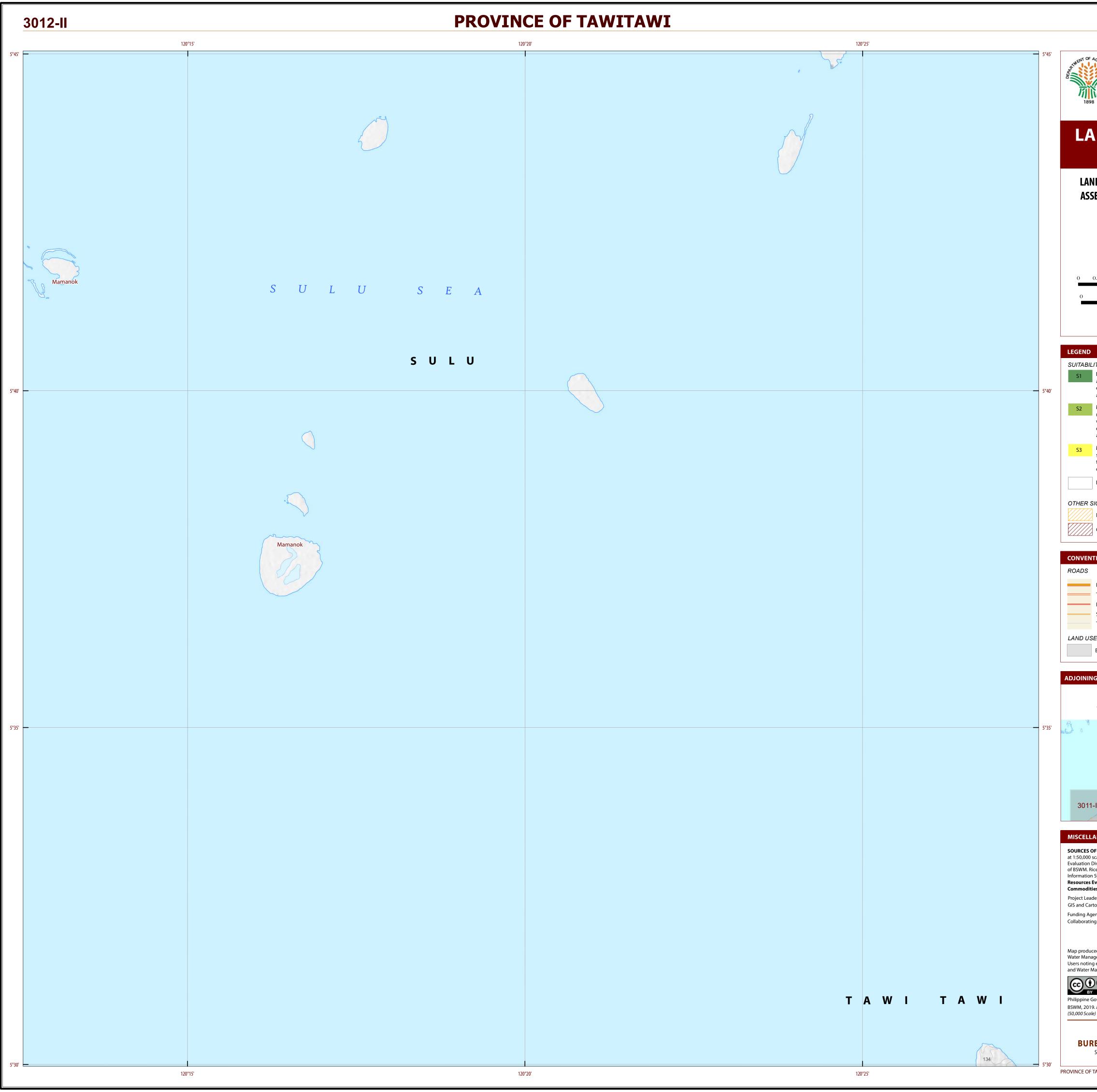


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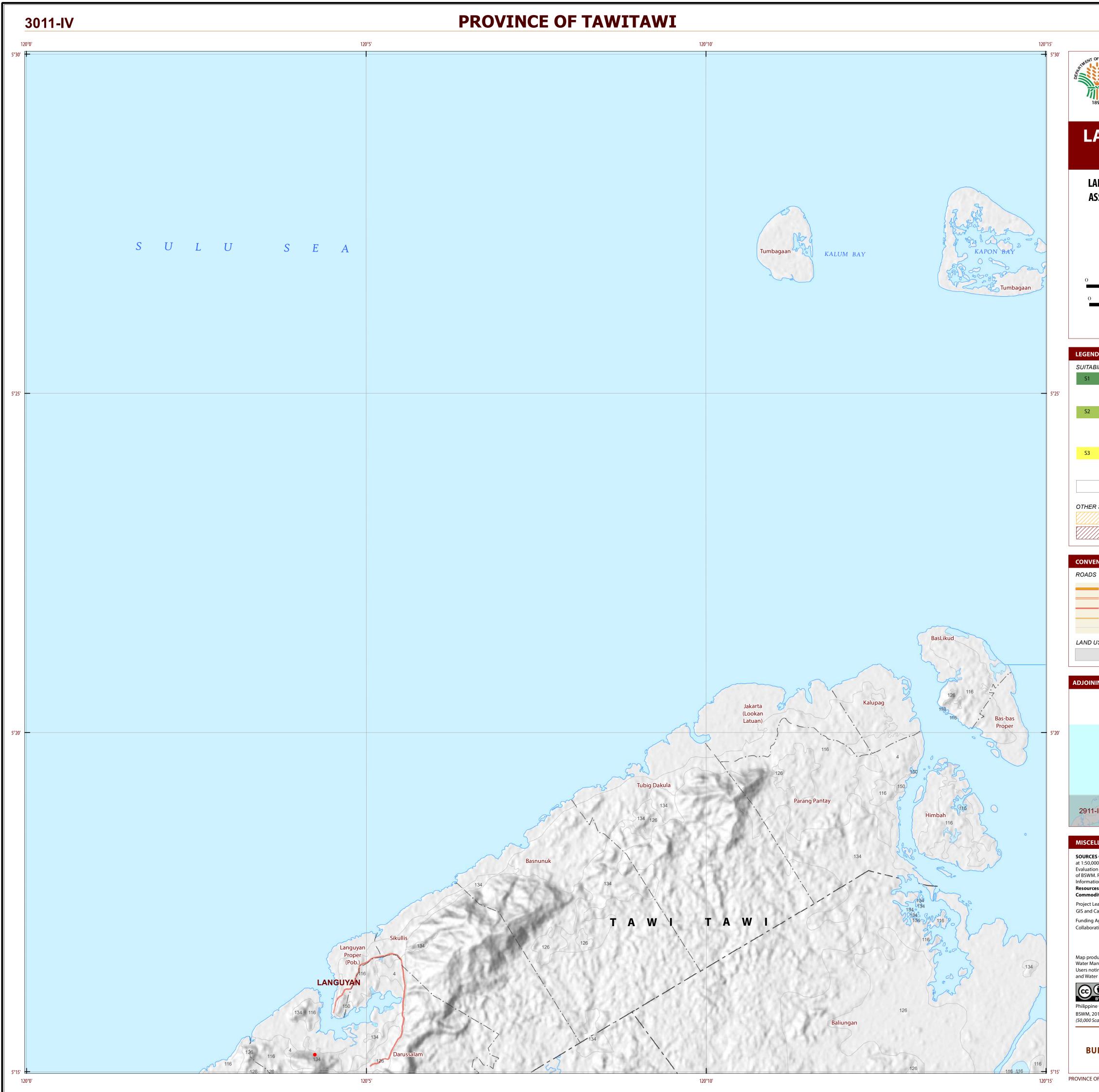
