

LAND SUITABILITY MAP

ARABICA COFFEE

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

PROVINCE OF SURIGAO DEL NORTE

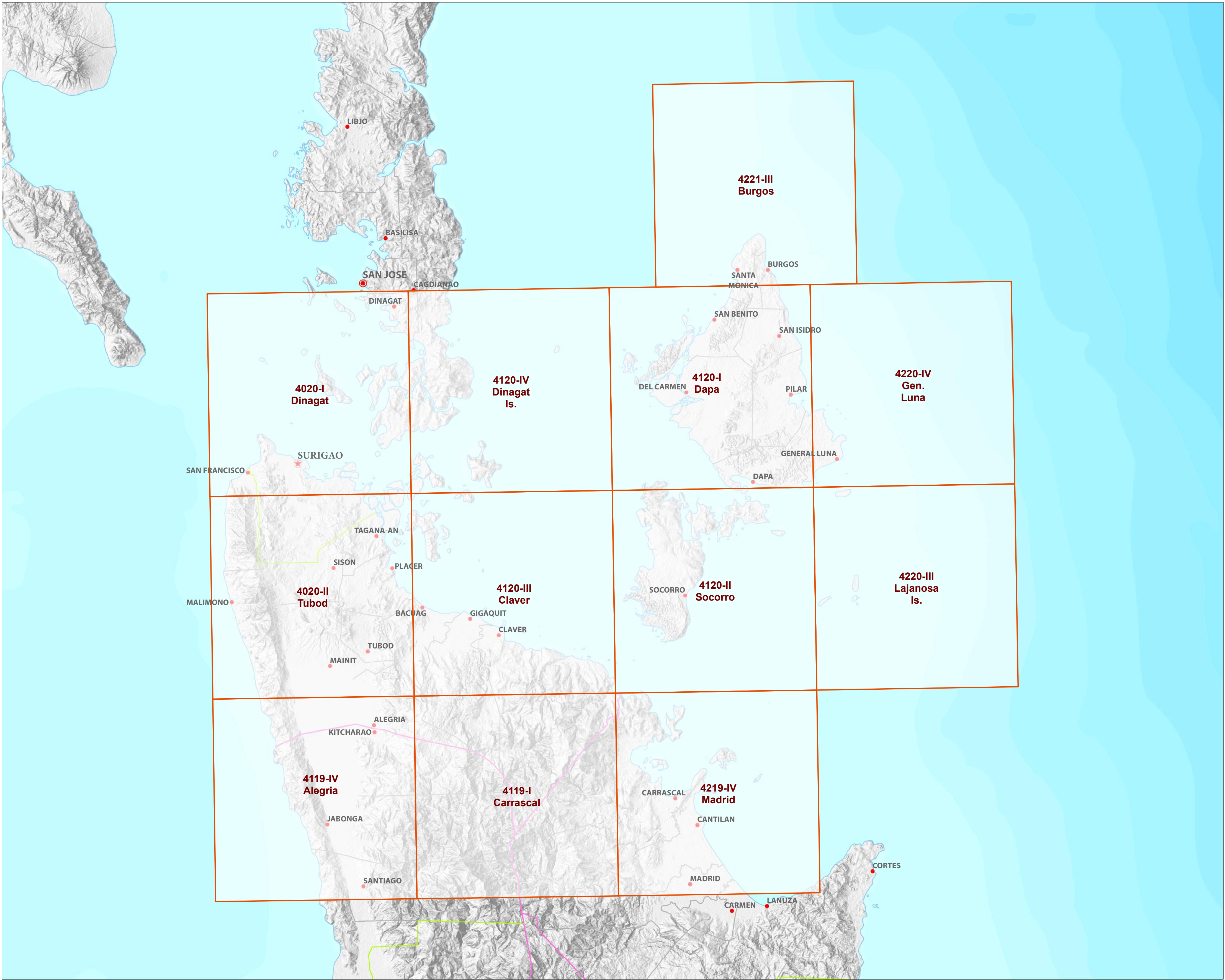


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BUREAU OF SOILS AND WATER MANAGEMENT

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LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS PROVINCE OF SURIGAO DEL NORTE



LEGEND

Places

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

Administrative Boundary

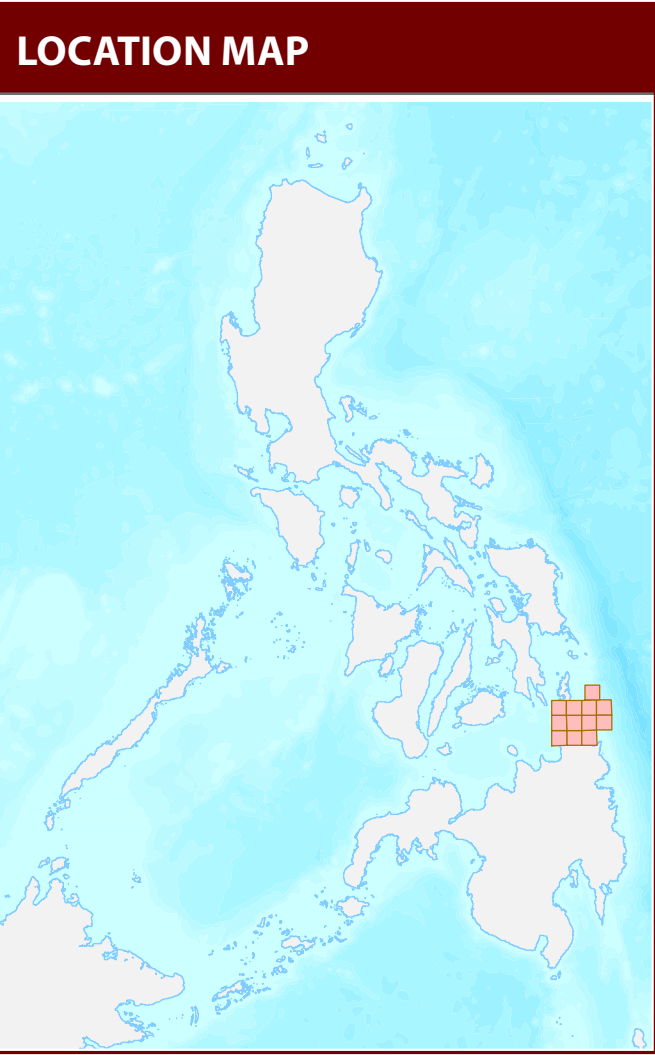
- Regional
- Provincial
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Map Index

- Index grid

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).

