# LAND SUITABILITY MAP

## CASSAVA

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

# PROVINCE OF LANAO DEL SUR

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
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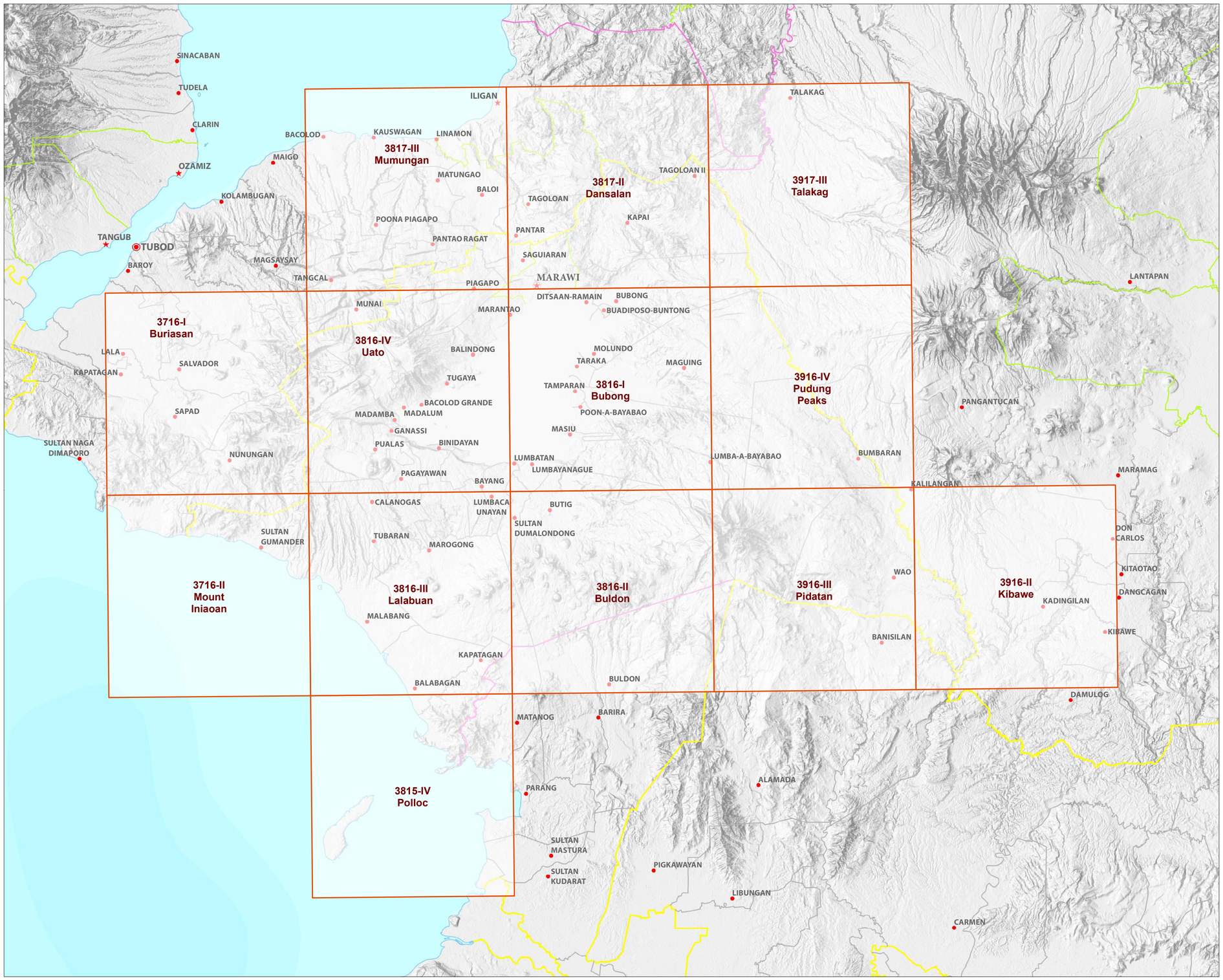
# MAP INDEX

## 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

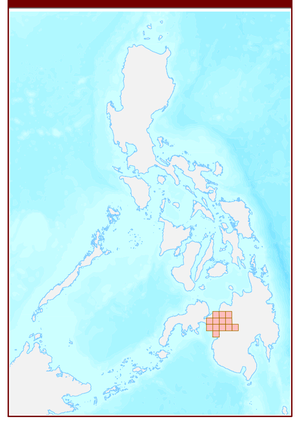
***Map Index***

- 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).

Map produced by the Geomatics and Soil Information Technology Division, Bureau of Soils and Water Management (BSWM).

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# LAND SUITABILITY MAP FOR CASSAVA

