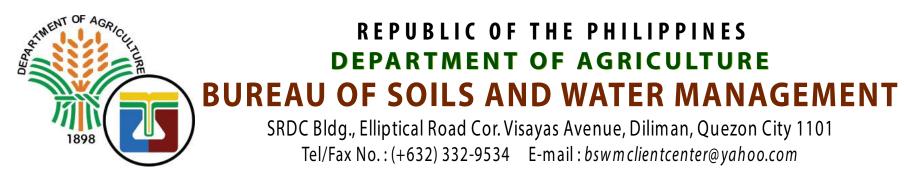
LAND SUITABILITY MAP

CASSAVA

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

PROVINCE OF COMPOSTELA VALLEY





MAP INDEX

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS PROVINCE OF COMPOSTELA VALLEY



LAND SUITABILITY MAP FOR **CASSAVA**

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS COMPOSTELA VALLEY, REGION XI

EXTENT OF SUITABILITY FOR CASSAVA PRODUCTION BY MUNICIPALITY

	EXISTING CASSAVA (Ha)			TOTAL EXISTING AREA (Ha)	EXPANSION AREA (Ha)							CONFLICT RESOLUTION AREA (Ha)									TOTAL
MUNICIPALITY					Coconut		Shrubland, unmanaged*		Grassland, unmanaged*		Banana		Corn		Oil palm		Mango		Other crops		POTENTIAL EXPANSION
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	AREA (Ha)
COMPOSTELA	-	-	-	-	1,573	753	6	76	-	18	3,639	121	1,127	6	25	18	-	-	-	28	7,391
LAAK	-	-	-	-	7,530	22,319	874	5,340	760	3,613	675	659	603	511	-	-	-	-	-	-	42,885
MABINI	-	-	-	-	1,872	492	12	72	59	191	1,119	104	-	-	-	-	-	-	-	-	3,920
MACO	-	-	-	-	1,816	2,554	16	166	14	358	1,020	177	221	33	-	-	-	-	5	-	6,379
MARAGUSAN	-	-	-	-	_	512	-	279	-	19	-	3,035	-	4	-	-	-	-	-	41	3,891
MAWAB	-	-	-	-	781	2,047	124	548	51	904	783	4	1,180	54	-	-	21	-	-	-	6,497
MONKAYO	-	-	-	-	4,310	10,183	170	1,883	128	811	2,088	151	505	77	42	29	-	-	6	3	20,386
MONTEVISTA	-	-	-	-	486	7,742	29	449	6	180	570	468	7	16	-	-	-	2	2	-	9,954
NABUNTURAN	-	-	-	-	6,066	2,482	46	149	160	545	617	165	63	8	182	-	1	-	6	-	10,491
NEW BATAAN	-	-	-	-	5,008	934	165	223	-	50	116	-	278	28	-	-	-	-	-	-	6,802
PANTUKAN	-	-	-	-	5,377	1,430	4	149	49	264	1,120	295	122	1	-	-	29	21	-	6	8,867
TOTAL	_	-	-	-	34,818	51,449	1,446	9,333	1,225	6,954	11,748	5,179	4,105	739	248	47	52	23	19	77	127,464

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

*establishment of shade trees prior to planting of cassava.

30 - 50

moderately deep

- deep to very deep

9 T2-E2-Sh2-Rc2

10 T2-El2

AGRONOMIC REQUIREMENT OF CASSAVA PRODUCTION

- none - few

28 T3-El2-E3

29 T3-El2-E3-Rc2

30 T3-El2-E3-Sh2-Rc2

10 - 30% - common

> 30%

	UTILIZATI TYPE	ON SUITABILITY 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	FSL, L, SiL, CL, SiCL, SCL, SC, SiC, C WD,MWD		5.6 -7.2	high	none-slight	none-slight	none-few	<500	1000-2000	I,II, III, IV	
	Cassava	S2	8 - 18	30 - 50	SL, HC	SPD, PD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	500-1500	2001-4500	II	
		S3	18 - 30	<30	S, LS, CSL VPD,E		<5.0 - > 7.9	low	severe	severe	many	>1500	<1000 >4500		
SLOPE (%)				SOIL DRAIN	AGE		SOIL REACTIO	ON (pH)		SOIL TEXTURE					
	0 - 3	- level to gently slopin	g	ED - 6	excessively drained		< 4.5 - ex	tremely acid		Coarse		Fine			
	3 - 8 - gently sloping to undulating		WD - v	WD - well drained			4.5 - 5.0 - very strongly acid			- sand		SC - s	sandy clay		
	8 - 18 - undulating to rolling		MWD - r	noderately well drain	ed	5.1 - 5.5 - strongly acid			LS	- loamy sand		SiC - s	silty clay		
	18 - 30 - rolling to moderately steep		SPD - s	- somewhat poorly drained			5.6 - 6.0 - medium acid			- coarse sandy loam	l	C - 0	clay		
	30 - 50	- 50 - steep		PD - r	poorly drained		6.1 - 6.5 - slightly acid			SL	- sandy loam		HC - l	neavy clay	
	> 50 - very steep VPI			VPD - v	o - very poorly drained			eutral		Medium	Medium				
							7.3 - 7.8 - mi	ildly alkaline		FSL	- fine sandy loam				
	SOIL DEPT	H (cm)		SURFACE IM	IPEDIMENT		7.9 - 8.4 - m	7.9 - 8.4 - moderately alkaline			- loam				
	0 - 30 - very shallow			ROCK OUTCR	ROCK OUTCROPS			- strongly alkaline			- silt loam				

