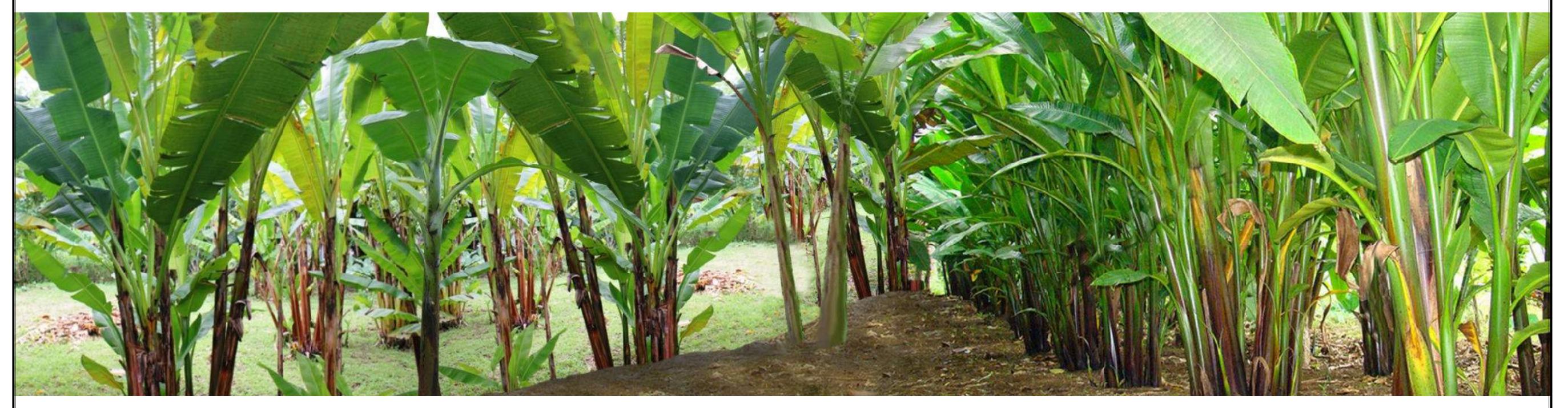
### LAND SUITABILITY MAP

### **ABACA**

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

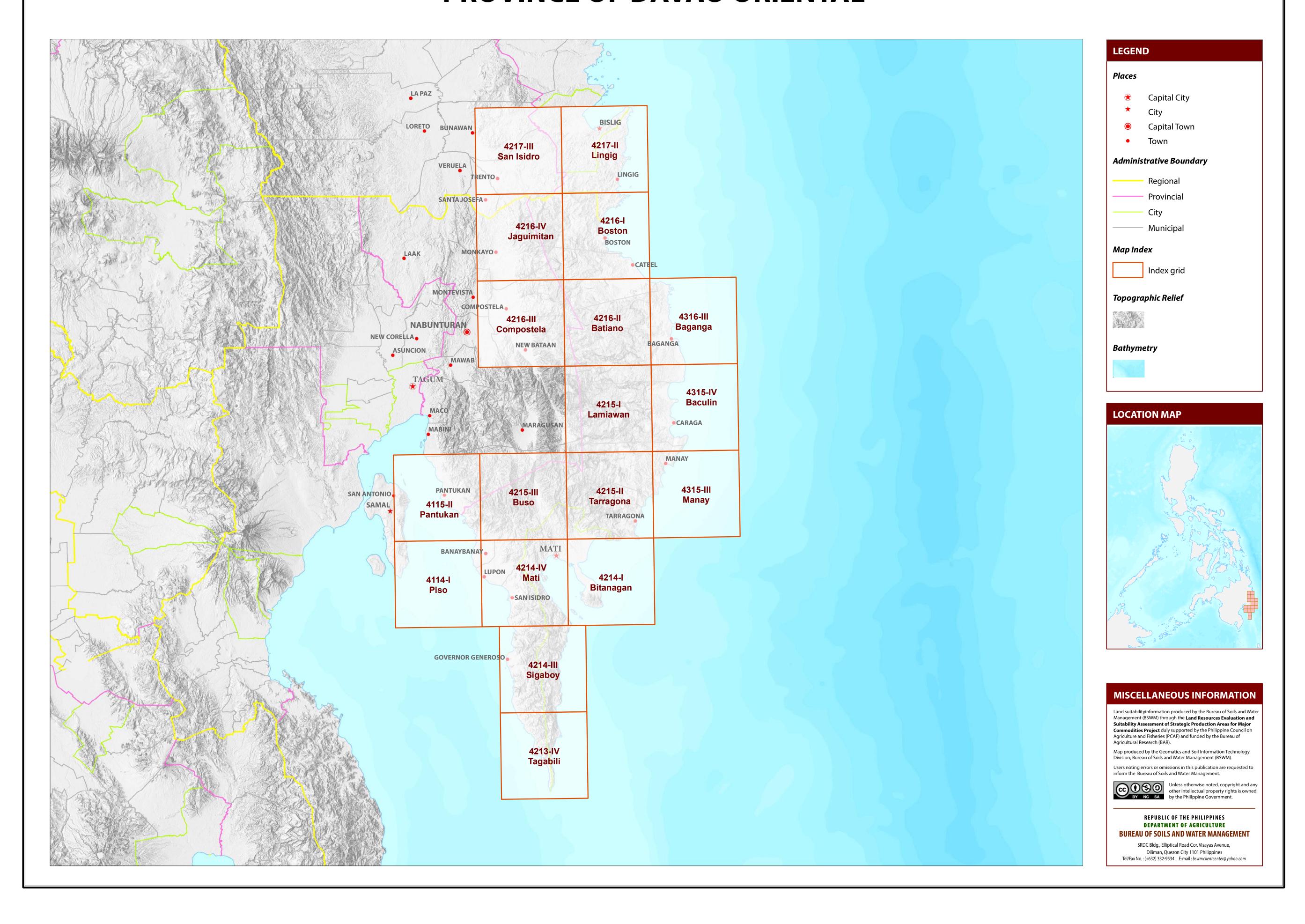
### PROVINCE OF DAVAO ORIENTAL





### **MAP INDEX**

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



## LAND SUITABILITY MAP FOR **ABACA**

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

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

		EXISTING ABACA (Ha)			EXPANSION AREA (Ha)						CONFLICT RESOLUTION AREA (Ha)								TOTAL
MUNICIPALITY	EXISTI				Coco	nut	Shrub unman	,	Grassl unmana	•	Ban	ana	Cor	'n	Man	go	Other	crops	POTENTIAL EXPANSION AREA (Ha)
	<b>S1</b>	<b>S2</b>	<b>S</b> 3		<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	<b>S1</b>	<b>S2</b>	AKEA (IIa)
BAGANGA	65	149	67	281	586	734	2,462	8,422	8	43	1,287	3,576	59	21	-	-	4	2	17,204
BANAYBANAY	-	-	-	-	1,701	582	67	150	440	537	63	7	20	-	3	-	1	-	3,572
BOSTON	-	3	7	10	334	788	233	1,863	58	187	-	-	34	38	-	-	-	-	3,536
CARAGA	-	-	-	-	901	1,734	-	356	21	691	-	-	-	-	-	-	-	-	3,703
CATEEL	-	-	-	-	1,602	419	1,010	7,439	97	570	575	779	276	100	-	-	-	-	12,867
CITY OF MATI	-	-	48	48	6,610	5,781	182	363	262	292	171	225	143	375	347	439	1,356	1,483	18,030
GOVERNOR GENEROSO	-	-	-	-	2,335	1,174	249	423	462	268	318	231	11	9	1	-	-	-	5,481
LUPON	-	-	-	-	3,092	1,124	198	1,152	6	206	3,340	1,240	176	8	-	9	-	10	10,561
MANAY	-	-	-	-	856	5,881	4	48	673	3,015	-	-	-	-	-	-	-	-	10,477
SAN ISIDRO	-	-	-	-	2,309	1,523	-	-	94	368	248	93	65	31	234	39	-	-	5,004
TARRAGONA	-		356	356	66	239		11	4	702	14	48	14	167	2	15	2	5	1,287