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

## PROVINCE OF LANAO DEL SUR, ARMM

### EXTENT OF SUITABILITY FOR CASSAVA PRODUCTION BY MUNICIPALITY

| MUNICIPALITY | EXISTING CASSAVA (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 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0 |
| BALABAGAN | - | - | - | - | 2,919 | 1,609 | - | - | - | - | 91 | 97 | - | - | - | - | - |
| BALINDONG | - | - | - | - | - | 55 | - | 53 | - | 96 | - | 115 | - | - | - | - | 320 |
| BAYANG | - | - | - | - | - | 132 | - | 18 | - | - | - | 559 | - | - | - | - | 710 |
| BINIDAYAN | - | - | - | - | - | 55 | - | - | - | - | - | 277 | - | - | - | - | 333 |
| BUADIPOSO-BUNTONG | - | - | - | - | - | - | - | 32 | - | 2 | - | 841 | - | - | - | - | 876 |
| BUBONG | - | - | - | - | - | - | - | 55 | - | 1 | - | 1,617 | - | - | - | - | 1,674 |
| BUMBARAN | - | - | - | - | - | - | - | 279 | 0 | 828 | - | 1,642 | - | - | - | - | 2,749 |
| BUTIG | - | - | - | - | - | 64 | - | 178 | 84 | 770 | - | 2,239 | - | - | - | - | 3,336 |
| CALANOGAS | - | - | - | - | - | 1,178 | - | 12 | - | 608 | - | 46 | - | - | - | - | 1,844 |
| DITSAAN-RAMAIN | - | - | - | - | - | - | - | - | - | - | - | 674 | - | - | - | - | 674 |
| GANASSI | - | - | - | - | - | 41 | - | 13 | - | - | - | 422 | - | - | - | - | 476 |
| KAPAI | - | - | - | - | - | - | - | 96 | - | - | - | 843 | - | - | - | - | 939 |
| KAPATAGAN | - | - | - | - | 789 | 1,607 | 1 | 165 | - | - | 36 | 46 | - | - | - | - | 1,854 |
| LUMBA-BAYABAO | - | - | - | - | - | - | - | 64 | - | 92 | - | 1,188 | - | - | - | - | 1,344 |
| LUMBACA-UNAYAN | - | - | - | - | - | 70 | - | 4 | - | - | - | 333 | - | - | - | - | 407 |
| LUMBATAN | - | - | - | - | - | 35 | - | 2 | - | - | - | 915 | - | - | - | - | 953 |
| LUMBAYANAGUE | - | - | - | - | - | 70 | - | 20 | - | - | - | 1,018 | - | - | - | - | 1,108 |
| MADALUM | - | - | - | - | - | 12 | - | 3 | - | 240 | - | 184 | - | - | - | - | 439 |
| MADAMBA | - | - | - | - | - | - | - | 30 | - | 168 | - | 190 | - | - | - | - | 388 |
| MAGUING | - | - | - | - | - | - | - | 73 | - | 2,872 | - | 3,342 | - | - | - | - | 6,286 |
| MALABANG | - | - | - | - | 988 | 1,511 | - | 43 | - | 181 | 192 | 144 | - | - | - | - | 2,070 |
| MARANTAO | - | - | - | - | - | 66 | - | 5 | - | 11 | - | 754 | - | - | - | - | 836 |
| MARAWI CITY | - | - | - | - | - | 4 | - | 25 | - | 95 | - | 938 | - | - | - | - | 1,062 |
| MAROGONG | - | - | - | - | 3,636 | 4,012 | 39 | 321 | - | 47 | 262 | 174 | - | - | - | - | 4,855 |
| MASIU | - | - | - | - | - | - | - | 7 | - | 214 | - | 989 | - | - | - | - | 1,211 |
| MULONDO | - | - | - | - | - | - | - | 17 | - | 221 | - | 525 | - | - | - | - | 763 |
| PAGAYAWAN | - | - | - | - | 44 | 190 | - | 9 | - | - | - | 482 | - | - | - | - | 681 |
| PIAGAPO | - | - | - | - | - | 0 | - | 33 | - | 11 | - | 1,144 | - | - | - | - | 1,187 |
| PICONG | - | - | - | - | 1,138 | 3,540 | - | 4 | - | 35 | - | - | - | - | - | - | 3,579 |
| POONA BAYABAO | - | - | - | - | - | - | - | 19 | - | 58 | - | 596 | - | - | - | - | 672 |
| PUALAS | - | - | - | - | - | 93 | - | 6 | - | 517 | - | 499 | - | - | - | - | 1,115 |
| SAGUIARAN | - | - | - | - | - | 7 | 4 | 82 | - | 10 | - | 556 | - | - | - | - | 658 |
| SULTAN DUMALONDONG | - | - | - | - | - | 39 | - | - | - | - | - | 919 | - | - | - | - | 959 |
| TAGOLOAN II | - | - | - | - | - | - | 14 | 121 | - | 891 | - | 178 | - | - | - | - | 1,205 |
| TAMPARAN | - | - | - | - | - | - | - | 9 | - | - | - | 449 | - | - | - | - | 458 |
| TARAKA | - | - | - | - | - | - | - | - | - | 14 | - | 609 | - | - | - | - | 622 |
| TUBARAN | - | - | - | - | 18 | 353 | - | 6 | - | 34 | - | 408 | - | - | - | - | 801 |
| TUGAYA | - | - | - | - | - | 12 | - | 36 | - | 39 | - | 7 | - | - | - | - | 93 |
| WAO | - | - | - | - | 4 | 10 | 45 | 135 | - | 917 | 1,126 | 2,320 | - | - | 5,225 | 2,121 | 11,898 |
| **Total Area (Ha)** | - | - | - | - | - | 14,764 | 102 | 1,975 | 84 | 8,970 | 1,707 | 28,281 | - | - | 5,225 | 2,121 | **63,229** |

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

### 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

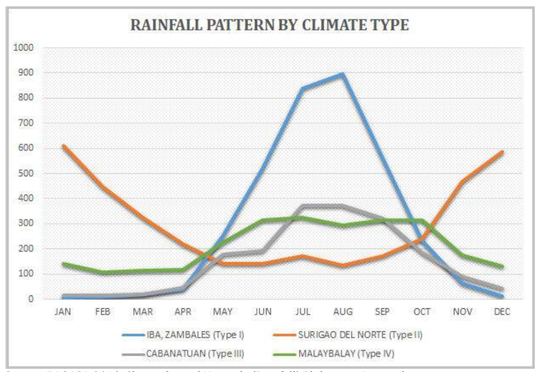
**TYPE I** : Two pronouced season, dry from November to April and wet during the rest of the year. Maximum rain period is from June to September

**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 CASSAVA 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cassava | 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 |
| | S2 | 8 - 18 | 30 - 50 | SL, HC | SPD, PD | 5.1 - 5.5<br>7.3 - 7.8 | medium | moderate | moderate | common | 500-1500 | 2001-4500 | II |
| | S3 | 18 - 30 | <30 | S, LS, CSL | VPD,ED | <5.0 - > 7.9 | low | severe | severe | many | >1500 | <1000<br>>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 - 500 - 1000m or 2000 - 2500m
El3 - < 500m or > 2500m

