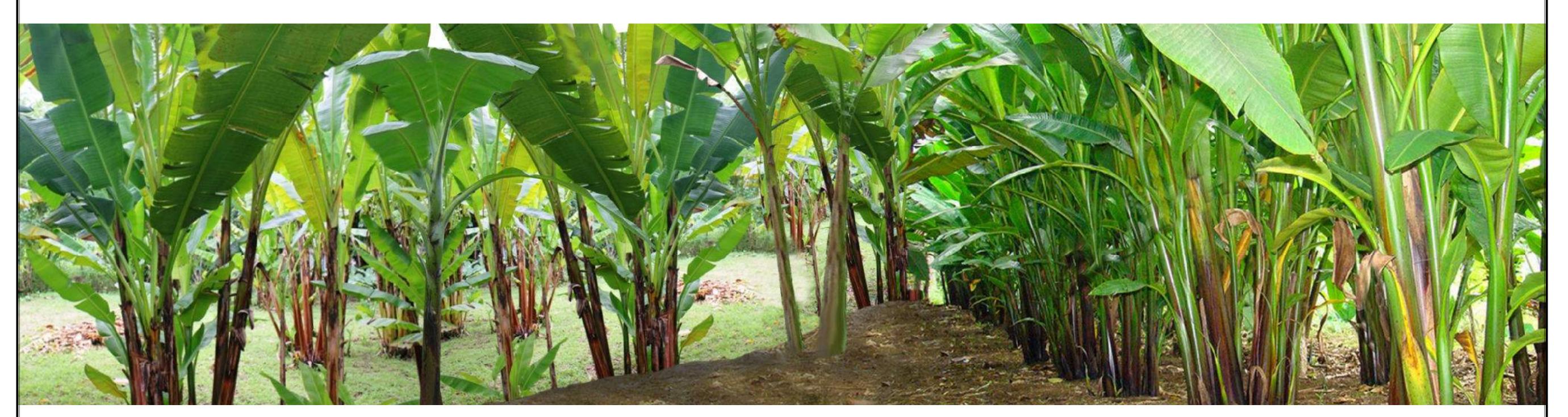
### LAND SUITABILITY MAP

### **ABACA**

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

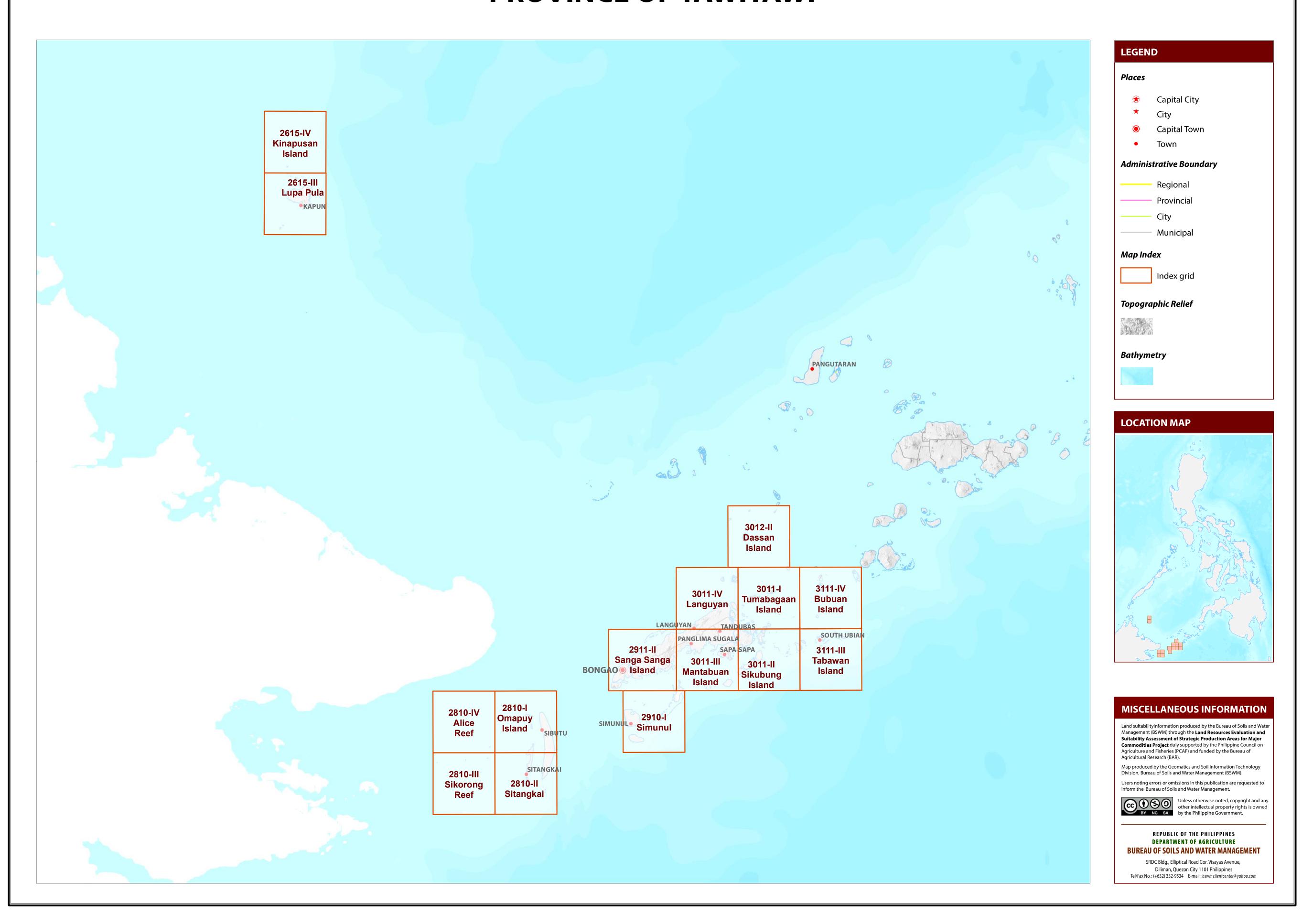
### PROVINCE OF TAWITAWI





#### **MAP INDEX**

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



## LAND SUITABILITY MAP FOR **ABACA**

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

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

						EX	KPANSIO	N AREA (I	ła)			CONI	LICT RES	SOLUTION	N (Ha)		тоты
MUNICIPALITY	EXISTI	NG ABAC	CA (Ha)	TOTAL EXISTING AREA (Ha)	Coc	onut		bland, naged*		sland, naged*	Co	rn		y rice, rigated	Other	crops	TOTAL POTENTIAL EXPANSION
	<b>S1</b>	<b>S2</b>	<b>S</b> 3		<b>S1</b>	S2	<b>S1</b>	S2	<b>S1</b>	<b>S2</b>	<b>S1</b>	S2	<b>S1</b>	<b>S2</b>	<b>S1</b>	S2	AREA (Ha)
BONGAO	-	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-	-
LANGUYAN	-	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-	-
MAPUN	-	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-	-
PANGLIMA SUGALA	-	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-	-
SAPA-SAPA	-	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-	-
SIBUTU	-	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-	-
SIMUNUL	-	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-	-
SITANGKAI	-	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-	-
SOUTH UBIAN	-	-	-	-	-	_	_	_	-	-	_	_	-	-	-	-	-
TANDUBAS	-	-	-	-	-	_	_	_	-	-	_	_	-	-	-	-	-
Total Area (Ha)	-	_	_	-	_	_	_	_	_	_	_	_	-	_	_	_	0

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

#### AGRONOMIC REQUIREMENT OF ABACA 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
	S1	<8	>50	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD, SPD	5.6 -7.2	high	none-slight	none-slight	none-few	<500	2001-4500	II, III, IV
Abaca	S2	8 - 30	30 - 50	FSL, L, SiL, SL	PD,VPD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	500-1500	1000-2000	I, II
	S3	>30	< 30	S, LS, CSL	ED	<5.0 - > 7.9	low	severe	severe	many	>1500	<1000 >4500	

