

# **LAND SUITABILITY MAP**

## **CACAO**

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

### **PROVINCE OF SULU**



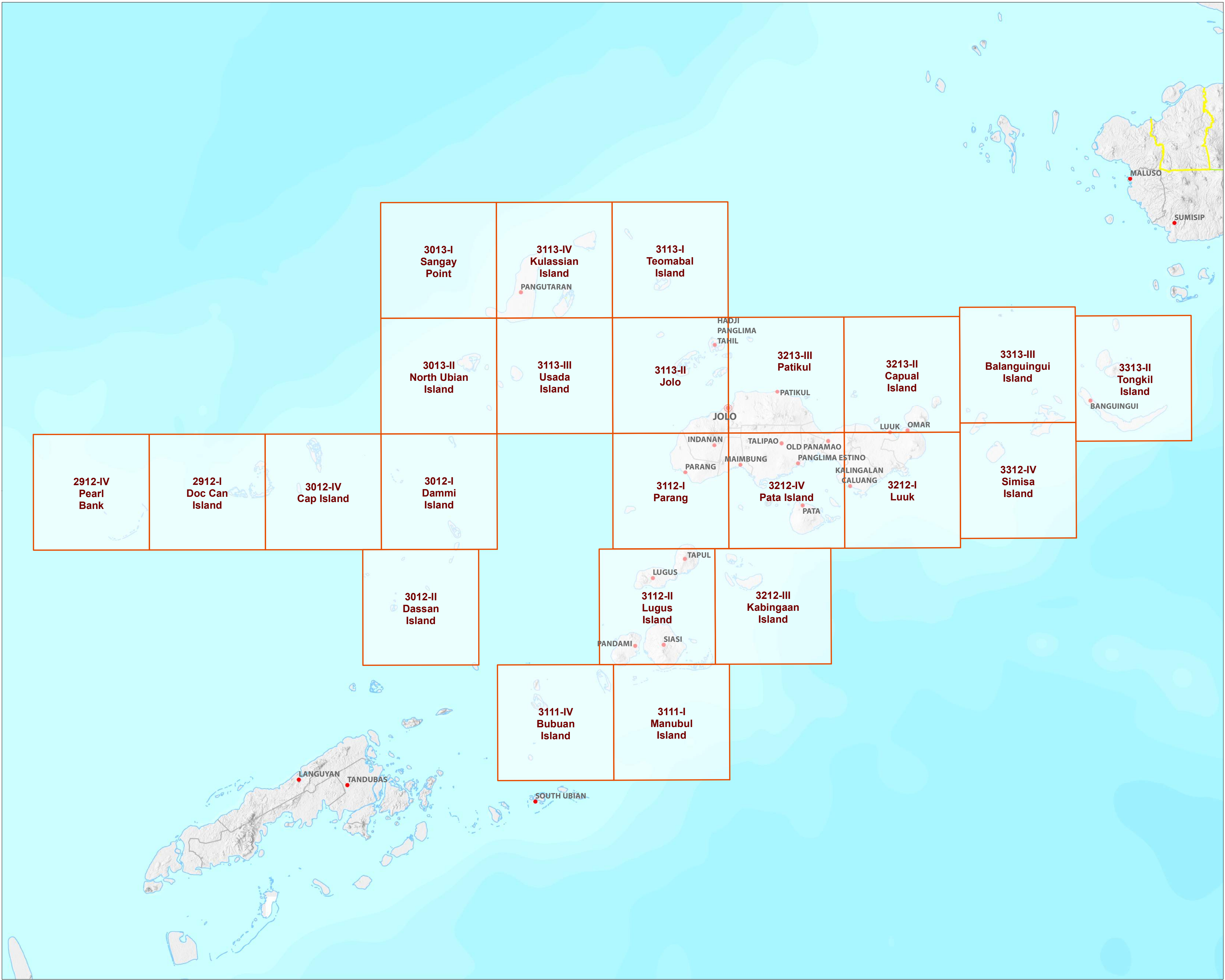
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# MAP INDEX

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



**LEGEND**

**Places**

- ★ Capital City
- ★ City
- Capital Town
- Town

**Administrative Boundary**

- Regional
- Provincial
- City
- Municipal

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**Topographic Relief**

**Bathymetry**



**MISCELLANEOUS INFORMATION**

Land suitability information 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 SULU, 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			
HADJI PANGLIMA TAHIL	-	-	-	-	-	-	-	-	64	-	-	-	-	-	-	-	64
INDANAN	-	-	-	-	6,447	-	6	-	860	-	146	-	-	-	-	-	7,459
JOLO	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	11
KALINGALAN CALUANG	-	-	-	-	3,565	-	-	-	1,846	-	-	-	-	-	-	-	5,411
LUGUS	-	-	-	-	1,666	-	-	-	1,112	-	-	-	-	-	-	-	2,779
LUUK	-	-	-	-	3,444	-	-	-	3,483	-	-	-	-	-	-	-	6,928
MAIMBUNG	-	-	-	-	2,863	-	-	-	287	-	912	-	-	-	-	-	4,062
OLD PANAMAO	-	-	-	-	3,720	-	31	-	1,422	-	533	-	-	-	-	-	5,706
OMAR	-	-	-	-	2,547	-	953	-	2,202	-	143	-	-	-	-	-	5,844
PANDAMI	-	-	-	-	1,964	-	-	-	410	-	-	-	-	-	-	-	2,374
PANGLIMA ESTINO	-	-	-	-	935	-	12	-	448	-	850	-	-	-	-	-	2,245
PANGUTARAN	-	-	-	-	9,085	-	-	-	-	-	-	-	-	-	-	-	9,085
PARANG	-	-	-	-	5,704	-	-	-	43	-	367	-	-	-	-	-	6,114
PATA	-	-	-	-	1,738	-	-	-	2,342	-	-	-	-	-	-	-	4,080
PATIKUL	-	-	-	-	7,494	-	121	-	2,380	-	498	-	-	-	-	-	10,493
SIASI	-	-	-	-	4,137	-	-	-	1,537	-	-	-	-	-	-	-	5,675
TALIPAO	-	-	-	-	8,905	-	54	5	1,521	-	4,409	-	-	-	-	-	14,892
TAPUL	-	-	-	-	980	-	-	-	838	-	-	-	-	-	-	-	1,818
TONGKIL	-	-	-	-	656	-	140	-	26	-	52	-	-	-	-	-	873
Total Area (Ha)	-	-	-	-	65,860	-	1,317	5	20,821	-	7,909	-	-	-	-	-	95,912

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

### 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

EI2 - 1000m - 1500m  
EI3 - > 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
1	EI2-Sh2-Rc2	11	T3-E3-Sh3-Rc2
2	F2-Tc	12	T3-EI2-E3-Sh3-Rc2
3	F3-D2	13	T3-F3-D2
4	T2	14	T3
5	T2-E3	15	T3-E3
6	T2-E3-Sh2-Rc2	16	T3-E3-Sh3-Rc3
7	T2-EI2-E3-Sh2-Rc2	17	T3-EI2-E3-Sh3-Rc3
8	T2-F3-D2	18	T3-EI3
9	T3	19	Tc
10	T3-E3		

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

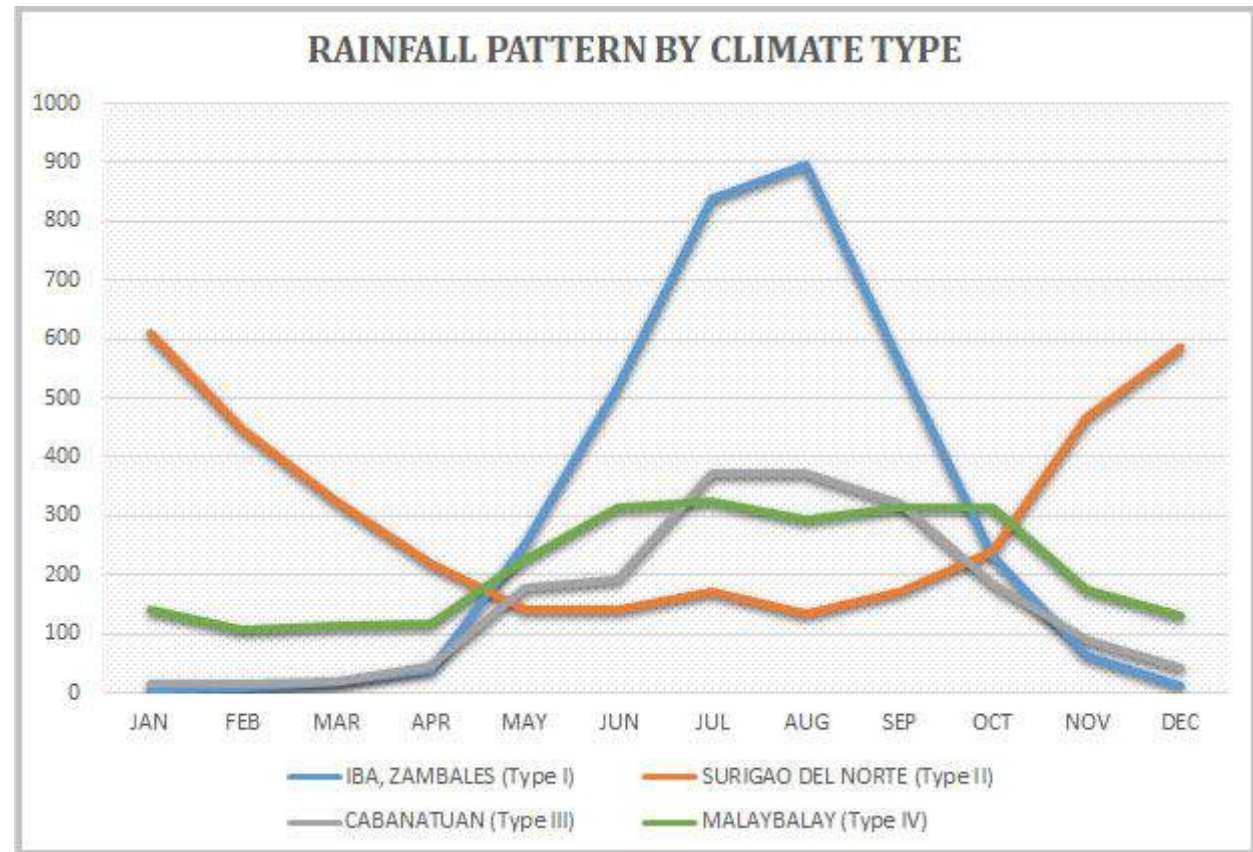
**TYPE I** : Two pronounced season, dry from November to April and wet during the rest of the year. Maximum rain period is from June to September

**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.

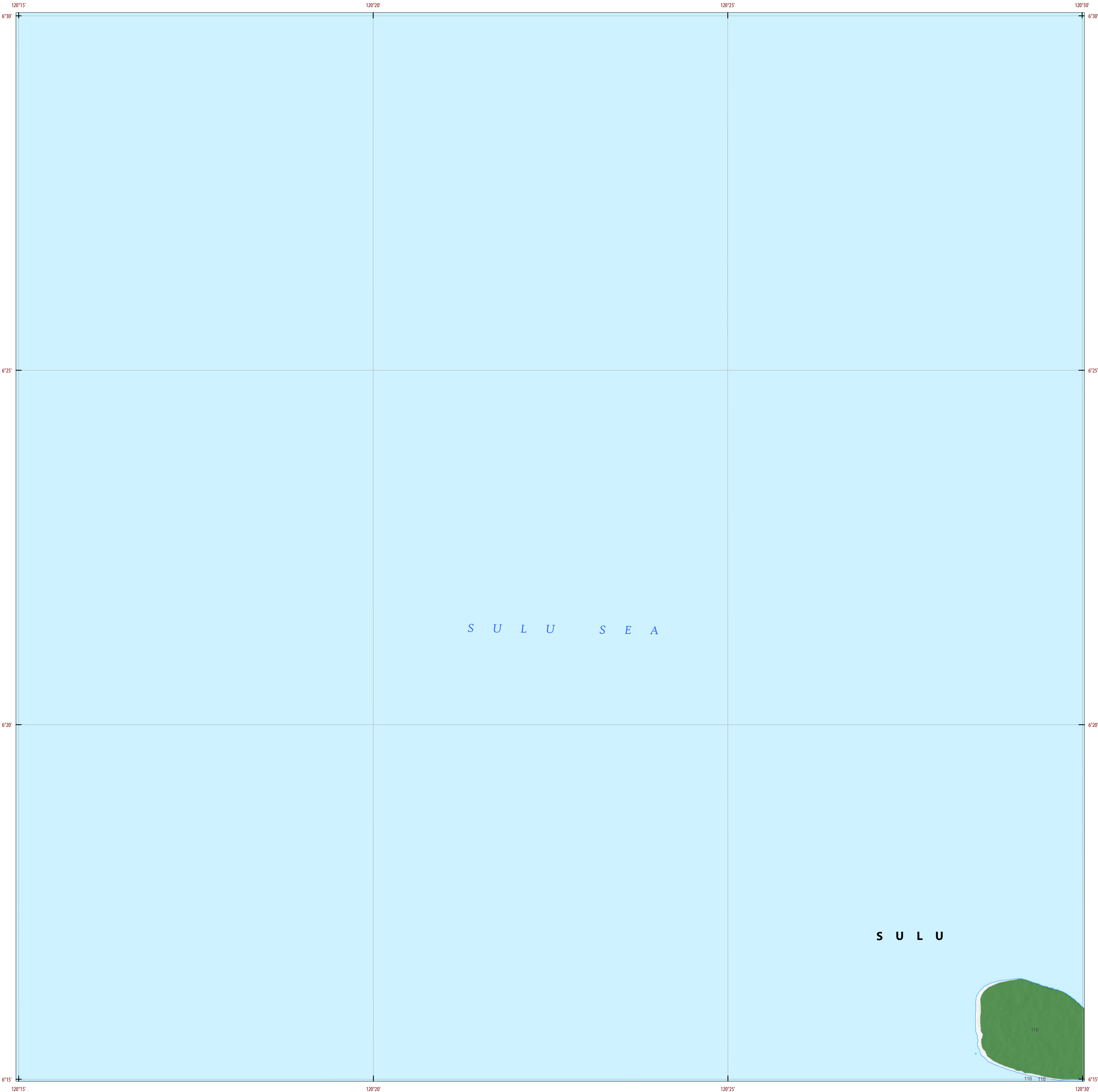
**TYPE IV** : Rainfall is more or less evenly distributed throughout the year. This type resembles Type II since it has no dry season.