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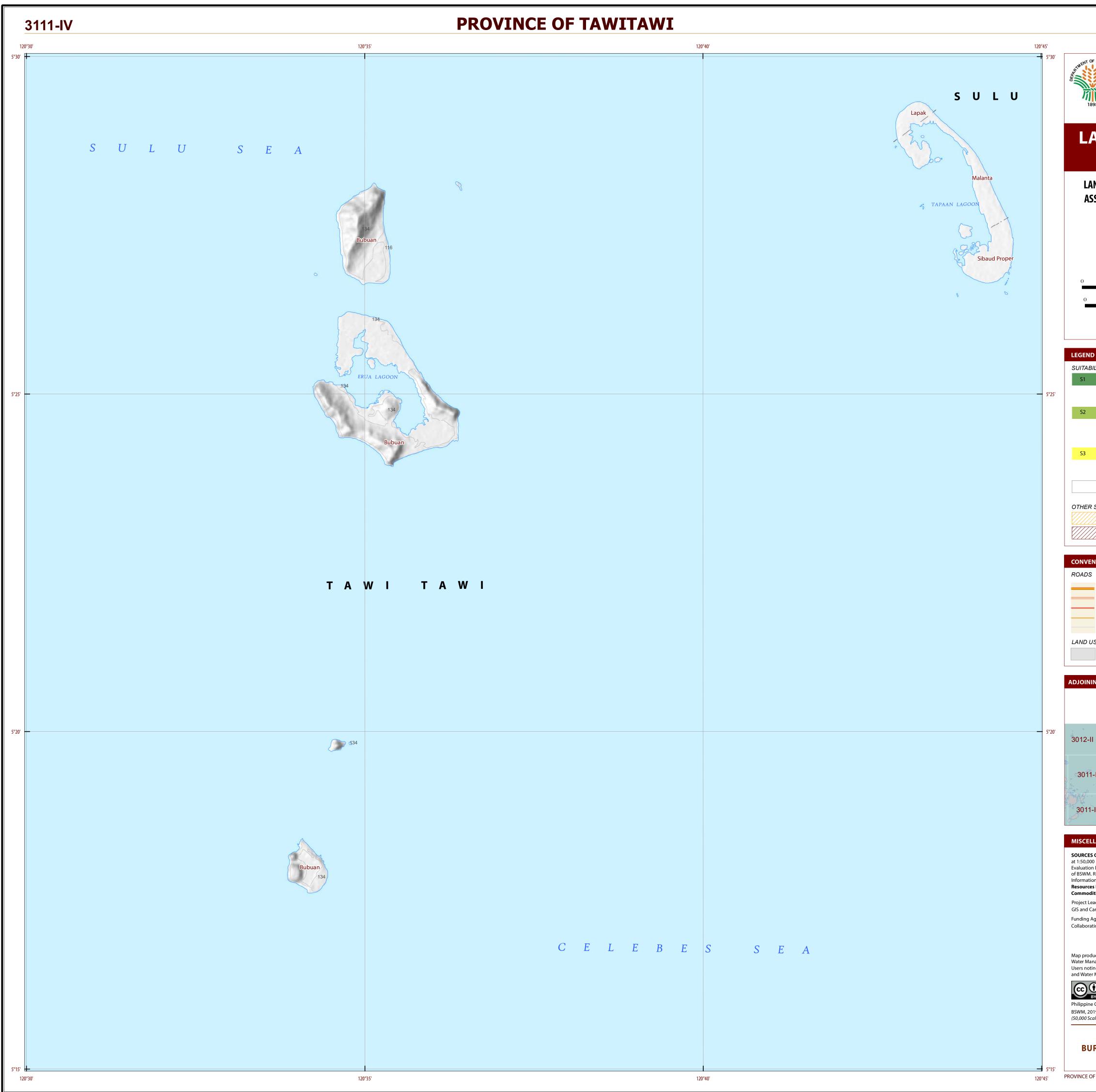


