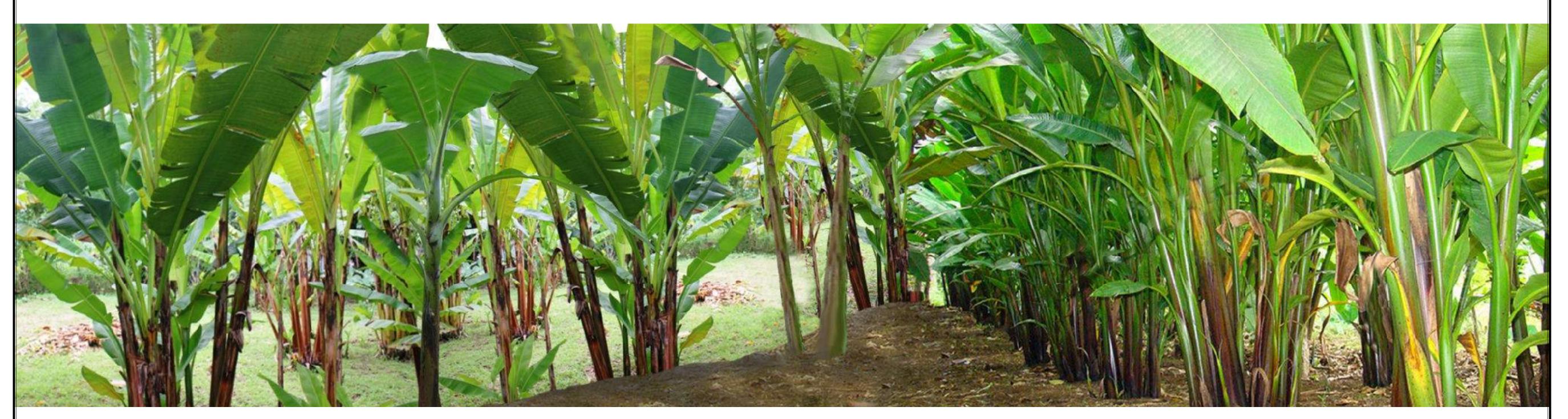
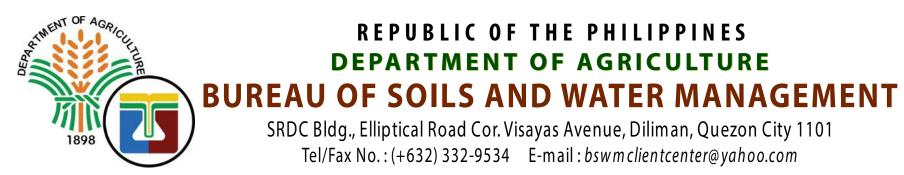
### LAND SUITABILITY MAP

