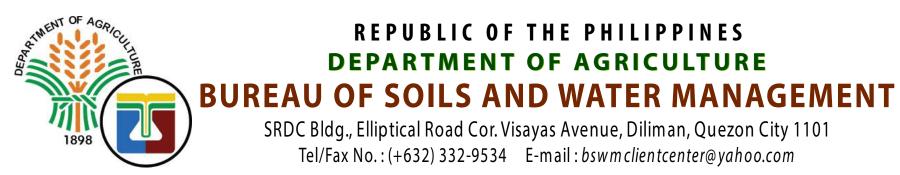
LAND SUITABILITY MAP

ARABICA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

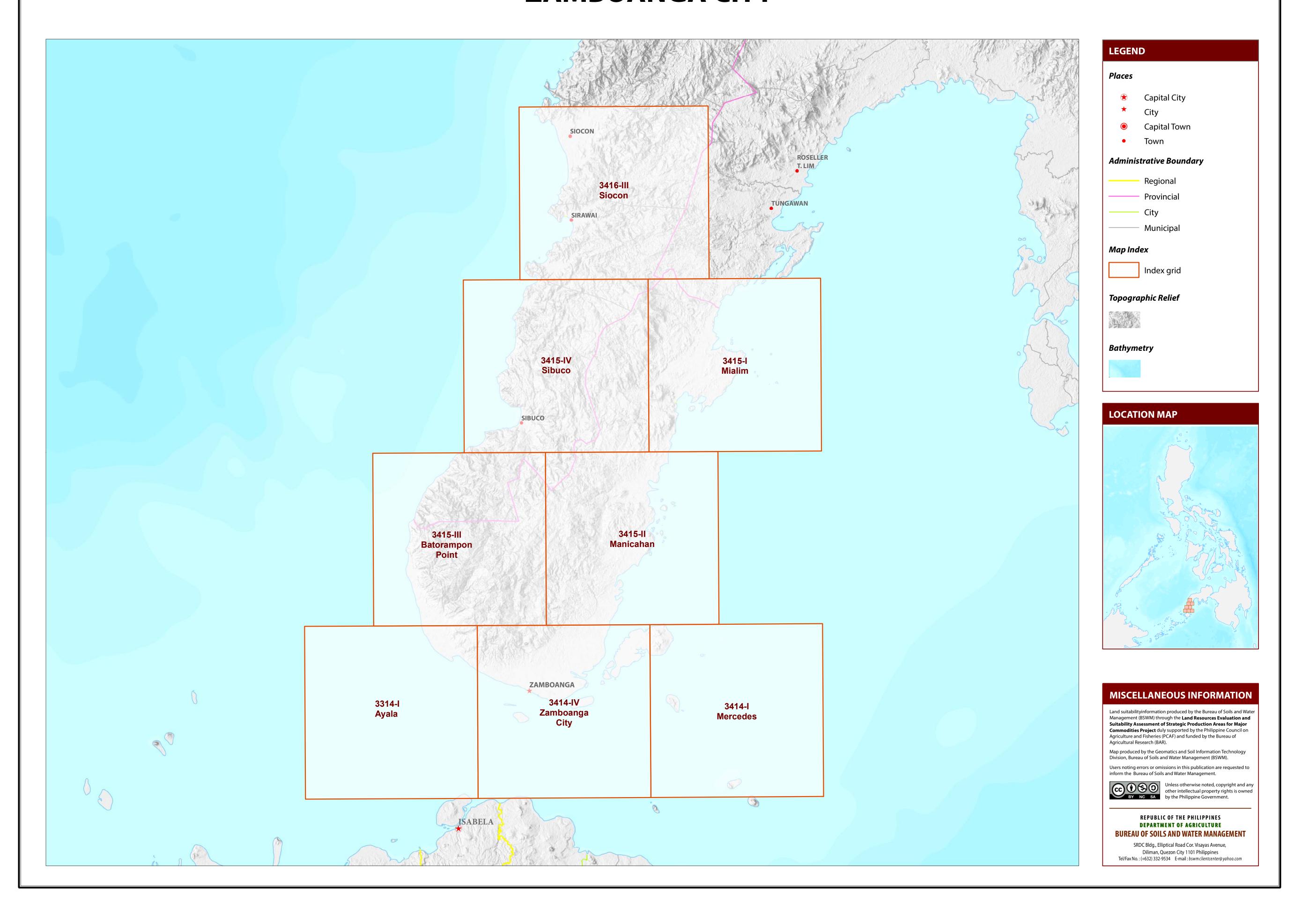
ZAMBOANGA CITY





MAP INDEX

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS ZAMBOANGA CITY



LAND SUITABILITY MAP FOR ARABICA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS ZAMBOANGA CITY, REGION IX

EXTENT OF SUITABILITY FOR ARABICA COFFEE PRODUCTION BY MUNICIPALITY

		•	•			EX	PANSION	N AREA (H	a)			CONFLIC	T RESOL	UTION A	REA (Ha)	TOTAL
MUNICIPALITY	EXISTIN	NG ARABI	ICA (Ha)	TOTAL EXISTING AREA (Ha)	Сос	onut		bland, naged*	Grass unman	•	Со	rn		y rice, rigated	Othe	r crops	POTENTIAL EXPANSION
	S1	S2	S 3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	AREA (Ha)
ZAMBOANGA CITY	-	-	_	-	_	205	-	414	-	6	-	-	-	-		-	626
TOTAL	-	-	_	-	-	205	-	414	-	6	-	-	-	-			626

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.

AGRONOMIC REQUIREMENT OF ARABICA COFFEE PRODUCTION

10 - 30% - common

> 30%

moderately deep

- deep to very deep

1	UTILIZATI TYPE	ON SUITABILITY RATING	SLOPE (%)	SOIL DEPTH (cm)	SOIL TEXTURE	SOIL DRAINAGE	REACT (pH)	ION	INHERENT FERTILITY	FLOODING CLASS	EROSION CLASS	ROCK OUTCROPS	ELEVATION (masl)	RAINF (mn	ALL	CLIMATIC TYPE