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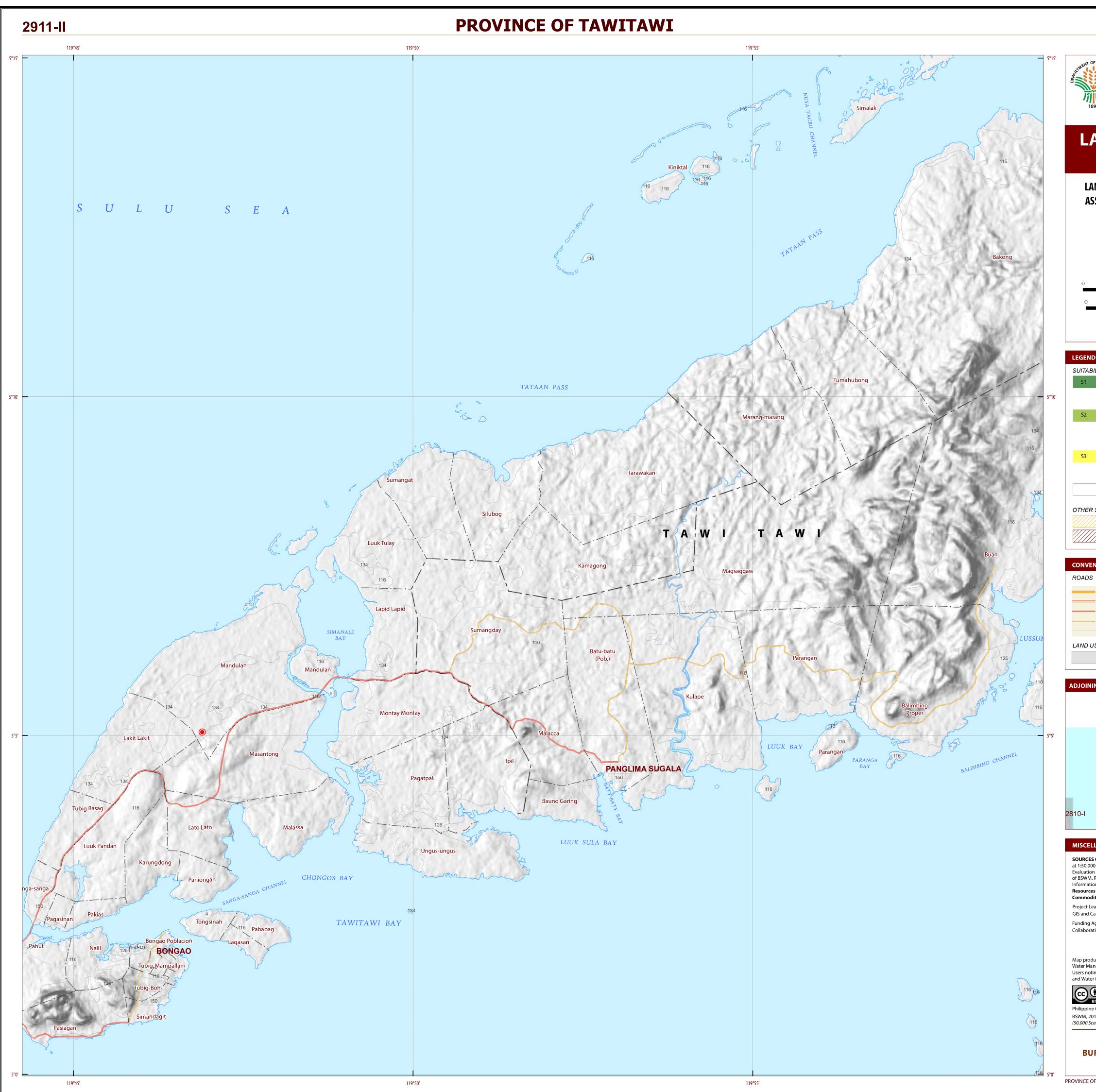
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