Province of Sulu is classified as climate 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>>.

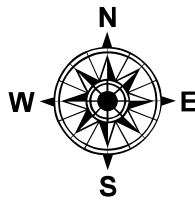




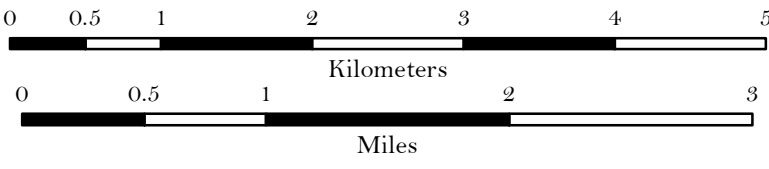


LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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

3013-I



INDEX MAP



MISCELLANEOUS INFORMATION

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: Local Government Unit (LGU) of covered provinces and municipalities

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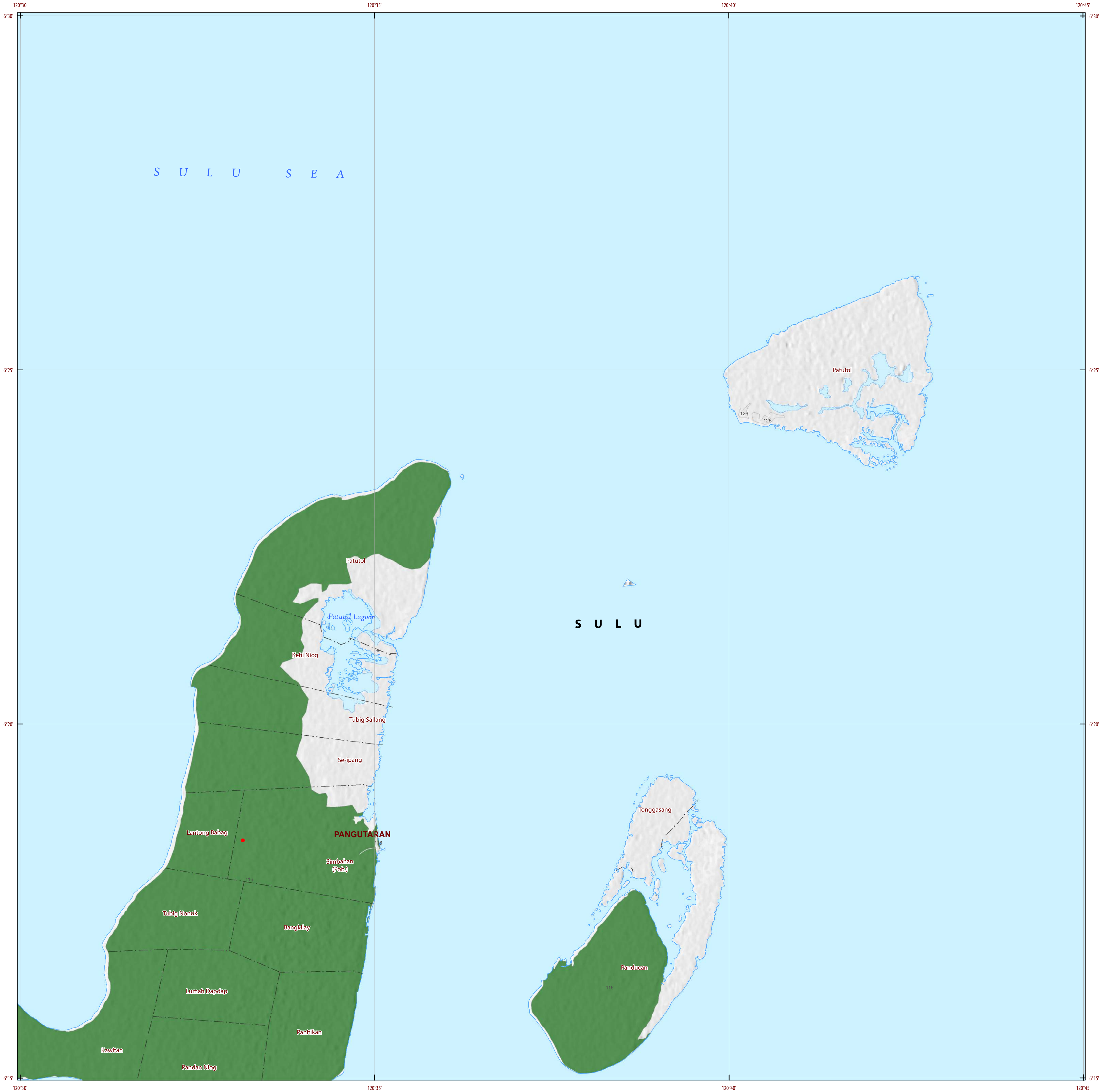
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3113-IV

PROVINCE OF SULU

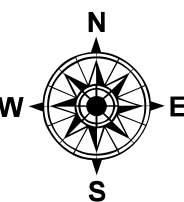
Kulassian Island




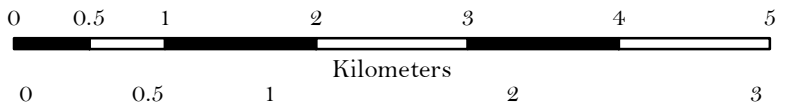


## LAND SUITABILITY MAP CACAO

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



SCALE 1 : 50 000



Universal Transverse Mercator Zone 51 N, PRS 1992 Datum  
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#### 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

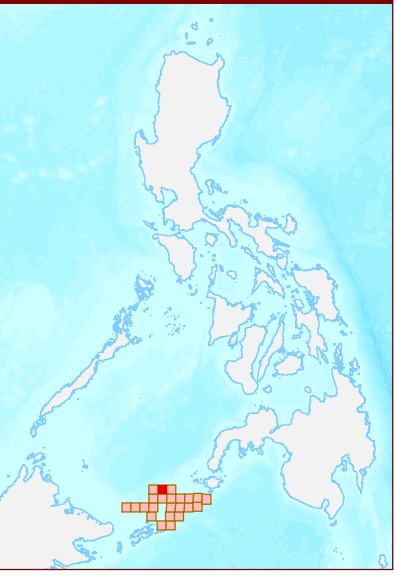
ROADS	BOUNDARY	HYDROLOGY
Expressway	Region	Sea / Shoreline
Trunk line	Province	Lakes / Rivers
Primary	District	<b>PLACES</b>
Secondary	Municipality	Capital City / City
Tertiary	Barangay	Capital Town / Town

**LAND USE**

- Built-up
- Fishpond
- Mangrove

#### ADJOINING SHEETS

**3113-IV**




#### MISCELLANEOUS INFORMATION

**SOURCES OF INFORMATION** : Topographic information taken from NAMRIA Topographic Map at 1:50,000 scale. Land resources information from the Agricultural Land Management and Evaluation Division (ALMED), Soil Survey Division (SSD) and Laboratory Services Division (LSD) of BSWM. Rice areas obtained from the Land Use System (FAO, 2015) and Philippine Rice Information System (PRISM) (IRRI, 2015). Data analysis and compilation through the **Land Resources Evaluation and Suitability Assessment of Strategic Production Areas for Major Commodities Project** implemented by BSWM (2017).

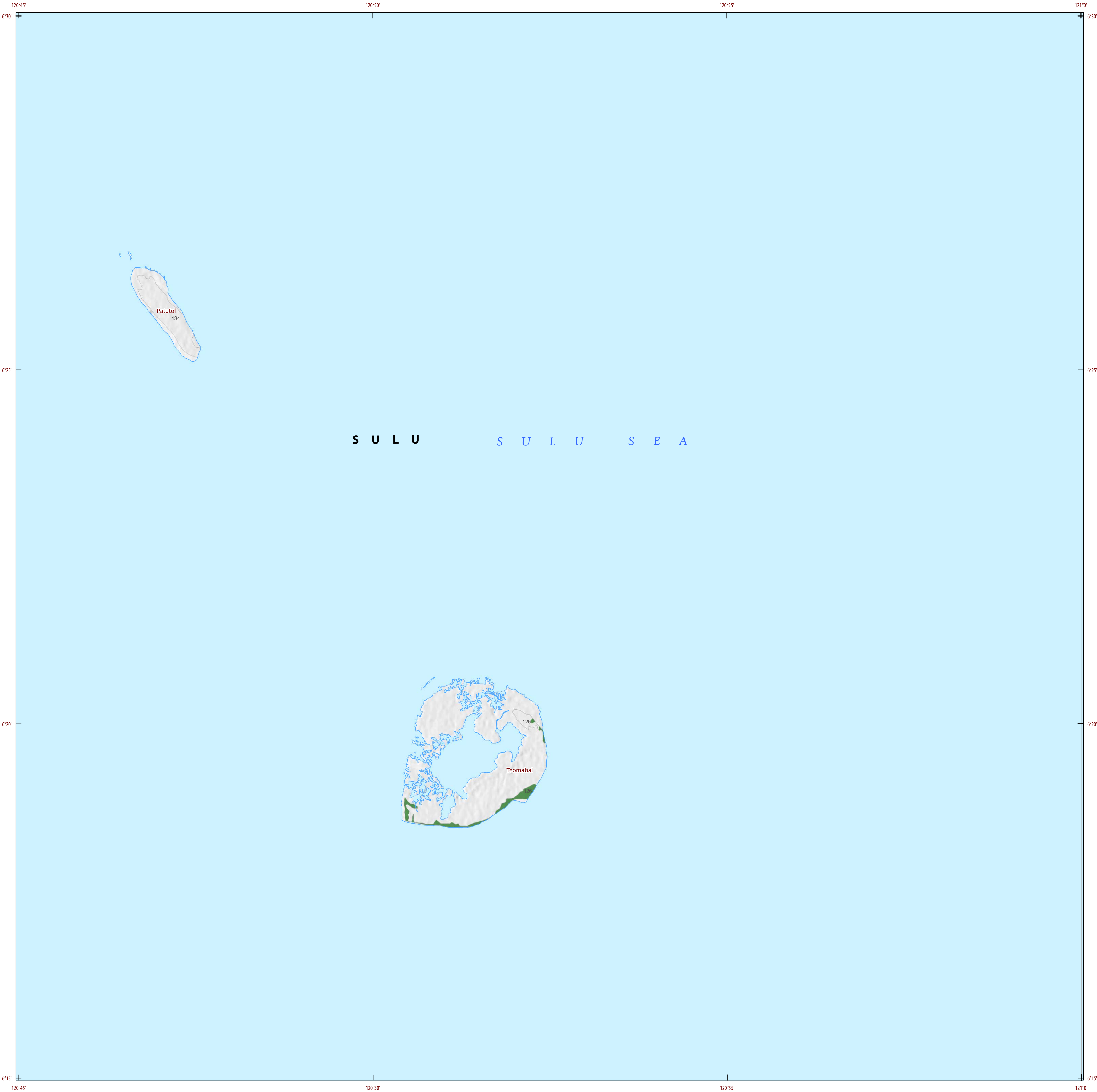
Project Leader : BERNARDO B. PASCUA  
GIS and Cartography : IRVIN K. SAMALCA  
Funding Agency : Department of Agriculture - Bureau of Agricultural Research (DA-BAR)  
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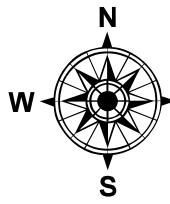






LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000

00.512345

Kilometers

00.5123

Miles

Universal Transverse Mercator Zone 51 N, PRS 1992 Datum  
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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

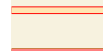
Land limitation


Land use


CONVENTIONAL SIGNS


ROADS

Expressway


Trunk line


Primary

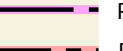
Secondary

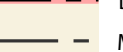
Tertiary

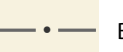
BOUNDARY

Region


Province


District

Municipality


Barangay


HYDROLOGY

Sea / Shoreline

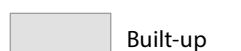
Lakes / Rivers


PLACES


Capital City / City

Capital Town / Town

LAND USE

Built-up

Fishpond

Mangrove

ADJOINING SHEETS

3113-I

3113-IV

3113-I

3113-III

3113-II

3213-III

INDEX MAP



MISCELLANEOUS INFORMATION

SOURCES OF INFORMATION

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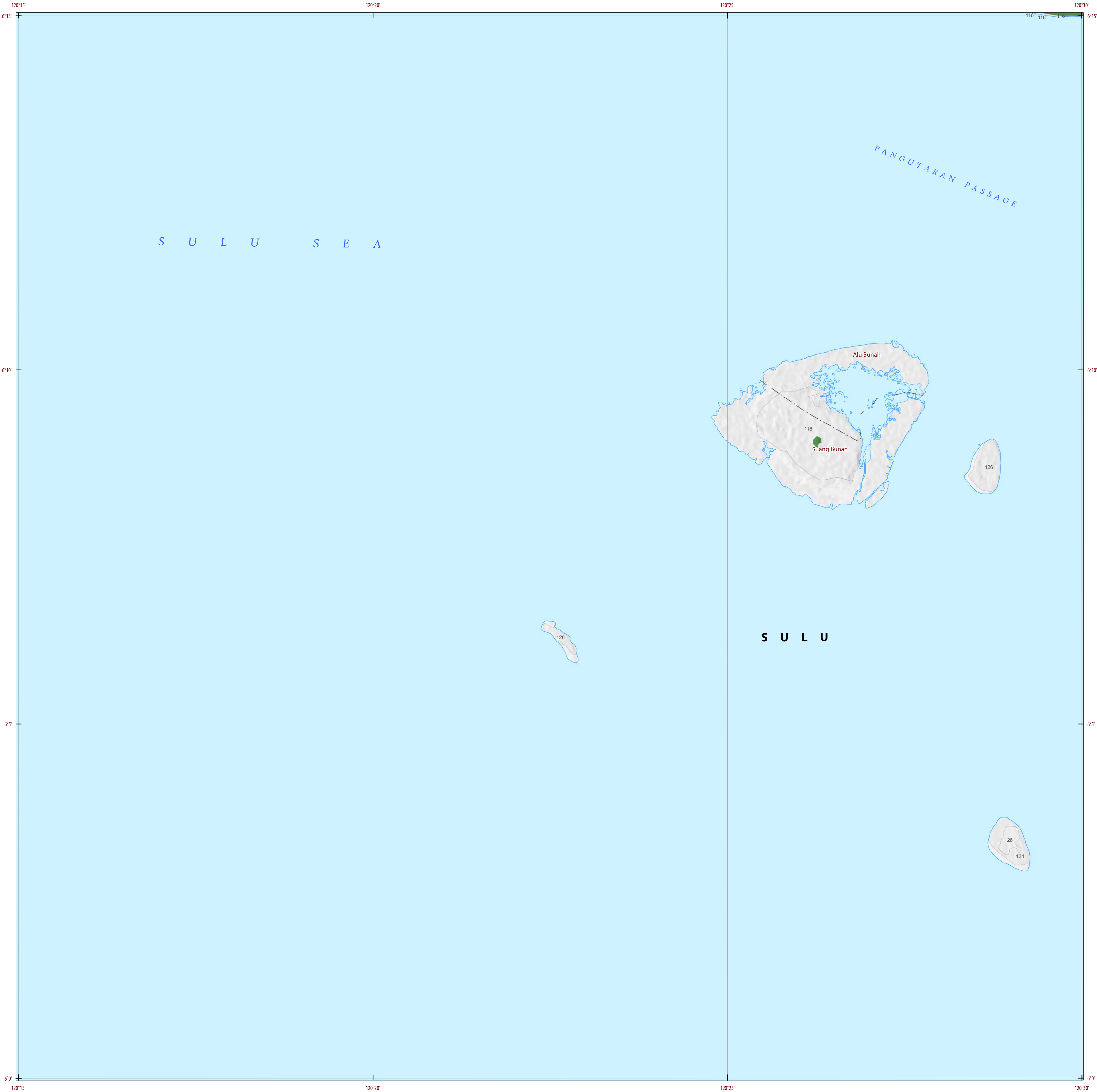
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PROVINCE OF SULU