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

**SOIL DEPTH**
Sh2 - Shallow to moderately deep (30 - 100cm)
Sh3 - Very shallow (< 30cm)

**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

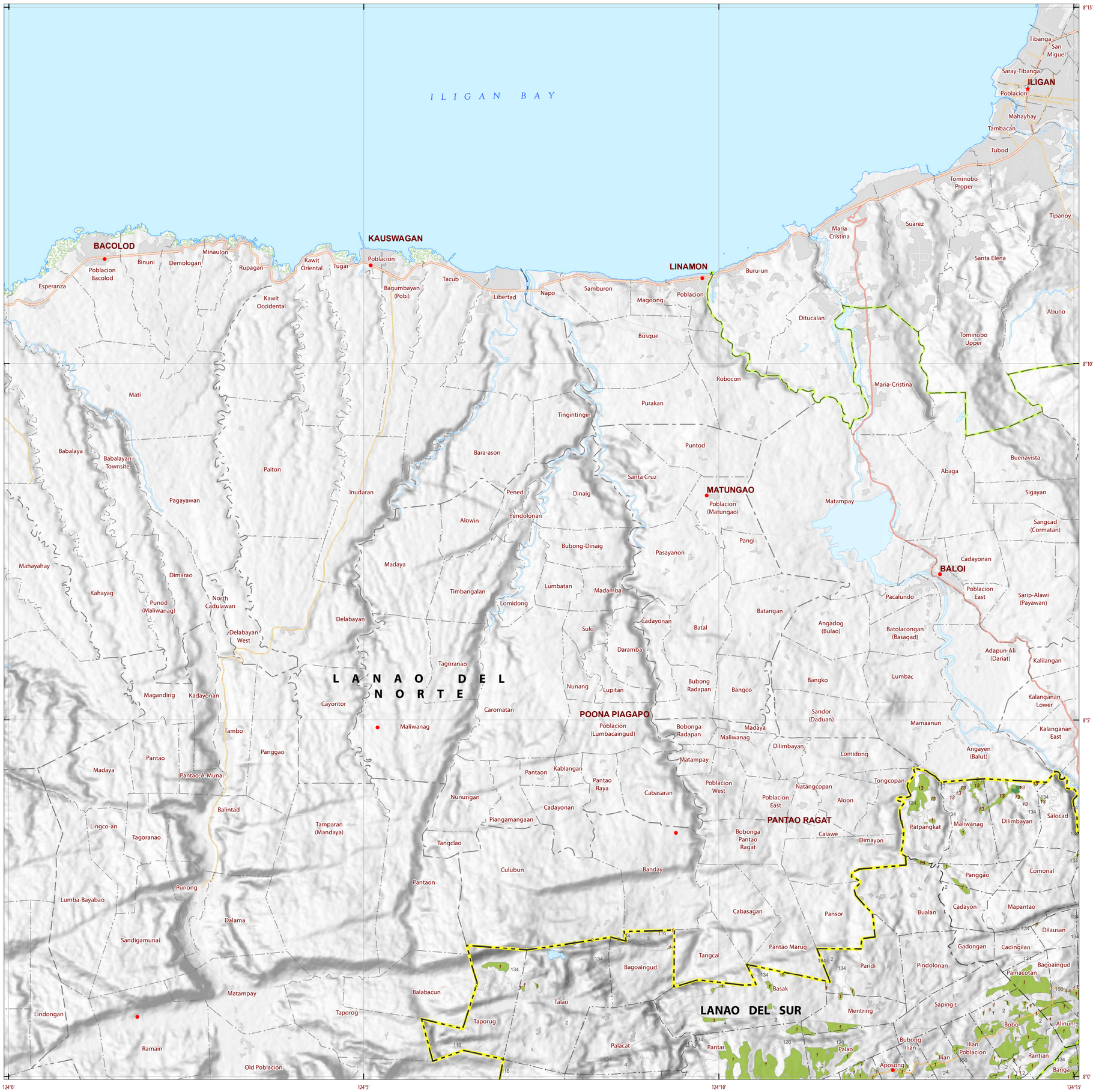
**ROCK OUTCROPS**
Rc2 - Common
Rc3 - Many

**FLOODING**
F2 - Moderate seasonal flooding
F3 - Severe seasonal flooding

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

# PROVINCE OF LANAO DEL SUR






## LAND SUITABILITY MAP
## CASSAVA

### 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.

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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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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

