LAND SUITABILITY MAP

CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

PROVINCE OF LANAO DEL SUR

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF SOILS AND WATER MANAGEMENT
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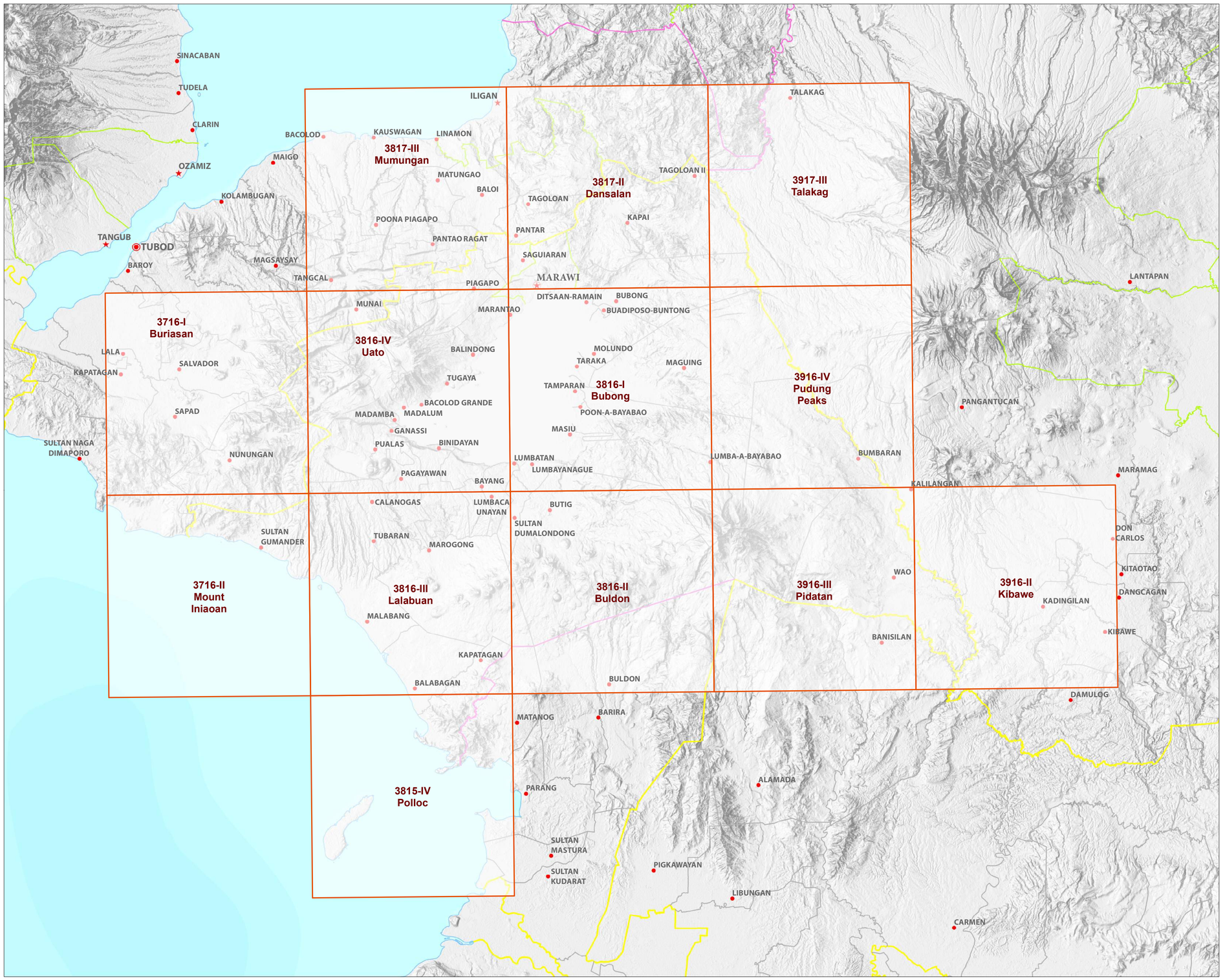
MAP INDEX

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

PROVINCE OF LANAO DEL SUR



LEGEND

Places

- Capital City
- City
- Capital Town
- Town

Administrative Boundary

- Regional
- Provincial
- City
- Municipal

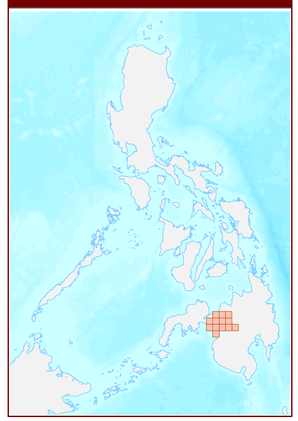
Map Index

- Index grid

Topographic Relief

Bathymetry

LOCATION MAP



MISCELLANEOUS INFORMATION

Land suitabilityinformation produced by the Bureau of Soils and Water Management (BSWM) through the **Land Resources Evaluation and Suitability Assessment of Strategic Production Areas for Major Commodities Project** duly supported by the Philippine Council on Agriculture and Fisheries (PCAF) and funded by the Bureau of Agricultural Research (BAR).

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LAND SUITABILITY MAP FOR CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