Sheet 3 of 23

Sheet No. 3113-I





LAND SUITABILITY MAP  
CACAO

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ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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SUITABILITY CLASSES

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- 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**

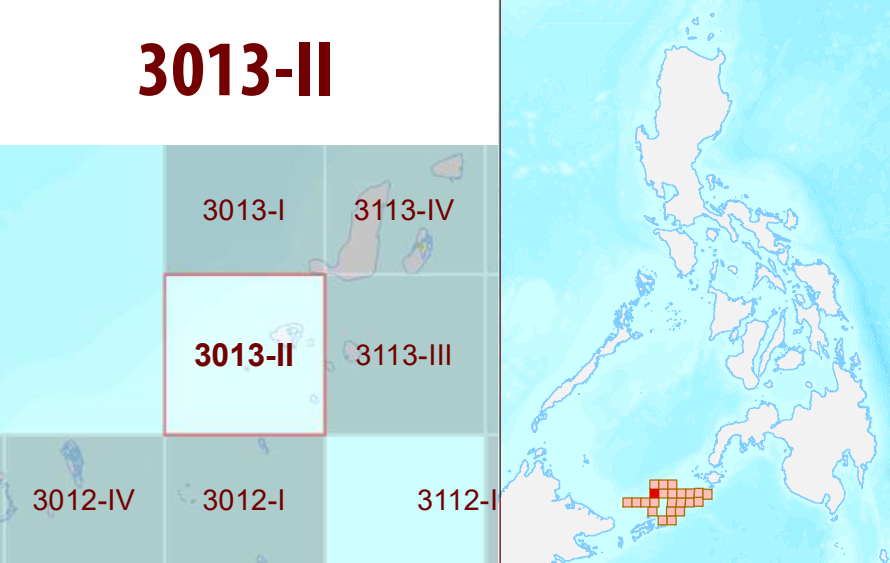
OTHER SIGNS

- 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



MISCELLANEOUS INFORMATION

**SOURCES OF INFORMATION** : Topographic information taken from NAMRIA Topographic Map at 1:50,000 scale. Land resources information from the Agricultural Land Management and Evaluation Division (ALMED), Soils Survey Division (SSD) and Laboratory Services Division (LSD) of BSWM. Rice areas obtained from the Land Use System (FAO, 2015) and Philippine Rice Information System (PRISM) (IRRI, 2015). Data analysis and compilation through the **Land Resources Evaluation and Suitability Assessment of Strategic Production Areas for Major Commodities Project** implemented by BSWM (2017).

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GIS and Cartography : IRVIN K. SAMALCA  
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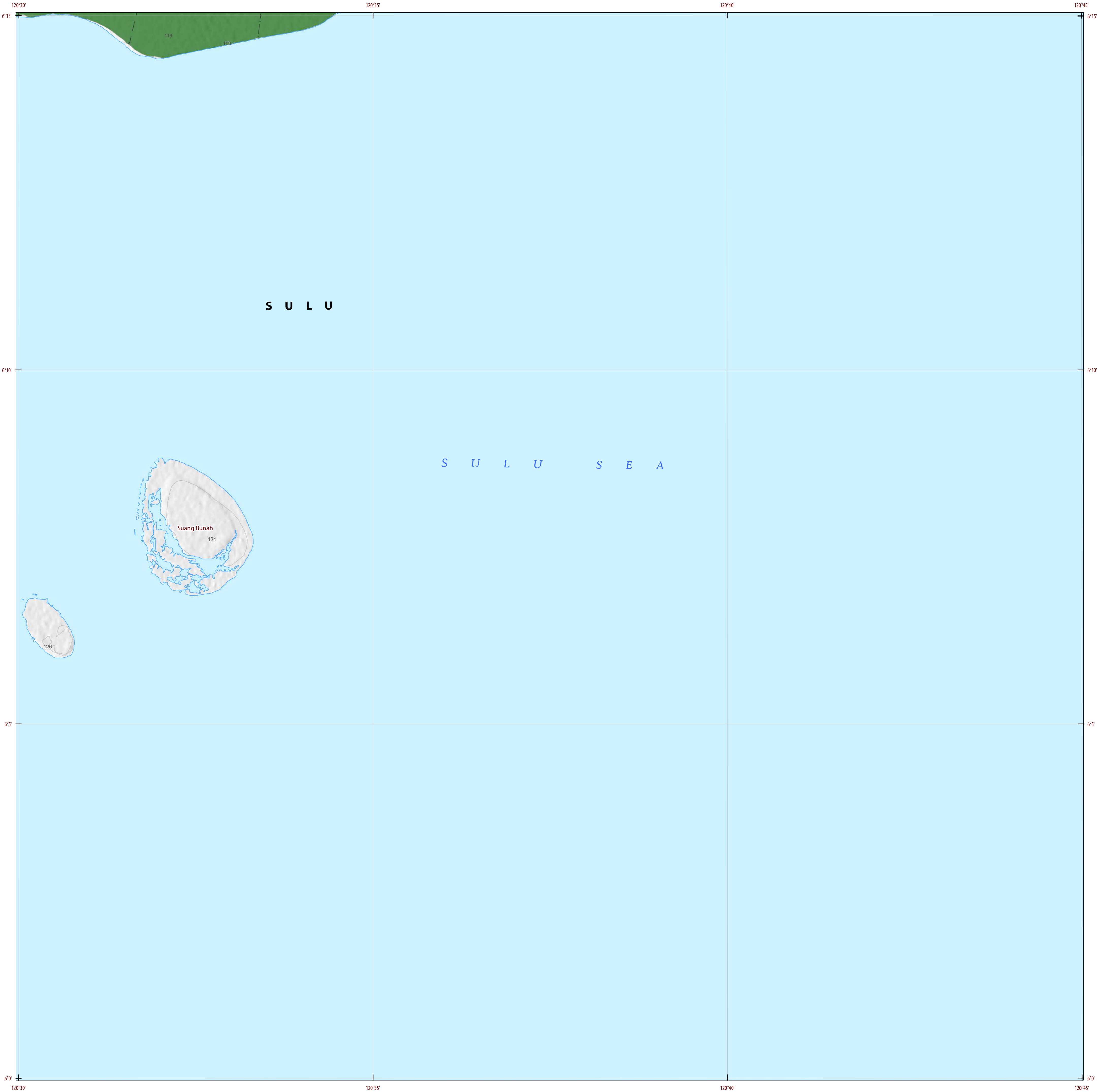
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3113-III

PROVINCE OF SULU

Usada Island



LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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**

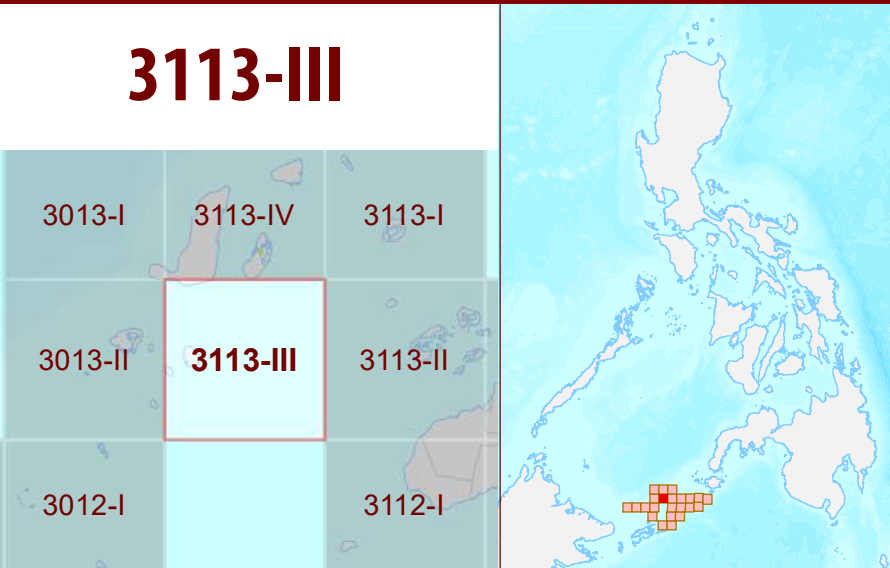
OTHER SIGNS

- NGP Areas
- Cacao
- 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



MISCELLANEOUS INFORMATION

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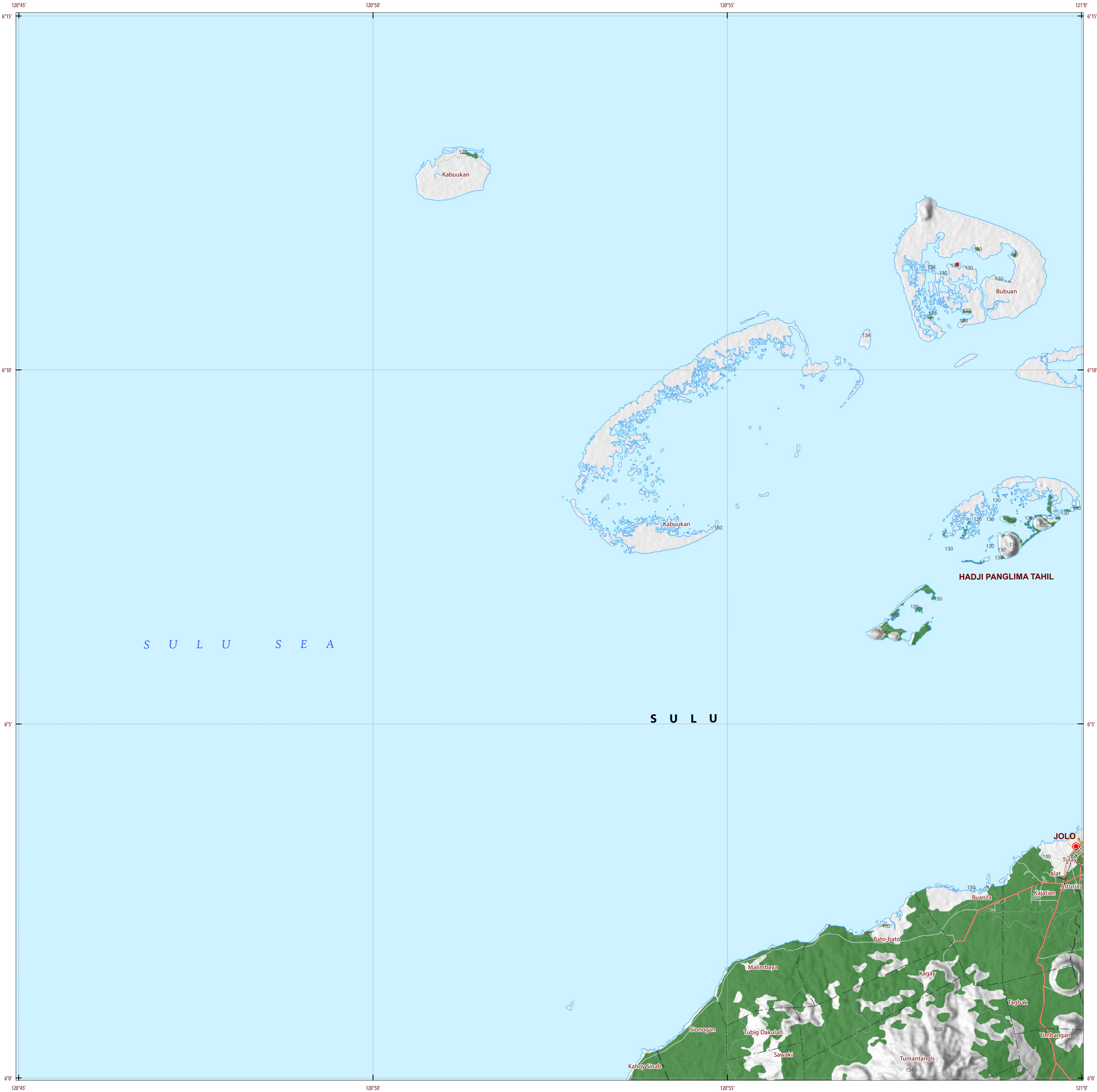
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## LAND SUITABILITY MAP CACAO

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



SCALE 1 : 50 000



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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**Not Suitable/ Not Relevant**