*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-II**

3817-III 3817-II 3917-III

3816-IV 3816-I 3916-IV

## INDEX MAP

## MISCELLANEOUS INFORMATION

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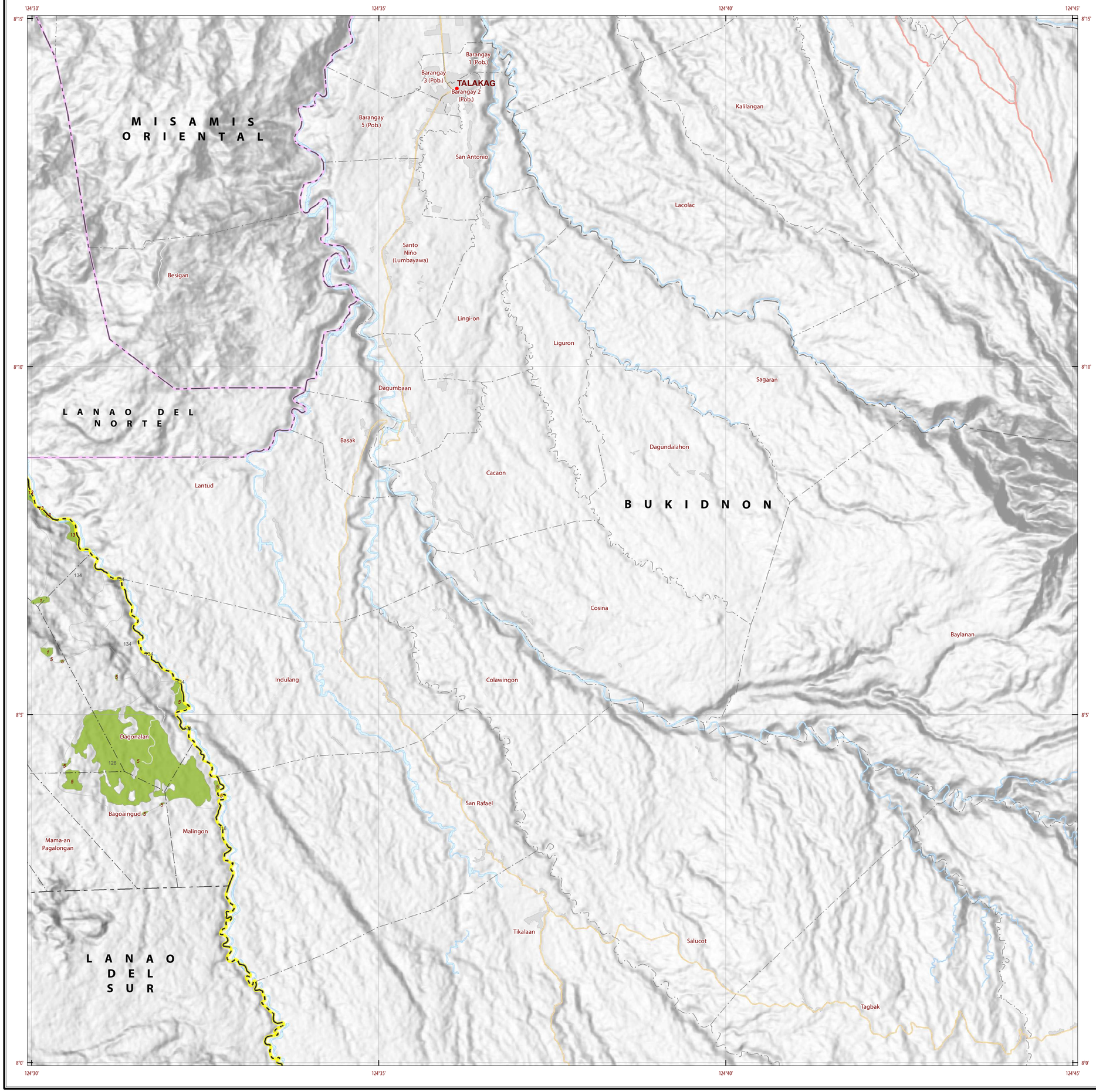


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N W E S

SCALE 1 : 50 000

0 0.5 1 2 3 4 5 Kilometers

0 0.5 1 2 3 Miles

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1 Land limitation

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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

3917-III

3817-II 3917-III

3816-I 3916-IV

## INDEX MAP

## MISCELLANEOUS INFORMATION

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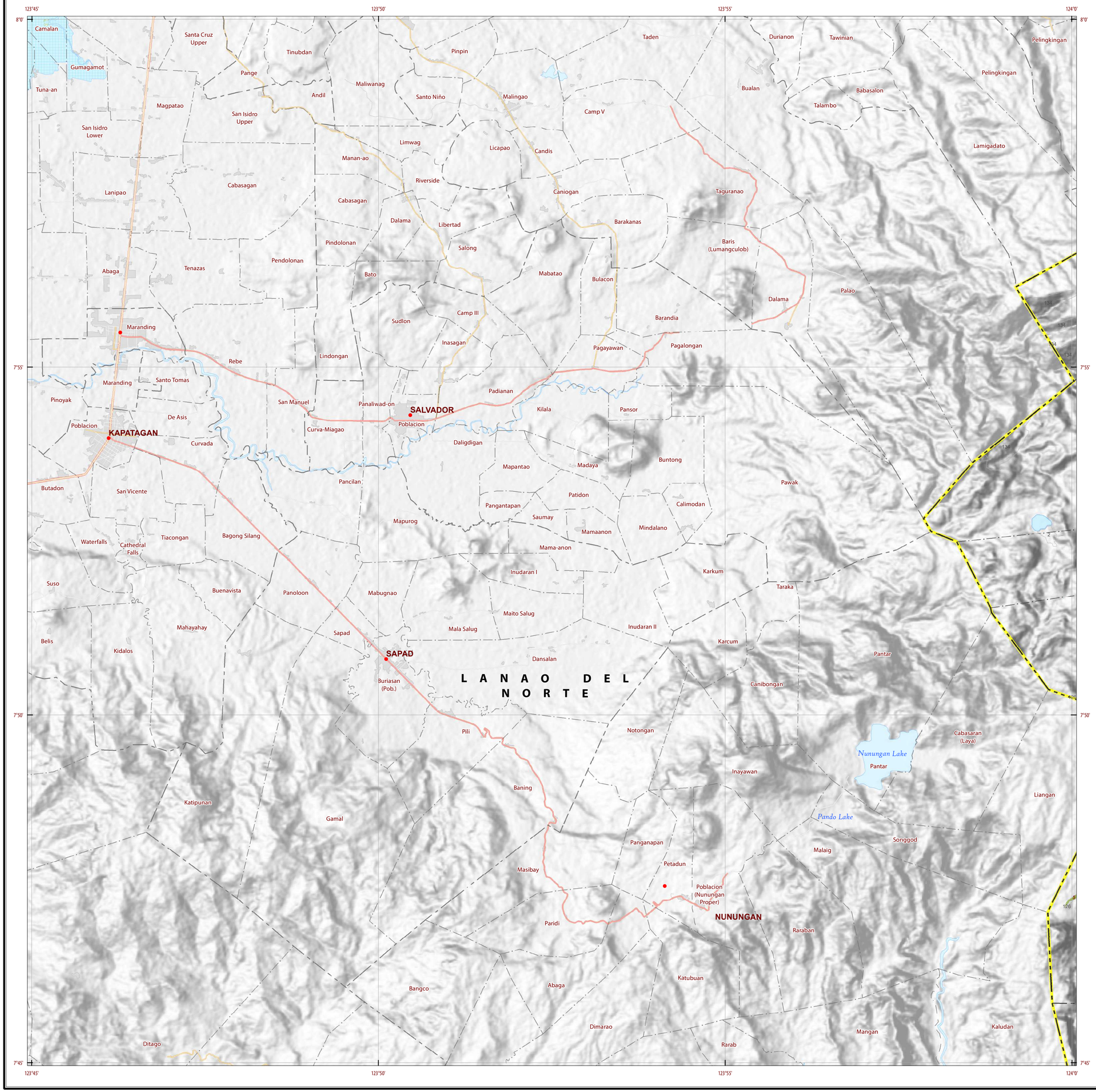