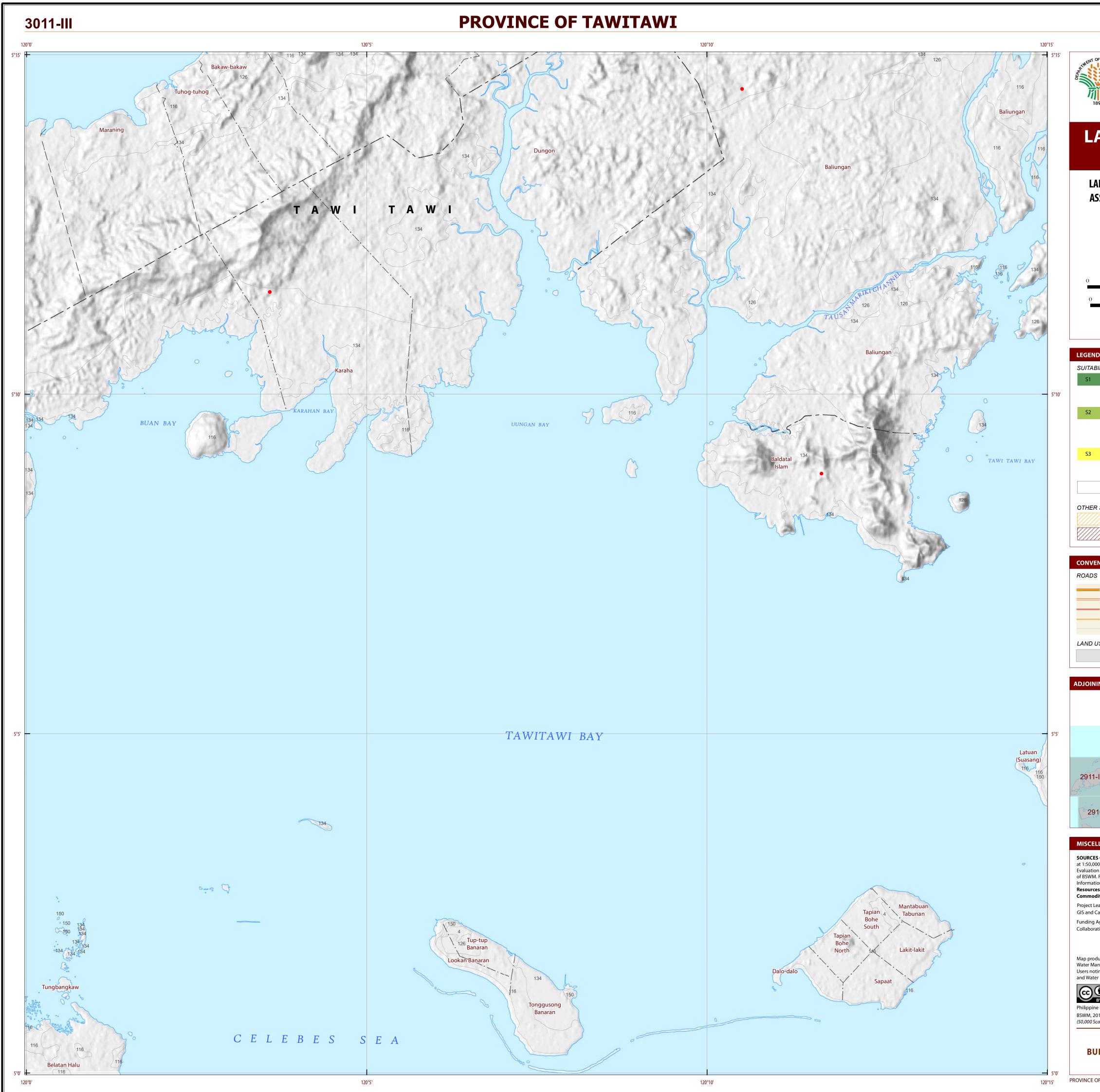
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