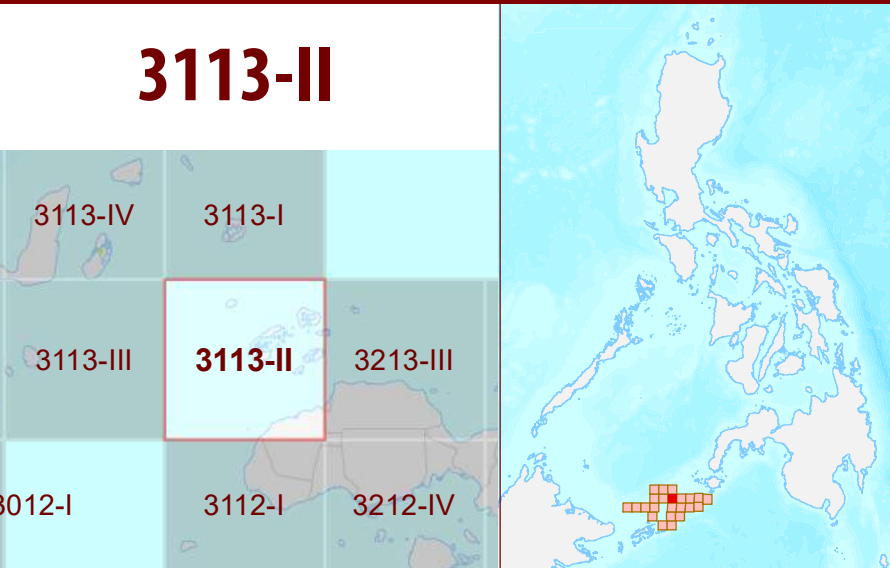
##### OTHER SIGNS

- 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



#### MISCELLANEOUS INFORMATION

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Project Leader : BERNARDO B. PASCUA  
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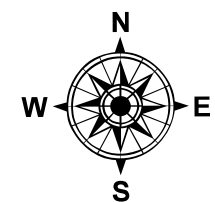
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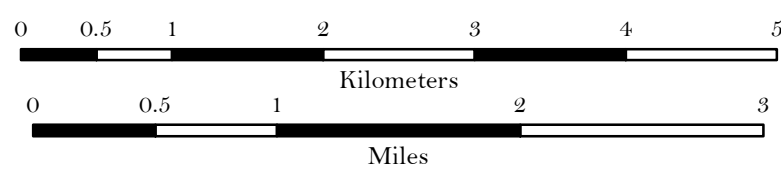
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## LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS



**SCALE 1 : 50 000**



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

### LEGEND

### SUITABILITY CLASSES

- |    |  |
|----|--|
| S1 | <b>Highly Suitable</b> - 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 | <b>Moderately Suitable</b> - 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 application of a given use from the use, although still attractive, will be appreciably inferior to that expected on class S1 land. |
| S3 | <b>Marginally Suitable</b> - 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

- 

## CONVENTIONAL SIGNS

## ROADS

- Express  
Trunk line  
Primary  
Secondary  
Tertiary

**BOUNDARY**

-  Region  
 Province  
 Sea / Shoreline  
 Lakes / Rivers

## PLACES

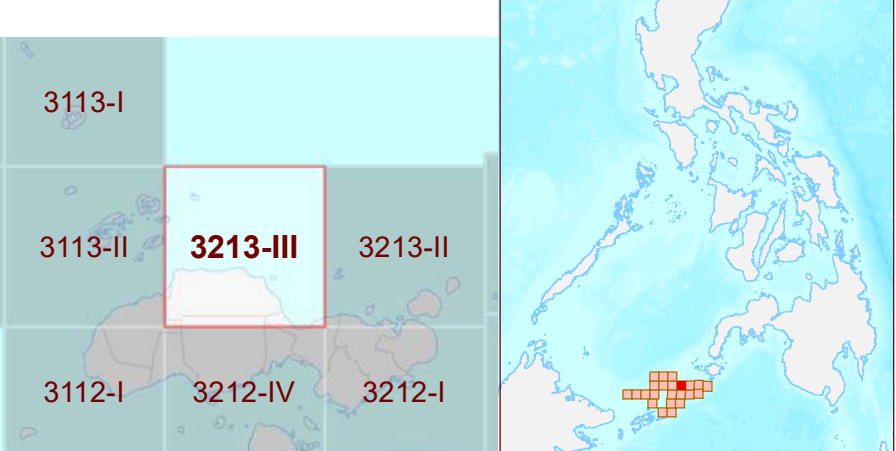
-  ★ Capital City / City  
 ● Capital Town / Town

## LAND USE

-  Built-up  Fishpond  Mangrove

## ADJOINING SHEETS

## 3213-III



### MISCELLANEOUS INFORMATION

**SOURCES OF INFORMATION :** Topographic information taken from NAMRIA Topographic Map at 1:50,000 scale. Land resources information from the Agricultural Land Management and Evaluation Division (ALMED), Soils Survey Division (SSD) and Laboratory Services Division (LSD) of BSWM. Rice areas obtained from the Land Use System (FAO, 2015) and Philippine Rice Information System (PRISM) (IRRI, 2015). Data analysis and compilation through the **Land Resources Evaluation and Suitability Assessment of Strategic Production Areas for Major Commodities Project** implemented by BSWM (2017).


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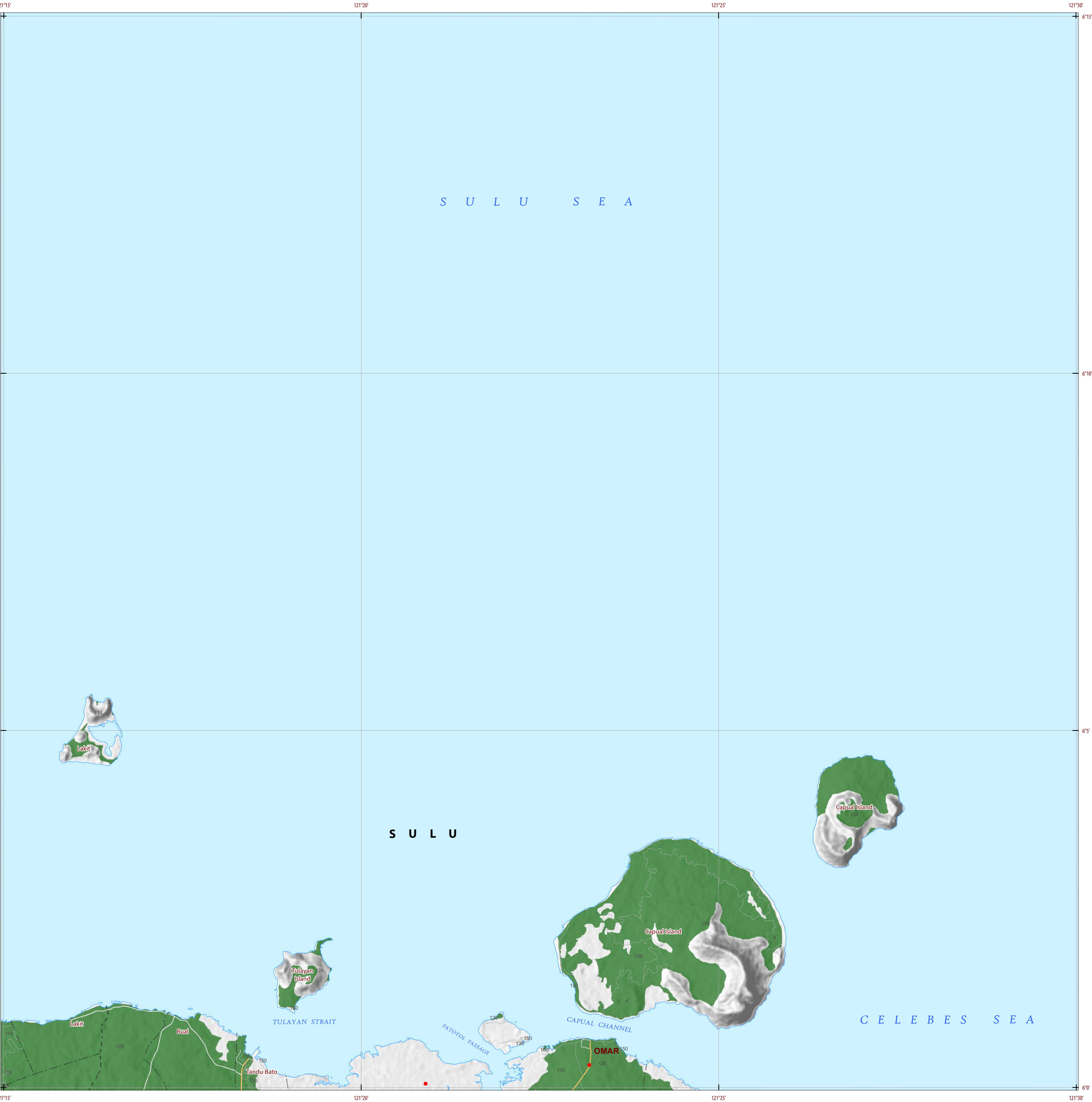
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3213-II

PROVINCE OF SULU

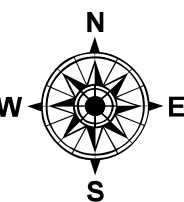
Capual Island



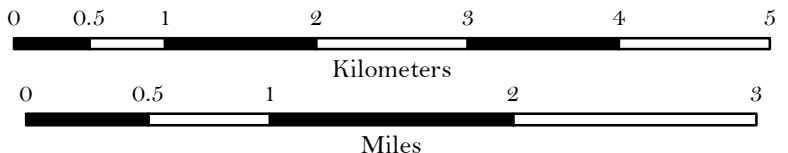


## LAND SUITABILITY MAP CACAO

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



SCALE 1 : 50 000



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

#### INDEX MAP

#### MISCELLANEOUS INFORMATION

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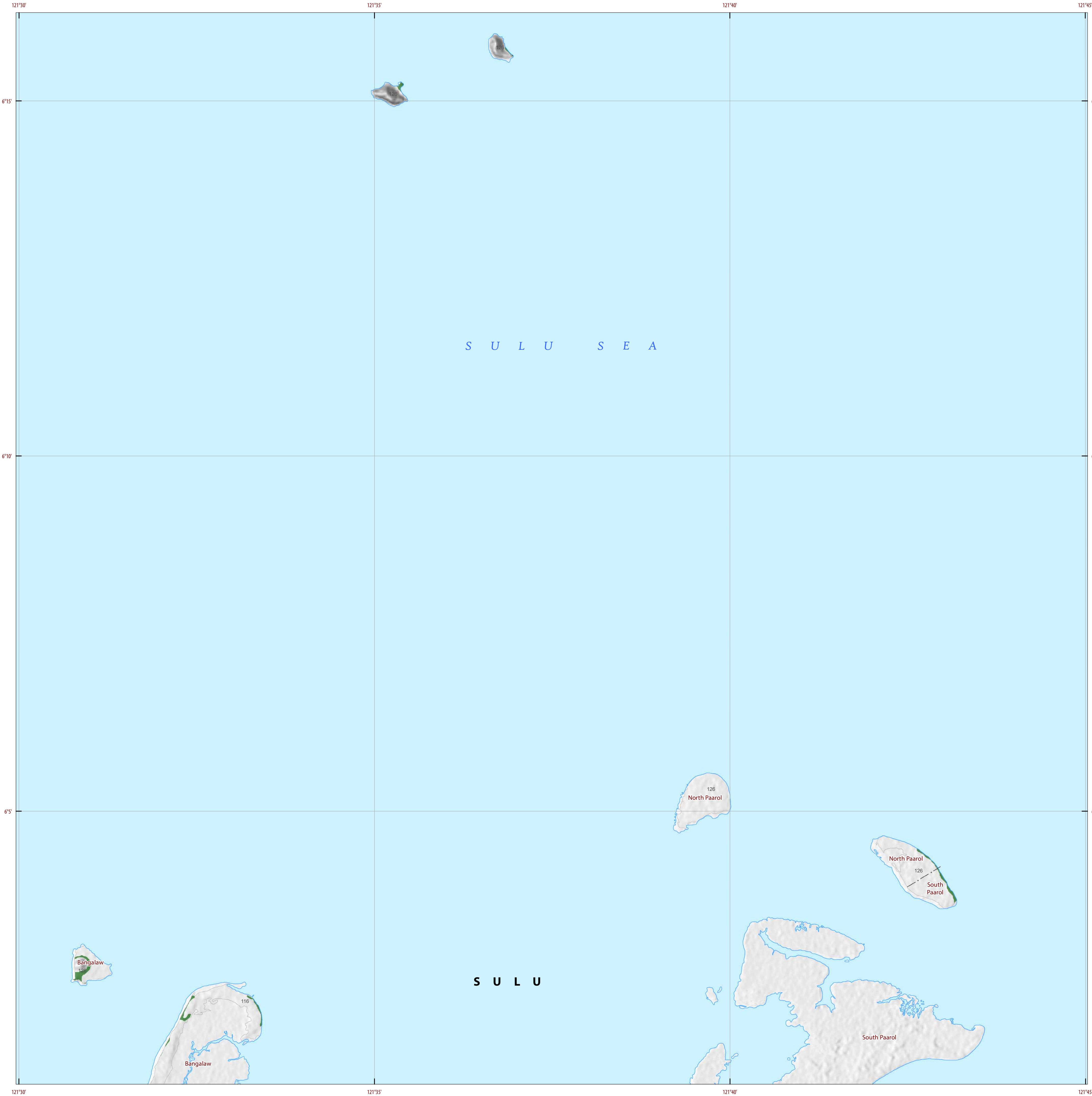
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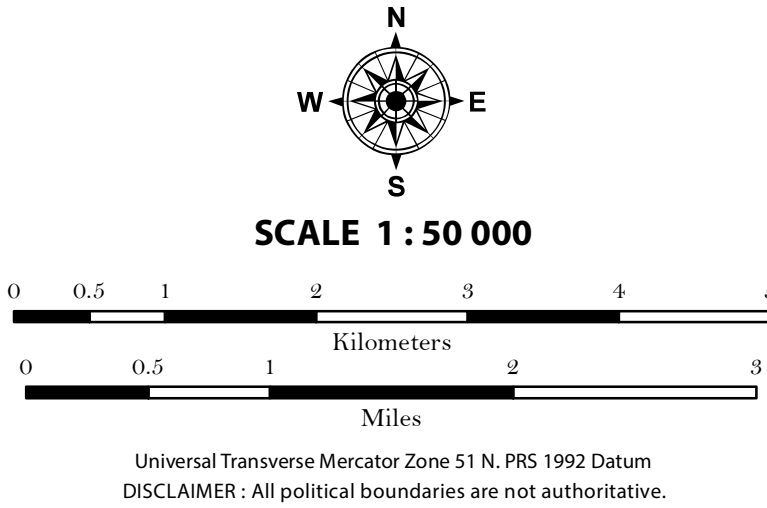
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LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