		S1	<8	>100	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD	5.6 -7	7.2	high	none-slight	none-sligh	t none-few	1000-2000	2001-4	1500	I, III, IV
	Coffee (Arabica) S2	8 - 30	30 - 100	FSL, L, SiL	SPD,PD	5.1 - 5 7.3 - 7		medium	moderate	moderate	common	500-1000 2000-2500	1000-2000		I, II
		S3	>30	<30	S, LS, CSL, SL	VPD,ED	<5.0 - > 7.9		low	severe	severe	many	<500 >2500	<1000 >4500		
	SLOPE (%)			SOIL DRAIN	SOIL DRAINAGE			SOIL REACTION (pH)			SOIL TEX	TURE				
()-3 -	- level to gently sloping		ED -	ED - excessively drained			- 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	- sand	dy clay	
8	3 - 18 -	undulating to rollir	g	MWD -	moderately well drained		5.1 - 5.5 - strongly acid				LS	- loamy sand		SiC	- silty	clay
1	18 - 30 -	rolling to moderate	ly steep	SPD -	somewhat poorly drained		5.6 - 6.0 - medium acid				CSL	- coarse sandy loam		С	- clay	•
3	30 - 50 -	- steep		PD -	poorly drained		6.1 - 6.5 - slightly acid				SL - sandy loam			HC	- heav	vy clay
>	> 50 -	very steep		VPD -	very poorly drained		6.6 - 7.2 - neutral				Medium					
							7.3 - 7.8	- milo	dly alkaline		FSL	- fine sandy loam				
	SOIL DEPT	H (cm)		SURFACE IN	SURFACE IMPEDIMENT			7.9 - 8.4 - moderately alkaline			L	- loam				
(0 - 30 -	very shallow		ROCK OUTC	ROCK OUTCROPS			> 8.5 - strongly alkaline			SiL	- silt loam				
3	30 - 50 - shallow		< 10% -	% - none - few						CL	- clay loam					

