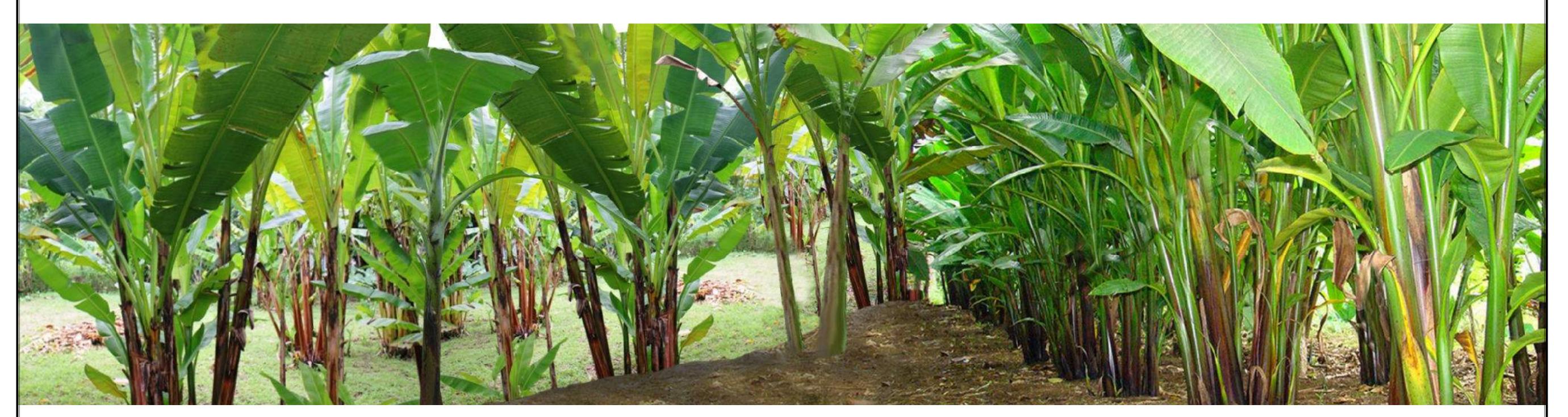
## LAND SUITABILITY MAP

### **ABACA**

# LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

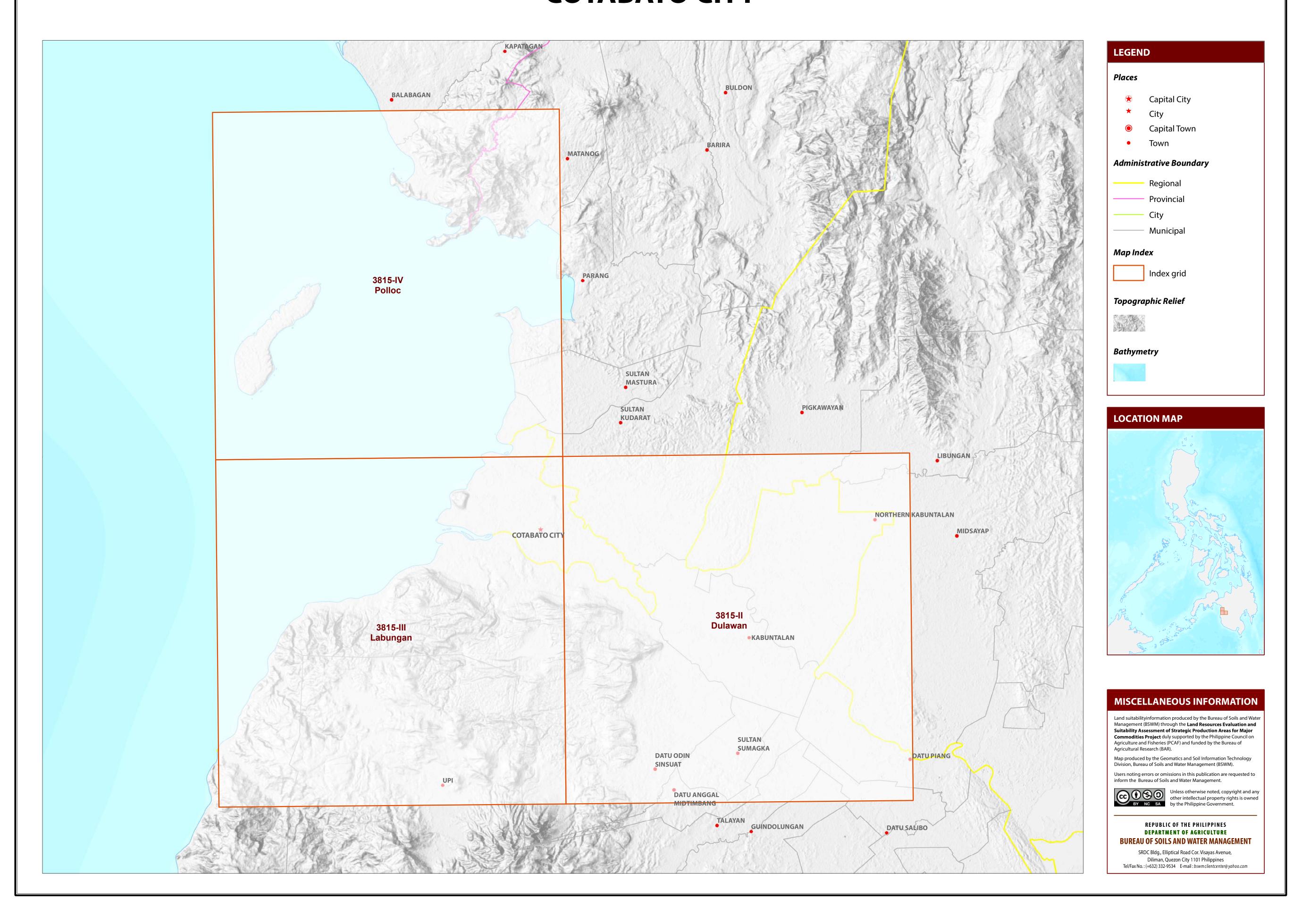
### **COTABATO CITY**





### MAP INDEX

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



# LAND SUITABILITY MAP FOR **ABACA**

## LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS COTABATO CITY, REGION XII

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

	EXISTING ABACA (Ha)						EXPANSION AREA (Ha)			CONFLICT RESOLUTION AREA (Ha)				TOTAL			
MUNICIPALITY			TOTAL EXISTING AREA (Ha)	Coc	onut	Shrul unmar	oland, naged*	Grass unman		Со	rn	Paddy non-iri	y rice, rigated	Other	crops	POTENTIAL EXPANSION AREA (Ha)	
	<b>S1</b>	S2	<b>S</b> 3		<b>S1</b>	S2	<b>S1</b>	S2	<b>S1</b>	S2	<b>S1</b>	S2	<b>S1</b>	S2	<b>S1</b>	S2	— АКЕА (Па)
COTABATO CITY	-	-	-	-	-		_	. 4	-	-	_	-	-	-	-	-	4
ΤΟΤΔΙ	_	_	_		_	_	_	4	_	_	_	_	_	_		_	4

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

\*establishment of shade trees prior to planting of.

### 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	

,					74300
SLOPE (%	<b>%</b> )	SOIL DRAINAGE	SOIL REACTION (pH)	SOIL TEXTURE	
0 - 3	- level to gently sloping	ED - excessively drained	< 4.5 - extremely acid	Coarse	Fine
3 - 8	- gently sloping to undulating	WD - well drained	4.5 - 5.0 - very strongly acid	S - sand	SC - sandy clay
8 - 18	- undulating to rolling	MWD - moderately well drained	5.1 - 5.5 - strongly acid	LS - loamy sand	SiC - silty clay
18 - 30	- rolling to moderately steep	SPD - somewhat poorly drained	5.6 - 6.0 - medium acid	CSL - coarse sandy loam	C - clay
30 - 50	- steep	PD - poorly drained	6.1 - 6.5 - slightly acid	SL - sandy loam	HC - heavy clay
> 50	- very steep	VPD - very poorly drained	6.6 - 7.2 - neutral	Medium	