**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**

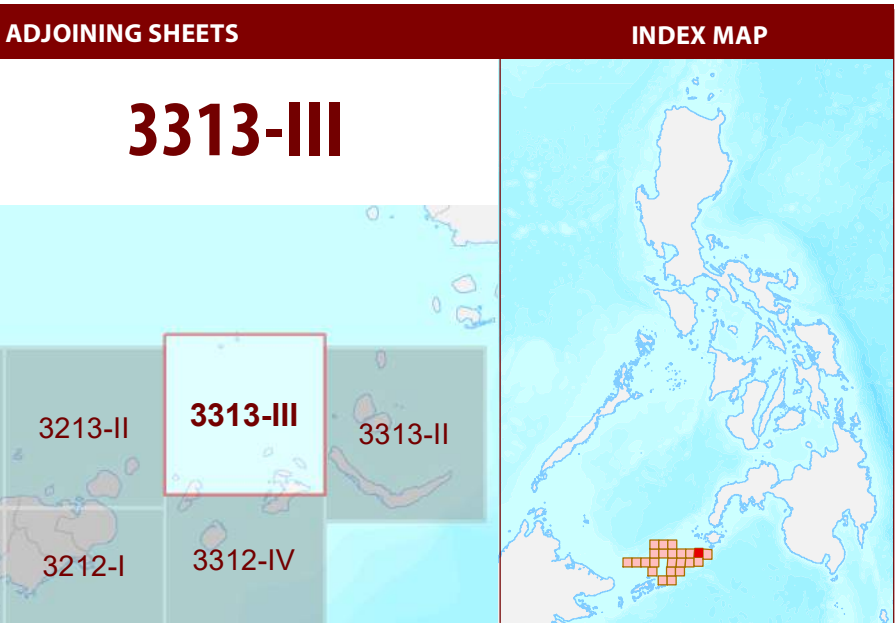
- Sea / Shoreline
- Lakes / Rivers

**PLACES**

- Capital City / City
- Capital Town / Town

**LAND USE**

- Built-up
- Fishpond
- Mangrove



**MISCELLANEOUS INFORMATION**

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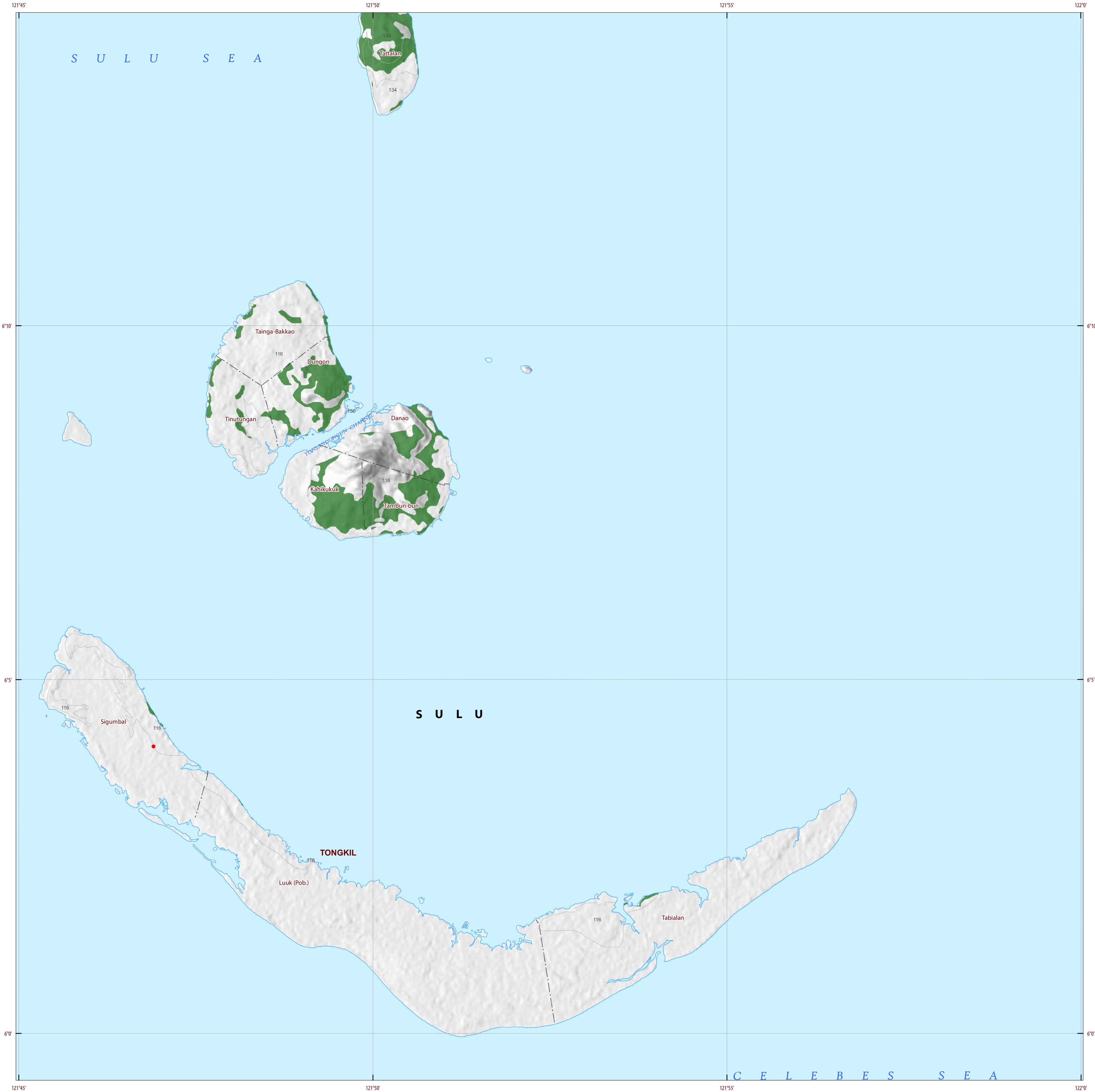
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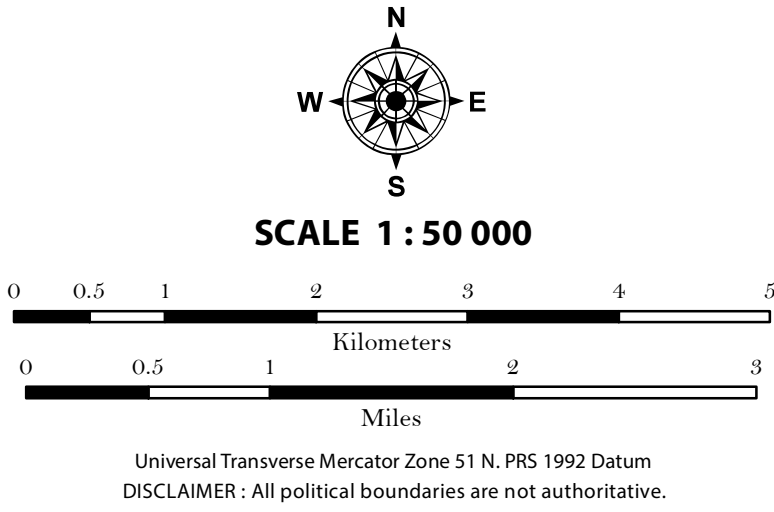
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LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



**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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**Not Suitable/ Not Relevant**

**OTHER SIGNS**

- NGP Areas
- Cacao
- Land limitation
- Land use

**CONVENTIONAL SIGNS**

<b>ROADS</b>	<b>BOUNDARY</b>	<b>HYDROLOGY</b>
Expressway	Region	Sea / Shoreline
Trunk line	Province	Lakes / Rivers
Primary	District	<b>PLACES</b>
Secondary	Municipality	Capital City / City
Tertiary	Barangay	Capital Town / Town

**LAND USE**

- Built-up
- Fishpond
- Mangrove

**ADJOINING SHEETS**

3313-II

3313-III, 3313-IV

**INDEX MAP**

**MISCELLANEOUS INFORMATION**

**SOURCES OF INFORMATION** : Topographic information taken from NAMRIA Topographic Map at 1:50,000 scale. Land resources information from the Agricultural Land Management and Evaluation Division (ALMED), Soils Survey Division (SSD) and Laboratory Services Division (LSD) of BSWM. Rice areas obtained from the Land Use System (FAO, 2015) and Philippine Rice Information System (PRISM) (IRRI, 2015). Data analysis and compilation through the **Land Resources Evaluation and Suitability Assessment of Strategic Production Areas for Major Commodities Project** implemented by BSWM (2017).

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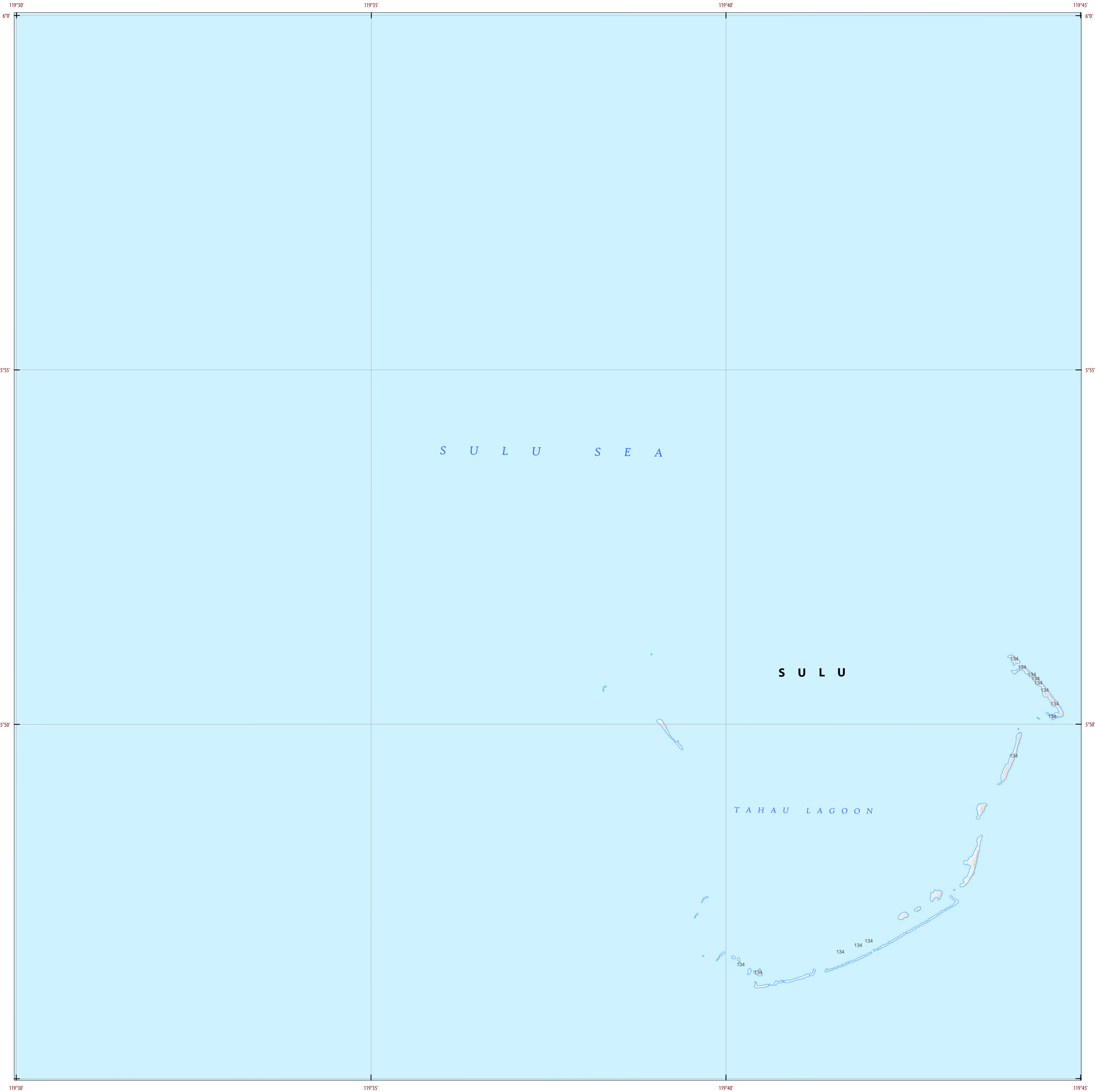
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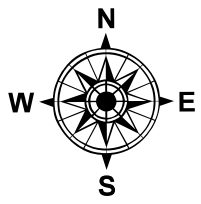
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LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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

LEGEND

SUITABILITY CLASSES

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**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

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MISCELLANEOUS INFORMATION

**SOURCES OF INFORMATION** : Topographic information taken from NAMRIA Topographic Map at 1:50,000 scale. Land resources information from the Agricultural Land Management and Evaluation Division (ALMED), Soils Survey Division (SSD) and Laboratory Services Division (LSD) of BSWM. Rice areas obtained from the Land Use System (FAO, 2015) and Philippine Rice Information System (PRISM) (IRRI, 2015). Data analysis and compilation through the **Land Resources Evaluation and Suitability Assessment of Strategic Production Areas for Major Commodities Project** implemented by BSWM (2017).