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 ARABICA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS SURIGAO DEL NORTE, REGION XIII

EXTENT OF SUITABILITY FOR ARABICA COFFEE PRODUCTION BY MUNICIPALITY

MUNICIPALITY	EXISTING COFFEE (Ha)			TOTAL EXISTING AREA (Ha)	EXPANSION AREA (Ha)						CONFLICT RESOLUTION AREA (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	
ALEGRIA	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
BACUAG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BURGOS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CLAVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEL CARMEN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL LUNA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GIGAQUIT	-	-	-	-	-	-	-	39	-	-	-	-	-	-	-	-	-
MAINIT	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
MALIMONO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PILAR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLACER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAN BENITO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAN FRANCISCO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAN ISIDRO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SANTA MONICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SISON	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOCORRO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SURIGAO CITY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TAGANA-AN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TUBOD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	1	-	-	-	43	-	-	-	-	-	-	-	-	43

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

AGRONOMIC REQUIREMENT OF ARABICA COFFEE 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
Coffee (Arabica)	S1	<8	>100	CL, SiCL, SCL, SC, SiC, C, HC	WD,MWD	5.6 -7.2	high	none-slight	none-slight	none-few	1000-2000	2001-4500	I, III, IV
	S2	8 - 30	30 - 100	FSL, L, SiL	SPD,PD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	500-1000 2000-2500	1000-2000	I, II
	S3	>30	<30	S, LS, CSL, SL	VPD,ED	<5.0 - > 7.9	low	severe	severe	many	<500 >2500	<1000 >4500	

SLOPE (%) 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 - 500 - 1000m or 2000 - 2500m EI3 - < 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
1	EI2	11	T2-E3-Rc3	21	T2-EI3-E3	31	T3-EI2-E3	41	T3-EI3-F3-D2
2	EI3	12	T2-E3-Sh2-Rc2	22	T2-EI3-E3-Rc2	32	T3-EI2-E3-Sh2-Rc3	42	T3-E3-Sh3-Rc3
3	EI3-F2-D2	13	T2-EI2	23	T2-EI3-E3-Rc3	33	T3-EI2-E3-Sh3-Rc2	43	T3-EI2-E3
4	EI3-F2-Tc	14	T2-EI2-E3	24	T2-EI3-E3-Sh2-Rc2	34	T3-EI3	44	T3-EI2-E3-Sh3-Rc3
5	EI3-F3-D2	15	T2-EI2-E3-Rc3	25	T2-EI3-E3-Sh2-Rc3	35	T3-EI3-E3	45	T3-EI3
6	EI3-Sh2	16	T2-EI2-E3-Sh2-Rc2	26	T2-EI3-F2-D2	36	T3-EI3-E3-Rc2	46	T3-EI3-E3
7	EI3-Sh2-Rc2	17	T2-EI2-Sh2-Rc2	27	T2-EI3-F3-D2	37	T3-EI3-E3-Sh2-Rc3	47	T3-EI3-E3-Rc3
8	EI3-Tc	18	T2-EI3	28	T2-Sh2-Rc2	38	T3-EI3-E3-Sh3-Rc2	48	T3-EI3-E3-Sh3-Rc3
9	Sh2-Rc2	19	T2-EI3-E2	29	T3-E3-Sh2-Rc3	39	T3-EI3-E3-Sh3-Rc3	49	T3-EI3-F3-D2
10	T2-E3	20	T2-EI3-E2-Sh2-Rc2	30	T3-E3-Sh3-Rc2	40	T3-EI3-F2-D2	50	T3-EI3

CODE	LANDUSE
4	Corn
81	Coffee
82	Cacao
116	Coconut
126	Grassland
134	Shrubs, unmanaged

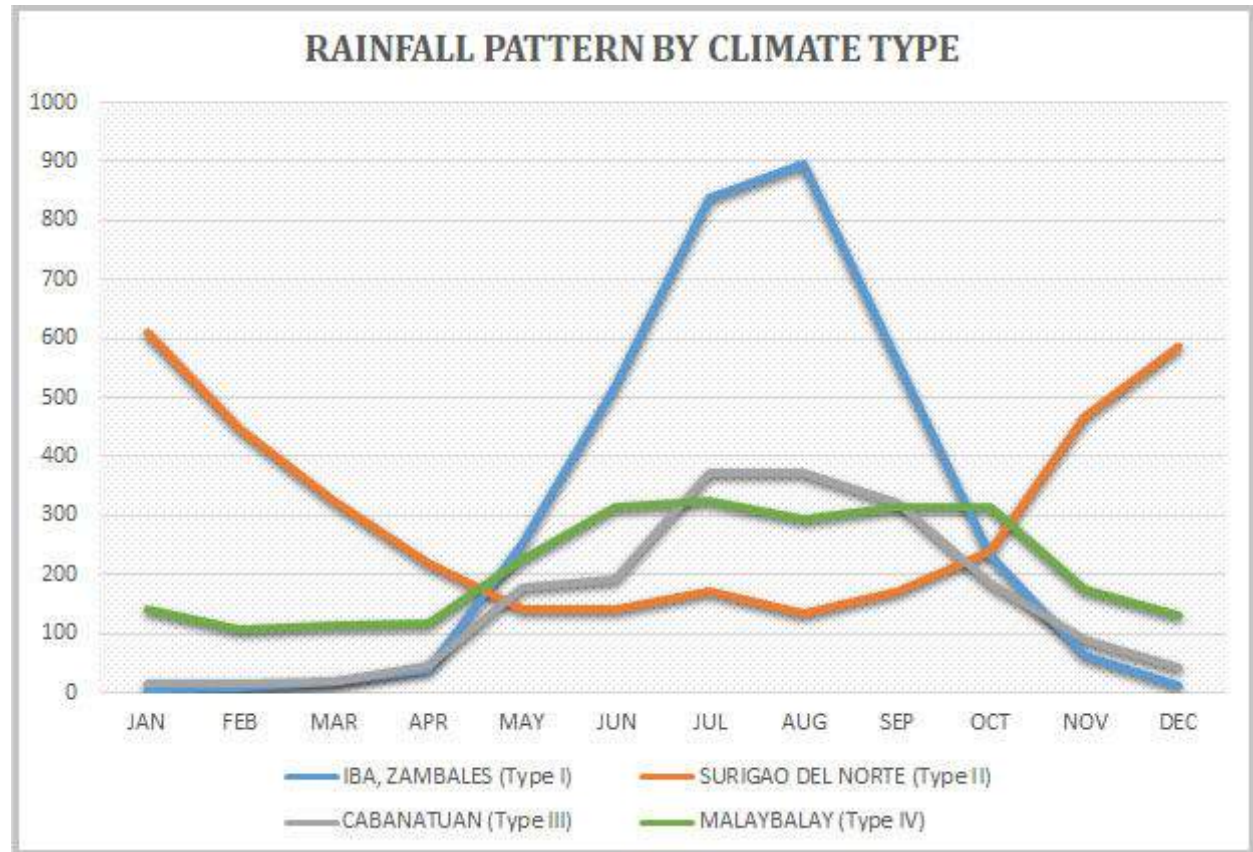
SUITABILITY CLASSES:

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.