- silty clay loam

- sandy clay loam

ELEVA	TION		SOIL I	DRAINA	GE		:	SOIL DEP	ТН		SOIL	EROSION
El2 ·	- 500 - 1000m or 2000 -	- 2500m	D2	- Somew	hat poorly drained to	poorly di	rained S	Sh2 - Sh	allow to moderately de	ep (30 - 100cm)	E2	- Moderate erosion
El3 ·	- < 500m or > 2500m		D3	- Very p	oorly drained or excess	sively dra	ained S	Sh3 - Ve	ery shallow (< 30cm)		E3	- Severe erosion
SLOPE	/TOPOGRAPHY		SOIL	ΓEXTUR	E		1	ROCK OU	TCROPS		FLO	ODING
	- Undulating to modera	tely steep	Tc	- Coarse	texture		I	Rc2 - Co	ommon		F2	- Moderate seasonal floodin
ГЗ -	- Steep to very steep						I	Rc3 - Ma	any		F3	- Severe seasonal flooding
CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	COD	E	LANDUSE
CODE 1	LIMITATION El2-Sh2-Rc2	CODE 11	LIMITATION T2-E12-E3	CODE 21	LIMITATION T2-E13-E3-Rc3	CODE 31	LIMITATION T3-E12-E3-Sh2-Rc3	CODE 41	LIMITATION T3-E3-Sh3-Rc3	COD 4	E Corr	-
2 CODE 1 2					_	+				4 82		1
1 2 3	El2-Sh2-Rc2	11	T2-El2-E3		T2-El3-E3-Rc3	31	T3-El2-E3-Sh2-Rc3	41	T3-E3-Sh3-Rc3	4	Corr	1
1 2 3 4	El2-Sh2-Rc2 El3	11 12	T2-E12-E3 T2-E12-E3-Rc3	21 22	T2-El3-E3-Rc3 T2-El3-E3-Sh2-Rc2	31 32	T3-El2-E3-Sh2-Rc3 T3-El2-E3-Sh3-Rc2	41 42	T3-E3-Sh3-Rc3 T3-E12-E3-Sh3-Rc3	4 82	Corr Caca Frui	t trees, mixed
1 2 3 4 5	E12-Sh2-Rc2 E13 E13-F2-D2	11 12 13	T2-El2-E3 T2-El2-E3-Rc3 T2-El2-E3-Sh2-Rc2	21 22 23	T2-El3-E3-Rc3 T2-El3-E3-Sh2-Rc2 T2-El3-E3-Sh2-Rc3	31 32 33	T3-El2-E3-Sh2-Rc3 T3-El2-E3-Sh3-Rc2 T3-El2-E3-Sh3-Rc3	41 42 43	T3-E3-Sh3-Rc3 T3-El2-E3-Sh3-Rc3 T3-El3	4 82 105	Corr Caca Frui Coco	t trees, mixed
1 2 3 4 5 6	El2-Sh2-Rc2 El3 El3-F2-D2 El3-F3-D2	11 12 13 14	T2-E12-E3 T2-E12-E3-Rc3 T2-E12-E3-Sh2-Rc2 T2-E12-E3-Sh2-Rc3	21 22 23	T2-El3-E3-Rc3 T2-El3-E3-Sh2-Rc2 T2-El3-E3-Sh2-Rc3 T2-El3-F2-D2	31 32 33 34	T3-El2-E3-Sh2-Rc3 T3-El2-E3-Sh3-Rc2 T3-El2-E3-Sh3-Rc3 T3-El3	41 42 43 44	T3-E3-Sh3-Rc3 T3-E12-E3-Sh3-Rc3 T3-E13 T3-E13-E3	4 82 105 116	Corr Caca Frui Cocc	t trees, mixed