# LAND SUITABILITY MAP CASSAVA

## 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.

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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-I

3817-III

3716-I

3816-IV

3716-II

3816-III

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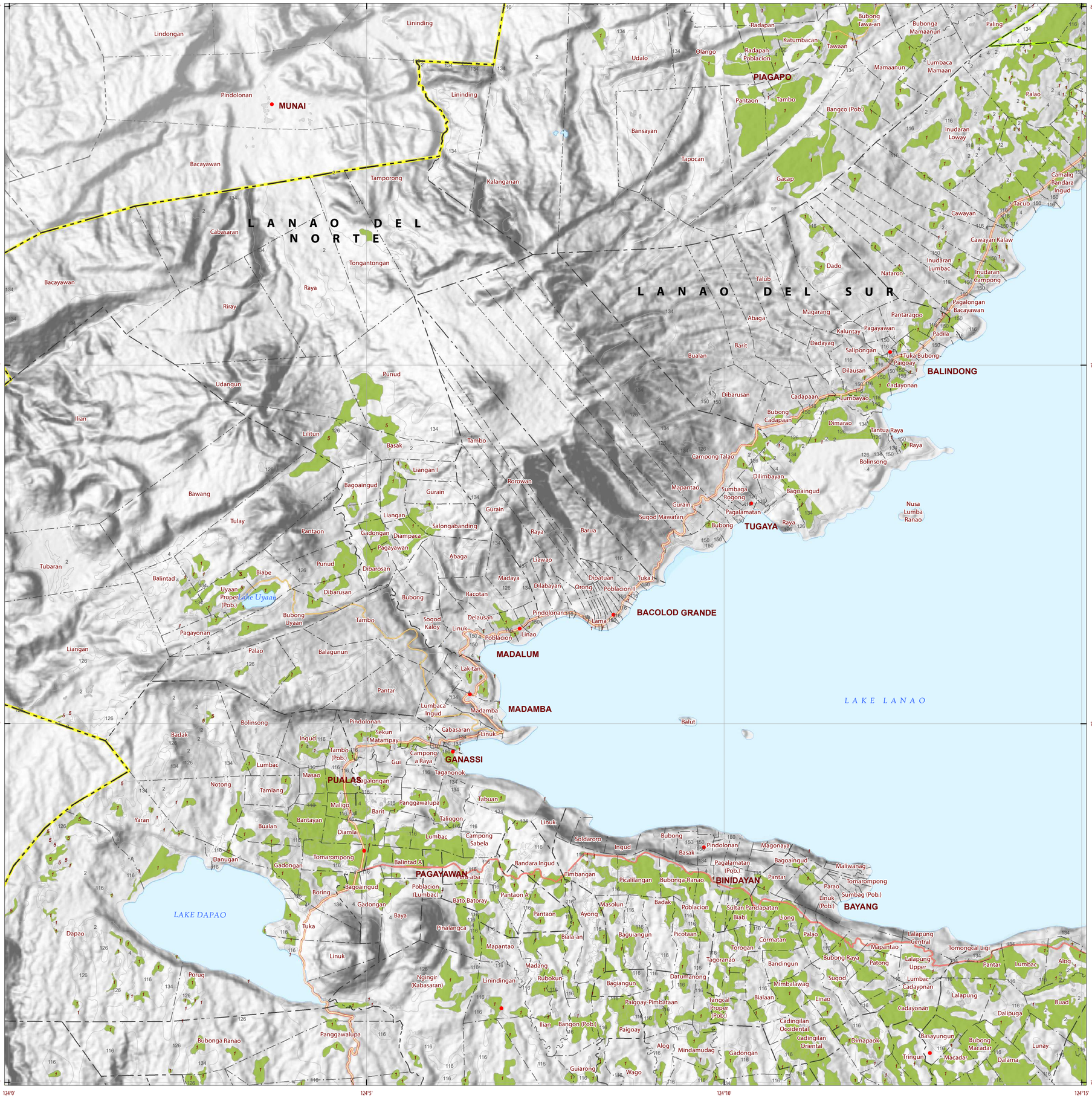
# PROVINCE OF LANAO DEL SUR






## LAND SUITABILITY MAP
## CASSAVA

### 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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*OTHER SIGNS*

NGP Areas
Cacao
Land limitation
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

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# LAND SUITABILITY MAP CASSAVA