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

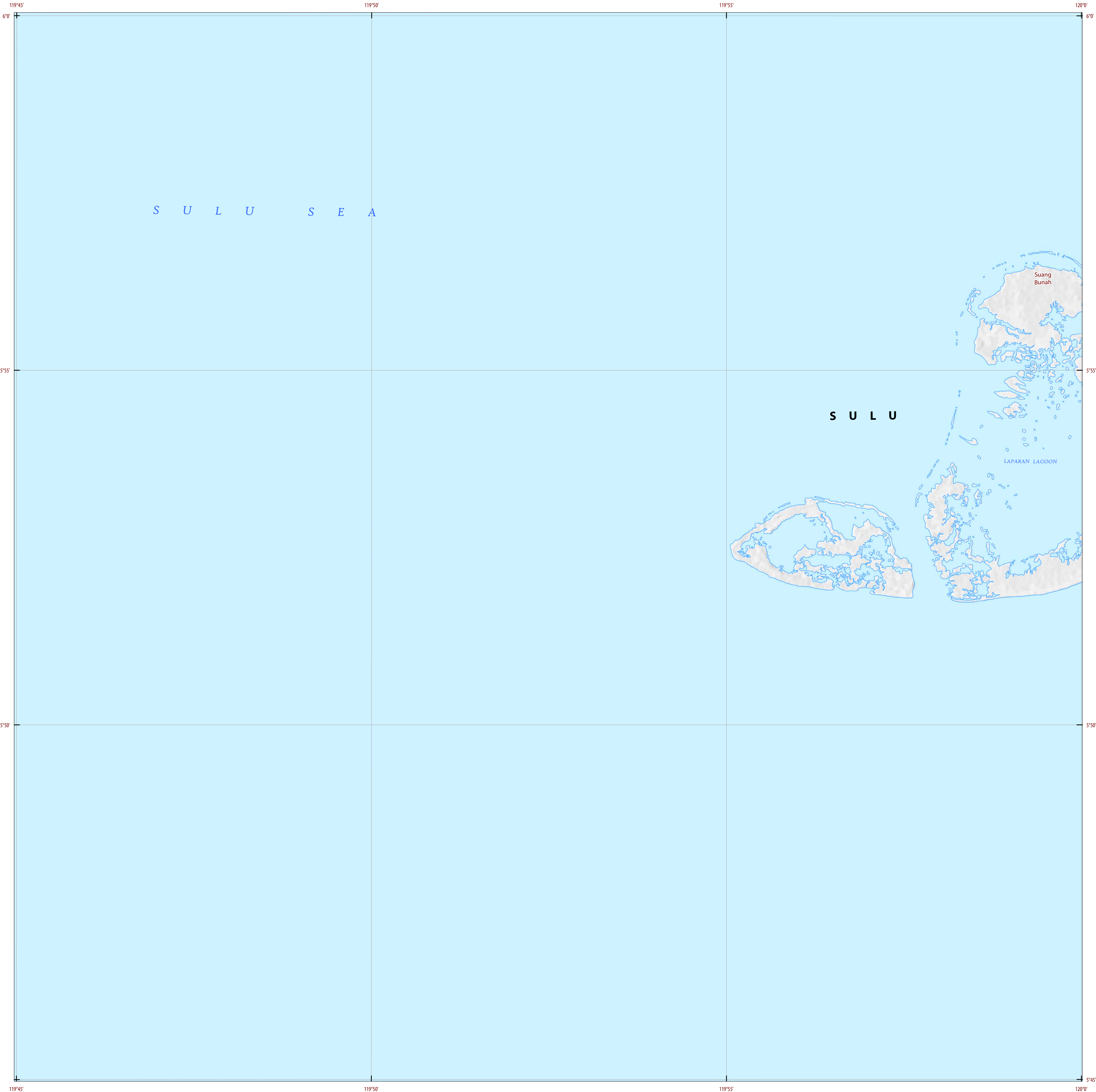
Funding Agency : Department of Agriculture - Bureau of Agricultural Research (DA-BAR)  
Collaborating Agencies : Philippine Council on Agriculture and Fisheries (PCAF)  
: Department of Agriculture and Fisheries - ARMM, Department of Agriculture Regional Field Office of Region IX, X, XI, XII and XIII (Caraga)  
: Local Government Unit (LGU) of covered provinces and municipalities




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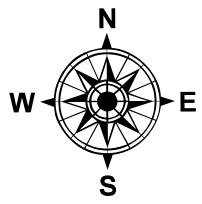




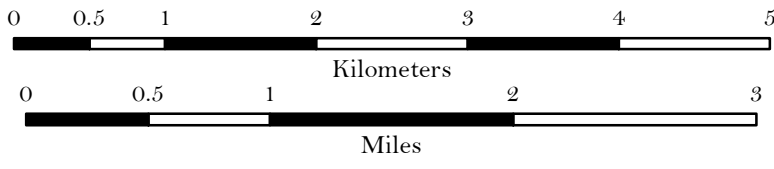


LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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

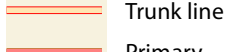
Land limitation

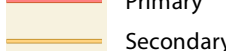
Land use

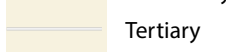
CONVENTIONAL SIGNS


ROADS

Expressway


Trunk line


Primary


Secondary


Tertiary

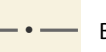
BOUNDARY

Region


Province


District

Municipality


Barangay


HYDROLOGY

Sea / Shoreline

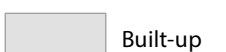
Lakes / Rivers


PLACES


Capital City / City

Capital Town / Town

LAND USE

Built-up

Fishpond

Mangrove

ADJOINING SHEETS

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3012-IV

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MISCELLANEOUS INFORMATION

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PROVINCE OF SULU

Sheet 12 of 23

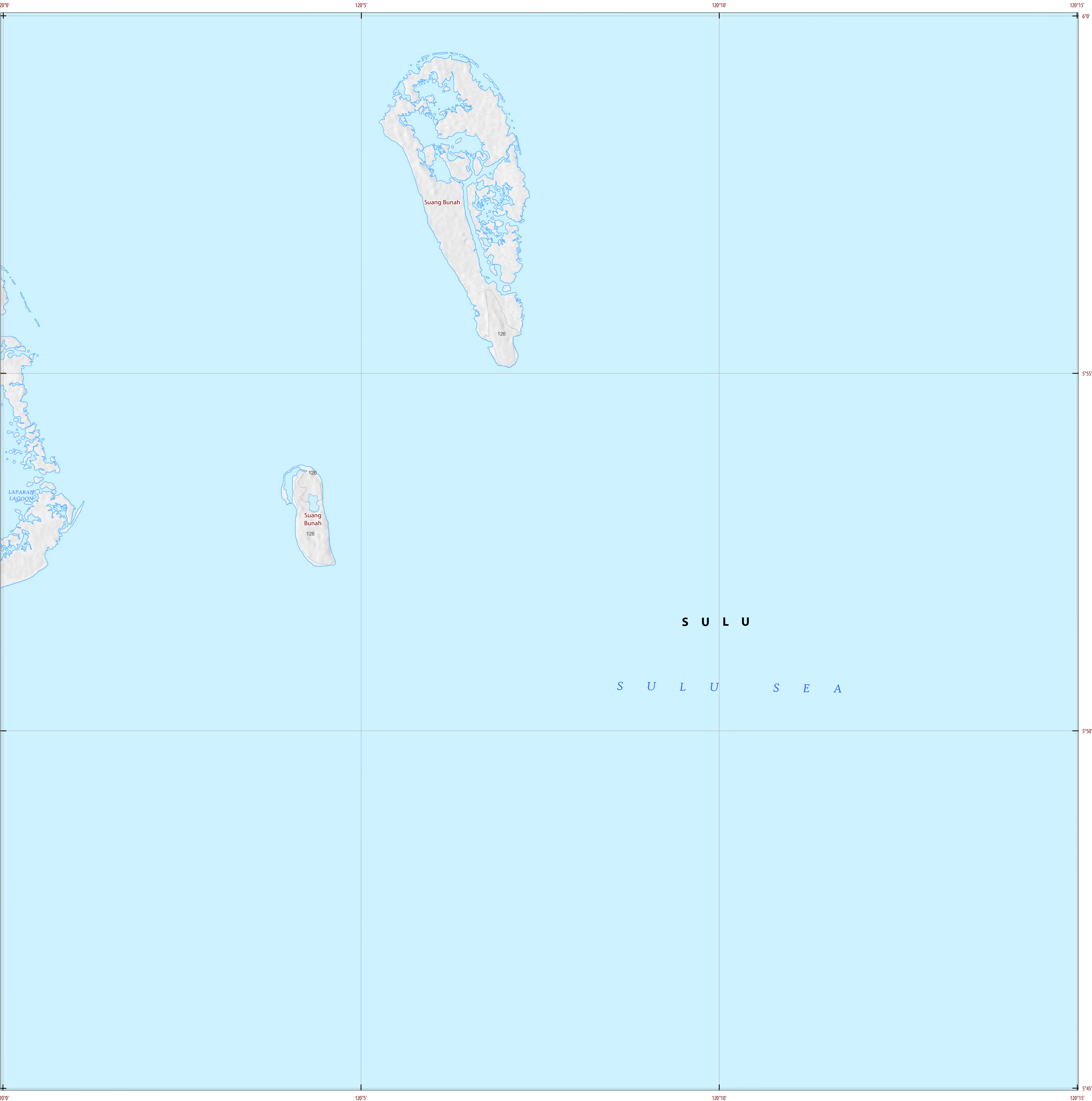
Sheet No. 2912-I




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PROVINCE OF SULU

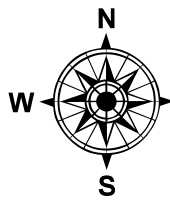
Cap Island





LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000

00.512345

Kilometers

00.5123

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

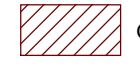
Marginally Suitable


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

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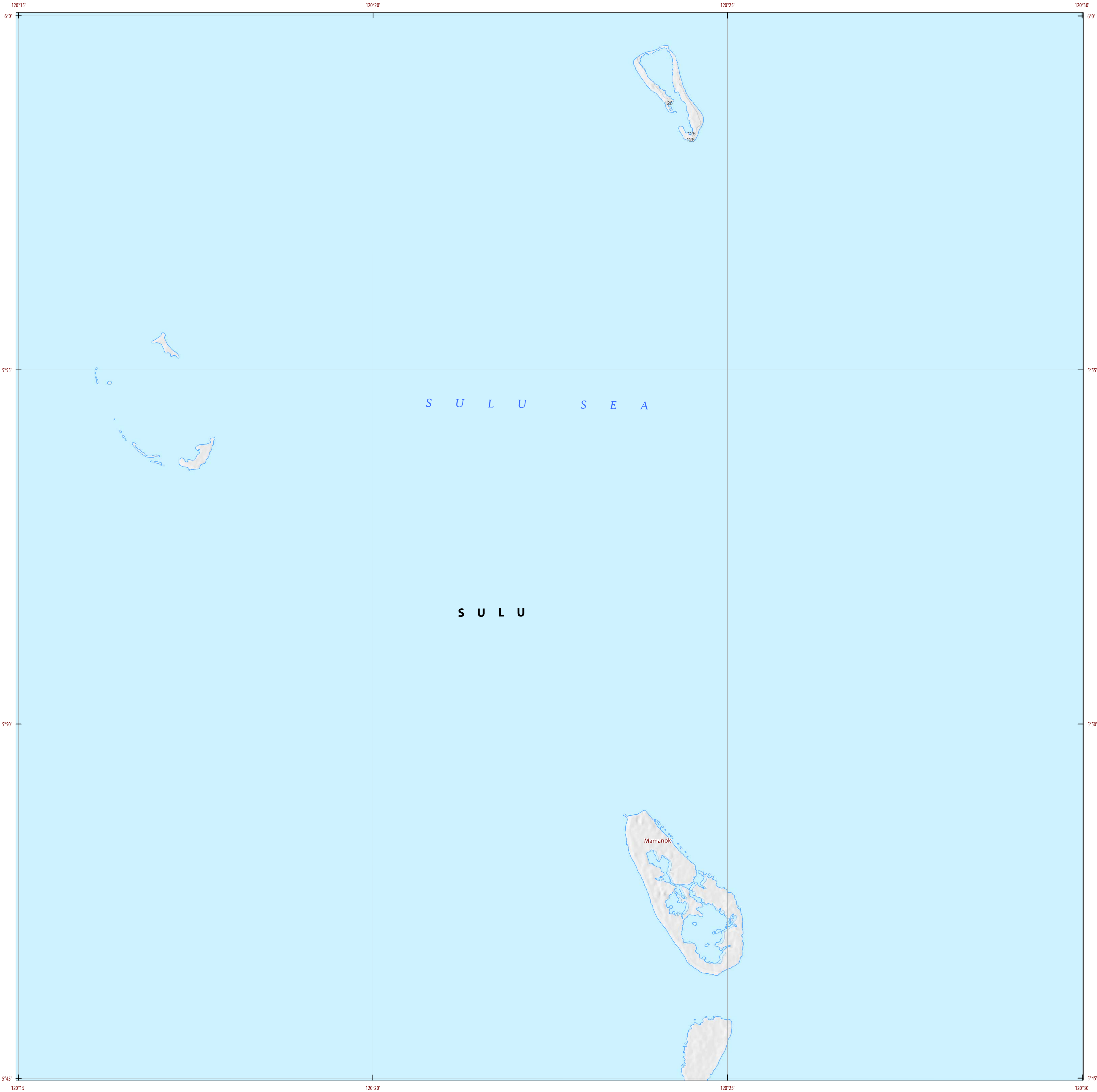
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PROVINCE OF SULU

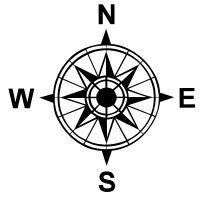
Sheet 13 of 23 Sheet No. 3012-IV





LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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**

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**MISCELLANEOUS INFORMATION**

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Project Leader : BERNARDO B. PASCUA  
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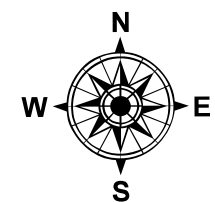
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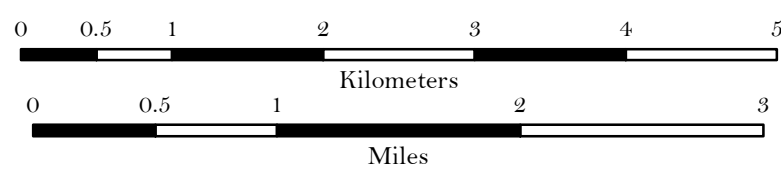
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## LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS



**SCALE 1 : 50 000**



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

### LEGEND

### SUITABILITY CLASSES

- |    |  |
|----|--|
| S1 | <b>Highly Suitable</b> - 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 | <b>Moderately Suitable</b> - 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 application of a given use from the use, although still attractive, will be appreciably inferior to that expected on class S1 land. |
| S3 | <b>Marginally Suitable</b> - 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  
 Sea / Shoreline  
 Lakes / Rivers

## PLACES

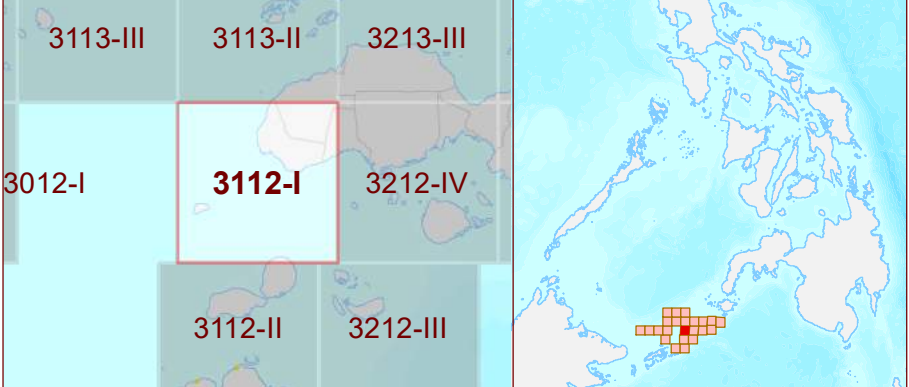
- |           |       |              |     |                     |
|-----------|-------|--------------|-----|---------------------|
| Secondary | — —   | Municipality | ★ ★ | Capital City / City |
| Tertiary  | — • — | Barangay     | ● ● | Capital Town / Town |

