

LAND SUITABILITY MAP

ROBUSTA, LIBERICA AND EXCELSA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

PROVINCE OF LAGUNA



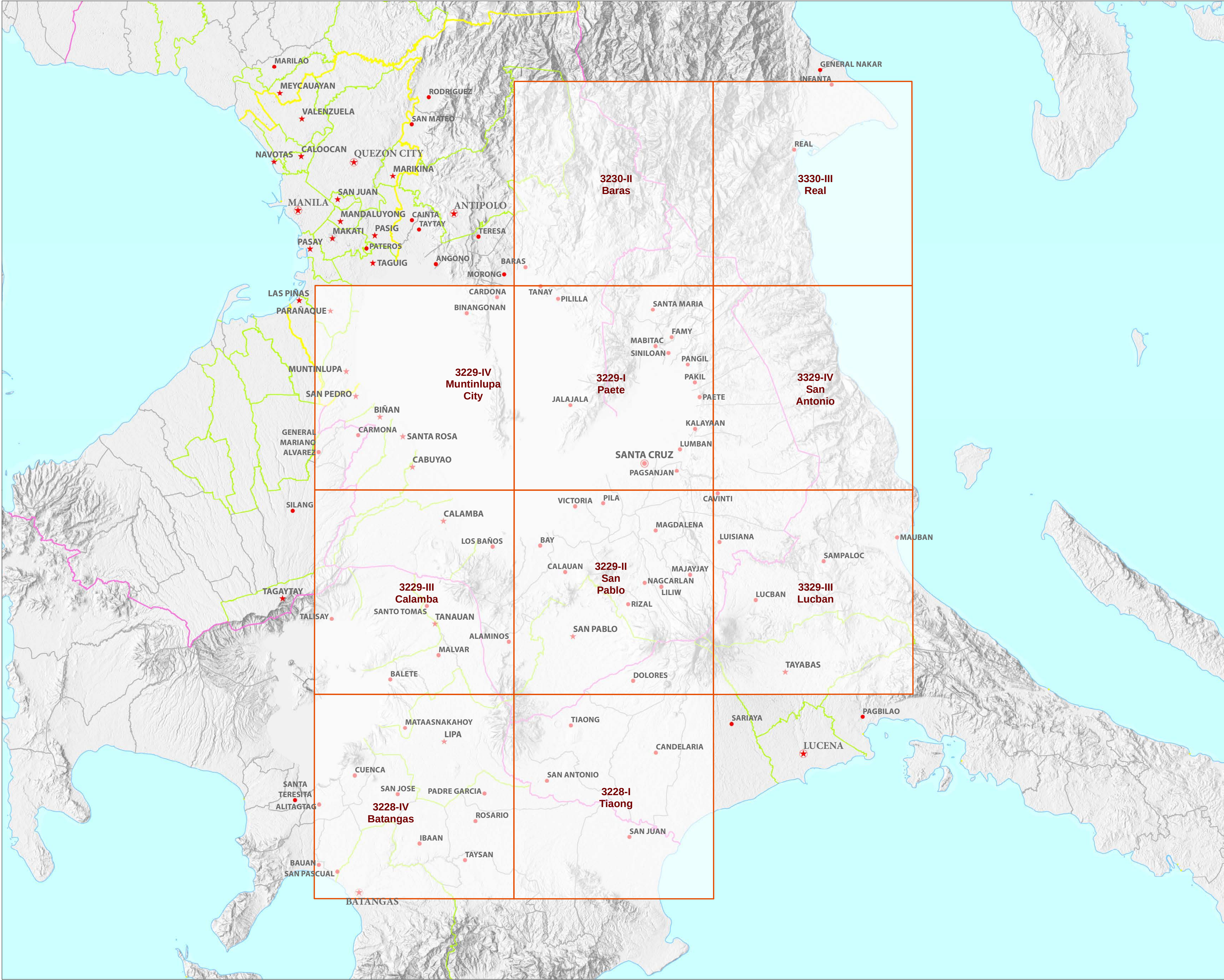
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DEPARTMENT OF AGRICULTURE
BUREAU OF SOILS AND WATER MANAGEMENT

SRDC Bldg., Elliptical Road Cor. Visayas Avenue, Diliman, Quezon City 1101
Tel/Fax No.: (+632) 332-9534 E-mail: bswmclientcenter@yahoo.com

MAP INDEX

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

PROVINCE OF LAGUNA



LEGEND

Places

- Capital City
- City
- Capital Town
- Town

Administrative Boundary

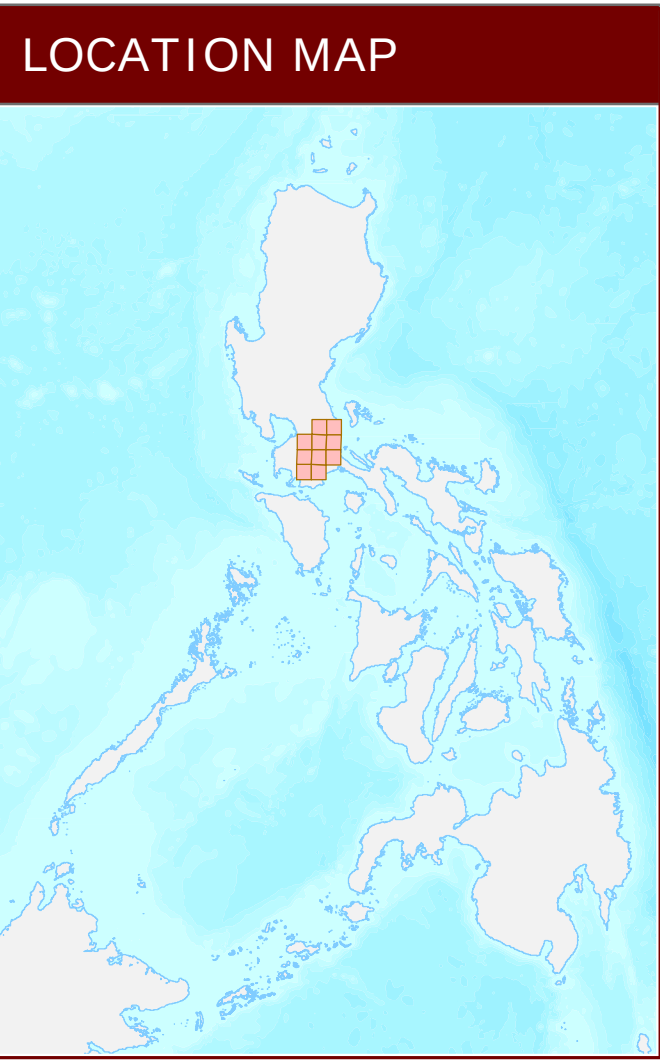
- Regional
- Provincial
- City
- Municipal