PROVINCE OF LANAO DEL SUR, ARMM

EXTENT OF SUITABILITY FOR CACAO PRODUCTION BY MUNICIPALITY

MUNICIPALITY	EXISTING CACAO (Ha)			TOTAL EXISTING AREA (Ha)	EXPANSION AREA (Ha)						CONFLICT RESOLUTION (Ha)						TOTAL POTENTIAL EXPANSION AREA (Ha)
					Coconut		Shrubland, unmanaged*		Grassland, unmanaged*		Corn		Paddy rice, non-irrigated		Other crops		
	S1	S2	S3		S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	
BACOLOD-KALAWI	-	-	-	-	-	98	-	-	-	-	-	-	-	-	-	-	98
BALABAGAN	-	-	-	-	4,528	-	-	-	0	-	189	-	-	-	-	-	4,717
BALINDONG	-	-	-	-	-	309	-	100	-	42	-	705	-	-	-	-	1,157
BAYANG	-	-	-	-	-	269	-	125	-	-	-	649	-	-	-	-	1,043
BINIDAYAN	-	-	-	-	-	154	-	69	-	-	-	519	-	-	-	-	742
BUADIPOSO-BUNTONG	-	-	-	-	-	-	-	69	-	2	-	1,057	-	-	-	-	1,128
BUBONG	-	-	-	-	-	-	-	155	-	1	-	1,977	-	-	-	-	2,133
BUMBARAN	-	-	-	-	-	2	-	914	-	387	-	6,239	-	-	-	-	7,543
BUTIG	-	-	-	-	-	100	-	98	-	155	-	1,210	-	-	-	-	1,562
CALANOGAS	-	-	-	-	1,152	1,014	-	70	-	559	-	819	-	-	-	-	3,614
DITSAAN-RAMAIN	-	-	-	-	-	-	-	12	-	-	-	733	-	-	-	-	744
GANASSI	-	-	-	-	-	130	-	34	-	-	-	812	-	-	-	-	976
KAPAI	-	-	-	-	-	-	-	564	-	-	-	1,680	-	-	-	-	2,244
KAPATAGAN	-	-	-	-	2,377	39	150	7	59	-	62	17	-	-	-	-	2,710
LUMBA-BAYABAO	-	-	-	-	-	-	-	70	-	92	-	1,423	-	-	-	-	1,585
LUMBACA-UNAYAN	-	-	-	-	20	223	-	87	-	-	-	761	-	-	-	-	1,091
LUMBATAN	-	-	-	-	-	93	-	17	-	-	-	1,084	-	-	-	-	1,193
LUMBAYANAGUE	-	-	-	-	-	47	-	38	-	-	-	328	-	-	-	-	413
MADALUM	-	-	-	-	-	42	-	65	-	240	-	539	-	-	-	-	885
MADAMBA	-	-	-	-	-	-	-	264	-	165	-	1,046	-	-	-	-	1,475
MAGUING	-	-	-	-	-	-	-	250	-	2,872	-	6,415	-	-	-	-	9,536
MALABANG	-	-	-	-	2,498	40	43	-	61	152	336	-	-	-	-	-	3,129
MARANTAO	-	-	-	-	-	342	-	16	-	11	-	1,968	-	-	-	-	2,336
MARAWI CITY	-	-	-	-	-	7	-	145	-	95	-	2,277	-	-	-	-	2,524
MAROGONG	-	-	1	1	6,893	1,850	143	394	-	7	433	63	-	-	-	-	9,782
MASIU	-	-	-	-	-	-	-	19	-	204	-	1,156	-	-	-	-	1,379
MULONDO	-	-	-	-	-	-	-	101	-	221	-	593	-	-	-	-	916
PAGAYAWAN	-	-	-	-	131	521	8	54	-	-	-	2,106	-	-	-	-	2,820
PIAGAPO	-	-	-	-	-	8	2	185	-	9	-	1,804	-	-	-	-	2,008
PICONG	-	-	-	-	4,674	163	4	-	17	33	-	-	-	-	-	-	4,891
POONA BAYABAO	-	-	-	-	-	-	-	25	-	58	-	868	-	-	-	-	950
PUALAS	-	-	-	-	-	251	-	178	-	482	-	949	-	-	-	-	1,859
SAGUIARAN	-	-	-	-	-	1	65	159	-	8	-	436	-	-	-	-	668
SULTAN DUMALONDONG	-	-	-	-	-	51	-	-	-	-	-	524	-	-	-	-	575
TAGOLOAN II	-	-	-	-	-	0	112	64	-	891	-	208	-	-	-	-	1,276
TAMPARAN	-	-	-	-	-	-	-	9	-	-	-	457	-	-	-	-	465
TARAKA	-	-	-	-	-	-	-	-	-	17	-	610	-	-	-	-	627
TUBARAN	-	-	-	-	289	743	-	87	7	34	5	1,223	-	-	-	-	2,389
TUGAYA	-	-	-	-	-	142	-	25	-	21	-	84	-	-	-	-	272
WAO	-	-	-	-	14	-	68	427	-	917	1,636	5,189	-	-	6,022	1,669	15,942
Total Area (Ha)	-	-	1	**1**	22,577	6,639	595	4,894	144	7,674	2,661	48,527	-	-	6,022	1,669	**101,401**

Note: Delivery of cacao planting materials must be started on the onset of rainy season.
**establishment of shade trees prior to planting of cacao.*

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

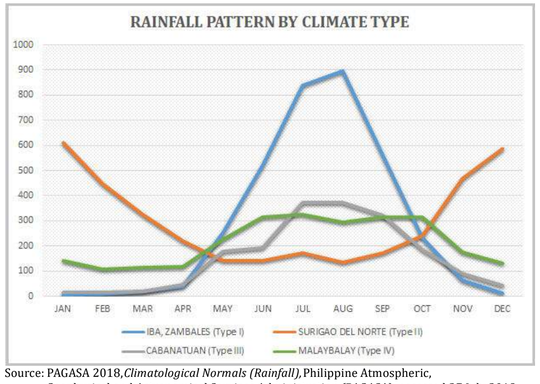
TYPE I : Two pronouced season, dry from November to April and wet during the rest of the year. Maximum rain period is from June to September

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.

Lanao Del Sur is classified as climatic Type III.



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>.

CODE	LANDUSE
2	Paddy rice, non-irrigated
4	Corn
81	Coffee
82	Cacao
112	Sugarcane
116	Coconut
126	Grassland
134	Shrubs, unmanaged

AGRONOMIC REQUIREMENT OF CACAO 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
Cacao	S1	<8	>100	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD	5.6 -7.2	high	none-slight	none-slight	none-few	<1000	2001-4500	I, III, IV
	S2	8 - 30	50 - 100	FSL, L, SiL	SPD,PD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	1000-1500	1000-2000	I, II
	S3	>30	<50	S, LS, CSL, SL	VPD,ED	<5.0 - > 7.9	low	severe	severe	many	>1500	<1000 >4500	

SLOPE (%)
0 - 3 - level to gently sloping
3 - 8 - gently sloping to undulating
8 - 18 - undulating to rolling
18 - 30 - rolling to moderately steep
30 - 50 - steep
> 50 - very steep

SOIL DRAINAGE
ED - excessively drained
WD - well drained
MWD - moderately well drained
SPD - somewhat poorly drained
PD - poorly drained
VPD - very poorly drained

SOIL REACTION (pH)
< 4.5 - extremely acid
4.5 - 5.0 - very strongly acid
5.1 - 5.5 - strongly acid
5.6 - 6.0 - medium acid
6.1 - 6.5 - slightly acid
6.6 - 7.2 - neutral
7.3 - 7.8 - mildly alkaline
7.9 - 8.4 - moderately alkaline
> 8.5 - strongly alkaline

SOIL TEXTURE
Coarse
S - sand
LS - loamy sand
CSL - coarse sandy loam
SL - sandy loam
Medium
FSL - fine sandy loam
L - loam
SiL - silt loam
CL - clay loam
SiCL - silty clay loam
SCL - sandy clay loam
Fine
SC - sandy clay
SiC - silty clay
C - clay
HC - heavy clay

SOIL DEPTH (cm)
0 - 30 - very shallow
30 - 50 - shallow
50 - 100 - moderately deep
> 100 - deep to very deep

SURFACE IMPEDIMENT
ROCK OUTCROPS
< 10% - none - few
10 - 30% - common
> 30% - many

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

ELEVATION
El2 - 1000m - 1500m
El3 - > 1500m

SOIL DRAINAGE
D2 - Somewhat poorly drained to poorly drained
D3 - Very poorly drained or excessively drained

SOIL DEPTH
Sh2 - Moderately deep (50 - 100cm)
Sh3 - Very shallow to shallow (< 50cm)