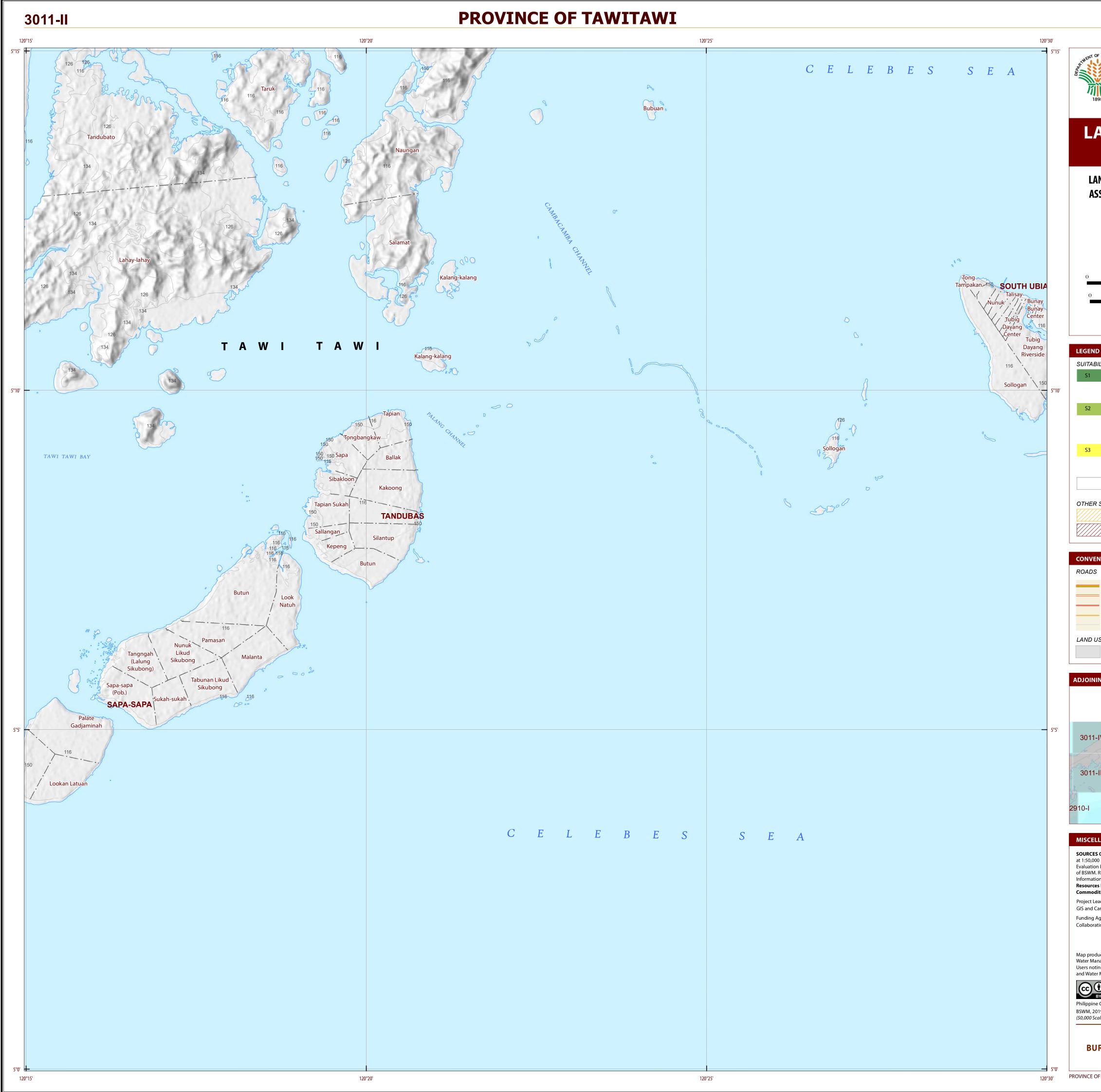
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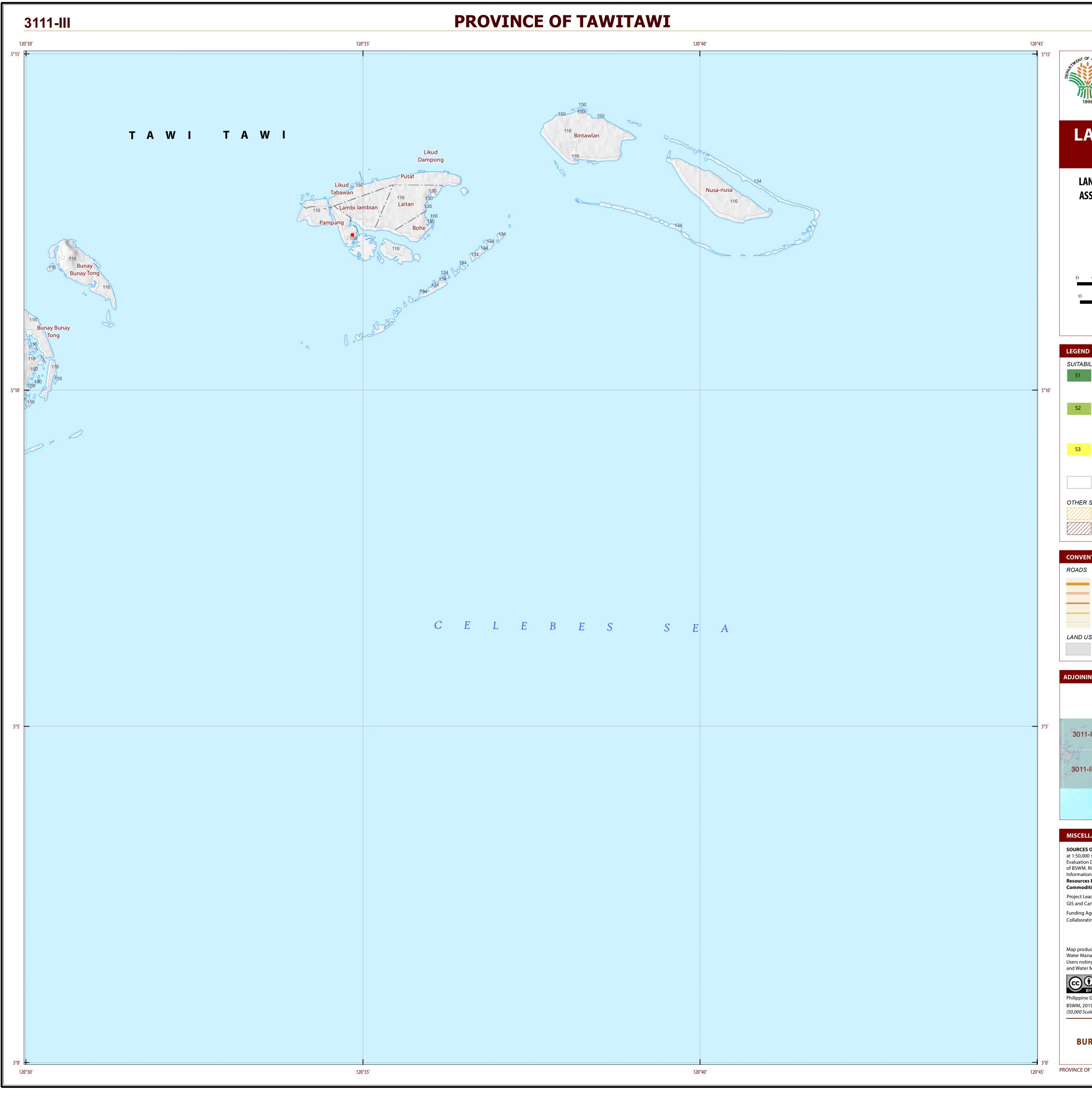