	S3	>30	< 30	S, LS, CSL	ED	<5.0 - > 7.9	low	severe	severe	many	>1500	<100 >450	
SLOPE (%	<b>%)</b>		SOIL DRA	MINAGE		SOIL REACTIO	ON (pH)		SOIL TEX	KTURE			
0 - 3	- level to gently slopi	ing	ED	- excessively drained		< 4.5 - ex	tremely acid		Coarse			Fine	
3 - 8	- gently sloping to ur	ndulating	WD	- well drained		4.5 - 5.0 - ve	ry strongly acid		S	- sand		SC	- sandy clay
8 - 18	- undulating to rollin	g	MWD	- moderately well draine	ed	5.1 - 5.5 - str	ongly acid		LS	- loamy sand		SiC	- silty clay
18 - 30	- rolling to moderate	ly steep	SPD	- somewhat poorly drain	ned	5.6 - 6.0 - me	edium acid		CSL	- coarse sandy loam		С	- clay
30 - 50	- steep		PD	- poorly drained		6.1 - 6.5 - sli	ghtly acid		SL	- sandy loam		HC	- heavy clay
> 50	- very steep		VPD	- very poorly drained		6.6 - 7.2 - ne	utral		Medium	ļ			
						7.3 - 7.8 - mi	ldly alkaline		FSL	- fine sandy loam			
SOIL DEF	PTH (cm)		SURFACE	E IMPEDIMENT		7.9 - 8.4 - mo	oderately alkaline		L	- loam			
0 - 30	- very shallow		ROCK OUT	ΓCROPS		> 8.5 - str	ongly alkaline		SiL	- silt loam			
30 - 50	- shallow		< 10%	- none - few					CL	- clay loam			
50 - 100	- moderately deep		10 - 30%	- common					SiCL	- silty clay loam			
> 100	- deep to very deep		> 30%	- many					SCL	- sandy clay loam			

#### LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

**ELEVATION** 

El2 - 500 - 1000m or 2000 - 2500m

**SOIL DRAINAGE** 

D2 - Somewhat poorly drained to poorly drained

El3 -	< 500m or > 2500m		D3 - V	ery poorly	drained or excessively dra
SLOPE/	/TOPOGRAPHY		SOIL TEX	TURE	
Γ2 -	Undulating to moderate	ely steep	Tc - C	oarse text	ure
ГЗ -	Steep to very steep				
CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
CODE 1	<b>LIMITATION</b> F2-D2	<b>CODE</b> 11	LIMITATION T2-F2-D2	<b>CODE 21</b>	LIMITATION T3
CODE  1 2					

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

SOIL	DEPTH
Sh2	- Shallow to moderately deep (30 - 100cm)
Sh3	- Very shallow (< 30cm)

**SOIL EROSION** 

**FLOODING** 

E2 - Moderate erosion

F2 - Moderate seasonal flooding

F3 - Severe seasonal flooding

E3 - Severe erosion

CODE	LANDUSE
2	Paddy rice, non-irrigated
4	Corn
107	Abaca
116	Coconut
126	Grassland, unmanaged
134	Shrubs, unmanaged
	<u> </u>

**ROCK OUTCROPS** 

Rc2 - Common

**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**

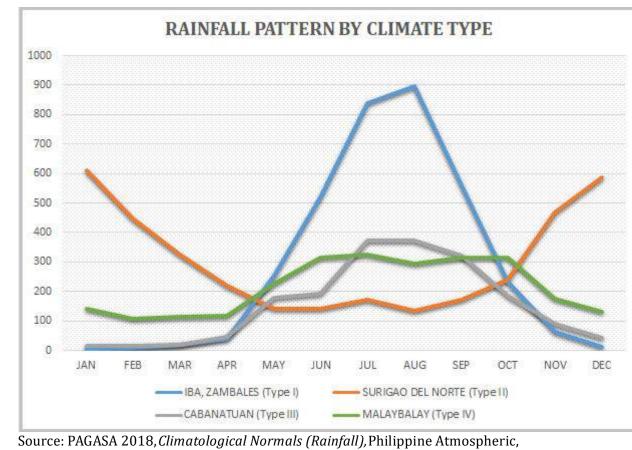
**TYPE I**: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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, <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>.