Map Index

- Index grid

Topographic Relief

Bathymetry



LAND SUITABILITY MAP FOR ROBUSTA, LIBERICA AND EXCELSA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS

LAGUNA, REGION IV-A

EXTENT OF SUITABILITY FOR ROBUSTA, LIBERICA AND EXCELSA COFFEE PRODUCTION BY MUNICIPALITY

MUNICIPALITY	EXISTING COFFEE (Ha)			TOTAL EXISTING AREA (Ha)	EXPANSION AREA (Ha)						CONFLICT RESOLUTION (Ha)								TOTAL POTENTIAL EXPANSION AREA (Ha)
					Coconut		Shrubland, unmanaged*		Grassland, unmanaged*		Corn		Rice paddy, non-irrigated		Sugarcane		Other crops		
	S1	S2	S1		S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2		
ALAMINOS	-	-	-	-	801	-	2,364	22	476	-	39	-	12	-	-	-	-	-	3,714
BAY	-	-	-	-	346	2	286	-	148	-	699	-	242	-	-	-	-	-	1,723
CABUYAO CITY	-	-	-	-	355	9	3	1	223	-	389	-	438	-	-	-	-	-	1,418
CALAUAN	-	-	-	-	1,866	-	276	-	623	-	1,218	-	246	-	-	-	-	-	4,230
CAVINTI	713	-	76	789	1,227	-	6,090	20	168	5	335	-	135	-	-	-	-	-	7,980
CITY OF BIÑAN	-	-	-	-	-	-	35	-	222	-	356	-	253	-	-	-	-	-	866
CITY OF CALAMBA	-	-	-	-	724	-	814	7	1,076	-	1,856	2	1,511	11	217	15	-	-	6,231
CITY OF SAN PEDRO	-	-	-	-	15	-	26	-	68	-	-	-	3	-	-	-	-	-	111
CITY OF SANTA ROSA	-	-	-	-	-	-	-	-	499	-	215	-	734	-	-	-	-	-	1,449
FAMY	33	-	3	36	235	-	536	-	49	-	219	-	27	-	-	-	-	-	1,067
KALAYAAN	212	-	3	215	1,038	-	1,916	-	205	-	378	-	232	-	-	-	-	-	3,769
LILIW	-	-	-	-	433	-	1,767	104	27	-	385	-	31	-	-	-	-	-	2,748
LOS BAÑOS	-	-	-	-	184	-	423	-	64	-	468	-	52	-	-	-	-	-	1,191
LUISIANA	-	-	-	-	107	-	4,514	-	190	-	0.03	-	163	-	-	-	-	-	4,974
LUMBAN	-	-	-	-	1,068	-	2,073	-	973	-	548	-	309	-	-	-	-	-	4,972
MABITAC	-	-	-	-	311	-	248	-	157	-	349	-	302	-	-	-	-	-	1,367
MAGDALENA	-	-	-	-	350	-	297	-	282	-	1,546	-	183	-	-	-	-	-	2,659
MAJAYJAY	-	-	-	-	842	43	1,174	201	50	20	660	180	45	9	-	-	-	-	3,224
NAGCARLAN	-	-	-	-	824	-	2,851	79	12	-	348	24	38	-	-	-	-	-	4,175
PAETE	-	-	-	-	289	-	1,515	65	83	-	23	-	49	-	-	-	-	-	2,023
PAGSANJAN	-	-	-	-	290	-	201	-	41	-	735	-	121	-	-	-	-	-	1,388
PAKIL	-	-	-	-	66	-	164	-	419	-	424	-	131	-	-	-	-	-	1,204
PANGIL	15	7	6	28	58	-	301	-	561	11	113	-	121	-	-	-	-	-	1,165
PILA	-	-	-	-	71	-	-	-	-	-	436	-	85	-	-	-	-	-	591
RIZAL	-	-	-	-	2	-	1,051	60	16	12	129	28	13	-	-	-	-	-	1,312
SAN PABLO CITY	-	-	-	-	1,160	4	9,798	447	182	33	872	-	367	2	-	-	-	-	12,865
SANTA CRUZ	-	-	-	-	85	-	-	-	24	-	718	-	241	-	-	-	-	-	1,069
SANTA MARIA	-	-	100	100	472	-	1,089	-	878	5	369	-	130	-	-	-	-	-	2,943
SINILOAN	111	-	61	172	352	-	634	-	215	-	151	-	68	-	-	-	-	-	1,420
VICTORIA	-	-	-	-	-	-	-	-	-	-	200	-	125	-	-	-	-	-	326
TOTAL	1,083	7	250	1,340	13,570	58	40,446	1,006	7,933	86	14,180	235	6,408	22	217	15	-	-	84,175

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

AGRONOMIC REQUIREMENT OF ROBUSTA, LIBERICA AND EXCELSA 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 (Robusta, Excelsa, Liberica)	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	30 - 100	FSL, L, SiL	SPD,PD	5.1 - 5.5 7.3 - 7.8	medium	moderate	moderate	common	1000-2000	1000-2000	I, II
	S3	>30	<30	S, LS, CSL, SL	VPD,ED	<5.0 -> 7.9	low	severe	severe	many	>2000	<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 DEPTH (cm)

0 - 30 - very shallow
30 - 50 - shallow
50 - 100 - moderately deep
> 100 - deep to very deep

SOIL DRAINAGE

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

SURFACE IMPEDIMENT

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

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

LAND LIMITATIONS DESCRIPTION AND COMBINATIONS

ELEVATION

EI2 - 1000m - 2000m
EI3 - > 2000m

SLOPE/TOPOGRAPHY

T2 - Undulating to moderately steep
T3 - Steep to very steep

SOIL DRAINAGE

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

SOIL TEXTURE

Tc - Coarse texture

SOIL DEPTH

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

ROCK OUTCROPS

Rc2 - Common
Rc3 - Many

SOIL EROSION

E2 - Moderate erosion
E3 - Severe erosion

FLOODING

F2 - Moderate seasonal flooding
F3 - Severe seasonal flooding

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.

Moderately Suitable (S2)

Land having limitation which in aggregate are moderately severe for sustained application of a given use; the limitation will reduce productivity or benefits and increase required inputs to the extent that the overall advantage to be gained from the use, although still attractive, will be appreciably inferior to that expected on class S1 land.

Marginally Suitable (S3)

Land having limitations which in aggregate are severe for sustained application of a given use and will so reduce productivity or benefits, or increase required inputs, that this expenditure will be only marginally justified.

Not Suitable / Not Relevant

Land having limitations which may be surmountable in time but which cannot be corrected with existing knowledge at currently acceptable cost; the limitations are so severe as to preclude successful sustained use of the land in the given manner. Existing forest, shrubland greater than 18% slope, irrigated paddy rice and miscellaneous land types such as built up areas, roads, etc are considered as not relevant.

CLIMATE TYPE

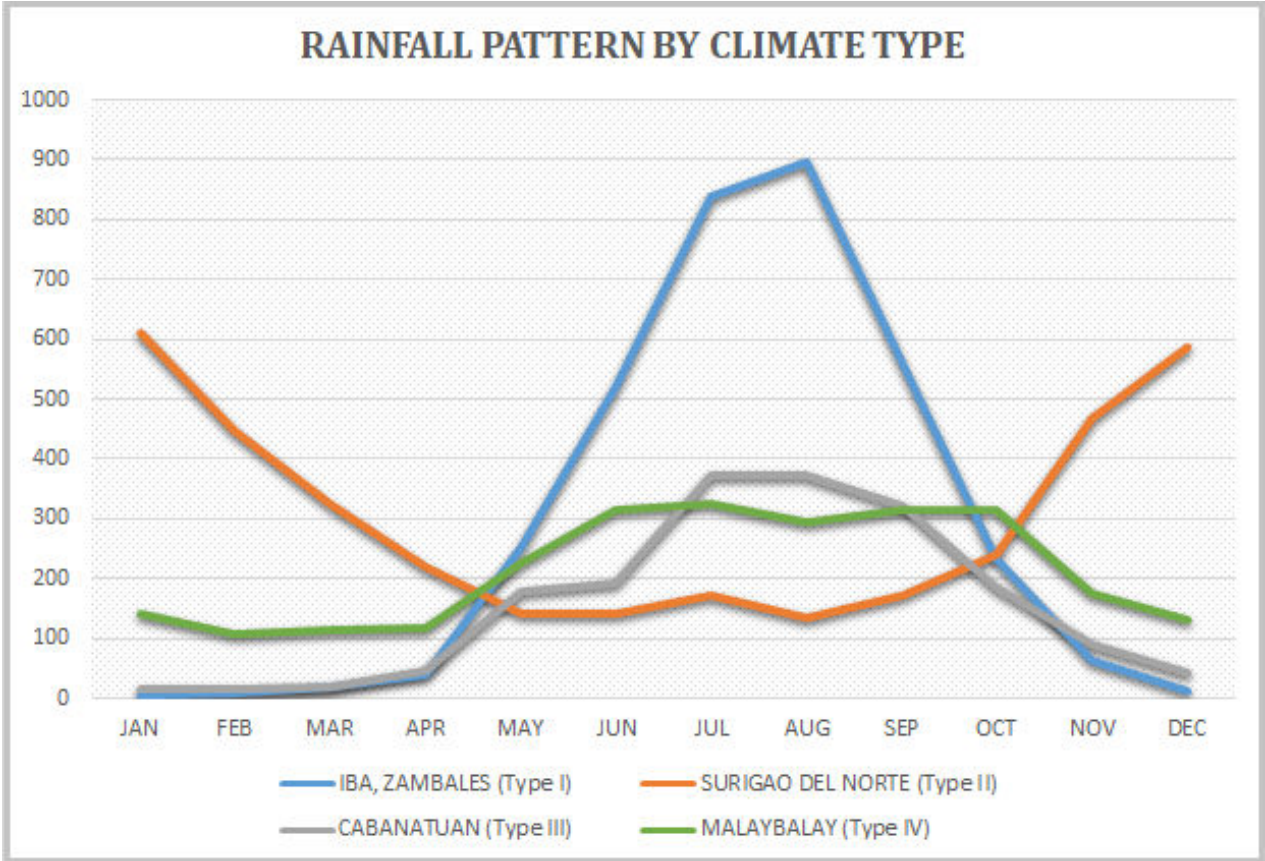
TYPE I : Two pronounced season, dry from November to April and wet during the rest of the year. Maximum rain period is from June to September