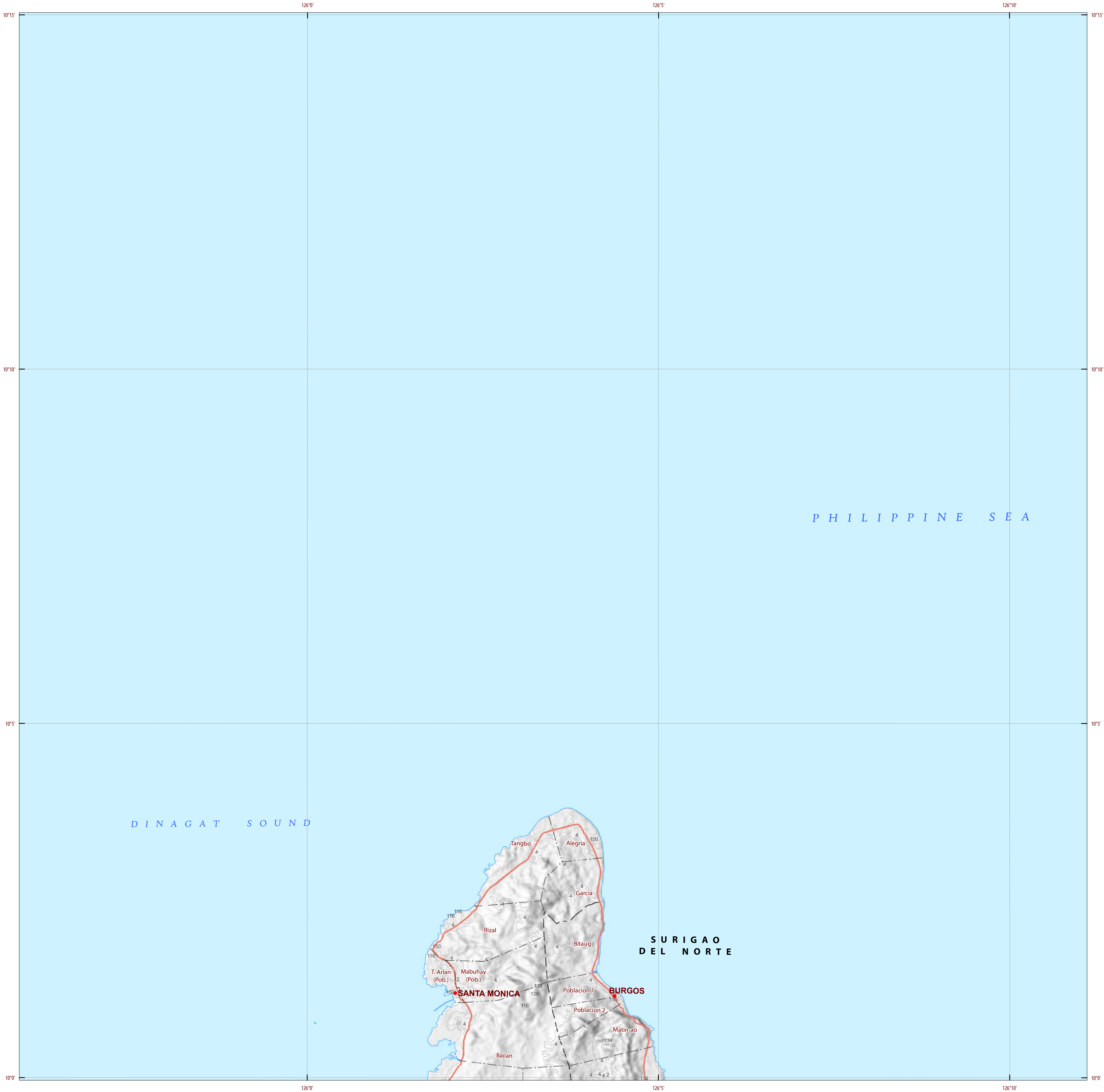
CLIMATE TYPE


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.

Surigao Del Norte is classified as climatic Type II



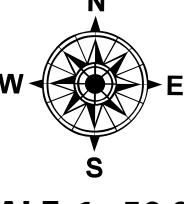
Source: PAGASA 2018, *Climatological Normals (Rainfall)*, Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), accessed 27 July 2018, <<https://www1.pagasa.dost.gov.ph/index.php/climate/climatological-normals>>.





LAND SUITABILITY MAP
ARABICA COFFEE

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

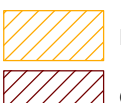
Moderately Suitable - Land having limitations which in aggregate are moderately severe for sustained application of a given use; the limitations will reduce productivity or benefits and increase required inputs to the extent that the overall advantage to be gained from the use, although still attractive, 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.

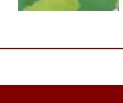
Not Suitable/ Not Relevant

OTHER SIGNS

 NGP Areas

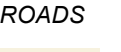
 Cacao


 Land limitation

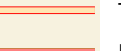
 Land use


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

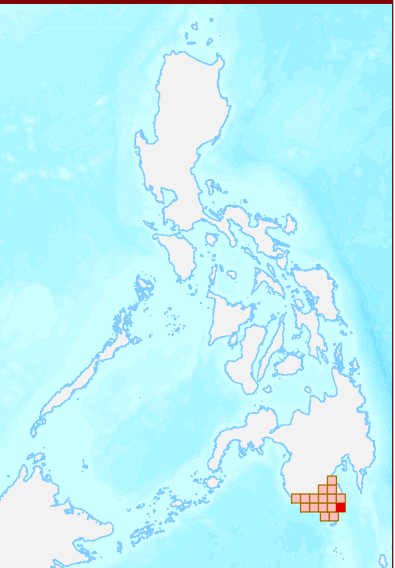
 Mangrove

ADJOINING SHEETS

4221-III

4120-IV 4120-I 4220-IV

INDEX MAP



MISCELLANEOUS INFORMATION

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Project Leader : BERNARDO B. PASCUA

GIS and Cartography : IRVIN K. SAMALCA

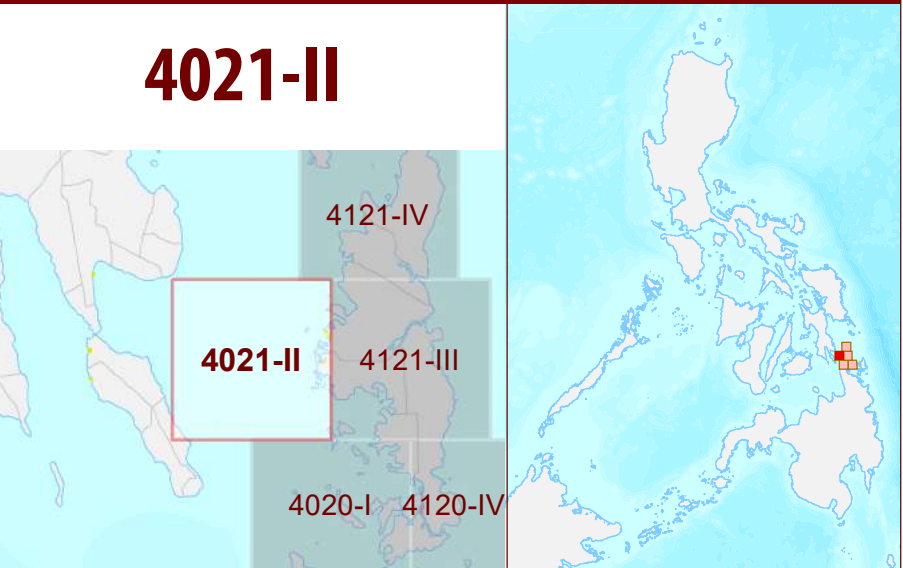
Funding Agency : Department of Agriculture - Bureau of Agricultural Research (DA-BAR)