## LAND USE

-  Built-up  Fishpond  Mangrove

## ADJOINING SHEETS

# 3112-I




### MISCELLANEOUS INFORMATION

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Project Leader	: BERNARDO B. PASCUA
GIS and Cartography	: IRVIN K. SAMALCA
Funding Agency	: Department of Agriculture - Bureau of Agricultural Research (DA-BAR)
Collaborating Agencies	: Philippine Council on Agriculture and Fisheries (PCAF) : Department of Agriculture and Fisheries - ARMM, Department of : Agriculture Regional Field Office of Region IX, X, XI, XII and XIII (Caraga) : Local Government Unit (LGU) of covered provinces and municipalities

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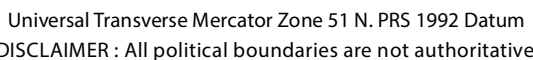
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 Tel/Fax No.: +(632) 332-9534 E-mail: bswmclntcenter@yahoo.com





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



### SUITABILITY CLASSES















### SUITABILITY CLASSES

- ☐
- Not Suitable/ Not Relevant




### OTHER SIGNS

-  NGP Areas  
 Cacao  


## CONVENTIONAL SIGNS

- | ROADS  | BOUNDARY   | HYDROLOGY   |
|--|--|---|
|  Expressway |  Region       |  Sea / Shoreline     |
|  Trunk line |  Province     |  Lakes / Rivers      |
|  Primary    |  District     | <b>PLACES</b>   |
|  Secondary  |  Municipality |  Capital City / City |
|  Tertiary   |  Barangay     |  Capital Town / Town |

LAND USE		
 Built-up	 Fishpond	 Mangrove

## ADJOINING SHEETS

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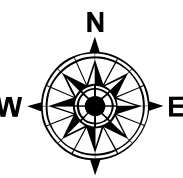






LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000

00.512345

Kilometers

00.5123

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.

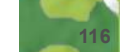
Not Suitable/ Not Relevant

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

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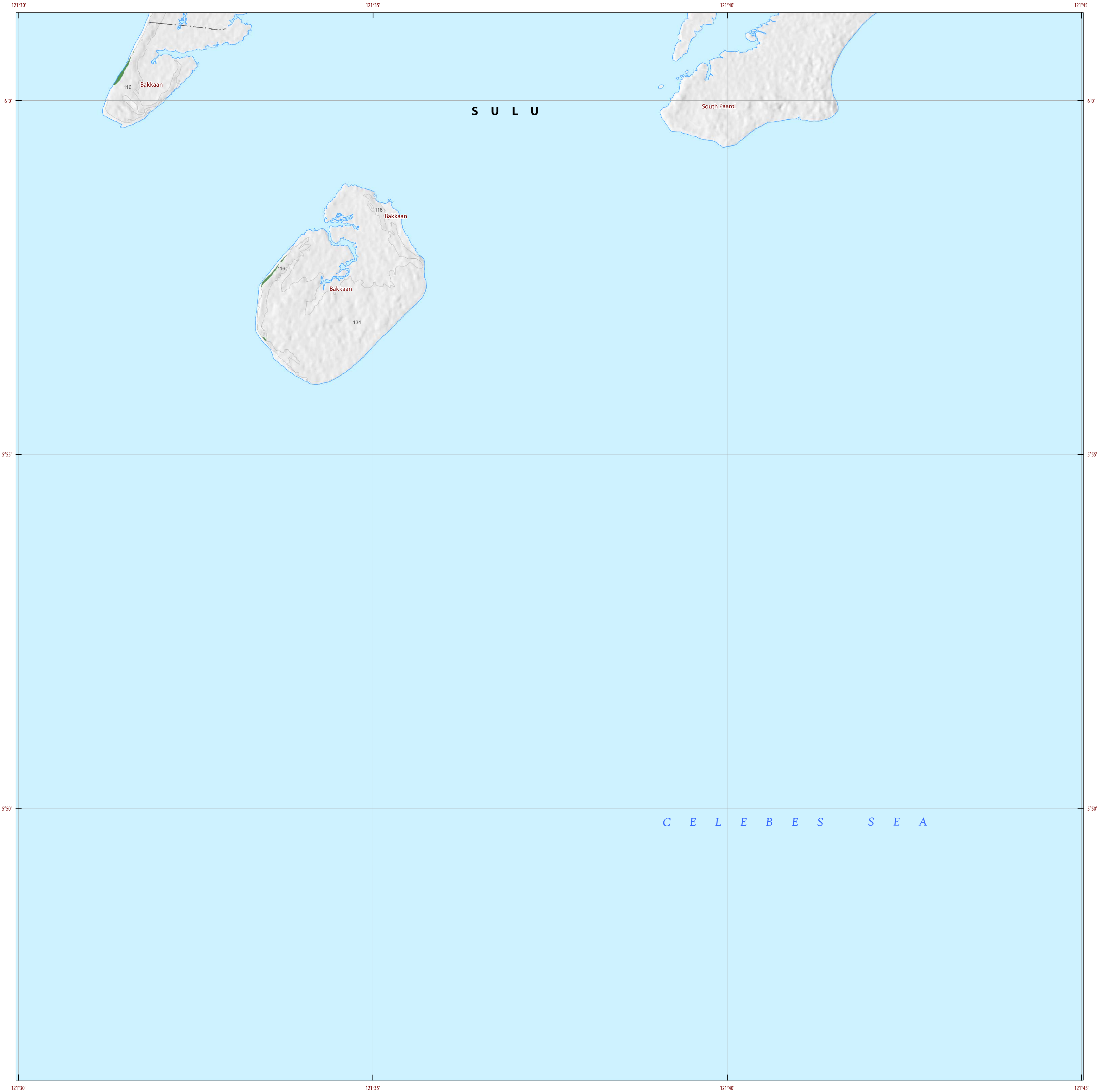
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PROVINCE OF SULU

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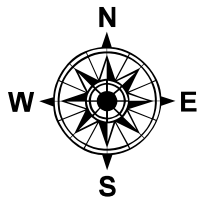






LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000

00.512345

Kilometers

00.5123

Miles

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

LEGEND

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

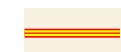
Cacao

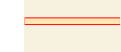
Land limitation

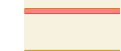
Land use

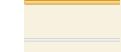
CONVENTIONAL SIGNS


ROADS

Expressway


Trunk line


Primary


Secondary


Tertiary


BOUNDARY

Region


Province


District

Municipality


Barangay


HYDROLOGY

Sea / Shoreline

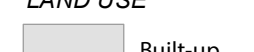
Lakes / Rivers


PLACES


Capital City / City

Capital Town / Town

LAND USE

Built-up

Fishpond

Mangrove

ADJOINING SHEETS

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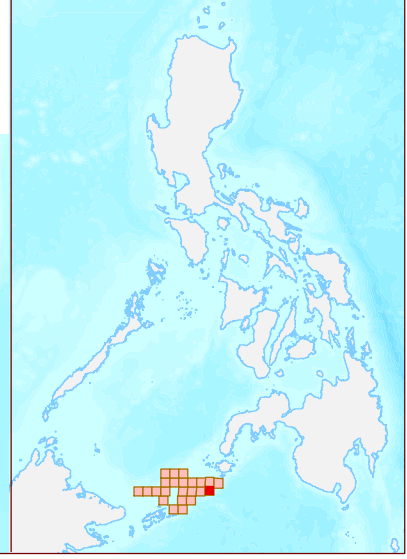
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3313-III

3313-II

3212-I

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MISCELLANEOUS INFORMATION

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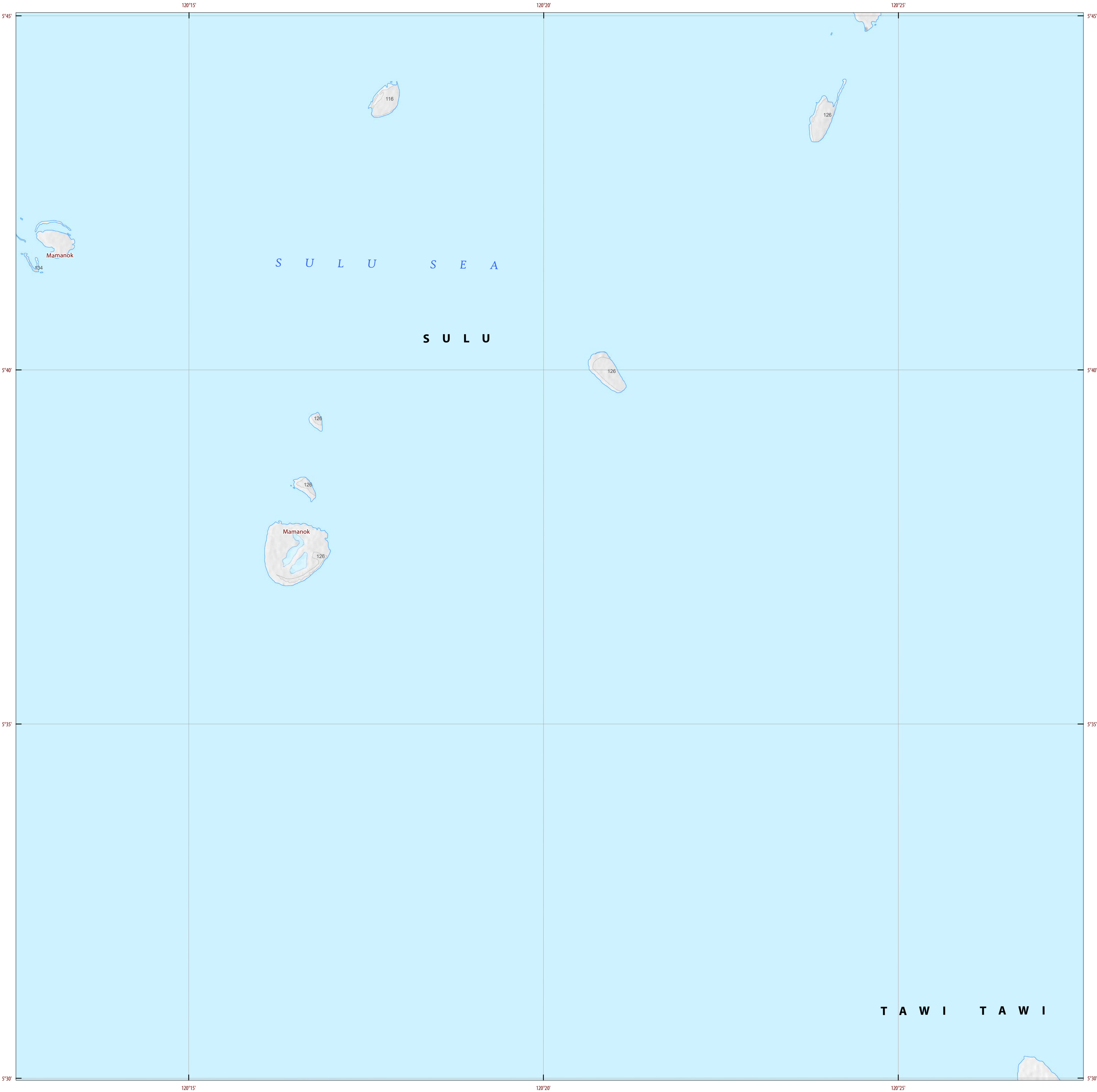
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PROVINCE OF SULU

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LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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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**Not Suitable/ Not Relevant**

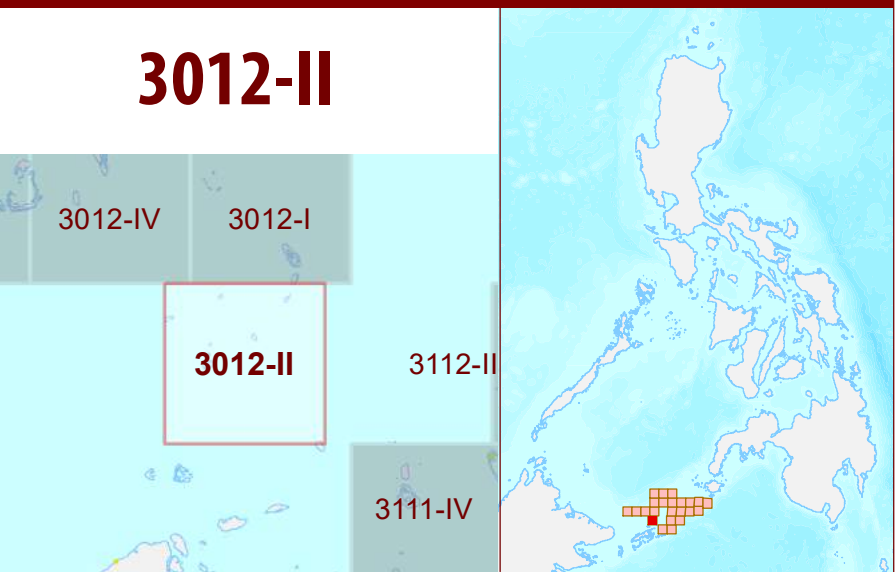
OTHER SIGNS

- 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



MISCELLANEOUS INFORMATION

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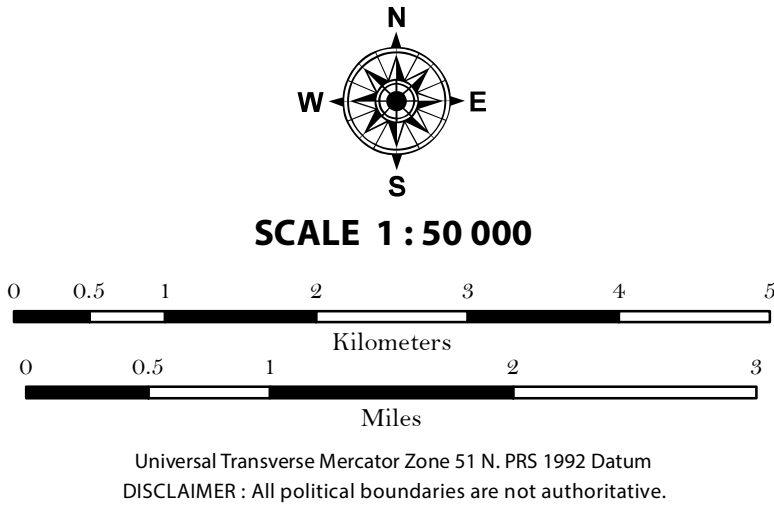
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LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



**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
- 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**

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**INDEX MAP**

**MISCELLANEOUS INFORMATION**

**SOURCES OF INFORMATION** : Topographic information taken from NAMRIA Topographic Map at 1:50,000 scale. Land resources information from the Agricultural Land Management and Evaluation Division (ALMED), Soils Survey Division (SSD) and Laboratory Services Division (LSD) of BSWM. Rice areas obtained from the Land Use System (FAO, 2015) and Philippine Rice Information System (PRISM) (IRRI, 2015). Data analysis and compilation through the **Land Resources Evaluation and Suitability Assessment of Strategic Production Areas for Major Commodities Project** implemented by BSWM (2017).