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.

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

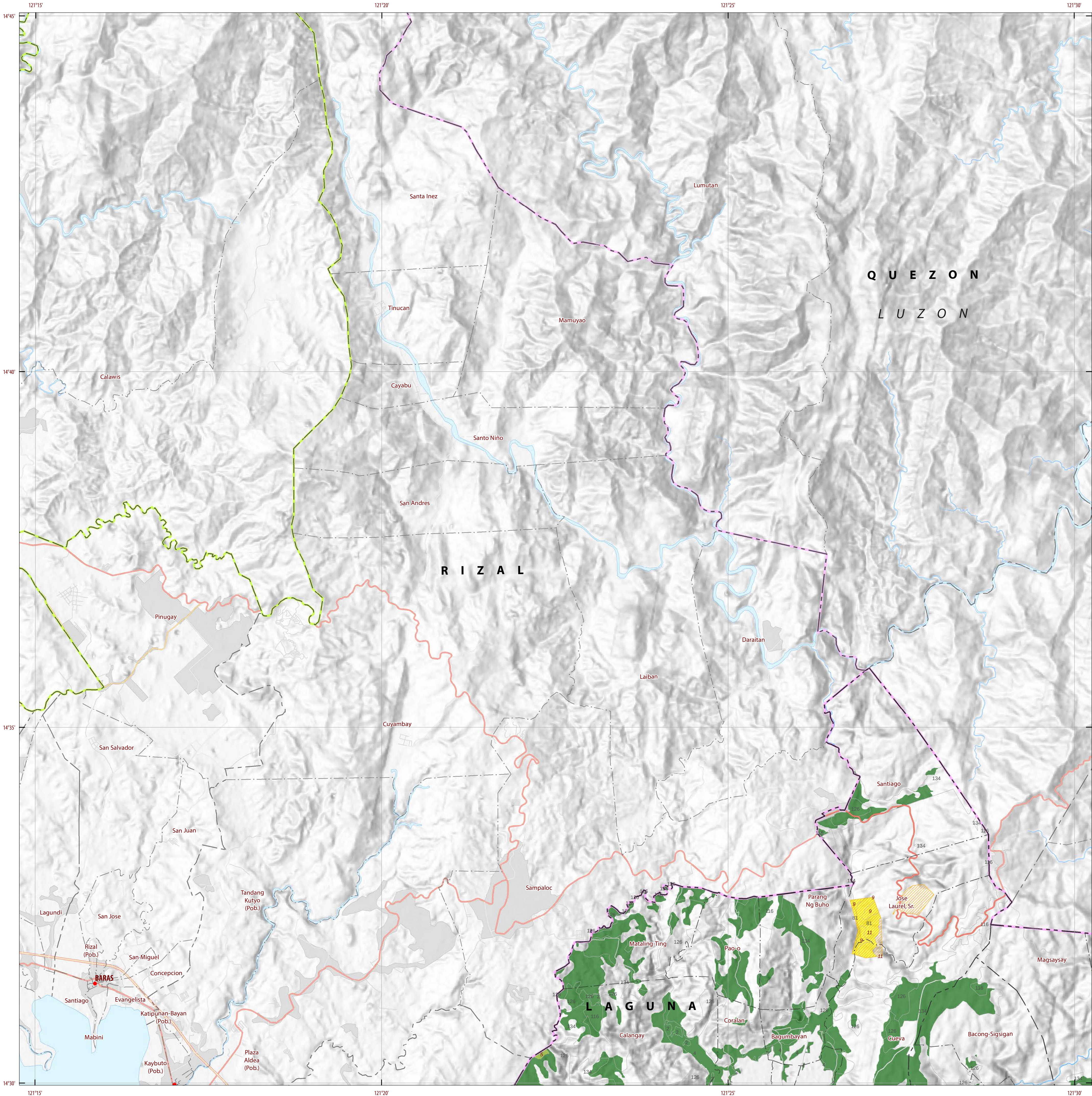
Western part of Laguna lies on climatic Type I and eastern part is Type III.



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

CODE	LAND LIMITATION	CODE	LAND LIMITATION
<i>1</i>	E2-Sh2-Rc2	<i>11</i>	T2-E3-Sh3-Rc2
<i>2</i>	EI2-Sh2-Rc2	<i>12</i>	T2-E3-Sh3-Rc3
<i>3</i>	F2-D2	<i>13</i>	T2-EI2-E3-Sh2-Rc2
<i>4</i>	Rc2	<i>14</i>	T2-EI2-E3-Sh3-Rc2
<i>5</i>	Sh2-Rc2	<i>15</i>	T3
<i>6</i>	Sh2-Rc3	<i>16</i>	T3-E3
<i>7</i>	T2	<i>17</i>	T3-E3-Sh3-Rc3
<i>8</i>	T2-E3	<i>18</i>	T3-EI2-E3-Sh3-Rc3
<i>9</i>	T2-E3-Sh2-Rc2	<i>19</i>	T3-E3-E3-Sh3-Rc3
<i>10</i>	T2-E3-Sh2-Rc3		

CODE	LAND USE
2	Non-irrigated rice
4	Corn
81	Coffee
82	Cacao
112	Sugarcane
116	Coconut
126	Grassland
134	Shrubland, unmanaged



LAND SUITABILITY MAP
ROBUSTA, LIBERICA
AND EXCELSA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY
ASSESSMENT OF STRATEGIC PRODUCTION AREAS

SCALE 1 : 50 000
0 0.5 1 2 3 4 5
0 0.5 1 2 3
Kilometers
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

Coffee

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

3230-II

3230-III

3229-IV

3229-I

3229-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 (PAO, 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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: Department of Agriculture and Fisheries - ARMM, Department of Agriculture Regional Field Office of Region IX, X, XII and XIII (Caraga)