SOIL EROSION
E2 - Moderate erosion
E3 - Severe erosion

SLOPE/TOPOGRAPHY
T2 - Undulating to moderately steep
T3 - Steep to very steep

SOIL TEXTURE
Tc - Coarse texture

ROCK OUTCROPS
Rc2 - Common
Rc3 - Many

FLOODING
F2 - Moderate seasonal flooding
F3 - Severe seasonal flooding

CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION	CODE	LIMITATION
1	E2-Sh2-Rc2	11	El3-Sh2-Rc2	21	T2-El2	31	T3	41	T3-El3	51	T3-El3
2	El2	12	El3-Sh2-Rc3	22	T2-El2-E3	32	T3-E3	42	T3-El3-E3-Sh3-Rc2	52	T3-El3-E3-Sh3-Rc3
3	El2-E2-Sh2-Rc3	13	F2-D2	23	T2-El2-E3-Rc2	33	T3-E3-Sh3-Rc2	43	T3-El3-E3-Sh3-Rc3	53	T3-El3
4	El2-F2-D2	14	F2-Tc	24	T2-El2-E3-Sh2-Rc2	34	T3-E3-Sh3-Rc3	44	T3-F3-D2		
5	El2-F3-D2	15	F3-D2	25	T2-El2-E3-Sh2-Rc3	35	T3-El2	45	T3		
6	El2-Rc2	16	Sh2-Rc2	26	T2-El2-F2-D2	36	T3-El2-E3	46	T3-E3		
7	El2-Sh2-Rc2	17	T2	27	T2-El3	37	T3-El2-E3-Rc2	47	T3-E3-Sh3-Rc3		
8	El2-Sh2-Rc3	18	T2-E3	28	T2-El3-E3-Sh2-Rc2	38	T3-El2-E3-Sh3-Rc2	48	T3-El2		
9	El3	19	T2-E3-Sh2-Rc2	29	T2-El3-E3-Sh2-Rc3	39	T3-El2-E3-Sh3-Rc3	49	T3-El2-E3		
10	El3-E2-Sh2-Rc3	20	T2-E3-Sh2-Rc3	30	T2-F3-D2	40	T3-El2-F2-D2	50	T3-El2-E3-Sh3-Rc3		

PROVINCE OF LANAO DEL SUR

LAND SUITABILITY MAP
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N
W E
S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5
Kilometers

0 0.5 1 2 3
Miles

Universal Transverse Mercator Zone 51 N. PRS 1992 Datum
DISCLAIMER : All political boundaries are not authoritative.

LEGEND

SUITABILITY CLASSES

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S3 **Marginally Suitable** - 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

OTHER SIGNS

NGP Areas
Cacao
1 Land limitation
118 Land use

CONVENTIONAL SIGNS

ROADS
Expressway
Trunk line
Primary
Secondary
Tertiary

BOUNDARY
Region
Province
District
Municipality
Barangay

HYDROLOGY
Sea / Shoreline
Lakes / Rivers

PLACES
Capital City / City
Capital Town / Town

LAND USE
Built-up
Fishpond
Mangrove

ADJOINING SHEETS

3817-III

3817-III
3817-II
3716-I
3816-IV
3816-I

INDEX MAP

MISCELLANEOUS INFORMATION

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Project Leader : BERNARDO B. PASCUA
GIS and Cartography : IRVIN K. SAMALCA

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LAND SUITABILITY MAP
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N W E S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5
Kilometers

0 0.5 1 2 3
Miles

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Not Suitable/ Not Relevant

OTHER SIGNS

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Cacao
1 Land limitation
118 Land use

CONVENTIONAL SIGNS

ROADS
Expressway
Trunk line
Primary
Secondary
Tertiary

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Province
District
Municipality
Barangay

HYDROLOGY
Sea / Shoreline
Lakes / Rivers

PLACES
Capital City / City
Capital Town / Town

LAND USE
Built-up
Fishpond
Mangrove

ADJOINING SHEETS

3817-II

3817-III | 3917-III
3816-IV | 3816-I | 3916-IV

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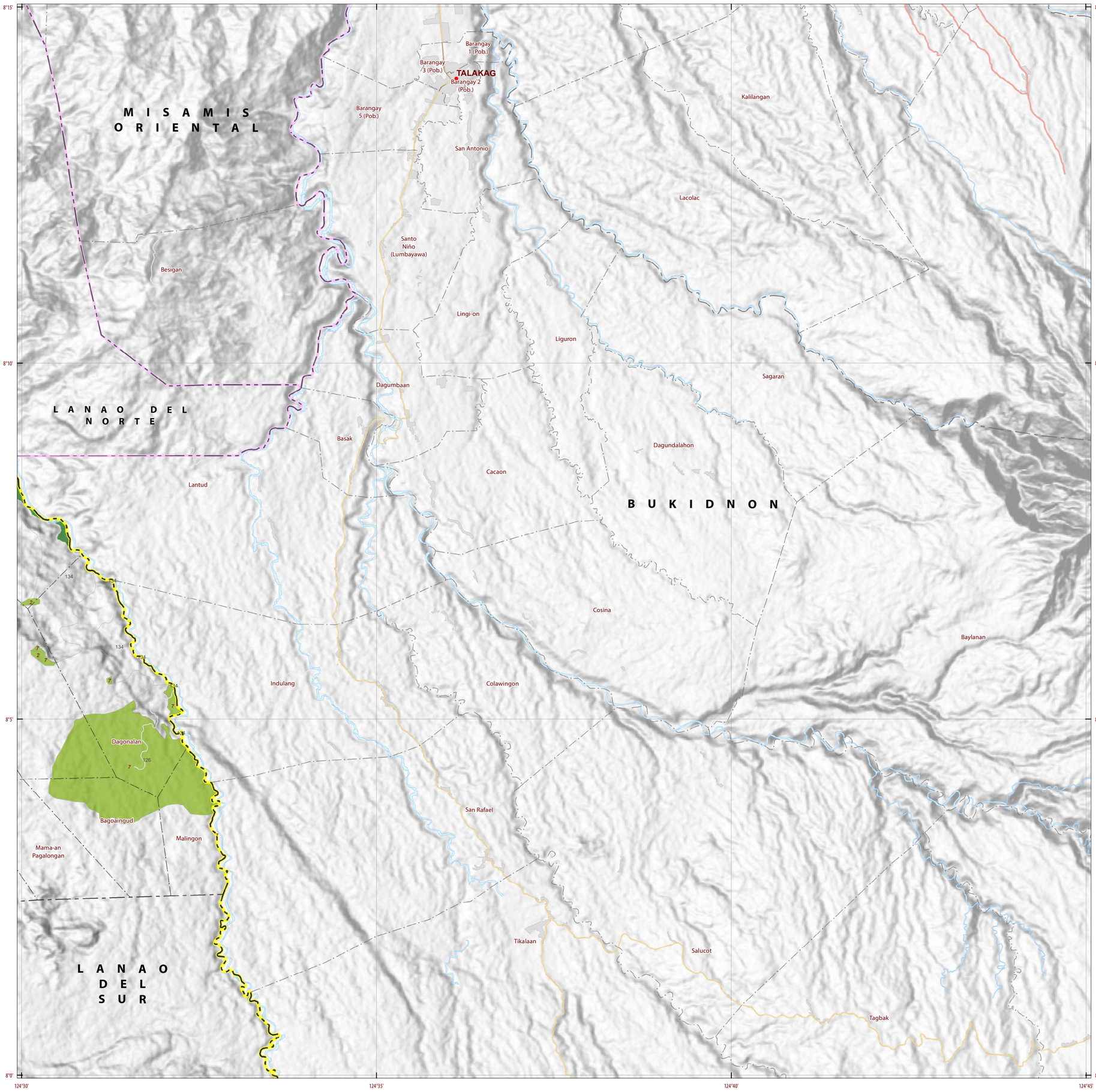