Collaborating Agencies : Philippine Council on Agriculture and Fisheries (PCAF)

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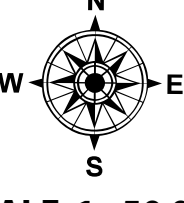
PROVINCE OF SURIGAO DEL NORTE Sheet 1 of 12 Sheet No. 4221-III






LAND SUITABILITY MAP
ARABICA COFFEE

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

 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

4020-I

4120-IV

4020-II

4120-III

INDEX MAP

MISCELLANEOUS INFORMATION

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Funding Agency


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Collaborating Agencies

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PROVINCE OF SURIGAO DEL NORTE

Sheet 2 of 12

Sheet No. 4020-I





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LAND RESOURCES EVALUATION AND SUITABILITY
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



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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OTHER SIGNS

NGP Areas

Cacao

Land limitation

Land use

CONVENTIONAL SIGNS

ROADS

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Trunk line

Primary

Secondary

Tertiary

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Barangay

HYDROLOGY

Sea / Shoreline

Lakes / Rivers

PLACES

Capital City / City

Capital Town / Town

LAND USE

Built-up

Fishpond

Mangrove

ADJOINING SHEETS

4120-IV

4020-I

4020-II

4120-I

4120-II

4221-III

4120-III

INDEX MAP

MISCELLANEOUS INFORMATION

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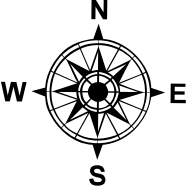
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LAND SUITABILITY MAP
ARABICA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000

00.512345

Kilometers

00.5123

Miles

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LEGEND

SUITABILITY CLASSES

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- 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

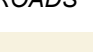
Cacao


Land limitation


Land use


CONVENTIONAL SIGNS

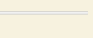
ROADS

Expressway


Trunk line


Primary

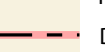
Secondary

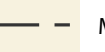
Tertiary

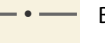
BOUNDARY

Region


Province


District

Municipality

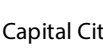
Barangay

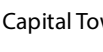
HYDROLOGY

Sea / Shoreline

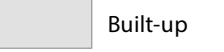
Lakes / Rivers


PLACES


Capital City / City

Capital Town / Town

LAND USE

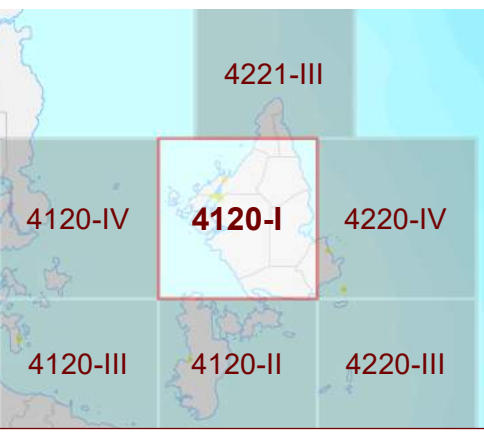
Built-up

Fishpond


Mangrove

ADJOINING SHEETS

4120-I



INDEX MAP



MISCELLANEOUS INFORMATION

SOURCES OF 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

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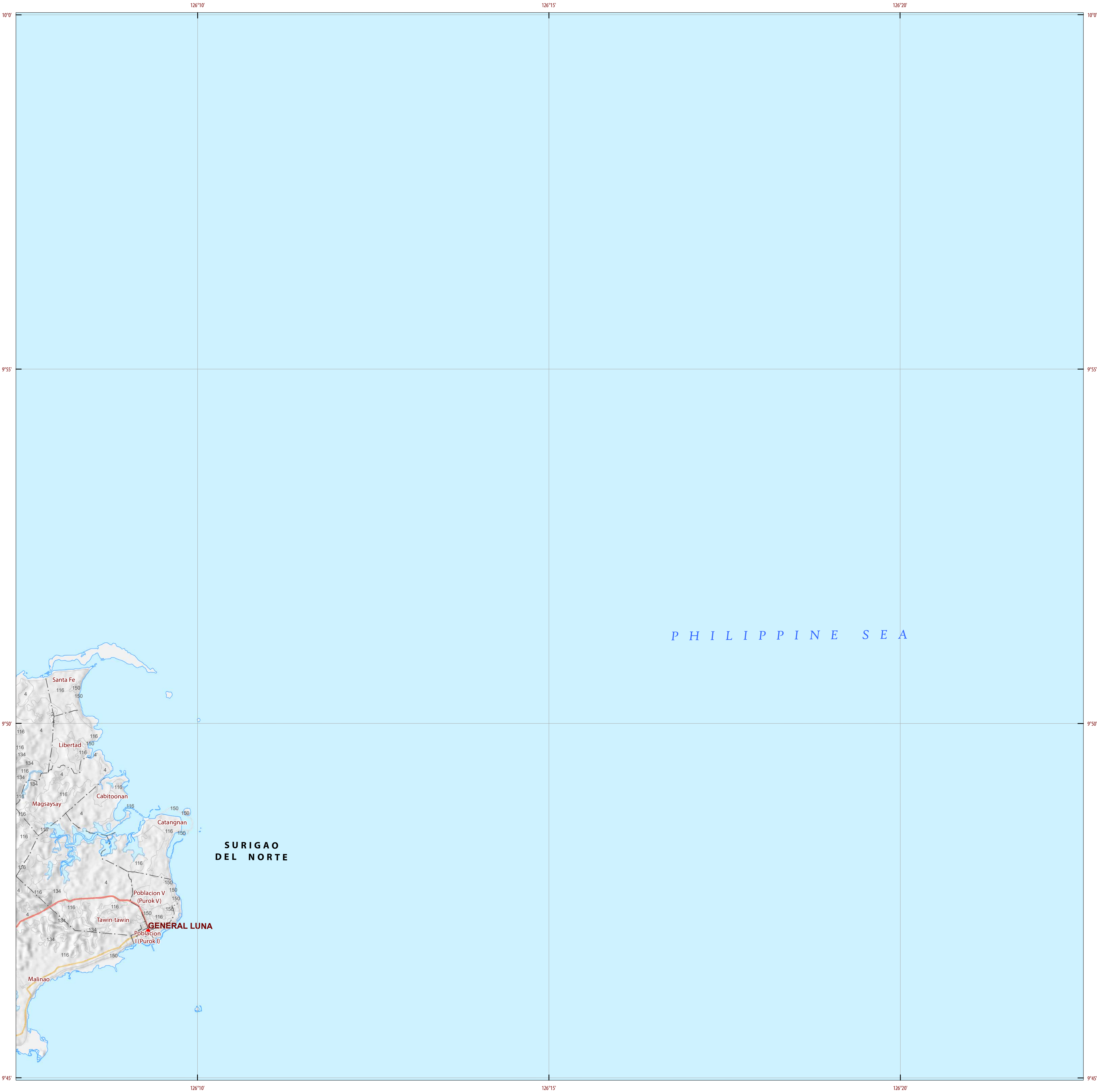
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PROVINCE OF SURIGAO DEL NORTE