## 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*

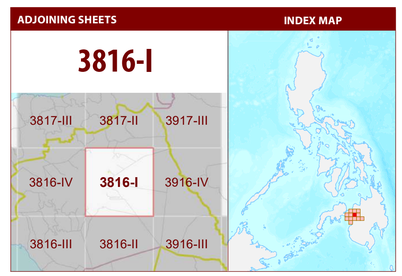
Built-up

Fishpond

Mangrove

## ADJOINING SHEETS

## INDEX MAP

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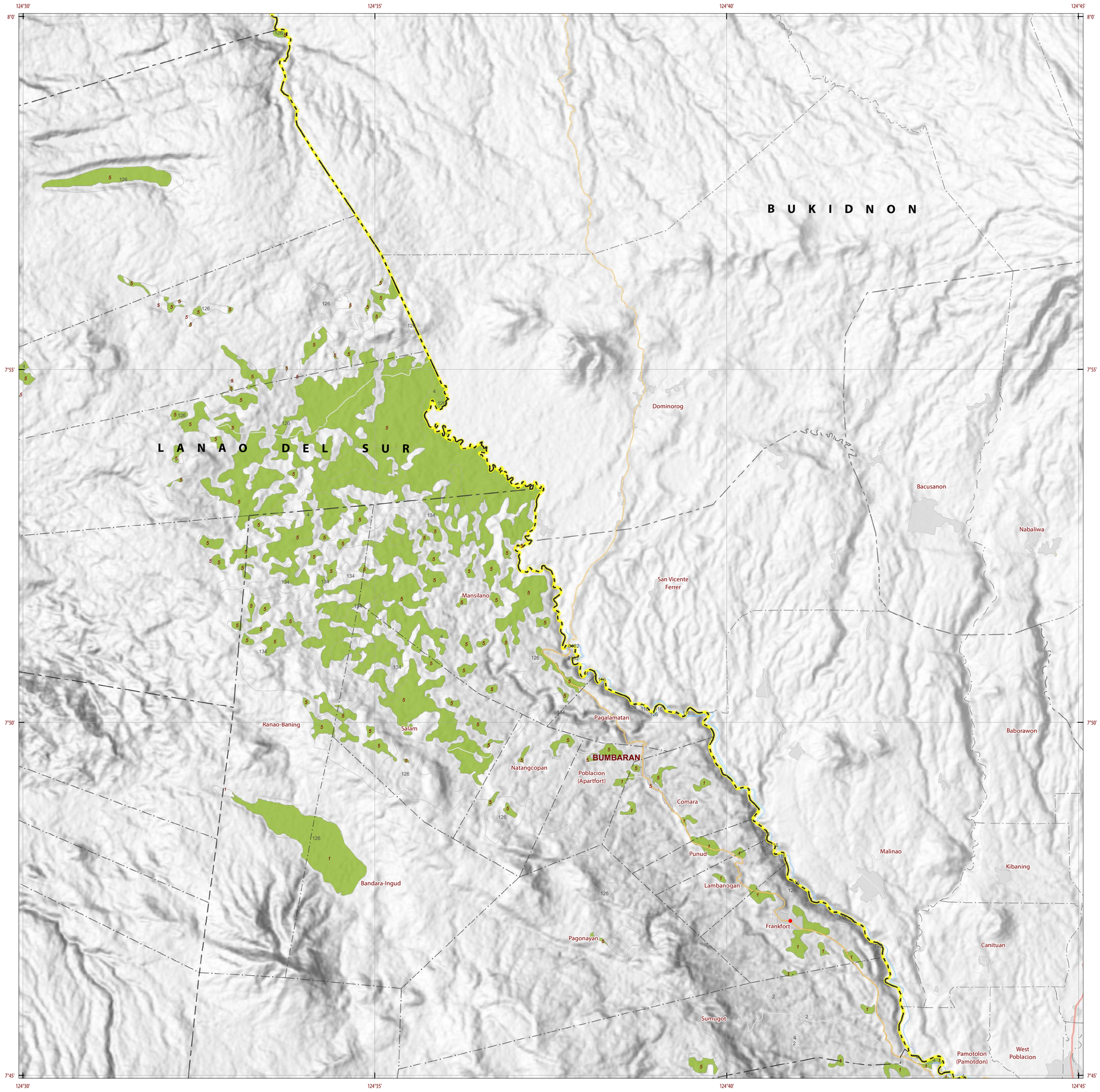
# PROVINCE OF LANAO DEL SUR






DEPARTMENT OF AGRICULTURE 1898

# LAND SUITABILITY MAP CASSAVA

## 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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*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