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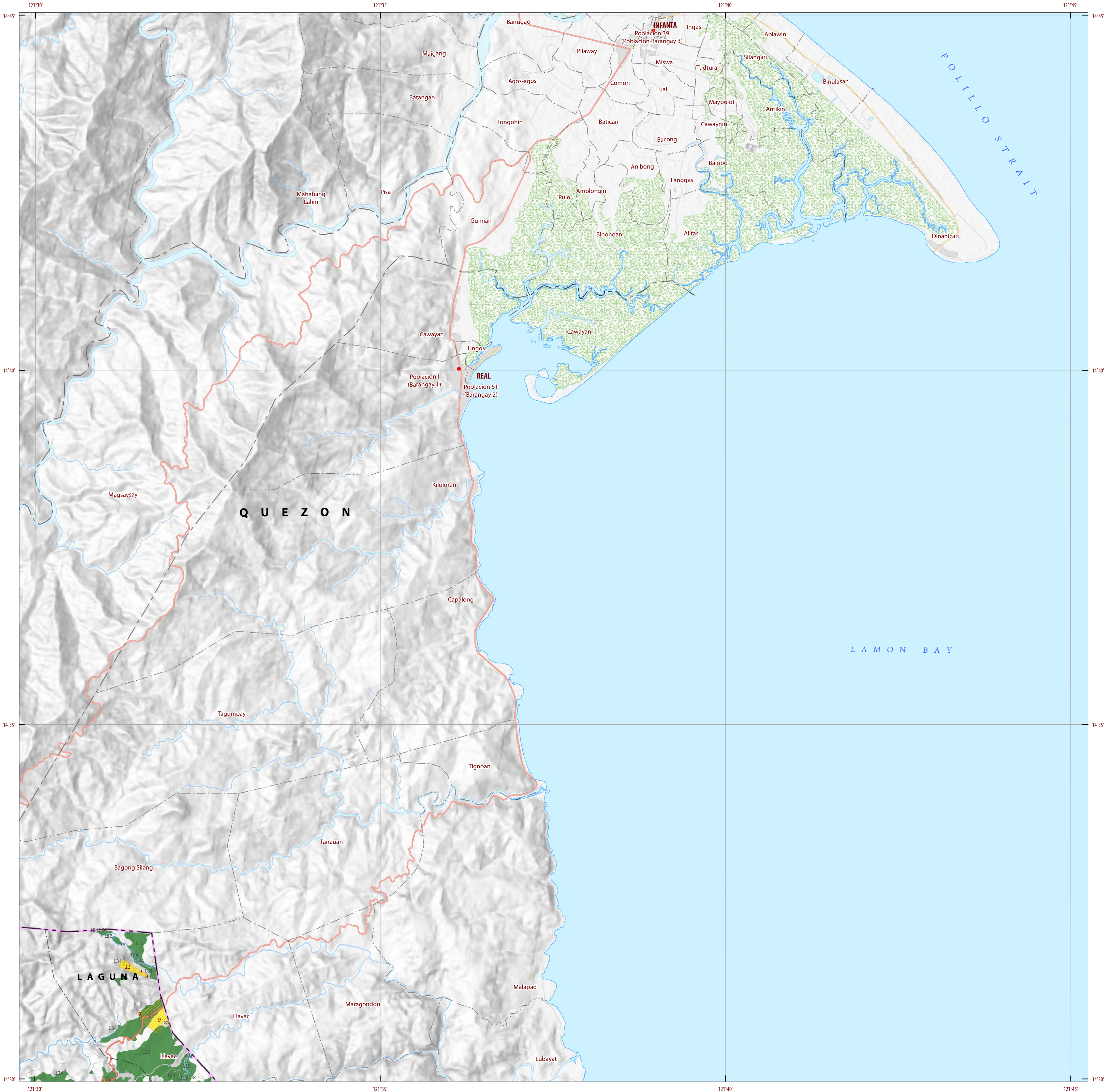
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PROVINCE OF LAGUNA

Sheet 1 of 10

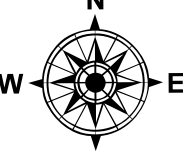
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LAND RESOURCES EVALUATION AND SUITABILITY ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000

0 0.5 1 2 3 4 5
Kilometers

0 0.5 1 2 3
Miles

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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

Coffee

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

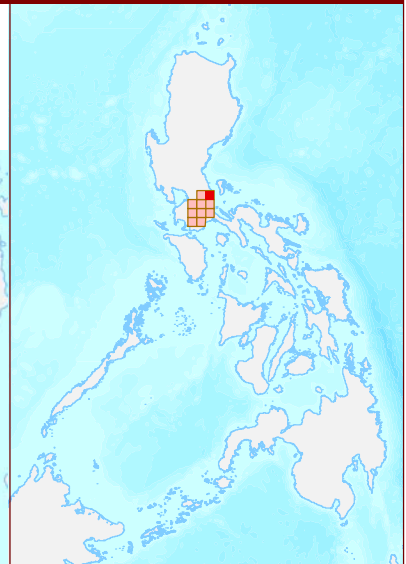
3230-II

3330-III

3229-I

3329-IV

INDEX MAP



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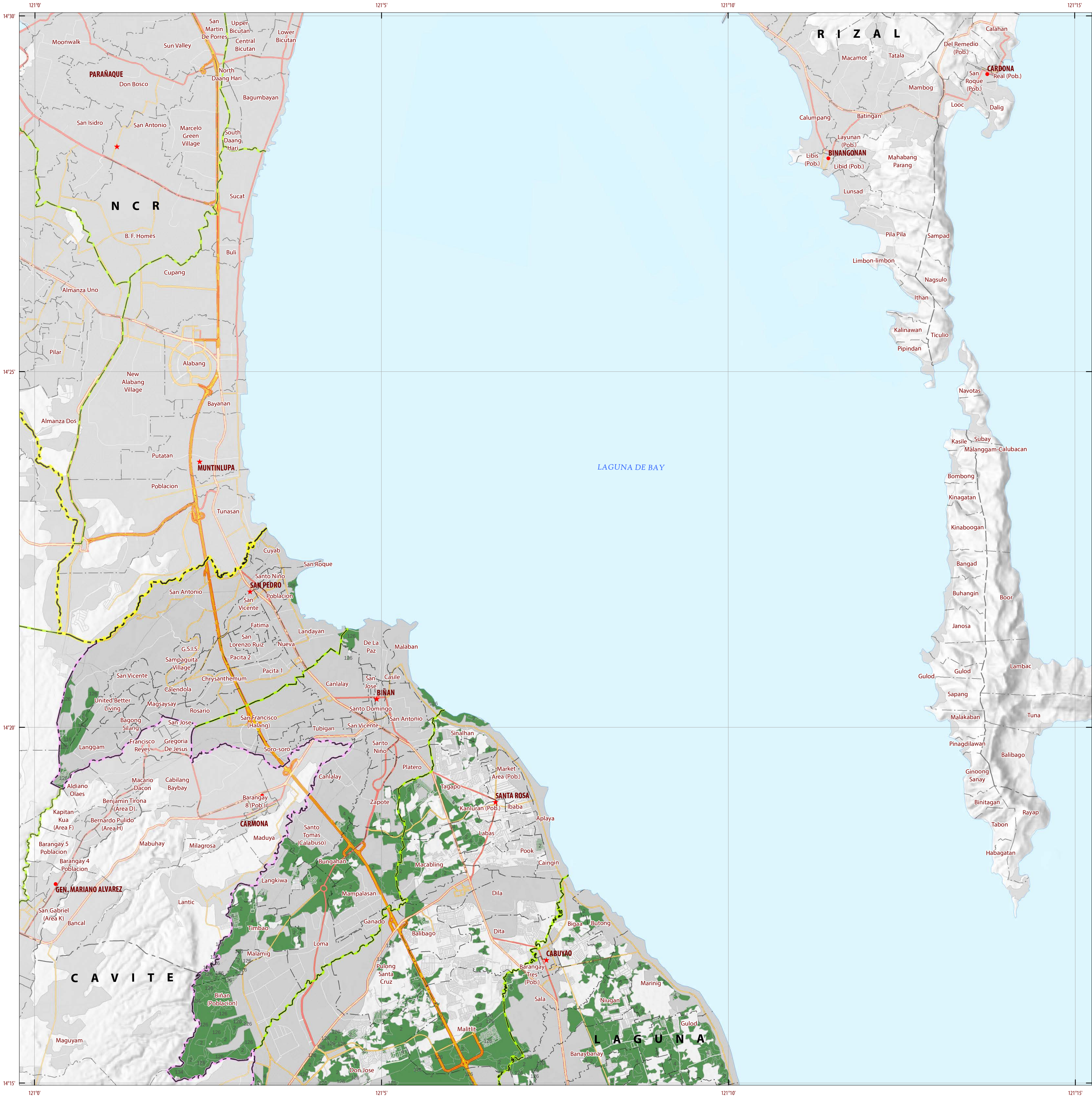
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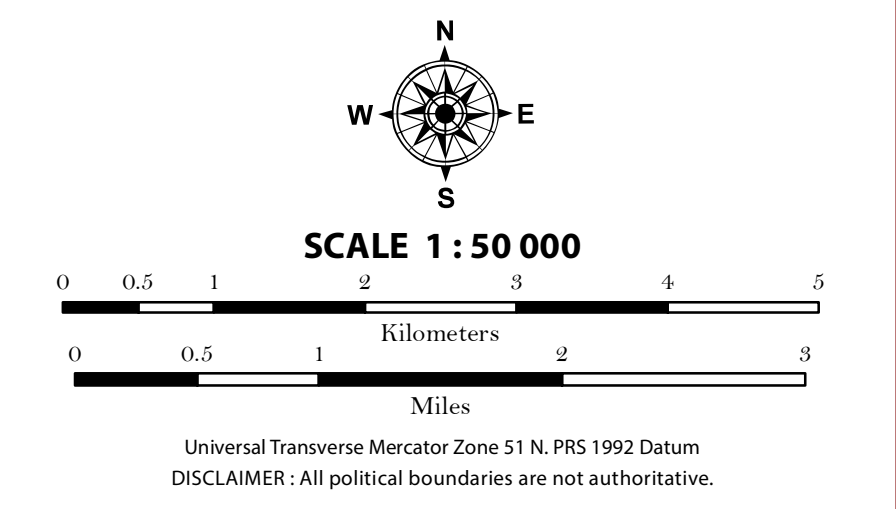
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BUREAU OF SOILS AND WATER MANAGEMENT
SRDC Bldg, Elliptical Road Cor. Visayas Avenue, Diliman, Quezon City 1101
Tel/Fax No.: (+632) 332-9534 E-mail: bswmcenter@da.gov.ph