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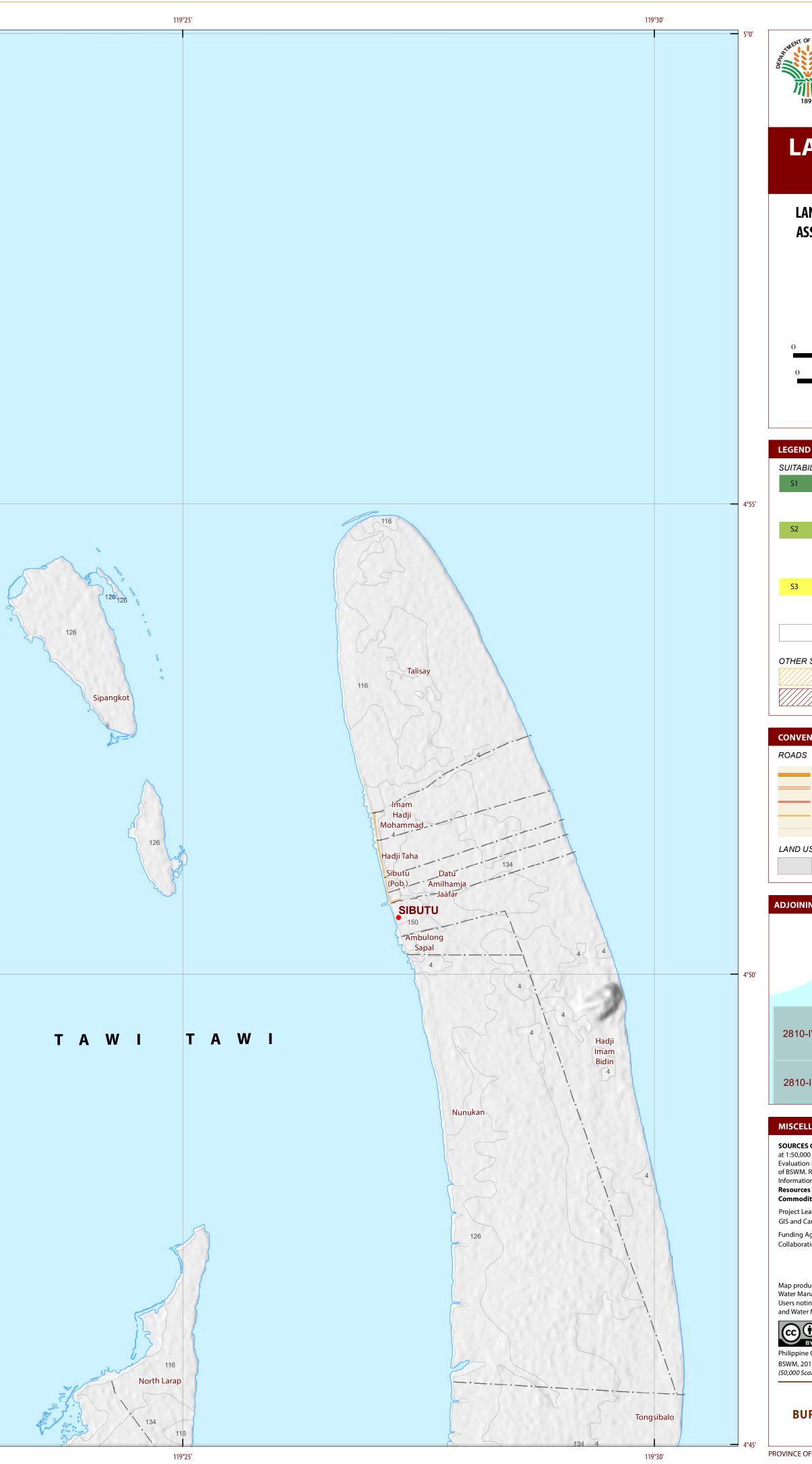