1 2 3 4 5 6 7	El2-Sh2-Rc2 El3 El3-F2-D2 El3-F3-D2 El3-Sh2-Rc2	11 12 13 14 15	T2-El2-E3 T2-El2-E3-Rc3 T2-El2-E3-Sh2-Rc2 T2-El2-E3-Sh2-Rc3 T2-El2-Sh2-Rc2	21 22 23 24 25	T2-El3-E3-Rc3 T2-El3-E3-Sh2-Rc2 T2-El3-E3-Sh2-Rc3 T2-El3-F2-D2 T2-El3-F3-D2	31 32 33 34 35	T3-El2-E3-Sh2-Rc3 T3-El2-E3-Sh3-Rc2 T3-El2-E3-Sh3-Rc3 T3-El3 T3-El3-E3	41 42 43 44 45	T3-E3-Sh3-Rc3 T3-E12-E3-Sh3-Rc3 T3-E13 T3-E13-E3 T3-E13-E3-Rc3	4 82 105 116 126	Corr Caca Frui Cocc Gras Shru	t trees, mixed onut sland lbs, unmanaged
2 3 4 5 6 7 8	E12-Sh2-Rc2 E13 E13-F2-D2 E13-F3-D2 E13-Sh2-Rc2 E13-Tc	11 12 13 14 15 16	T2-El2-E3 T2-El2-E3-Rc3 T2-El2-E3-Sh2-Rc2 T2-El2-E3-Sh2-Rc3 T2-El2-Sh2-Rc2 T2-El2-Sh2-Rc3	21 22 23 24 25 26	T2-El3-E3-Rc3 T2-El3-E3-Sh2-Rc2 T2-El3-E3-Sh2-Rc3 T2-El3-F2-D2 T2-El3-F3-D2 T2-Sh2-Rc2	31 32 33 34 35 36	T3-El2-E3-Sh2-Rc3 T3-El2-E3-Sh3-Rc2 T3-El2-E3-Sh3-Rc3 T3-El3 T3-El3-E3 T3-El3-E3-Rc2	41 42 43 44 45 46	T3-E3-Sh3-Rc3 T3-E12-E3-Sh3-Rc3 T3-E13 T3-E13-E3 T3-E13-E3-Rc3 T3-E13-E3-Sh3-Rc3	4 82 105 116 126 134	Corr Caca Frui Cocc Gras Shru	t trees, mixed onut sland lbs, unmanaged
1 2 3 4 5 6 7 8	El2-Sh2-Rc2 El3 El3-F2-D2 El3-F3-D2 El3-Sh2-Rc2 El3-Tc T2-E3-Rc3	11 12 13 14 15 16 17	T2-E12-E3 T2-E12-E3-Rc3 T2-E12-E3-Sh2-Rc2 T2-E12-E3-Sh2-Rc3 T2-E12-Sh2-Rc2 T2-E12-Sh2-Rc3 T2-E12-Sh2-Rc3	21 22 23 24 25 26 27	T2-El3-E3-Rc3 T2-El3-E3-Sh2-Rc2 T2-El3-E3-Sh2-Rc3 T2-El3-F2-D2 T2-El3-F3-D2 T2-Sh2-Rc2 T2-Sh2-Rc3	31 32 33 34 35 36 37	T3-El2-E3-Sh2-Rc3 T3-El2-E3-Sh3-Rc2 T3-El2-E3-Sh3-Rc3 T3-El3 T3-El3-E3 T3-El3-E3 T3-El3-E3-Rc2 T3-El3-E3-Sh2-Rc3	41 42 43 44 45 46	T3-E3-Sh3-Rc3 T3-E12-E3-Sh3-Rc3 T3-E13 T3-E13-E3 T3-E13-E3-Rc3 T3-E13-E3-Sh3-Rc3	4 82 105 116 126 134	Corr Caca Frui Cocc Gras Shru	t trees, mixed onut sland lbs, unmanaged

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

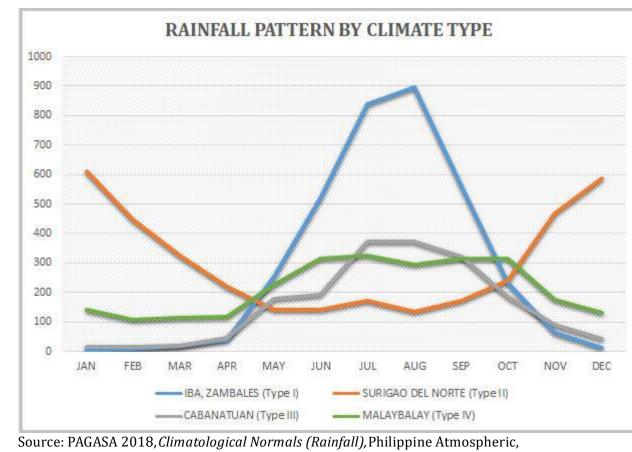
TYPE I: Two pronouced season, dry from November to April and TYPE II: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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

Whole part of Zamboanga City is classified as climatic Type III.



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