**3916-IV**

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

## INDEX MAP

## MISCELLANEOUS INFORMATION

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# PROVINCE OF LANAO DEL SUR

DEPARTMENT OF AGRICULTURE 1898

# LAND SUITABILITY MAP CASSAVA

## 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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*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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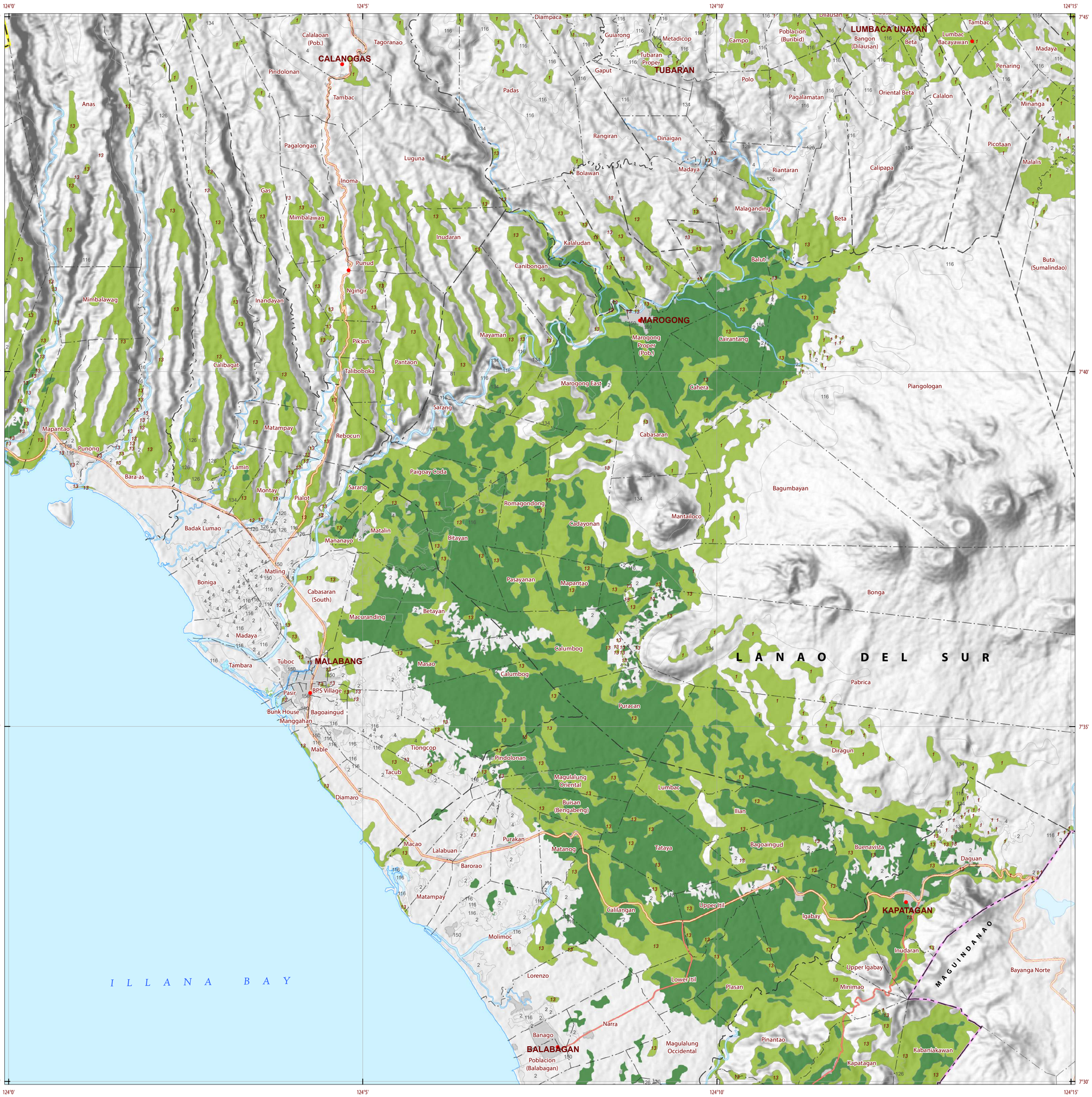


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Cacao

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118 Land use

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Region

Province

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*HYDROLOGY*

Sea / Shoreline

Lakes / Rivers

*PLACES*

Capital City / City

Capital Town / Town

*LAND USE*

Built-up

Fishpond

Mangrove

## ADJOINING SHEETS

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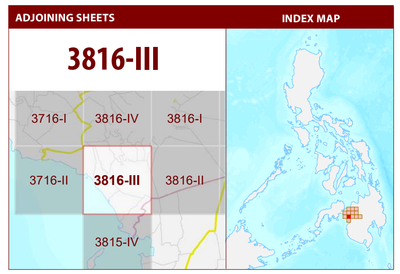


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N W E S

SCALE 1 : 50 000

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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

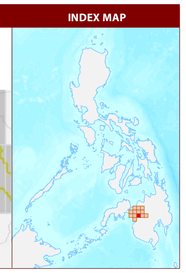
3816-II

3816-IV 3816-I 3916-IV

3816-III 3816-II 3916-III

3815-IV

## INDEX MAP



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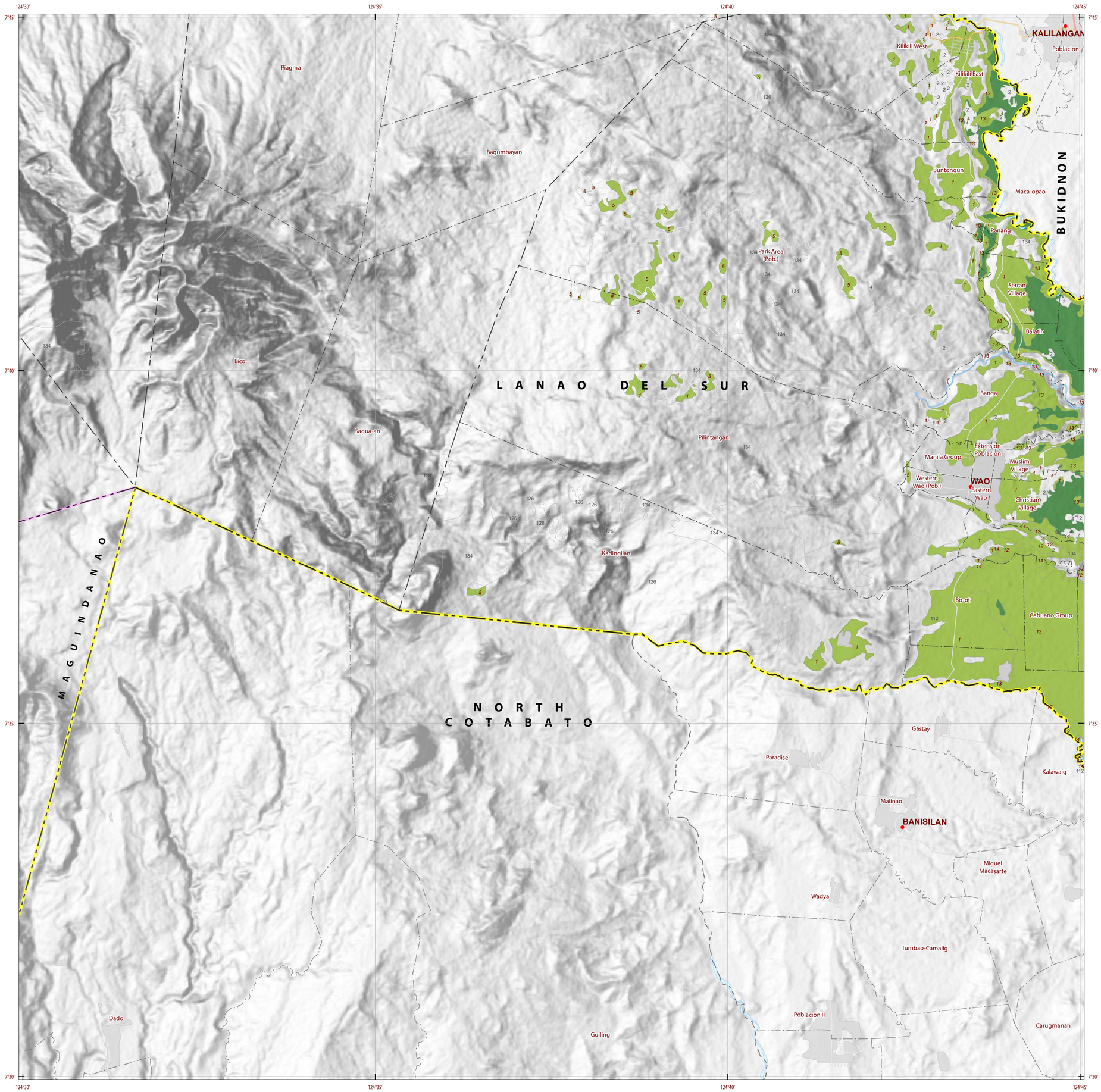