Sheet 4 of 12

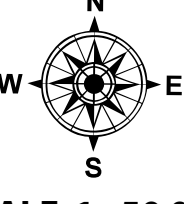
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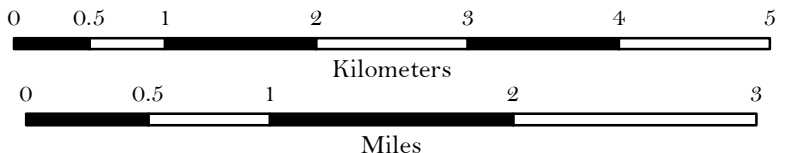


LAND SUITABILITY MAP ARABICA COFFEE

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

4221-III

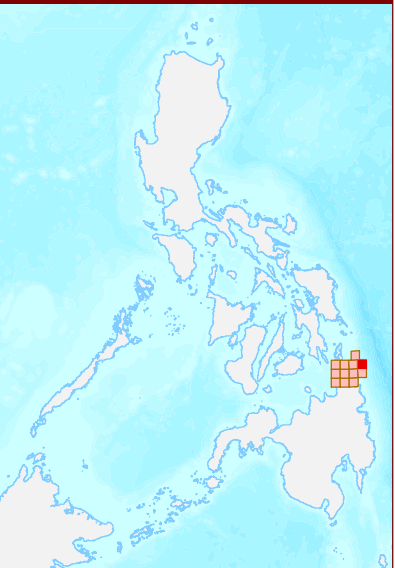
4120-I

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4120-II

4220-III

INDEX MAP



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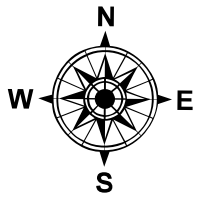
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LAND SUITABILITY MAP ARABICA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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LEGEND

SUITABILITY CLASSES

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Not Suitable/ Not Relevant

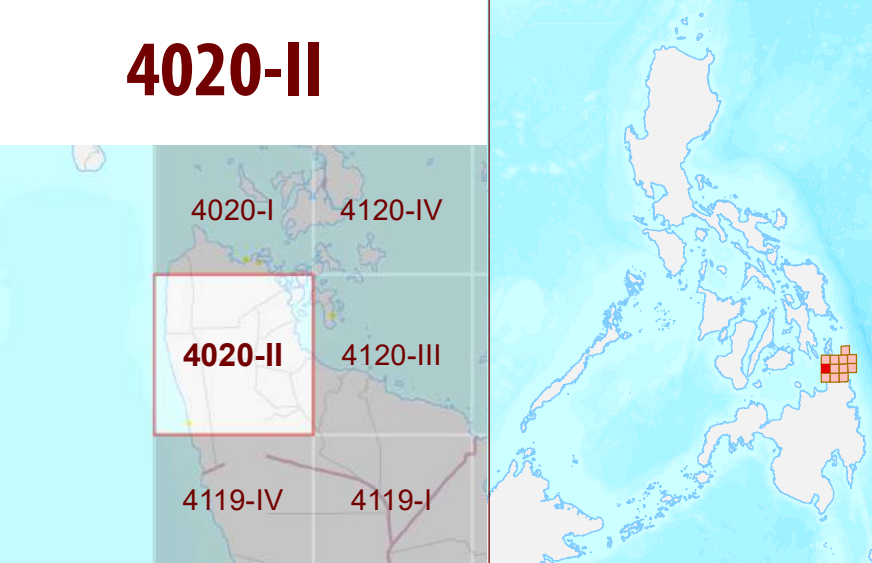
OTHER SIGNS

- 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



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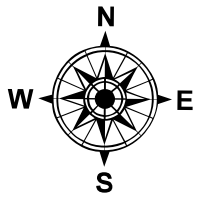
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LAND SUITABILITY MAP ARABICA COFFEE

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

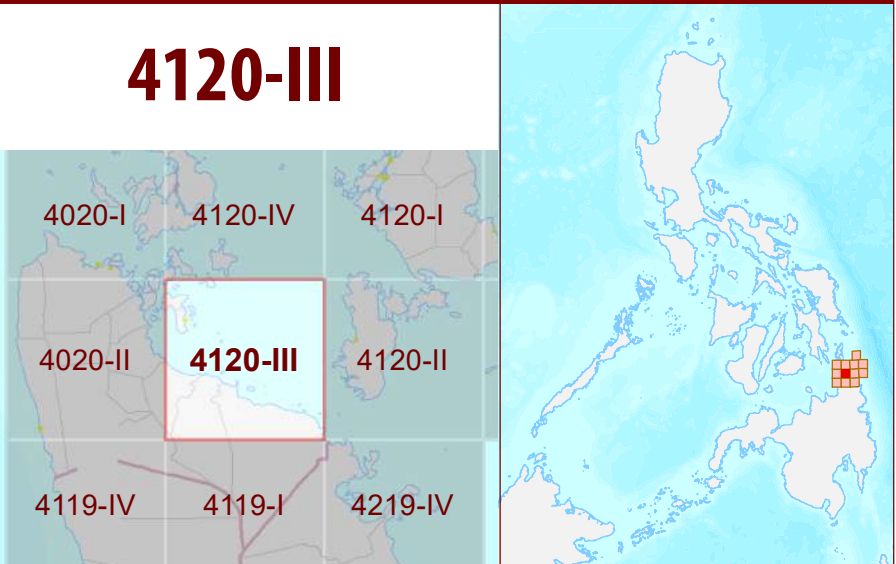
OTHER SIGNS

- NGP Areas
- Cacao
- Land limitation
- Land use

CONVENTIONAL SIGNS

- | | | |
|--------------|-----------------|---------------------|
| ROADS | BOUNDARY | HYDROLOGY |
| Expressway | Region | Sea / Shoreline |
| Trunk line | Province | Lakes / Rivers |
| Primary | District | PLACES |
| Secondary | Municipality | Capital City / City |
| Tertiary | Barangay | Capital Town / Town |
- LAND USE**
- Built-up
 - Fishpond
 - Mangrove