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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
- Coffee
- Land limitation
- Land use

CONVENTIONAL SIGNS

ROADS

- Expressway
- Trunk line
- Primary
- Secondary
- Tertiary

BOUNDARY

- Region
- Province
- District
- Municipality
- Barangay

HYDROLOGY

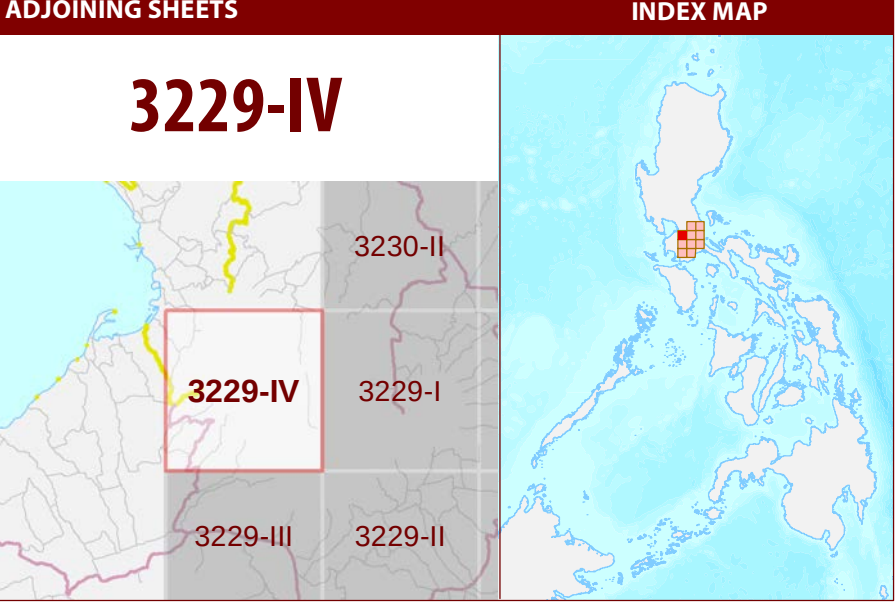
- Sea / Shoreline
- Lakes / Rivers

PLACES

- Capital City / City
- Capital Town / Town

LAND USE

- Built-up
- Fishpond
- Mangrove



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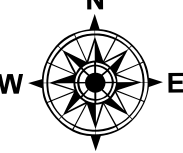
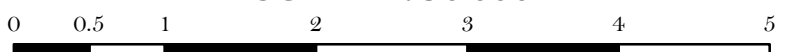
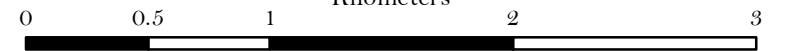
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ASSESSMENT OF STRATEGIC PRODUCTION AREAS


SCALE 1 : 50 000


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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

 Coffee

 Land limitation

 Land use

CONVENTIONAL SIGNS

ROADS

 Expressway

 Trunk line

 Primary

 Secondary

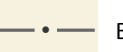
 Tertiary

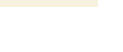
BOUNDARY

 Region

 Province

 District

 Municipality

 Barangay

HYDROLOGY

 Sea / Shoreline

 Lakes / Rivers

PLACES

 Capital City / City

 Capital Town / Town

LAND USE

 Built-up

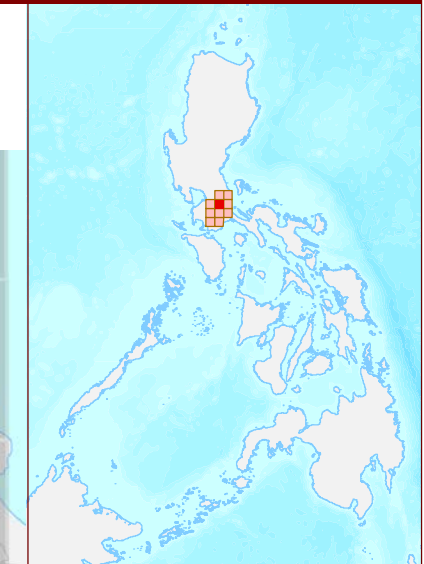
 Fishpond

 Mangrove

ADJOINING SHEETS

INDEX MAP

3229-I



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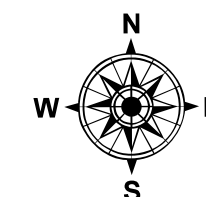
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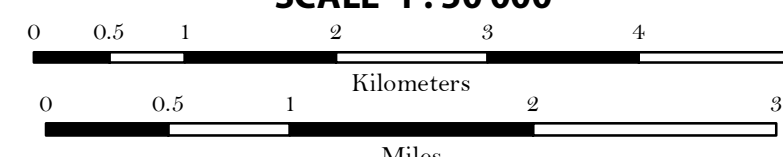
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Tel/Fax No. : (+632) 332-9534 E-mail : bswmcenter@yahoo.com

LAND SUITABILITY MAP ROBUSTA, LIBERICA AND EXCELSA 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
 Coffee
 Land limitation
 Land use