### **ABACA**

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

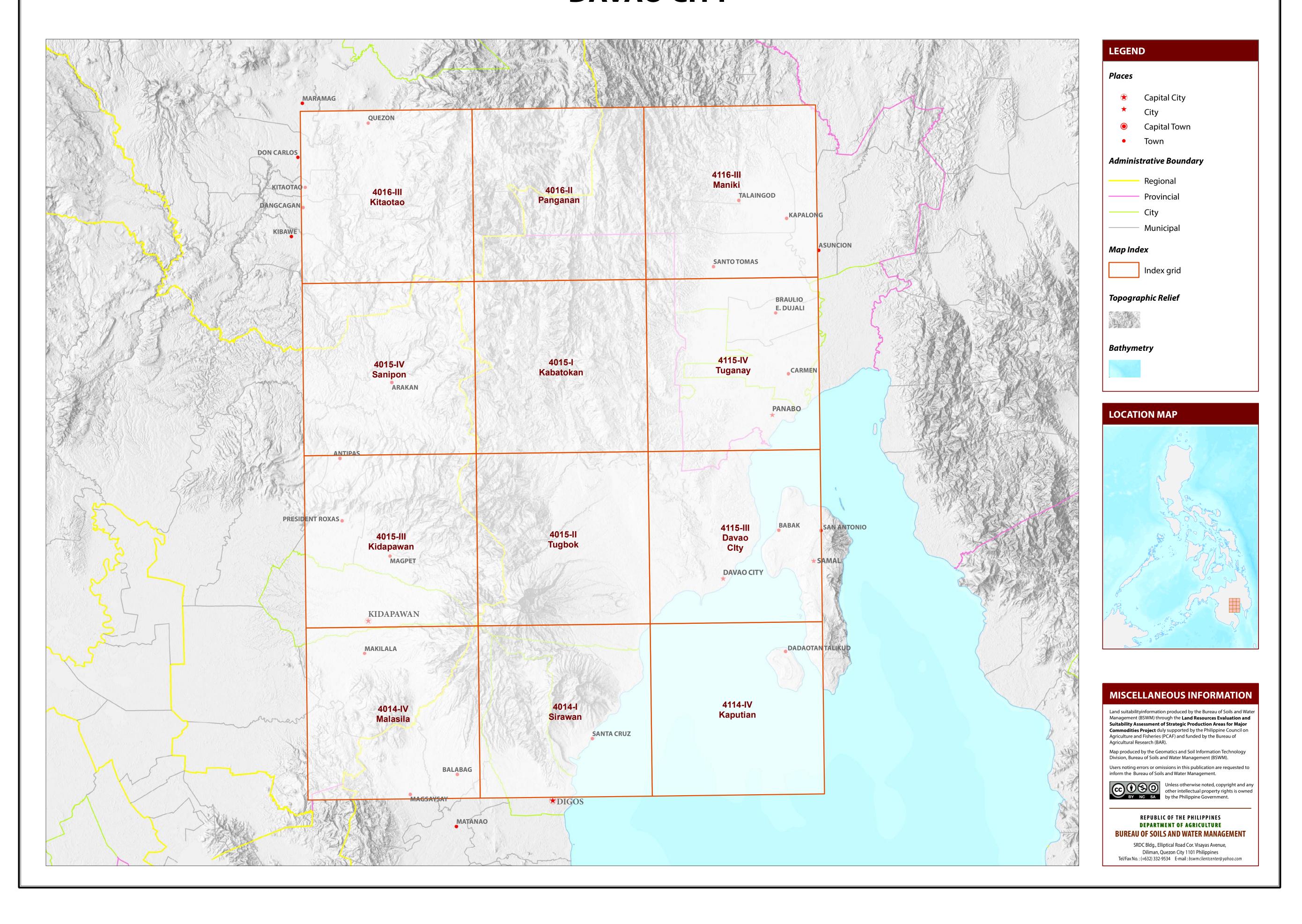
### **DAVAO CITY**





### MAP INDEX

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



## LAND SUITABILITY MAP FOR **ABACA**

### LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS DAVAO CITY, REGION XI

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

				TOTAL EXISTING AREA (Ha)	EXPANSION AREA (Ha)					CONFLICT RESOLUTION AREA (Ha)									TOTAL		
MUNICIPALITY	EXISTING ABACA (Ha)		Coconut Shrubland, unmanaged*		,	Grassland, unmanaged*		Banana		Mango		Pineapple		Sugarcane		Other crops		POTENTIAL EXPANSION AREA (Ha)			
	<b>S1</b>	S2	<b>S</b> 3		S1	S2	S1	S2	S1	S2	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	S1	<b>S2</b>	АКЕА (Па)
DAVAO CITY	-			-	25,504	27,428	348	2,484	1,018	9,572	1,436	3,227	677	521	653	666	3	113	273	280	74,202
TOTAL	-		-	-	25,504	27,428	348	2,484	1,018	9,572	1,436	3,227	677	521	653	666	3	113	273	280	74,202

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

\*establishment of shade trees prior to planting of abaca.

**SUITABILITY** 

#### AGRONOMIC REQUIREMENT OF ABACA PRODUCTION

SOIL DEPTH

UTILIZAT TYPE	RATING.	SLOPE (%)	SOIL DEPTH (cm)	SOIL TEXTURE	SOIL DRAINAGE	REACTION (pH)	INHERENT FERTILITY	FLOODING CLASS	EROSION CLASS	ROCK OUTCROPS	ELEVATION (masl)	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	
SLOPE (%	SLOPE (%) SOIL DRAINAGE					SOIL REACTI	ON (pH)		SOIL TEXTU	JRE			
0 - 3	0 - 3 - level to gently sloping			ED - excessively drained			< 4.5 - extremely acid					Fine	
3 - 8			WD - v	well drained		4.5 - 5.0 - very strongly acid			S -	sand		SC -	sandy clay
8 - 18			ed	5.1 - 5.5 - strongly acid			LS -	loamy sand		SiC -	silty clay		
18 - 30			SPD -s	- somewhat poorly drained		5.6 - 6.0 - medium acid		CSL -	coarse sandy loam		С -	clay	
30 - 50				6.1 - 6.5 - slightly acid		SL -	sandy loam		HC -	heavy clay			
> 50				6.6 - 7.2 - neutral			Medium						
						7.3 - 7.8 - m	nildly alkaline		FSL -	fine sandy loam			
SOIL DEP	SOIL DEPTH (cm) SURFACE IMPEDIMENT				7.9 - 8.4 - m	noderately alkaline		L -	loam				
0 - 30	0 - 30 - very shallow ROCK OUTCROPS			> 8.5 - st	rongly alkaline		SiL -	silt loam					
30 - 50							CL -	clay loam					
50 - 100							SiCL -	silty clay loam					
> 100	- deep to very deep		> 30% - n	nany					SCL -	sandy clay loam			