LAND SUITABILITY MAP CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N W E S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5 Kilometers

0 0.5 1 2 3 Miles

Universal Transverse Mercator Zone 51 N. PRS 1992 Datum

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Cacao

1 Land limitation

118 Land use

CONVENTIONAL SIGNS

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Expressway

Trunk line

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Region

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HYDROLOGY

Sea / Shoreline

Lakes / Rivers

PLACES

Capital City / City

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LAND USE

Built-up

Fishpond

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3816-I 3916-IV

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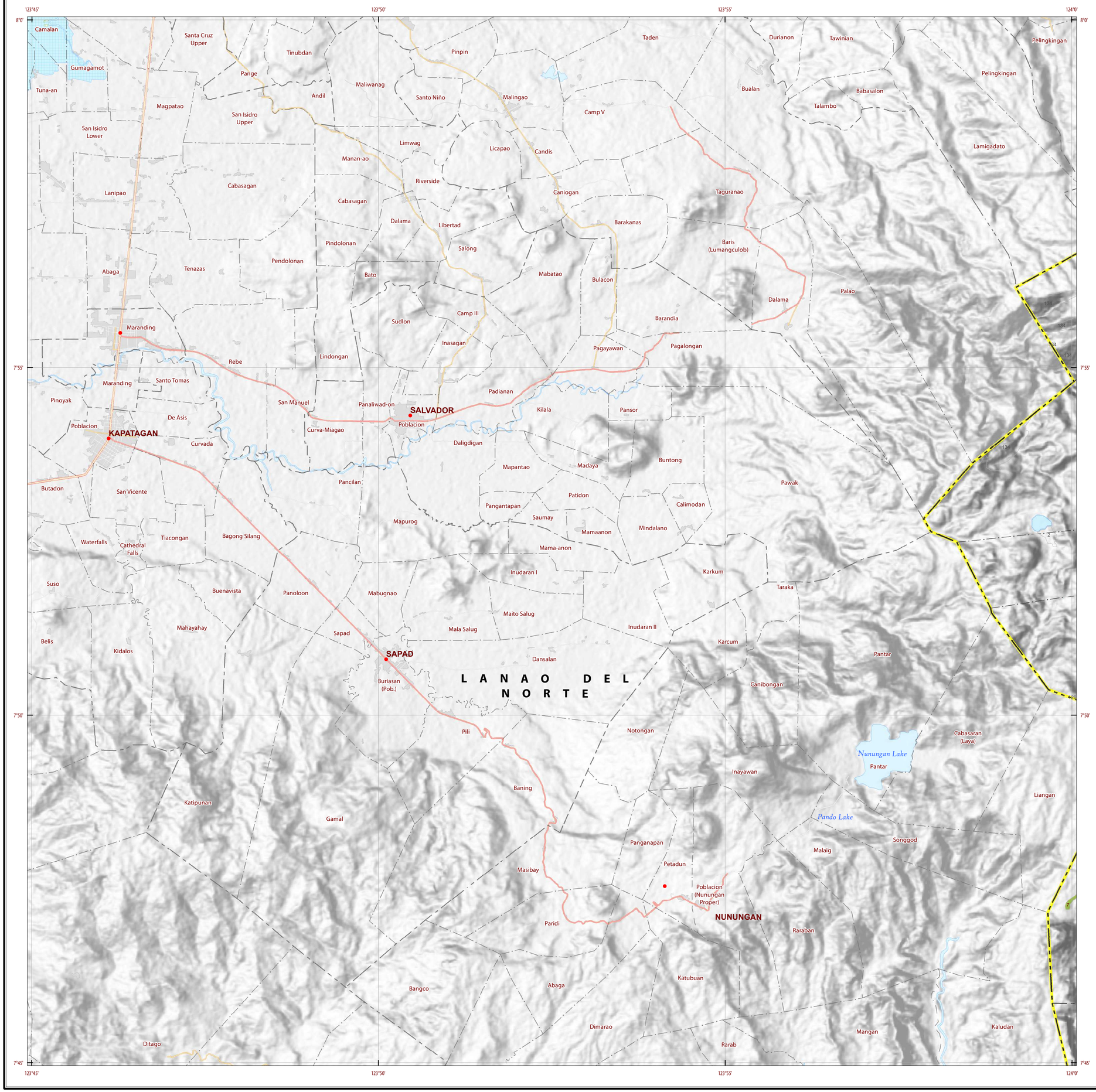

LAND SUITABILITY MAP
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N W E S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5 Kilometers

0 0.5 1 2 3 Miles

Universal Transverse Mercator Zone 51 N. PRS 1992 Datum

DISCLAIMER : All political boundaries are not authoritative.

LEGEND

SUITABILITY CLASSES

- S1 **Highly Suitable** - Land having no significant limitations 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.
- S2 **Moderately Suitable** - Land having limitations which in aggregate are moderately severe for sustained application of a given use; the limitations 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.
- S3 **Marginally Suitable** - 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**

OTHER SIGNS

- NGP Areas
- Cacao
- 1 Land limitation
- 116 Land use

CONVENTIONAL SIGNS

ROADS

- Expressway
- Trunk line
- Primary
- Secondary
- Tertiary

BOUNDARY

- Region
- Province
- District
- Municipality
- Barangay

HYDROLOGY

- Sea / Shoreline
- Lakes / Rivers

PLACES

- Capital City / City
- Capital Town / Town

LAND USE

- Built-up
- Fishpond
- Mangrove

ADJOINING SHEETS

3716-I

3817-III
3716-I
3816-IV
3716-II
3816-III

INDEX MAP

MISCELLANEOUS INFORMATION

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PROVINCE OF LANAO DEL SUR

LAND SUITABILITY MAP
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N
W E
S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5
Kilometers

0 0.5 1 2 3
Miles

Universal Transverse Mercator Zone 51 N. PRS 1992 Datum
DISCLAIMER : All political boundaries are not authoritative.