CONVENTIONAL SIGNS

ROADS

- Express
- Trunk line
- Primary
- Secondary
- Tertiary

BOUNDARY

- Region
 Province

PLACES

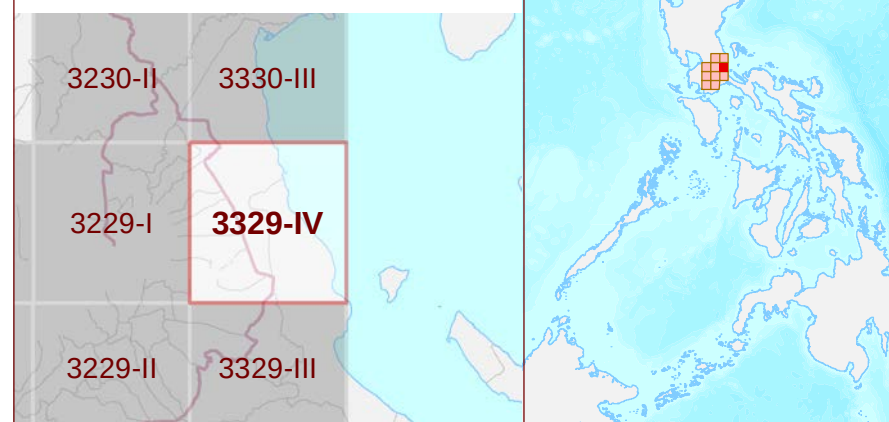
- ★ Capital City / City
 ● Capital Town / Town

LAND USE

- Legend: Built-up Fishpond Mangrove

ADJOINING SHEETS

3329-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), 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 (PRISIM) (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
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

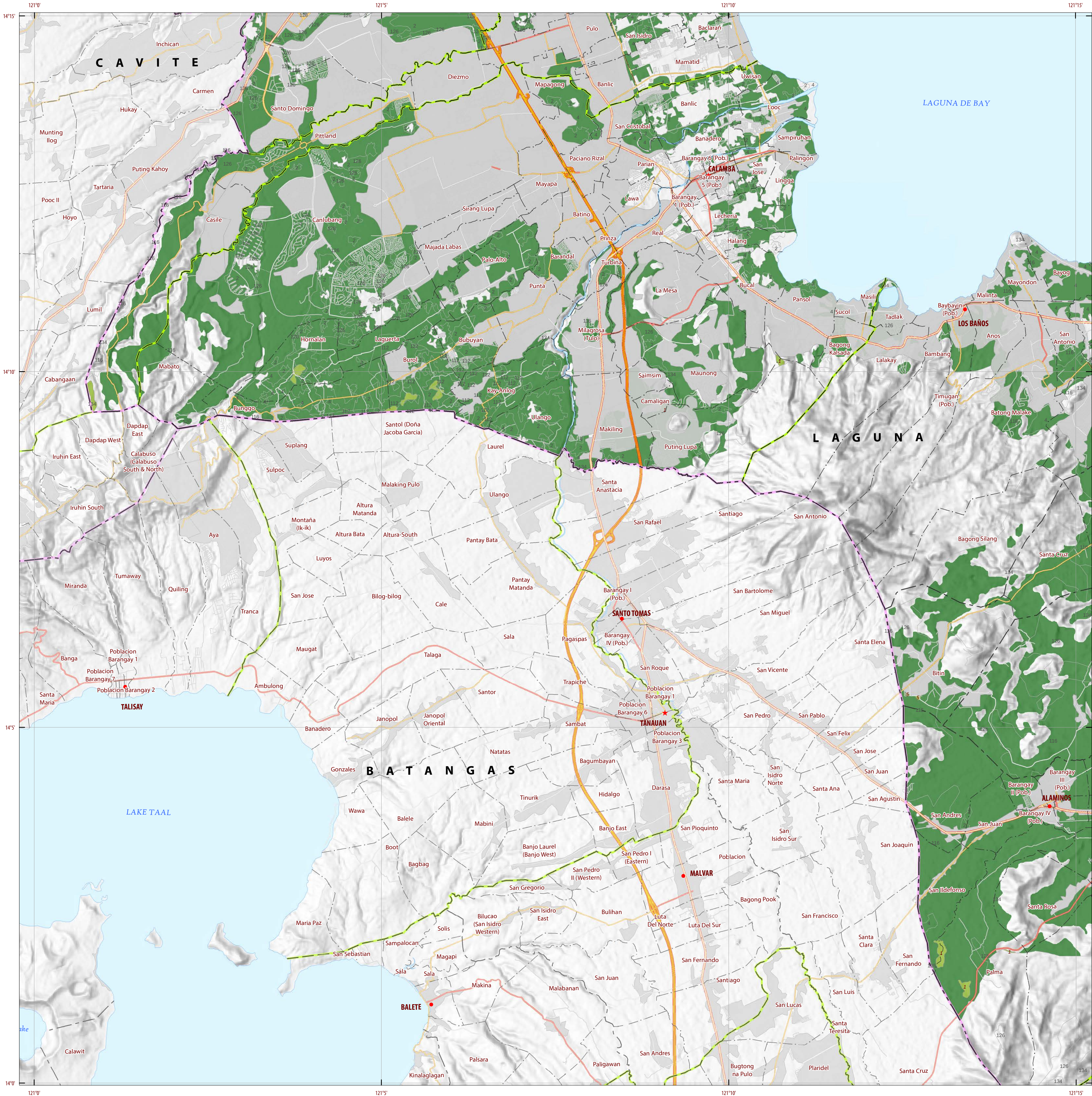
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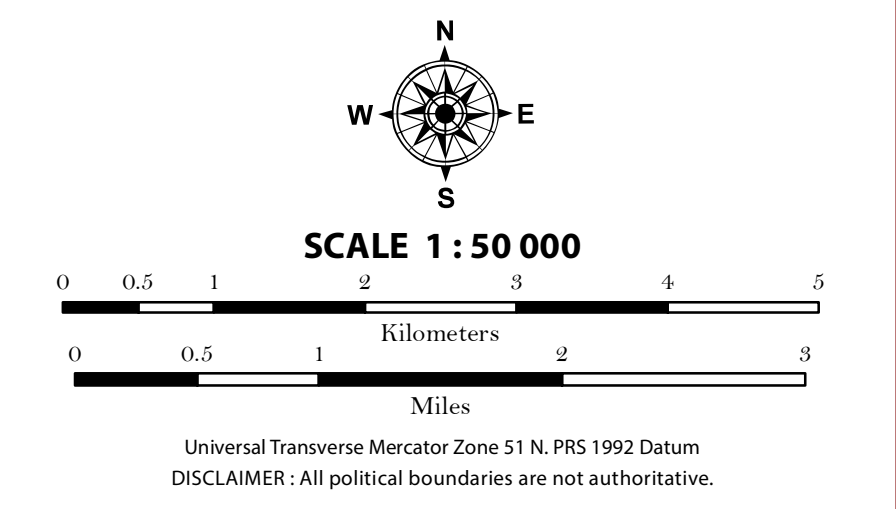
PROVINCE OF LAGUNA

Sheet 5 of 10 Sheet No. 3329-IV



LAND SUITABILITY MAP
ROBUSTA, LIBERICA
AND EXCELSA 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.
- 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
- Coffee
- Land limitation
- Land use