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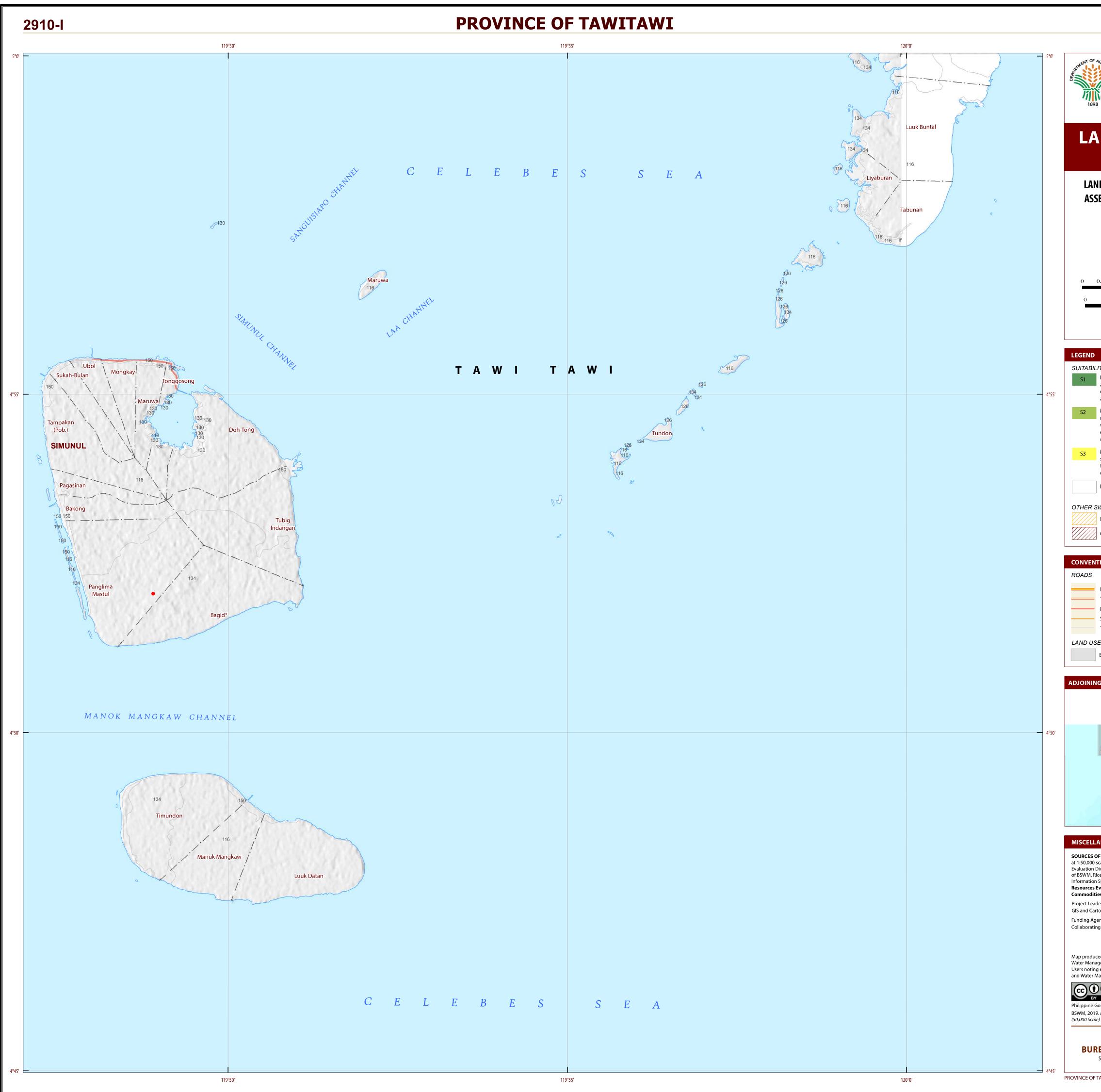
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