# LAND SUITABILITY MAP CASSAVA

## 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

Land limitation

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

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# LAND SUITABILITY MAP CASSAVA

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N W E S

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0 0.5 1 2 3 Miles

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**Not Suitable/ Not Relevant**

*OTHER SIGNS*

NGP Areas

Cacao

1 Land limitation

11 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

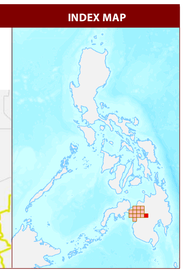
**3916-II**

3916-IV

3916-III

3916-II

## INDEX MAP



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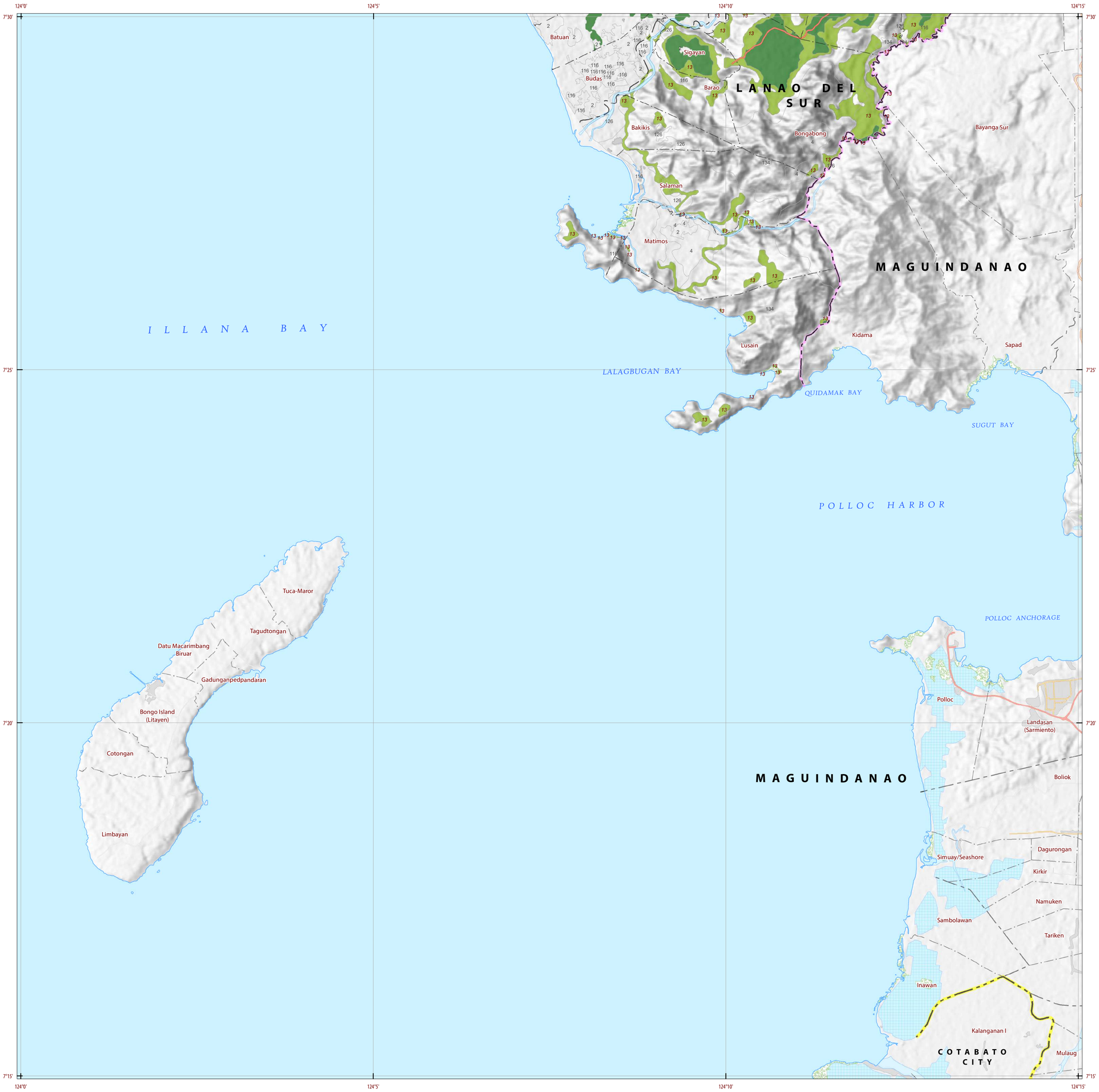
# PROVINCE OF LANAO DEL SUR






## LAND SUITABILITY MAP
## CASSAVA

### 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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*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

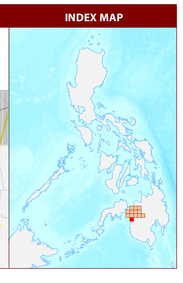
## ADJOINING SHEETS

3815-IV

3716-II 3816-III 3816-II

3815-IV

## INDEX MAP



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