CONVENTIONAL SIGNS

ROADS

- Expressway
- Trunk line
- Primary
- Secondary
- Tertiary

BOUNDARY

- Region
- Province
- District
- Municipality
- Barangay

HYDROLOGY

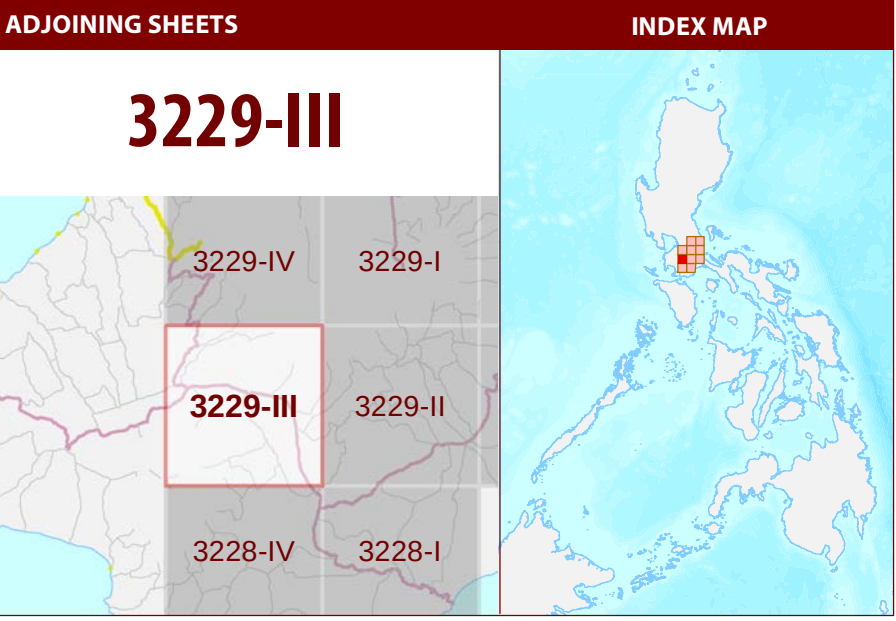
- Sea / Shoreline
- Lakes / Rivers

PLACES

- Capital City / City
- Capital Town / Town

LAND USE

- Built-up
- Fishpond
- Mangrove



MISCELLANEOUS INFORMATION

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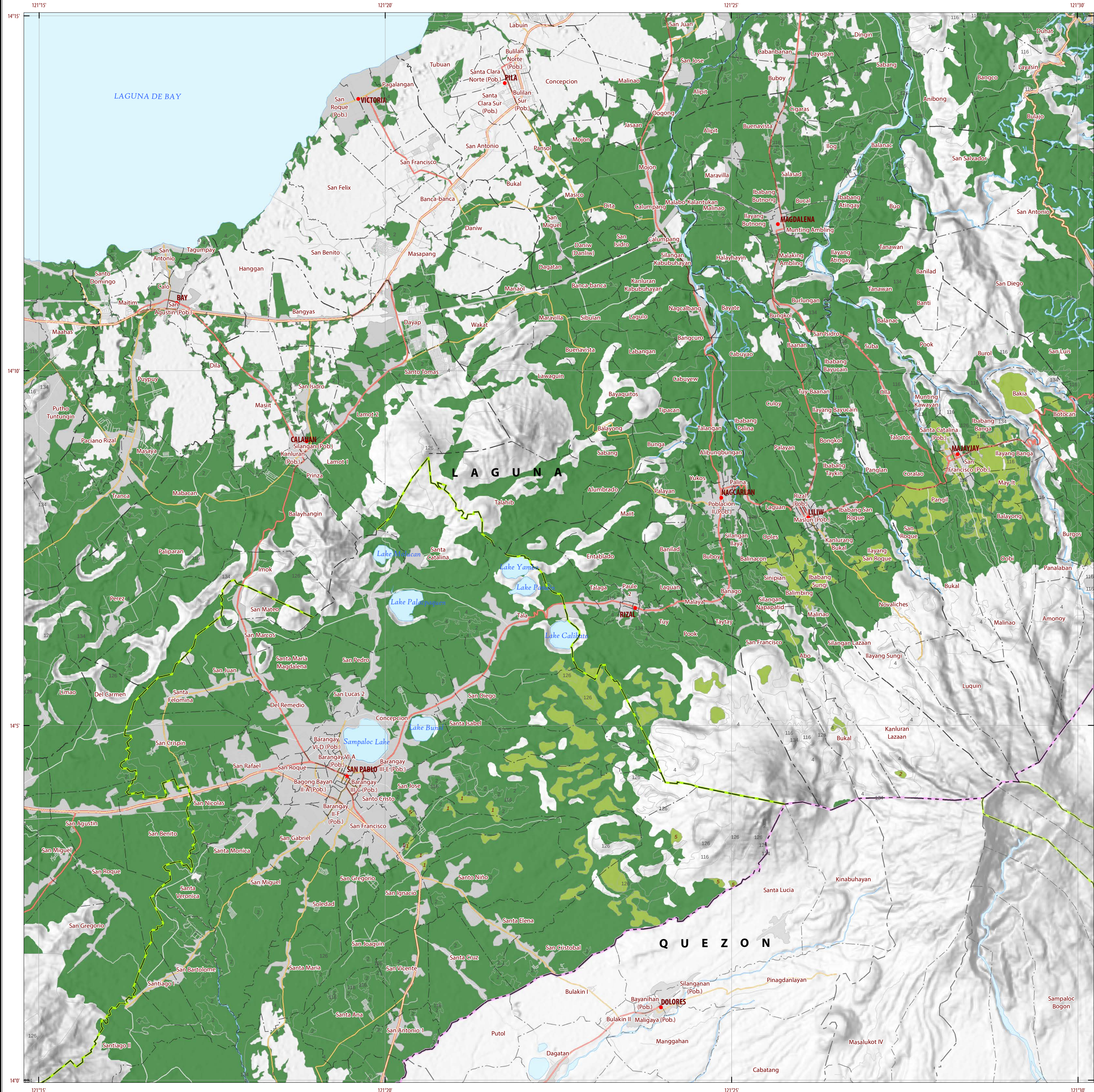
Project Leader : BERNARDO B. PASCUA
GIS and Cartography : IRVIN K. SAMALCA

Funding Agency : Department of Agriculture - Bureau of Agricultural Research (DA-BAR)
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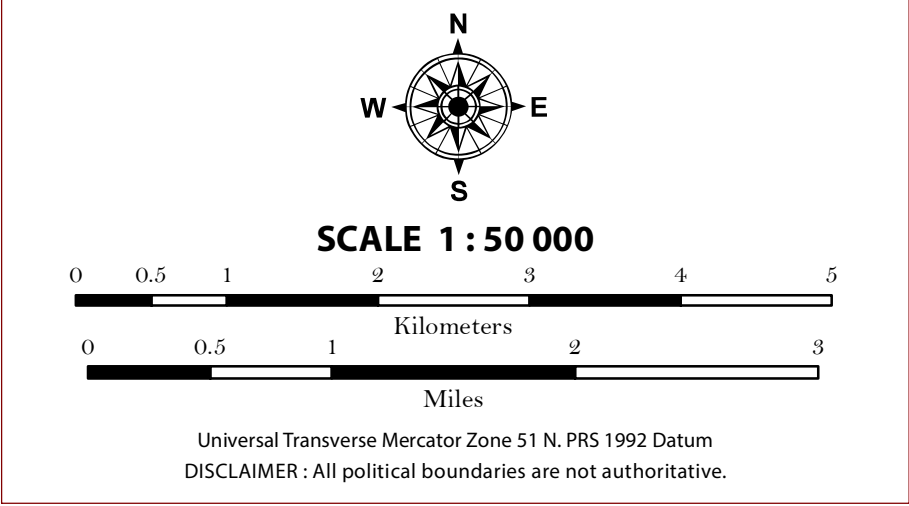
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SRDC Bldg, Elliptical Road Cor. Visayas Avenue, Diliman, Quezon City 1101
Tel/Fax No.: (+632) 322-9534 E-mail: bswmcenter@da.gov.ph



LAND SUITABILITY MAP ROBUSTA, LIBERICA AND EXCELSA 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.
- 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
- Coffee
- 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