LEGEND

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Not Suitable/ Not Relevant

OTHER SIGNS

NGP Areas
Cacao
1 Land limitation
118 Land use

CONVENTIONAL SIGNS

ROADS
Expressway
Trunk line
Primary
Secondary
Tertiary

BOUNDARY
Region
Province
District
Municipality
Barangay

HYDROLOGY
Sea / Shoreline
Lakes / Rivers

PLACES
Capital City / City
Capital Town / Town

LAND USE
Built-up
Fishpond
Mangrove

ADJOINING SHEETS

3816-IV

3817-III 3817-II
3716-I 3816-IV 3816-I
3716-II 3816-III 3816-II

INDEX MAP

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LAND SUITABILITY MAP
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N
W E
S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5
Kilometers

0 0.5 1 2 3
Miles

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118 Land use

CONVENTIONAL SIGNS

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Tertiary

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Province
District
Municipality
Barangay

HYDROLOGY
Sea / Shoreline
Lakes / Rivers

PLACES
Capital City / City
Capital Town / Town

LAND USE
Built-up
Fishpond
Mangrove

ADJOINING SHEETS

3816-I

3817-III 3817-II 3917-III
3816-IV 3816-I 3916-IV
3816-III 3816-II 3916-III

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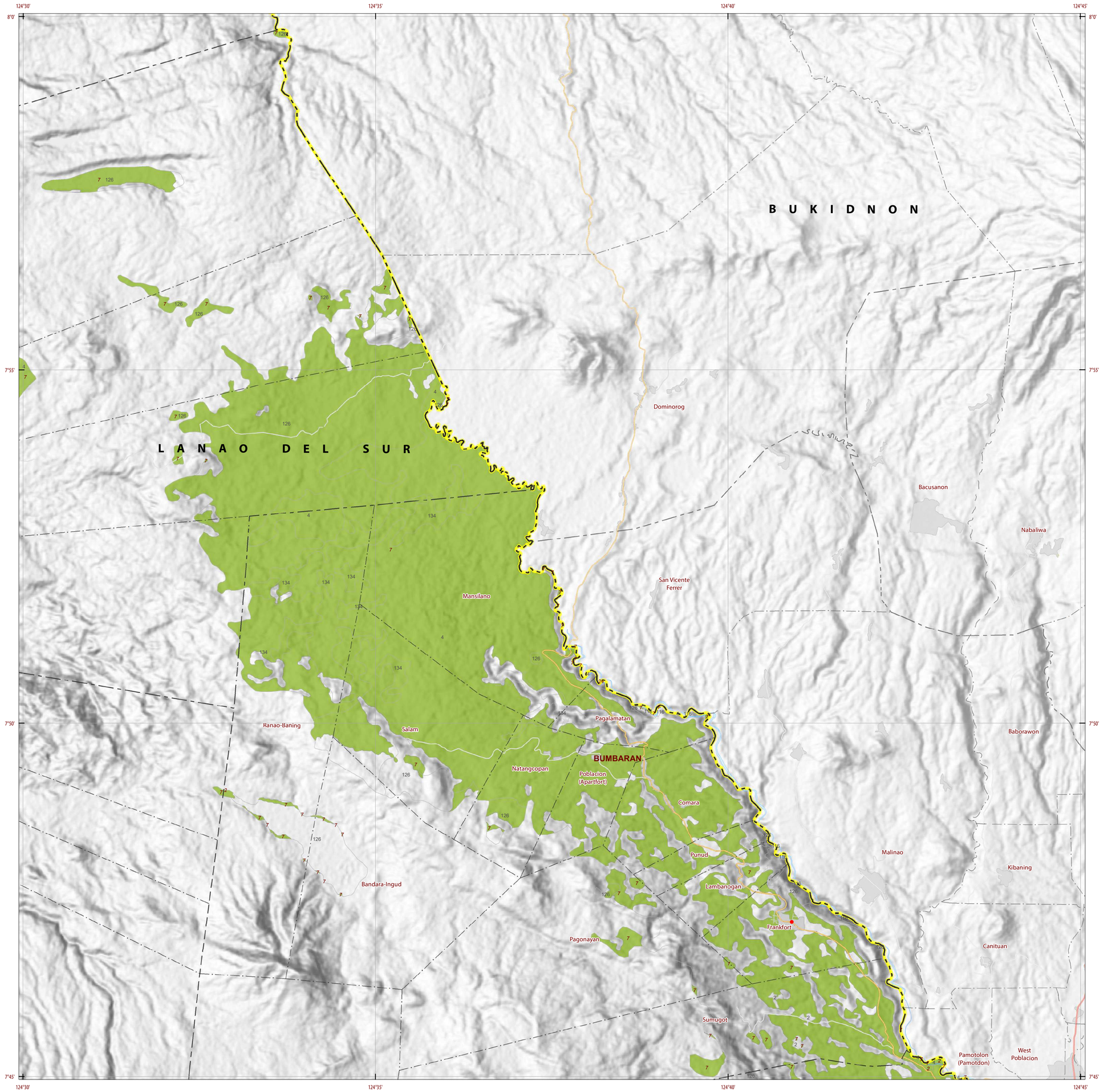
PROVINCE OF LANAO DEL SUR



LAND SUITABILITY MAP
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N
W E
S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5
Kilometers

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NGP Areas
Cacao
1 Land limitation
116 Land use

CONVENTIONAL SIGNS

ROADS
Expressway
Trunk line
Primary
Secondary
Tertiary

BOUNDARY
Region
Province
District
Municipality
Barangay

HYDROLOGY
Sea / Shoreline
Lakes / Rivers

PLACES
Capital City / City
Capital Town / Town

LAND USE
Built-up
Fishpond
Mangrove

ADJOINING SHEETS

3916-IV

3817-II 3917-III
3816-I 3916-IV
3816-II 3916-III 3916-II

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LAND SUITABILITY MAP
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N W E S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5 Kilometers