ADJOINING SHEETS



MISCELLANEOUS INFORMATION

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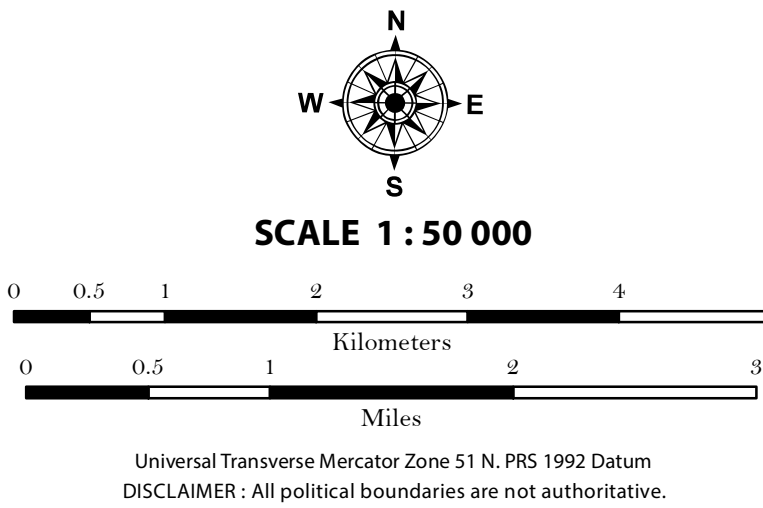
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LAND SUITABILITY MAP
ARABICA COFFEE

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

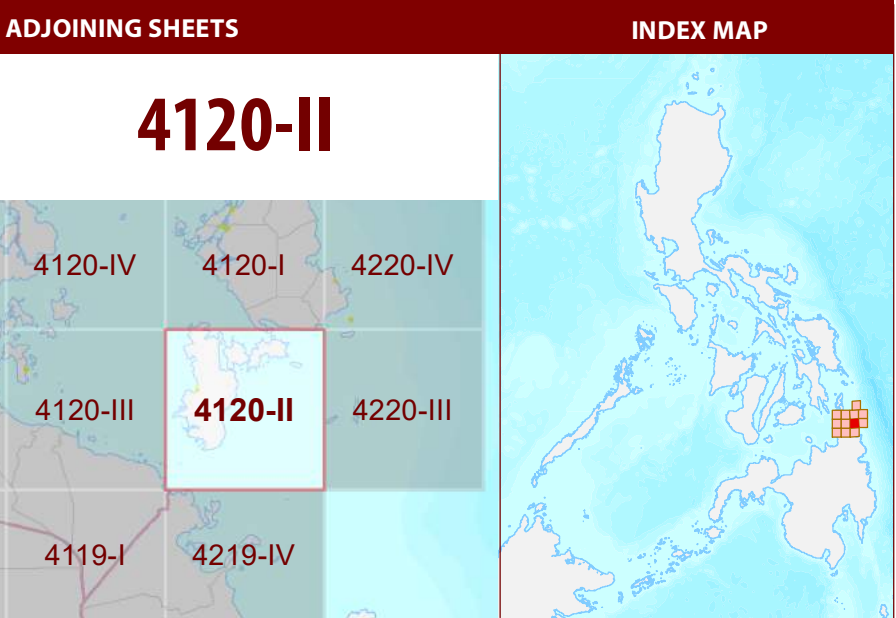
- NGP Areas
- Cacao
- Land limitation
- Land use

CONVENTIONAL SIGNS

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

LAND USE

- Built-up
- Fishpond
- Mangrove



MISCELLANEOUS INFORMATION

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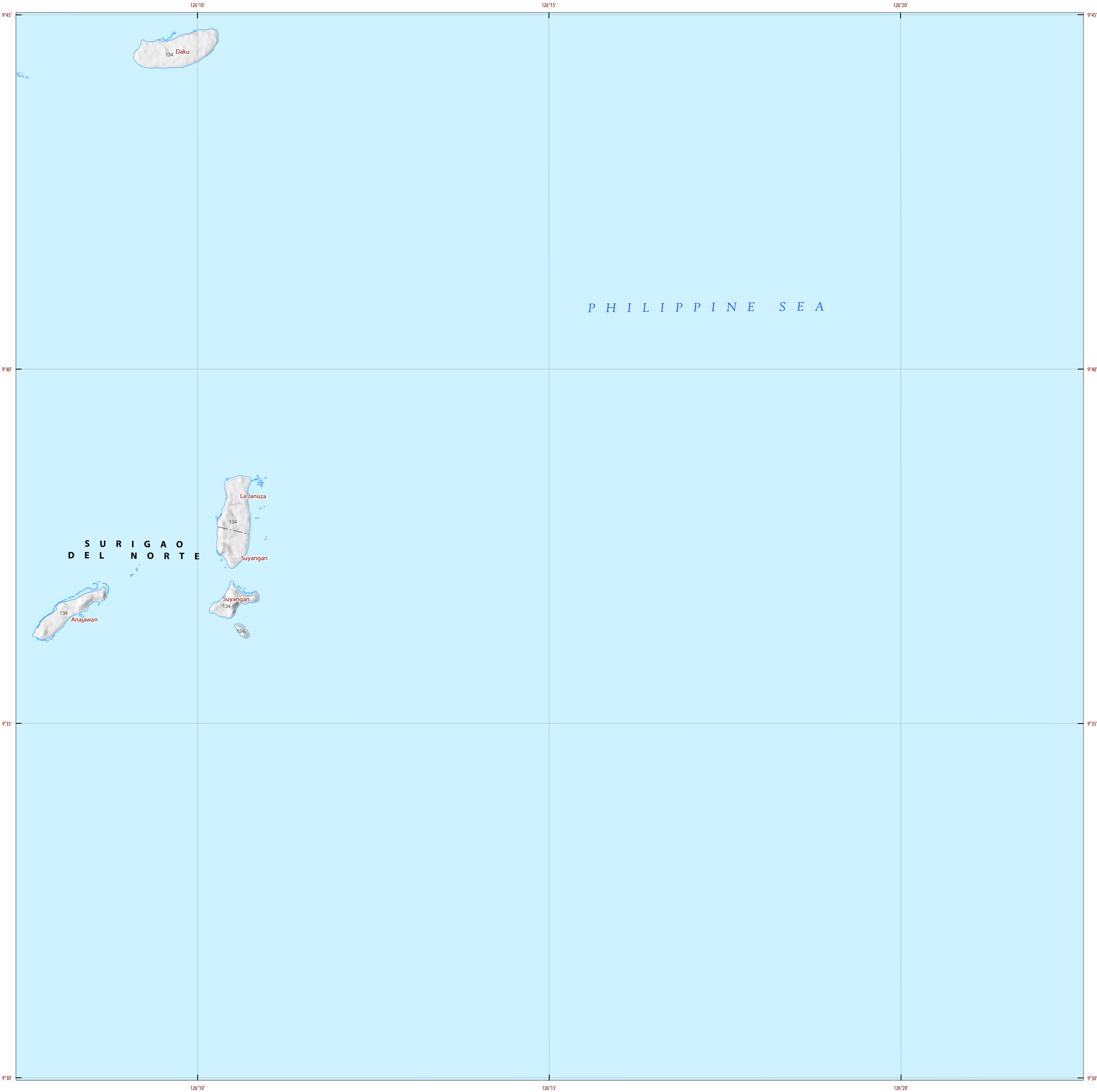
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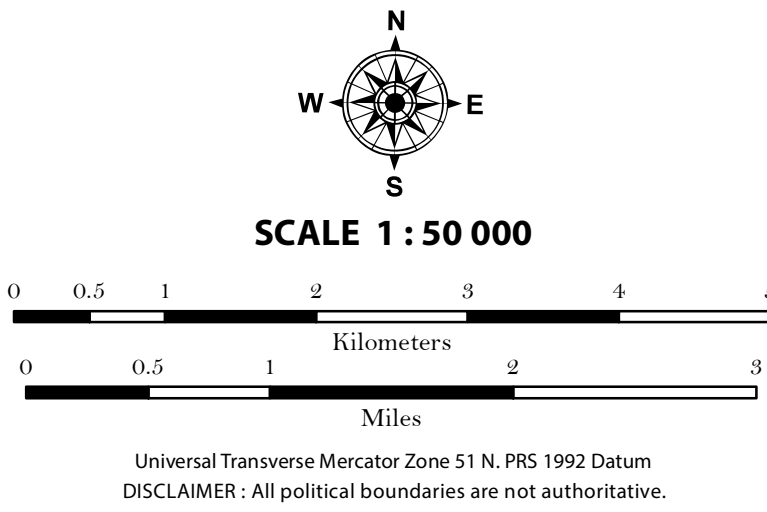
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LAND SUITABILITY MAP
ARABICA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