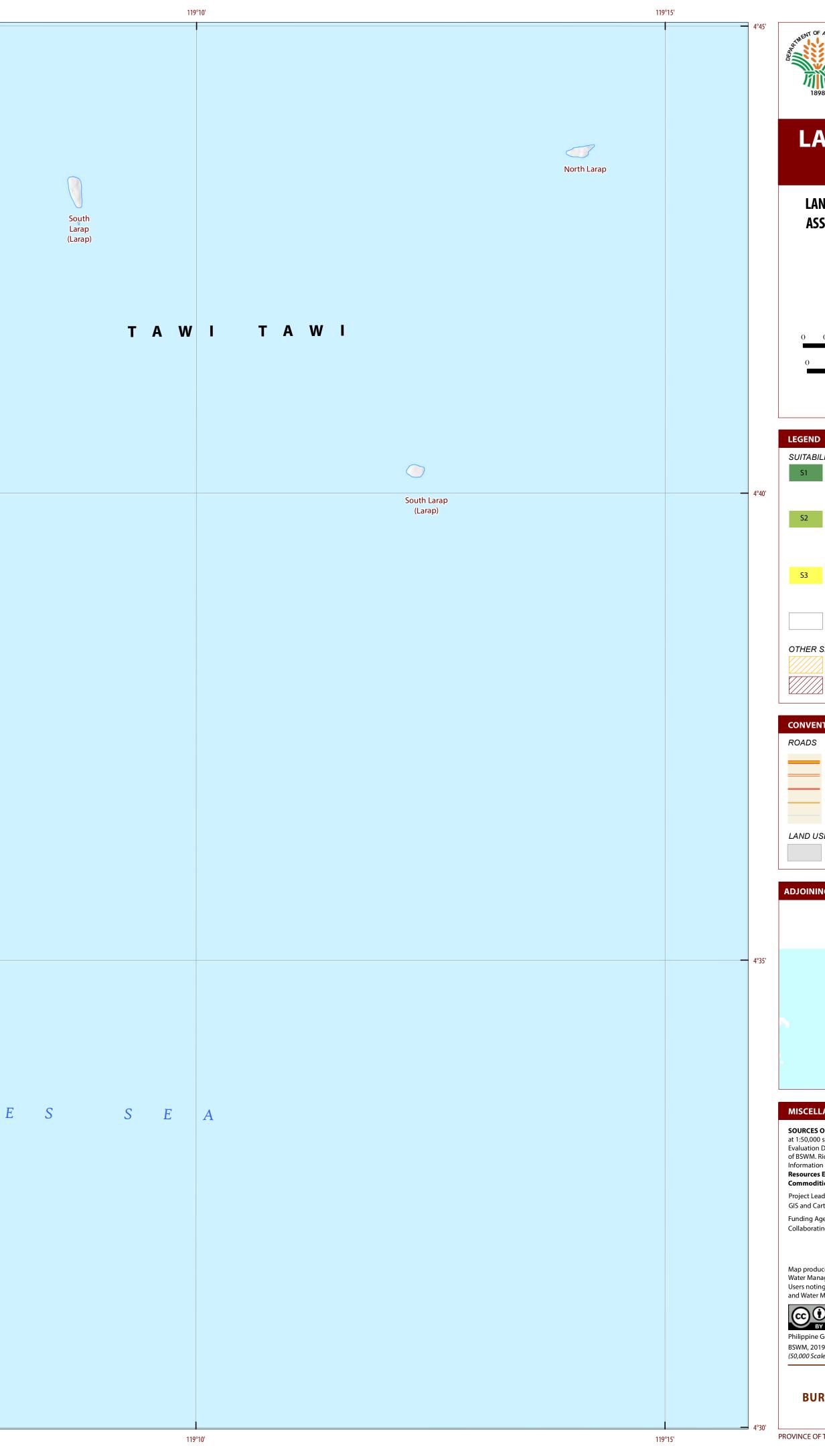
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