0 0.5 1 2 3 Miles

Universal Transverse Mercator Zone 51 N. PRS 1992 Datum

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LEGEND

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Not Suitable/ Not Relevant

OTHER SIGNS

NGP Areas

Cacao

1 Land limitation

118 Land use

CONVENTIONAL SIGNS

ROADS

Expressway

Trunk line

Primary

Secondary

Tertiary

BOUNDARY

Region

Province

District

Municipality

Barangay

HYDROLOGY

Sea / Shoreline

Lakes / Rivers

PLACES

Capital City / City

Capital Town / Town

LAND USE

Built-up

Fishpond

Mangrove

ADJOINING SHEETS

3716-II

3716-I

3816-IV

3716-II

3816-III

3815-IV

INDEX MAP

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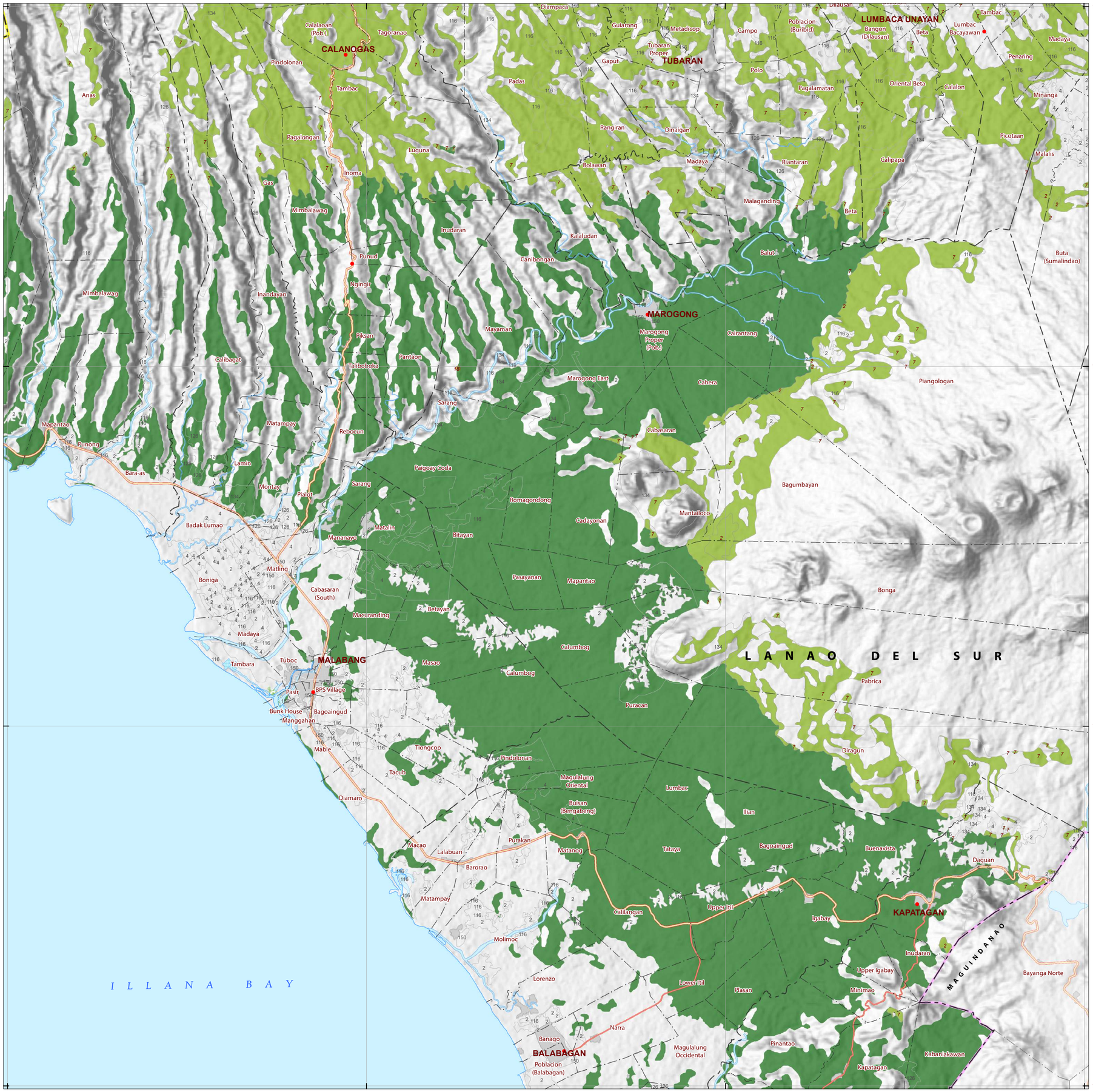
PROVINCE OF LANAO DEL SUR



DEPARTMENT OF AGRICULTURE 1898

LAND SUITABILITY MAP
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N W E S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5 Kilometers

0 0.5 1 2 3 Miles

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Cacao

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118 Land use

CONVENTIONAL SIGNS

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Region

Province

District

Municipality

Barangay

HYDROLOGY

Sea / Shoreline

Lakes / Rivers

PLACES

Capital City / City

Capital Town / Town

LAND USE

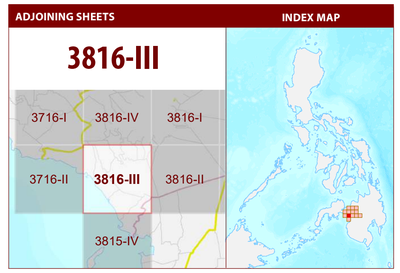
Built-up

Fishpond

Mangrove

ADJOINING SHEETS

INDEX MAP



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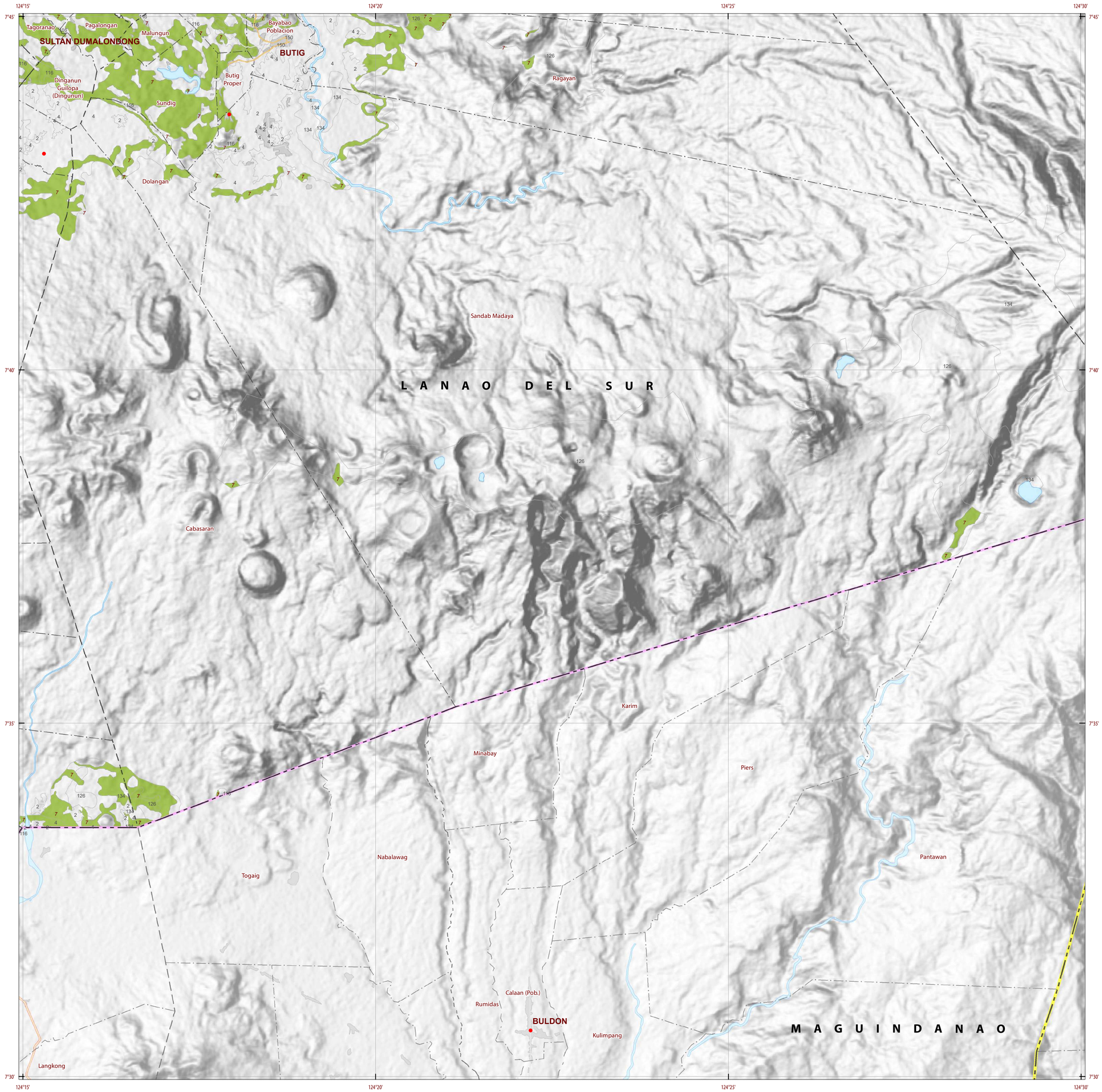

LAND SUITABILITY MAP CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N W E S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5 Kilometers