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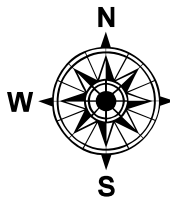




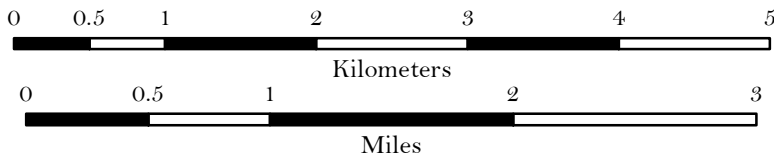


LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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

LEGEND

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

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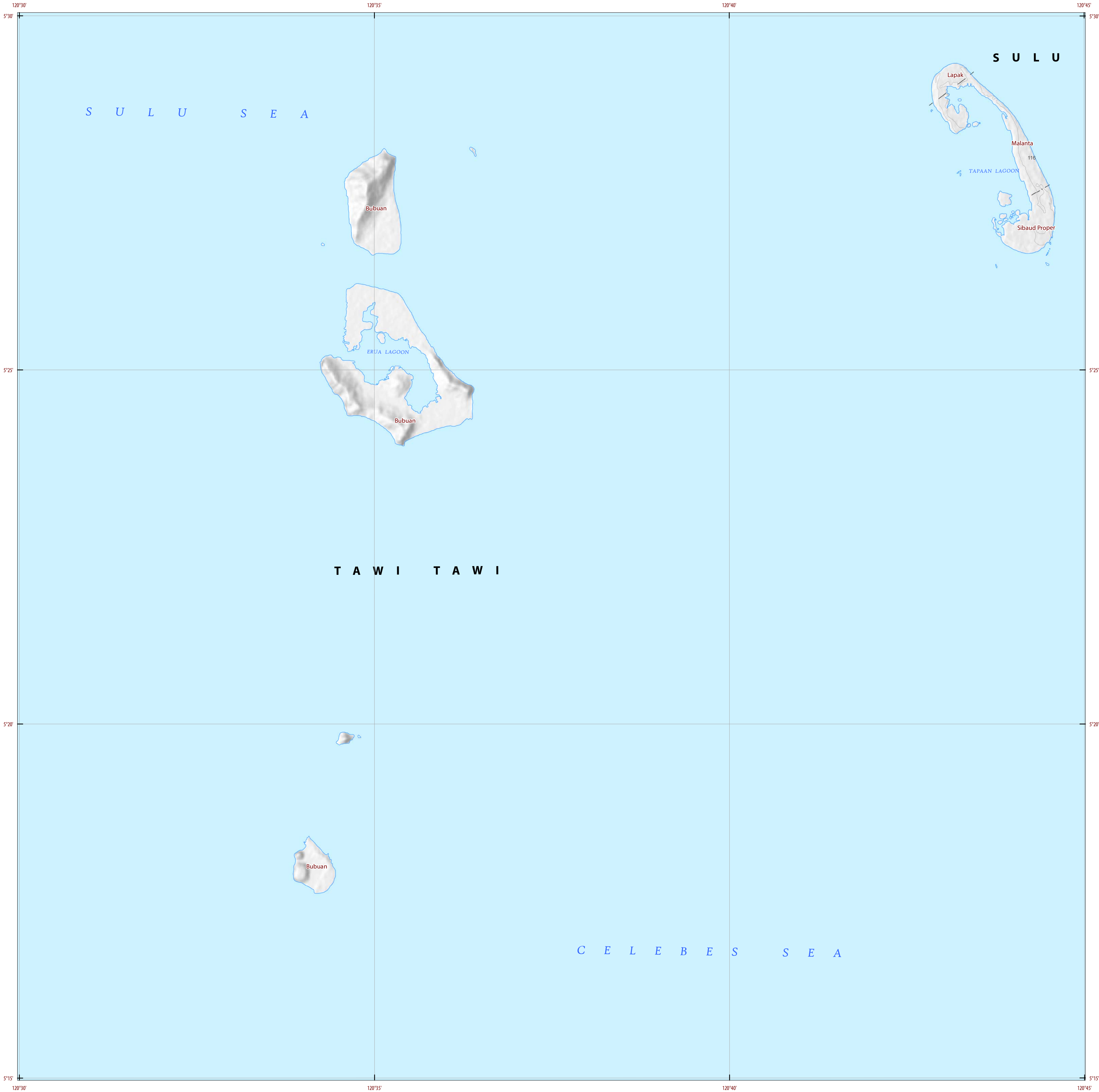
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3111-IV

PROVINCE OF SULU

Bubuan Island

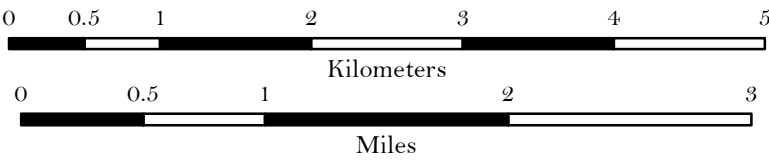


LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



Universal Transverse Mercator Zone 51 N, PRS 1992 Datum  
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LEGEND

SUITABILITY CLASSES

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Not Suitable/ Not Relevant

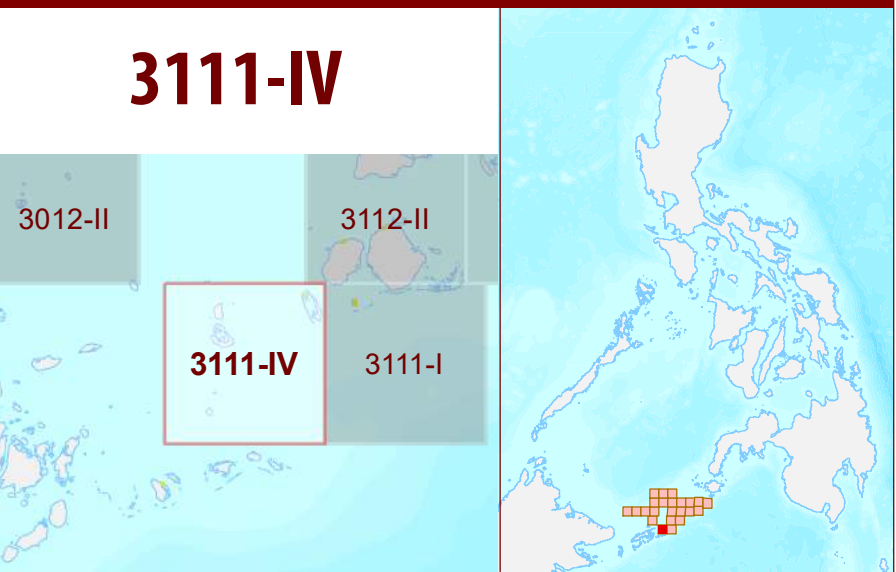
OTHER SIGNS

- 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



MISCELLANEOUS INFORMATION

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PROVINCE OF SULU

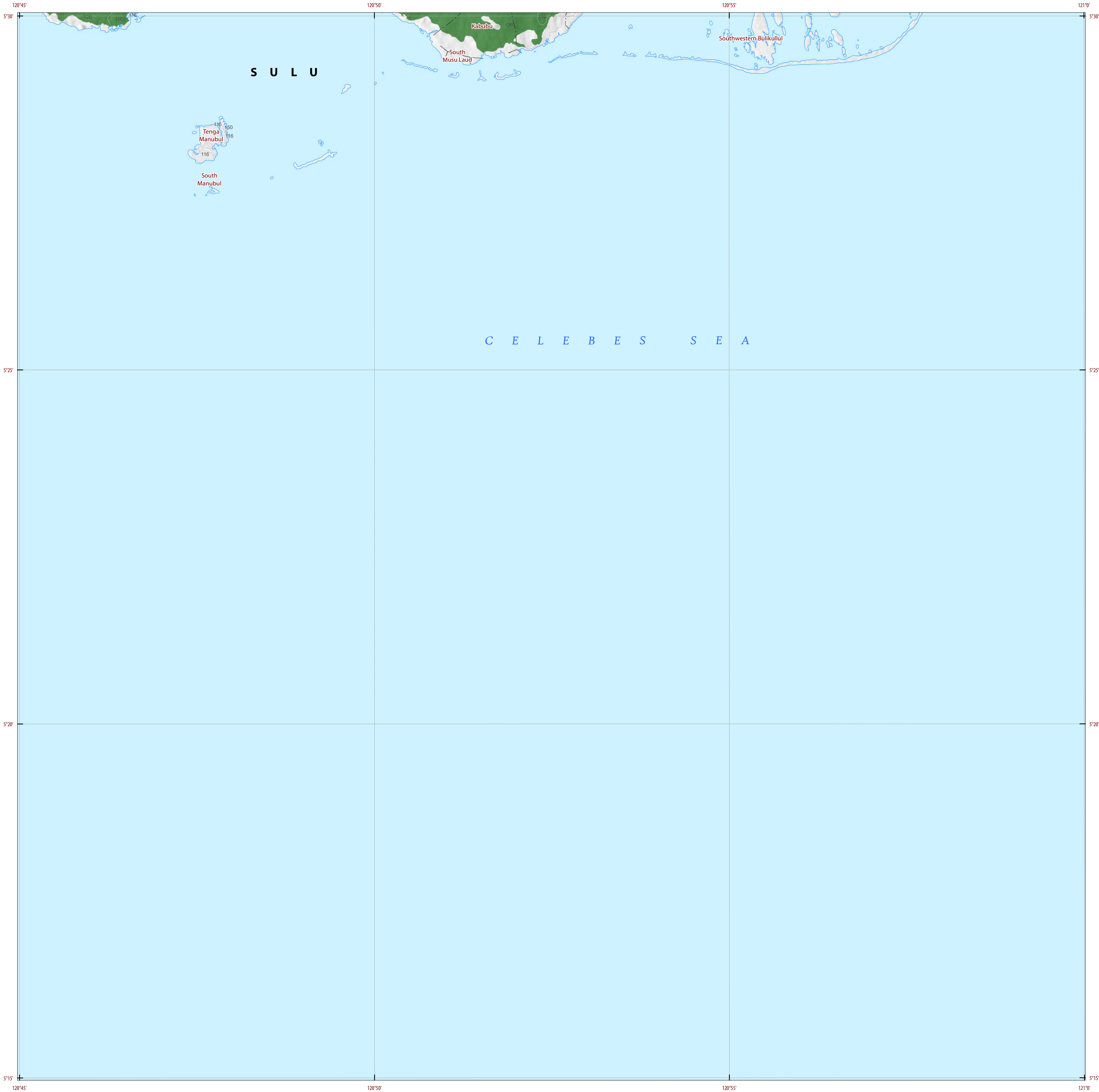
Sheet 22 of 23 Sheet No. 3111-IV



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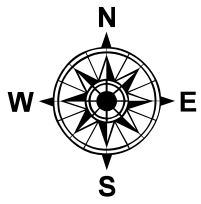
PROVINCE OF SULU

Manubul Island



LAND SUITABILITY MAP  
CACAO

LAND RESOURCES EVALUATION AND SUITABILITY  
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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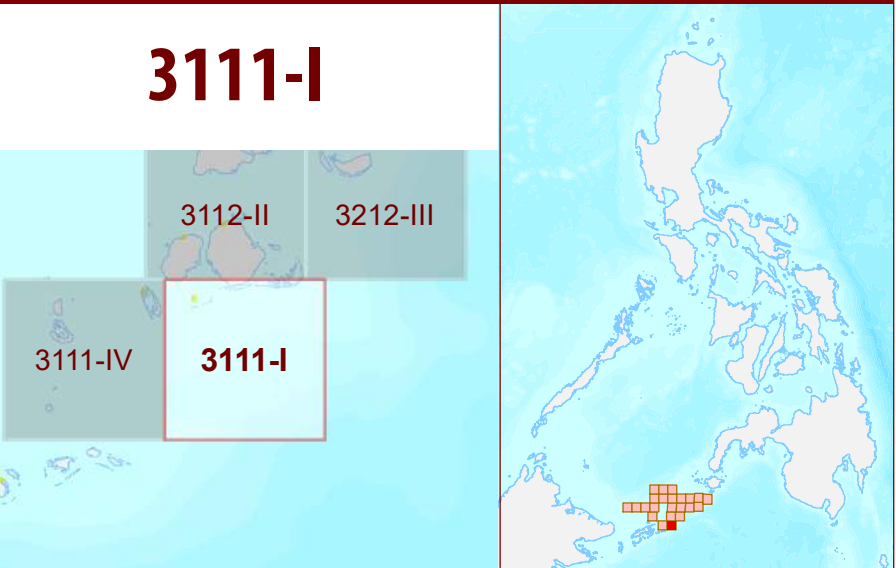
OTHER SIGNS

- NGP Areas
- Cacao
- Land limitation
- Land use

CONVENTIONAL SIGNS

- ROADS**
  - Expressway
  - Trunk line
  - Primary
  - Secondary
  - Tertiary
- BOUNDARY**
  - Region
  - Province
  - District
  - Municipality
  - Barangay
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  - Lakes / Rivers
- PLACES**
  - Capital City / City
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ADJOINING SHEETS



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