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

4220-III

INDEX MAP

MISCELLANEOUS INFORMATION

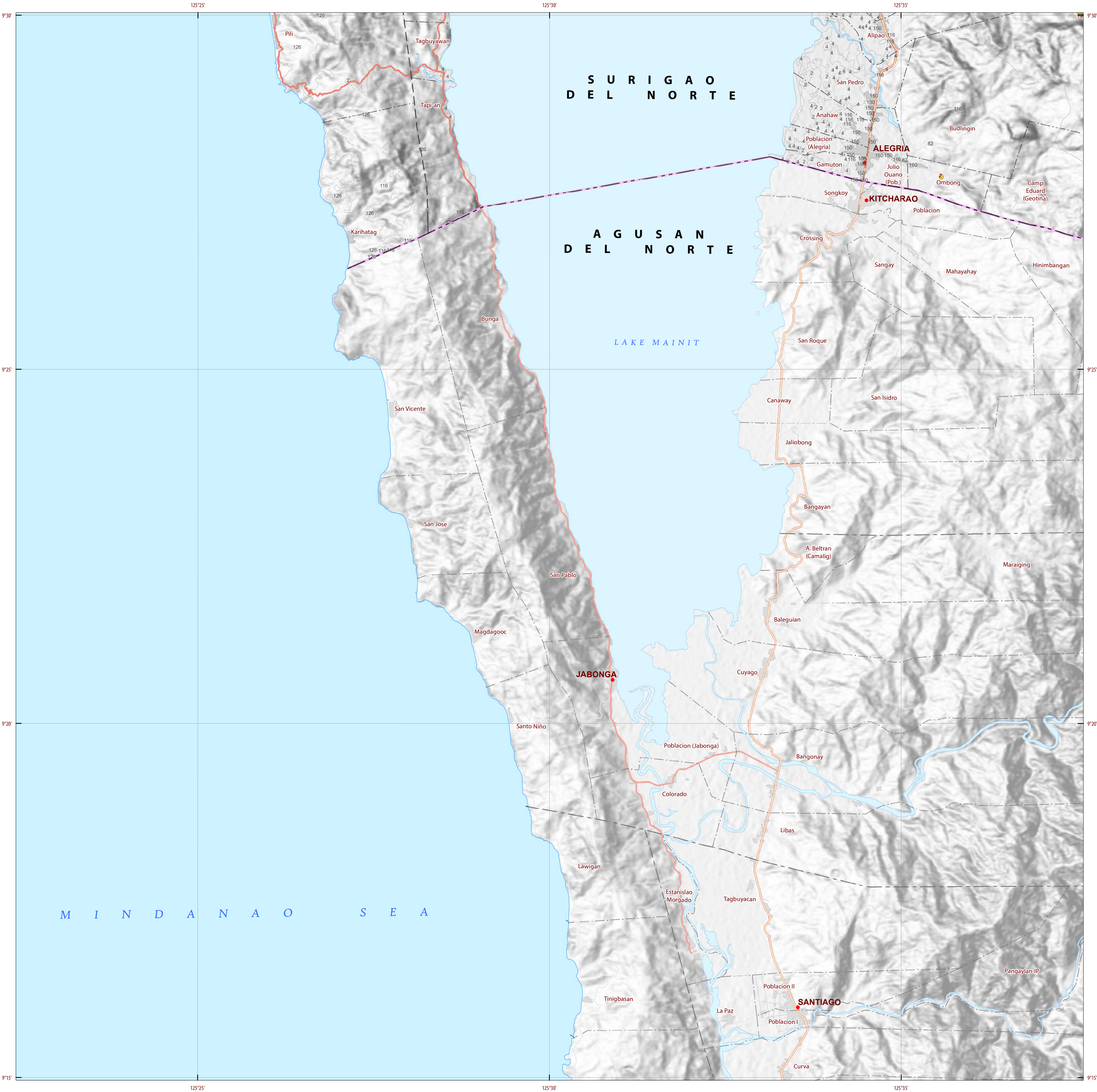
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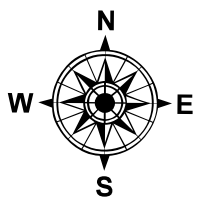
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LAND SUITABILITY MAP ARABICA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000



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LEGEND

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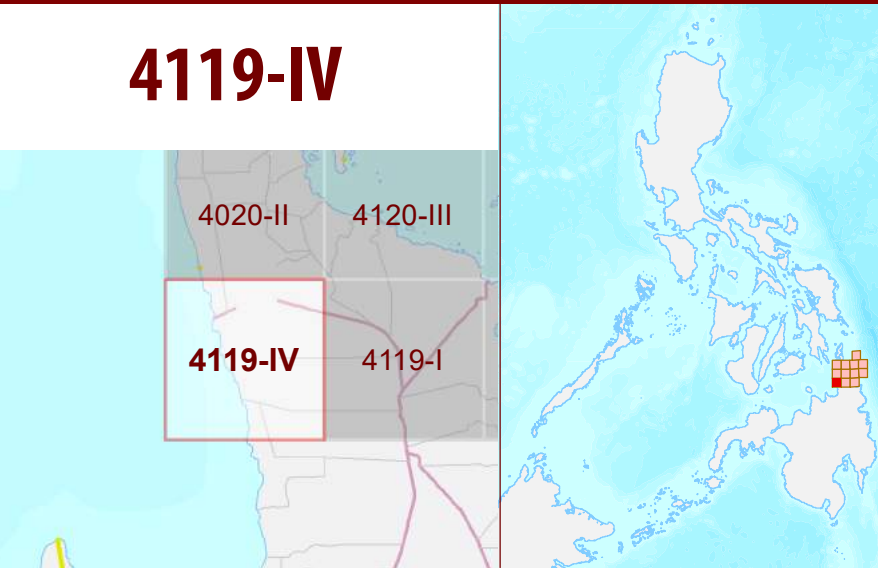
OTHER SIGNS