0 0.5 1 2 3 Miles

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Cacao

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CONVENTIONAL SIGNS

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HYDROLOGY

Sea / Shoreline

Lakes / Rivers

PLACES

Capital City / City

Capital Town / Town

LAND USE

Built-up

Fishpond

Mangrove

ADJOINING SHEETS

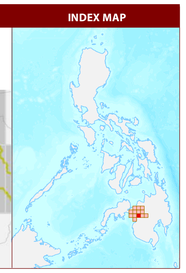
3816-II

3816-IV 3816-I 3916-IV

3816-III 3816-II 3916-III

3815-IV

INDEX MAP



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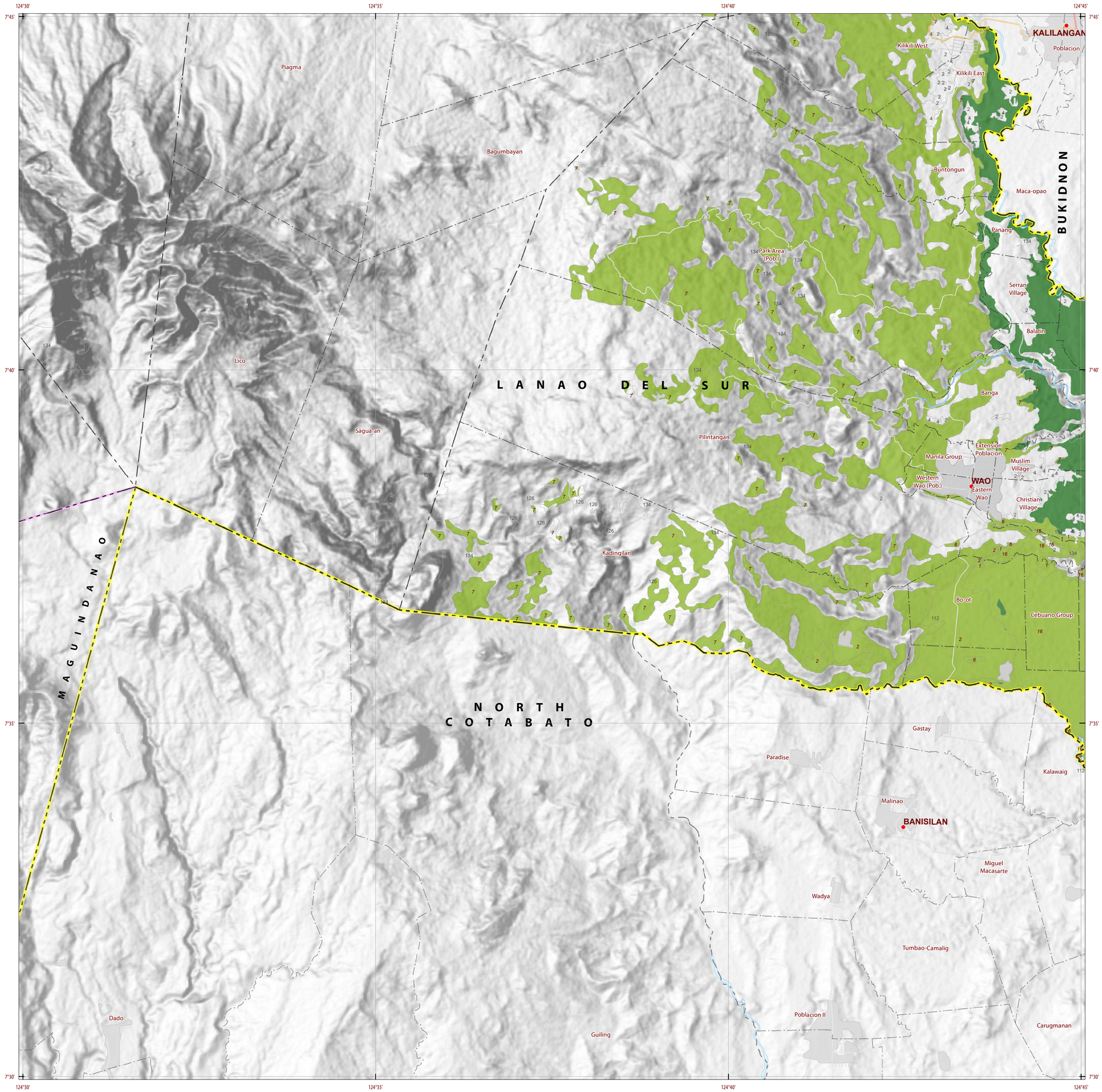

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CACAO

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N W E S

SCALE 1 : 50 000

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NGP Areas

Cacao

1 Land limitation

116 Land use

CONVENTIONAL SIGNS

ROADS

Expressway

Trunk line

Primary

Secondary

Tertiary

BOUNDARY

Region

Province

District

Municipality

Barangay

HYDROLOGY

Sea / Shoreline

Lakes / Rivers

PLACES

Capital City / City

Capital Town / Town

LAND USE

Built-up

Fishpond

Mangrove

ADJOINING SHEETS

3916-III

3816-I 3916-IV

3816-II 3916-III 3916-II

3815-IV

INDEX MAP

MISCELLANEOUS INFORMATION

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Project Leader : BERNARDO B. PASCUA
GIS and Cartography : IRVIN K. SAMALCA