TOTAL	65	152	477	695	20,392	19,980	4,405	20,227	2,125	6,879	6,016	6,198	798	749	587	503	1,363	1,500	91,722

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

UT	LAND TILIZATION TYPE	SUITABILITY RATING	SLOPE (%)	SOIL DEPTH (cm)	SOIL TEXTURE	SOIL DRAINAGE	SOIL REACTI (pH)	ION	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. 7.3 - 7.		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 (%)			SOIL DRAIN	IAGE		SOIL REACTION (pH)				SOIL TEXTURE					
0 -	3 - le	evel to gently slopin	g	ED -	excessively drained		< 4.5	- extr	remely acid		Coarse			Fine	
3 -	3 - 8 - gently sloping to undulating		WD -	well drained		4.5 - 5.0 - very strongly acid				S	- sand		SC - s	andy clay	
8 -	8 - 18 - undulating to rolling		MWD -	WD - moderately well drained			5.1 - 5.5 - strongly acid			LS	- loamy sand		SiC - s	ilty clay	
18	18 - 30 - rolling to moderately steep		SPD -	SPD - somewhat poorly drained			5.6 - 6.0 - medium acid			CSL	- coarse sandy loam	l		lay	
30	30 - 50 - steep		PD -	PD - poorly drained			6.1 - 6.5 - slightly acid			SL	- sandy loam		HC - h	eavy clay	
> 5	0 - v	ery steep		VPD -	very poorly drained		6.6 - 7.2	- neu	utral		Medium				
							7.3 - 7.8	- mile	ldly alkaline		FSL	- fine sandy loam			
SO	IL DEPTH	(cm)		SURFACE IN	MPEDIMENT		7.9 - 8.4	- mod	derately alkaline		L	- loam			
0 - 30 - very shallow		ROCK OUTCROPS			> 8.5 - strongly alkaline			SiL	- silt loam						
30	- 50 - sł	hallow		< 10% -	none - few						CL	- clay loam			
50	- 100 - m	noderately deep		10 - 30% -	common						SiCL	- silty clay loam			
> 1	00 - de	leep to very deep		> 30% -	many						SCL	- sandy clay loam			

#### LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

**ELEVATION SOIL DRAINAGE** SOIL DEPTH **SOIL EROSION** El2 - 500 - 1000m or 2000 - 2500m D2 - Somewhat poorly drained to poorly drained Sh2 - Shallow to moderately deep (30 - 100cm) E2 - Moderate erosion E3 - Severe erosion El3 -<500 m or > 2500 mD3 - Very poorly drained or excessively drained Sh3 - Very shallow (< 30cm) SLOPE/TOPOGRAPHY **SOIL TEXTURE ROCK OUTCROPS FLOODING** T2 - Undulating to moderately steep Rc2 - Common F2 - Moderate seasonal flooding Tc - Coarse texture F3 - Severe seasonal flooding T3 - Steep to very steep Rc3 - Many

1		1	1						1	ı	
CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	E2-Rc3	11	T2-E2-Sh2-Rc2	21	T2-El2-Rc2	31	Т3-Е3	41	T3-F3-D2	51	Тс
2	E2-Sh2-Rc3	12	T2-E3	22	T2-El2-Sh2-Rc2	32	T3-E3-Rc2	42	Т3		
3	El2-E2-Sh2-Rc3	13	T2-E3-Rc2	23	T2-El2-Sh2-Rc3	33	T3-E3-Sh2-Rc3	43	T3-E3		
4	F2-D2	14	T2-E3-Rc3	24	T2-El3-E3-Sh2-Rc3	34	T3-E3-Sh3-Rc2	44	T3-E3-Rc3		
5	F3-D2	15	T2-E3-Sh2-Rc2	25	T2-F2-D2	35	T3-E3-Sh3-Rc3	45	T3-E3-Sh3-Rc3		
6	Rc2	16	T2-E3-Sh2-Rc3	26	T2-F3-D2	36	T3-El2-E3-Sh2-Rc3	46	T3-El2-E3-Sh3-Rc3		
7	Sh2	17	T2-El2-E3-Rc2	27	T2-Rc2	37	T3-El2-E3-Sh3-Rc2	47	T3-El3-E3-Sh3-Rc3		
8	Sh2-Rc2	18	T2-El2-E3-Rc3	28	T2-Sh2-Rc2	38	T3-El2-E3-Sh3-Rc3	48	T3-F2-D2		
9	T2	19	T2-El2-E3-Sh2-Rc2	29	T2-Sh2-Rc3	39	T3-El3-E3-Sh3-Rc3	49	T3-F3-D2		
10	T2-E2	20	T2-El2-E3-Sh2-Rc3	30	T3	40	T3-F2-D2	<i>50</i>	T3-El3		

CODE	LANDUSE	CODE	LANDUSE
4	Corn	107	Abaca
47	Vegetable	116	Coconut
50	Rootcrops	126	Grassland
51	Cassava	134	Shrubs, unmanaged
81	Coffee	137	Rubber
82	Cacao		
85	Mango		
90	Pomelo		
91	Banana		
105	Fruit trees, mixed		

#### **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**

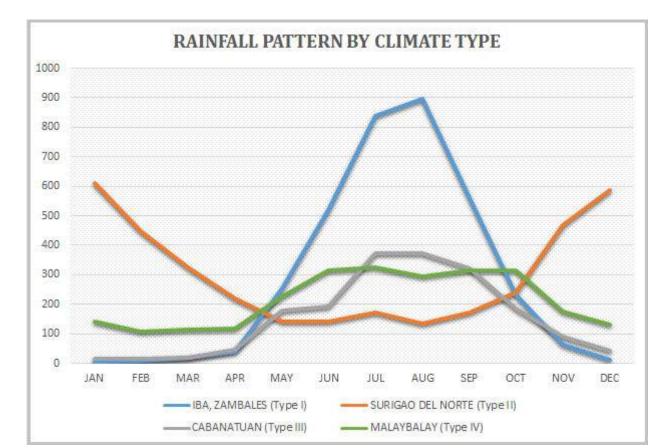
wet during the rest of the year. Maximum rain period is from June to September

**TYPE I**: Two pronouced season, dry from November to April and **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 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 season.

Davao Oriental 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>.