- 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



MISCELLANEOUS INFORMATION

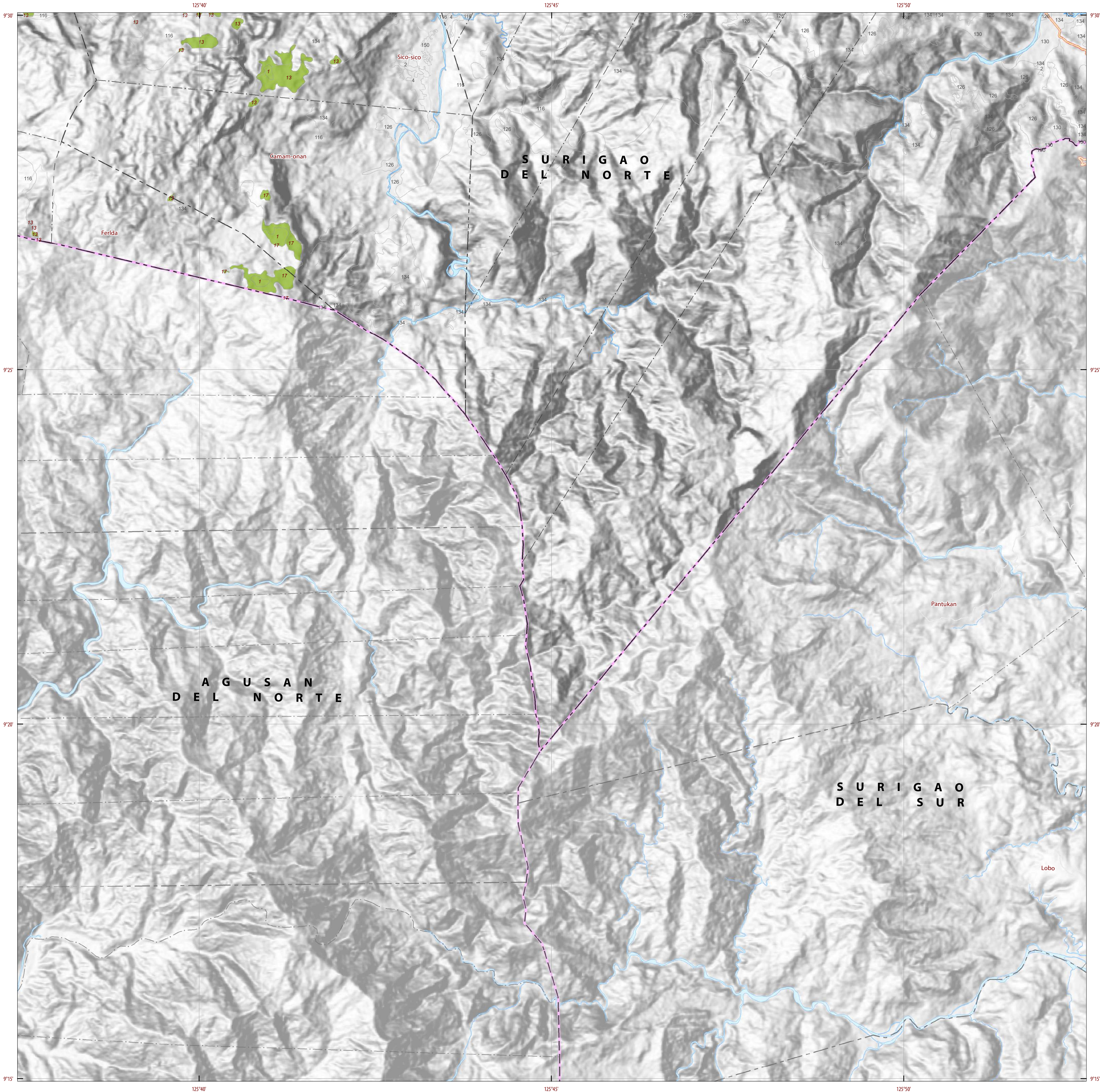
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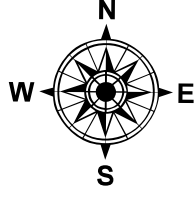
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LAND SUITABILITY MAP
ARABICA COFFEE

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

4119-I

4020-II

4120-III

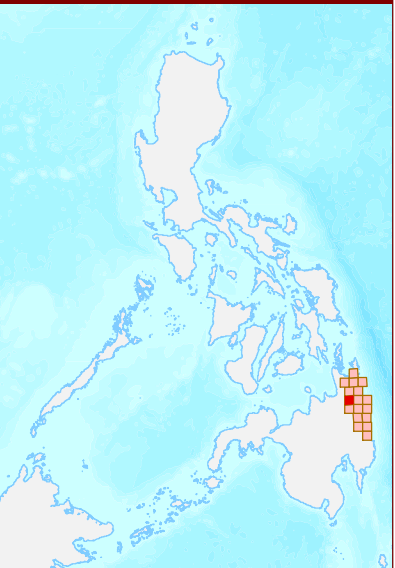
4120-II

4119-IV

4119-I

4219-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).

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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PROVINCE OF SURIGAO DEL NORTE

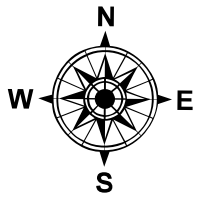
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LAND SUITABILITY MAP
ARABICA COFFEE

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

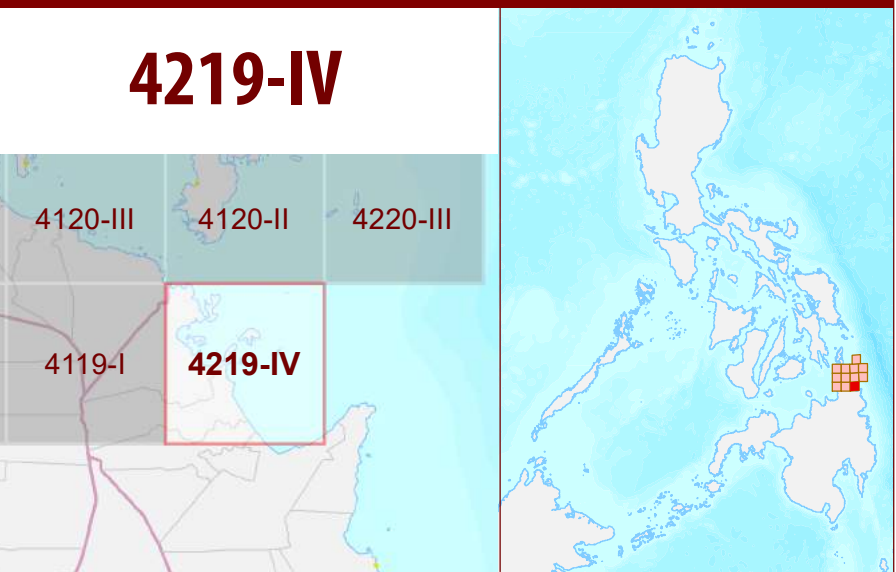
OTHER SIGNS

- NGP Areas
- Cacao
- Land limitation
- Land use

CONVENTIONAL SIGNS

- ROADS**
 - 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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