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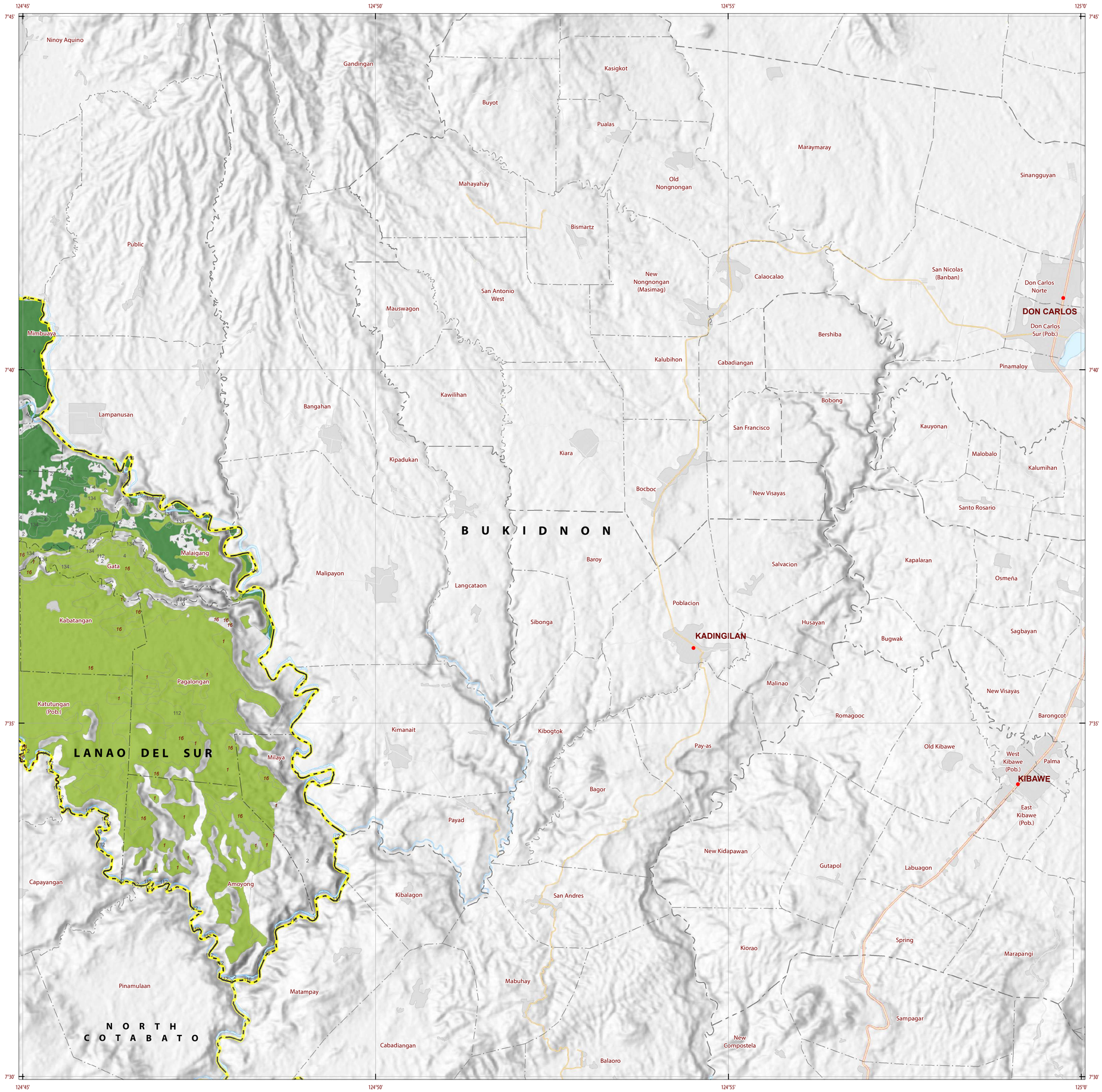

LAND SUITABILITY MAP
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N W E S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5 Kilometers

0 0.5 1 2 3 Miles

Universal Transverse Mercator Zone 51 N. PRS 1992 Datum

DISCLAIMER : All political boundaries are not authoritative.

LEGEND

SUITABILITY CLASSES

S1 **Highly Suitable** - Land having no significant limitations 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.

S2 **Moderately Suitable** - Land having limitations which in aggregate are moderately severe for sustained application of a given use; the limitations 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.

S3 **Marginally Suitable** - 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

OTHER SIGNS

NGP Areas

Cacao

1 Land limitation

116 Land use

CONVENTIONAL SIGNS

ROADS

Expressway

Trunk line

Primary

Secondary

Tertiary

BOUNDARY

Region

Province

District

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HYDROLOGY

Sea / Shoreline

Lakes / Rivers

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Built-up

Fishpond

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3916-III

3916-II

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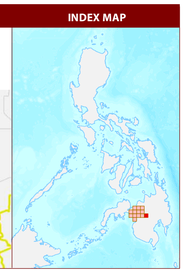

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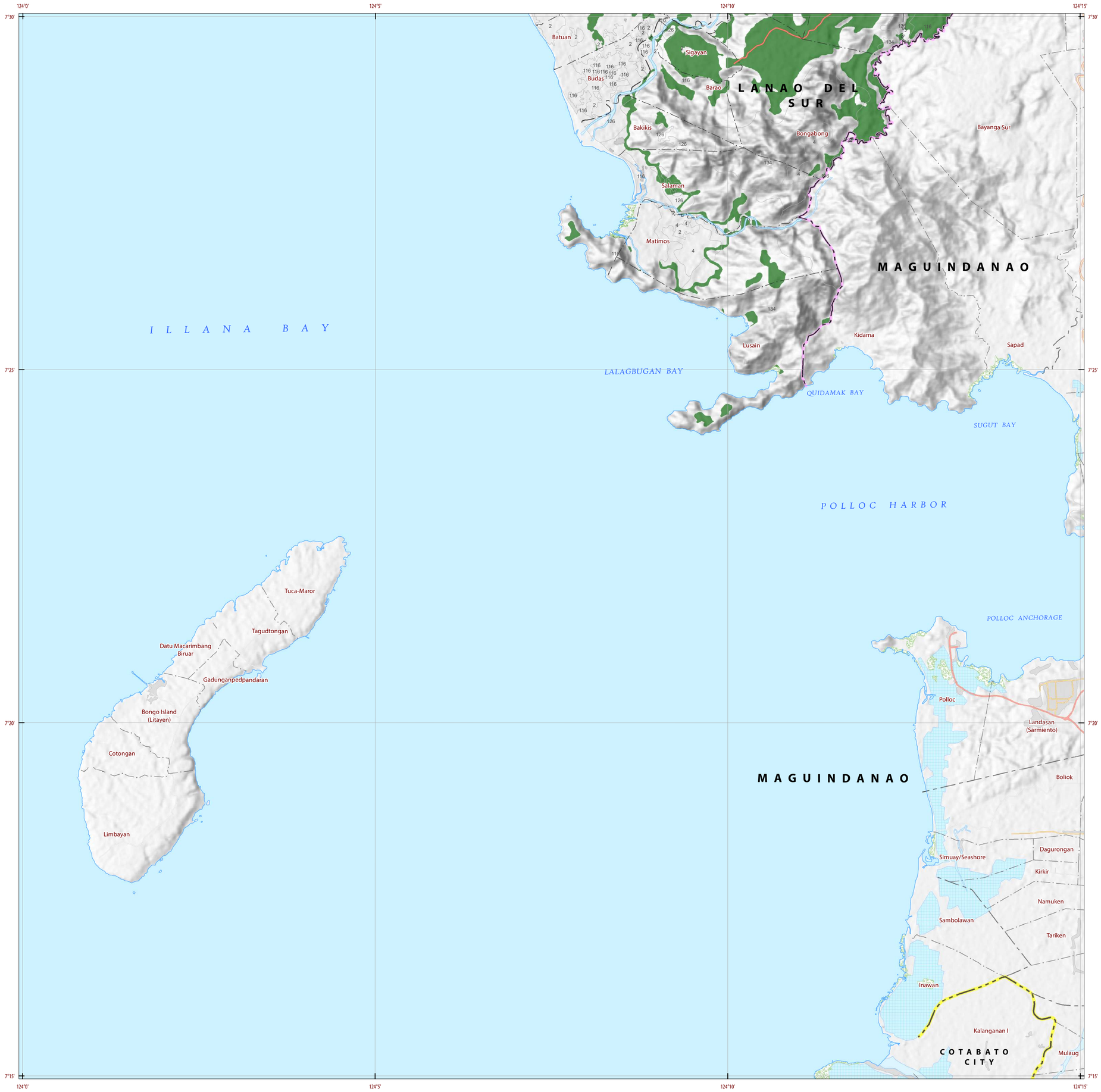
PROVINCE OF LANAO DEL SUR



DEPARTMENT OF AGRICULTURE 1898

LAND SUITABILITY MAP CACAO

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

N W E S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5
Kilometers

0 0.5 1 2 3
Miles

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