			7.3 - 7.8 - mildly alkaline	FSL - fine sandy loam	
SOIL DEF	PTH (cm)	SURFACE IMPEDIMENT	7.9 - 8.4 - moderately alkaline	L - loam	
0 - 30	- very shallow	ROCK OUTCROPS	> 8.5 - strongly 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	

SOIL DEPTH

**ROCK OUTCROPS** 

Rc2 - Common

Rc3 - Many

Sh2 - Shallow to moderately deep (30 - 100cm)

Sh3 - Very shallow (< 30cm)

**SOIL EROSION** 

**FLOODING** 

E3 - Severe erosion

- Moderate erosion

F2 - Moderate seasonal flooding

F3 - Severe seasonal flooding

### LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

ELEVATION	SOIL DRAINAGE					
El2 - 500 - 1000m or 2000 - 2500m	D2 - Somewhat poorly drained to poorly dra					
El3 - < 500m or > 2500m	D3 - Very poorly drained or excessively drai					

SLOPE/TOPOGRAPHY **SOIL TEXTURE** T2 - Undulating to moderately steep Tc - Coarse texture

CODE	LIMITATION	CODE	LIMITATION
1	F2-D2	11	T3-El3
2	F2-Tc		
3	F3-D2		
4	T2		
<i>5</i>	T2-F2-D2		
6	T2-F3-D2		
7	Т3		
8	T3-F2-D2		
9	T3-F3-D2		
10	T3-F3-D2		

T3 - Steep to very steep

CODE	LANDUSE
116	Coconut
134	Shrubs, unmanaged

#### Highly Suitable (S1)

**SUITABILITY CLASSES:** 

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.

**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.

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.

**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**

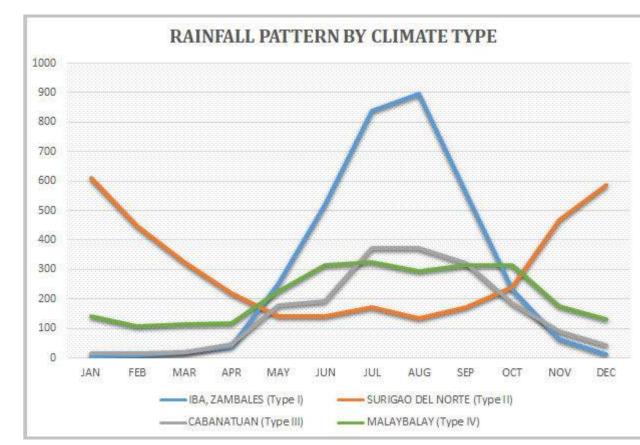
**TYPE I**: Two pronouced season, dry from November to April and **TYPE II**: No dry season with a very pronounced maximum rain wet during the rest of the year. Maximum rain period is from June to September

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 season.

Western part of Cotabato City is classified as climatic Type IV and Eastern part is Type III.



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>.