38 T3-El3-E3-Sh3-Rc3 48 T3-El3-E3-Sh3-Rc3

49 T3-El3

- clay loam

- silty clay loam

- sandy clay loam

105 Fruit trees, mixed

116 Coconut

119 Oil palm

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

18 T2-F2-D2

19 T3

20 T3-E3

	ATION - 500 - 1000m or 2000 - 25 - < 500m or > 2500m	500m		poorly drained to poorl	l Sh2		o moderately deep (30 - 1 ow (< 30cm)	.00cm)	SOIL EROSION E2 - Moderate erosion E3 - Severe erosion					
SLOPI	E/TOPOGRAPHY		SOIL TEX	SOIL TEXTURE					S		FL			
T2	- Undulating to moderatel	Tc - C	ure	Rc2	Rc2 - Common					F2 - Moderate seasonal flooding				
Т3	- Steep to very steep			Rc3	Rc3 - Many				F3 - Severe seasonal flooding					
		I	T	T	I	T	T			T [
CODE	E LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION		CODE	LANDUSE	CODE	LANDUSE
1	El2	11	T2-El2-E3-Sh2-Rc3	21	T3-E3-Rc2	31	T3-El2-E3-Sh2-Rc3	41	T3-E3-Rc3		3	Upland rice	126	Grassland
2	El2-E2-Sh2-Rc3	12	T2-El2-Rc2	22	T3-E3-Rc3	32	T3-El2-E3-Sh3-Rc2	42	T3-E3-Sh3-Rc3		4	Corn	127	Pasture
3	El2-Sh2-Rc2	13	T2-El2-Sh2-Rc2	23	T3-E3-Sh2-Rc2	33	T3-El2-E3-Sh3-Rc3	43	T3-E12		81	Coffee	134	Shrubs, unmanaged
4	F2-D2	14	T2-El2-Sh2-Rc3	24	T3-E3-Sh2-Rc3	34	T3-El3	44	T3-El2-E3		82	Cacao	137	Rubber (T)
5	F3-D2	15	T2-El3-E3-Sh2-Rc3	25	T3-E3-Sh3-Rc2	35	T3-El3-E3-Sh2-Rc2	45	T3-E12-E3-Rc3		83	Citrus, calamansi	139	Falcata
6	Sh2	16	T2-El3-Sh2-Rc2	26	T3-E3-Sh3-Rc3	36	T3-El3-E3-Sh2-Rc3	46	T3-E12-E3-Sh3-Rc3		85	Mango		
7	Sh2-Rc2	17	T2-El3-Sh2-Rc3	27	T3-El2	37	T3-El3-E3-Sh3-Rc2	47	T3-El3		91	Banana		

*3*9 T3

40 T3-E3

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

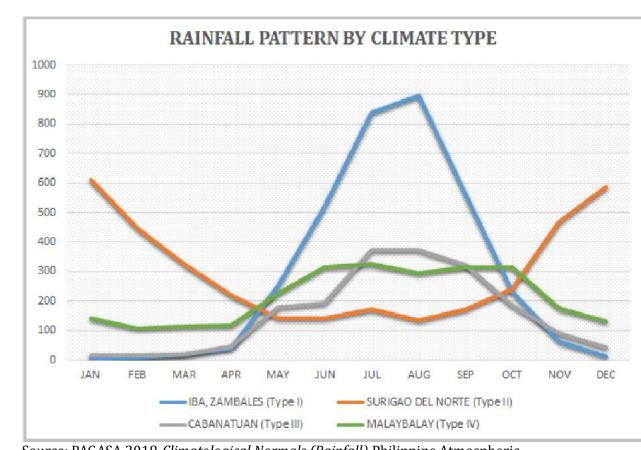
TYPE I: Two pronouced season, dry from November to April and TYPE II: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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

Compostela Valley is classified as climatic Type IV.



Source: PAGASA 2018, Climatological Normals (Rainfall), Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), accessed 27 July 2018, https://www1.pagasa.dost.gov.ph/index.php/climate/climatological-normals.