INHERENT FLOODING

**EROSION** 

ROCK

**SOIL EROSION** 

E3 - Severe erosion

- Moderate erosion

**ELEVATION** 

#### LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

ELEVATION	SOIL DRAINAGE	SOIL DEPTH				
El2 - 500 - 1000m or 2000 - 2500m	D2 - Somewhat poorly drained to poorly drained	Sh2 - Shallow to moderately deep (30 - 100cm)				
El3 $-<500$ m or $>2500$ m	D3 - Very poorly drained or excessively drained	Sh3 - Very shallow (< 30cm)				
SLOPE/TOPOGRAPHY	SOIL TEXTURE	ROCK OUTCROPS				

**FLOODING** T2 - Undulating to moderately steep Tc - Coarse texture Rc2 - Common F2 - Moderate seasonal flooding T3 - Steep to very steep Rc3 - Many F3 - Severe seasonal flooding

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	E2-Sh2-Rc3	11	T2-E3	21	T2-El2-Rc2	31	Т3	41	T3-El3-E3-Sh3-Rc2	51	T3-El3
2	El2	12	T2-E3-Rc2	22	T2-El2-Sh2-Rc2	32	Т3-Е3	42	Т3		
3	El2-E2-Sh2-Rc3	13	T2-E3-Rc3	23	T2-El2-Sh2-Rc3	33	T3-E3-Rc2	43	Т3-Е3		
4	El3	14	T2-E3-Sh2-Rc2	24	T2-El3-E3-Sh2-Rc2	34	T3-E3-Sh3-Rc2	44	T3-E3-Rc3		
5	F2-D2	15	T2-E3-Sh2-Rc3	<i>25</i>	T2-El3-Sh2-Rc2	35	T3-E3-Sh3-Rc3	45	T3-E3-Sh3-Rc3		
6	F3-D2	16	T2-El2	26	T2-F2-D2	36	T3-El2	46	T3-El2		
7	Sh2	17	T2-El2-E3	27	T2-F3-D2	37	T3-El2-E3	47	T3-El2-E3		
8	Sh2-Rc2	18	T2-El2-E3-Rc2	<i>28</i>	T2-Rc2	38	T3-El2-E3-Rc2	48	T3-El2-E3-Rc3		
9	T2	19	T2-El2-E3-Sh2-Rc2	<i>2</i> 9	T2-Sh2-Rc2	39	T3-El2-E3-Sh3-Rc2	49	T3-El2-E3-Sh3-Rc3		
10	T2-E2-Sh2-Rc2	20	T2-El2-E3-Sh2-Rc3	30	T2-Sh2-Rc3	40	T3-El2-E3-Sh3-Rc3	50	T3-El3-E3-Sh3-Rc3		

CODE	LANDUSE	CODE	LANDUSE
4	Corn	134	Shrubs, unmanaged
34	Diversified crops		
84	Pineapple		
85	Mango		
91	Banana		
105	Fruit trees, mixed		
112	Sugarcane		
116	Coconut		
126	Grassland		
131	ipil ipil		

**CLIMATIC** 

#### **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**

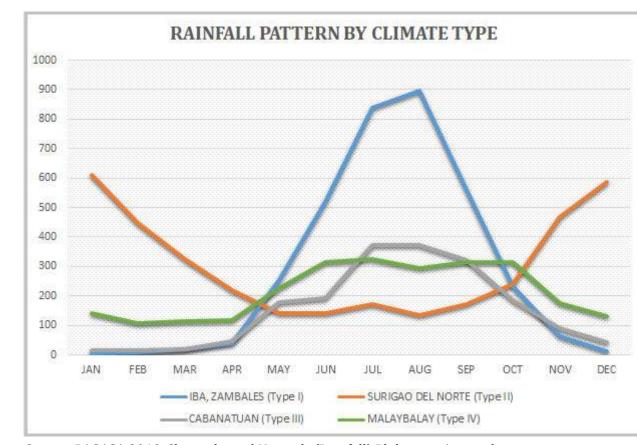
**TYPE I**: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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

Davao City is classified as climatic 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>.