3229-II

INDEX MAP

MISCELLANEOUS INFORMATION

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

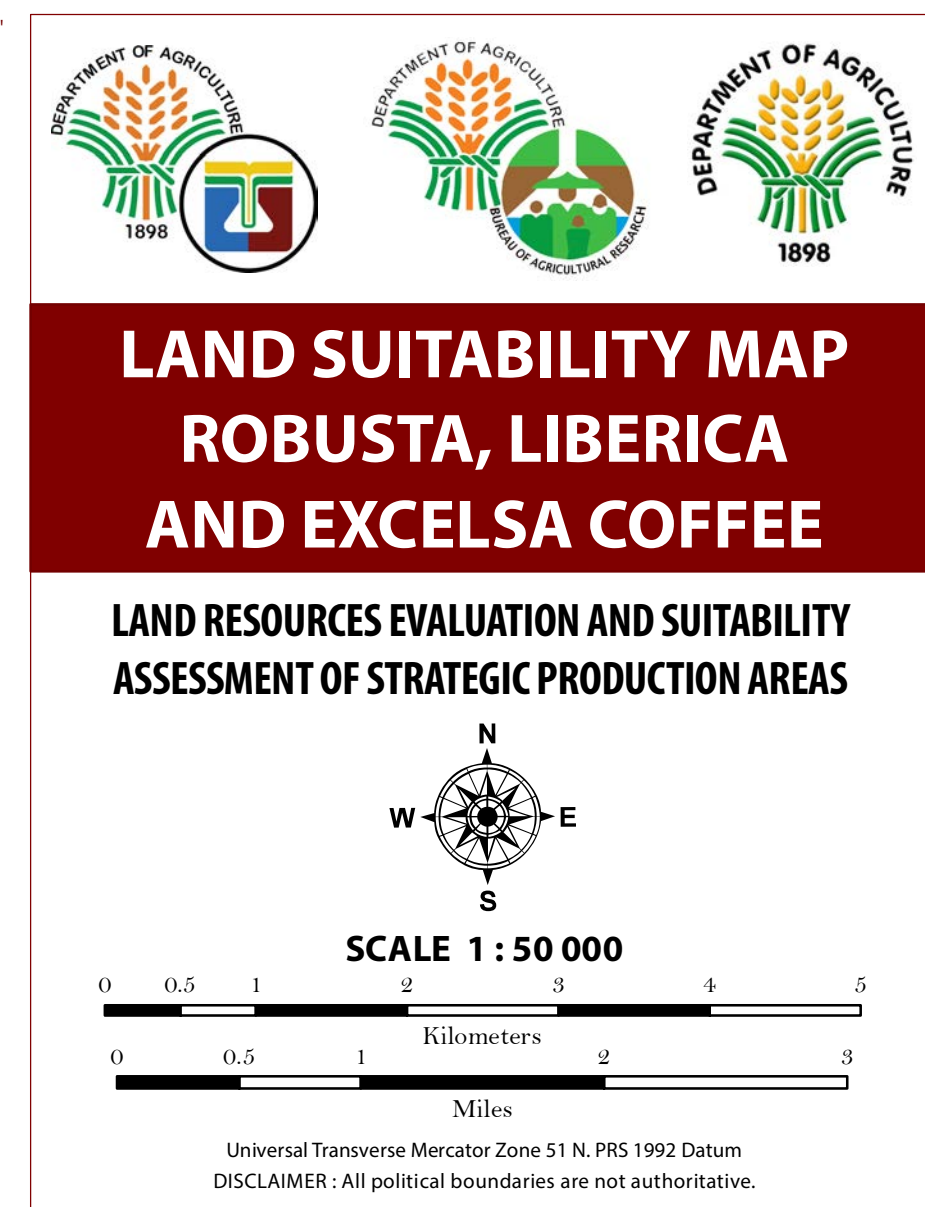
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SRDC Bldg, Elliptical Road Cor. Viayas Avenue, Diliman, Quezon City 1101
Tel/Fax No.: (+632) 332-9534 E-mail: bswmcenter@da.gov.ph



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.

NGP Areas

Coffee

1

116

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
INDEX MAP

3329-III

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 (PAO, 2015) and Philippine Rice Information System (PRIS) for 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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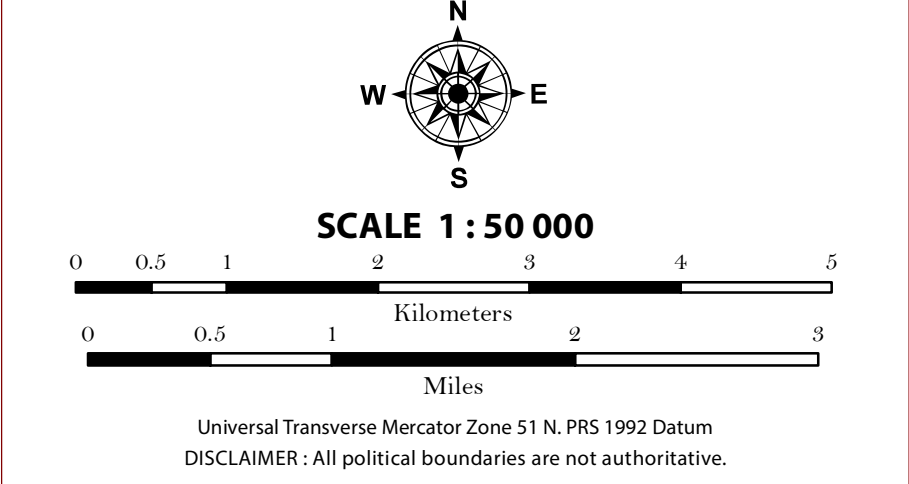
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Tel/Fax No.: (+632) 332-9534 E-mail: bswmclientcenter@yahoo.com



LAND SUITABILITY MAP ROBUSTA, LIBERICA AND EXCELSA 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.

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

Coffee

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

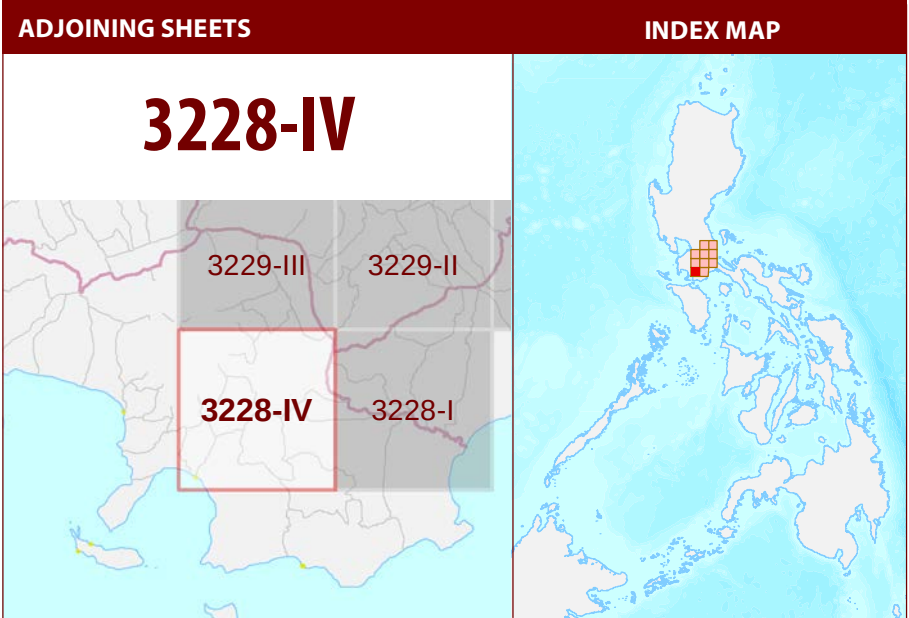
Capital Town / Town

LAND USE

Built-up

Fishpond

Mangrove



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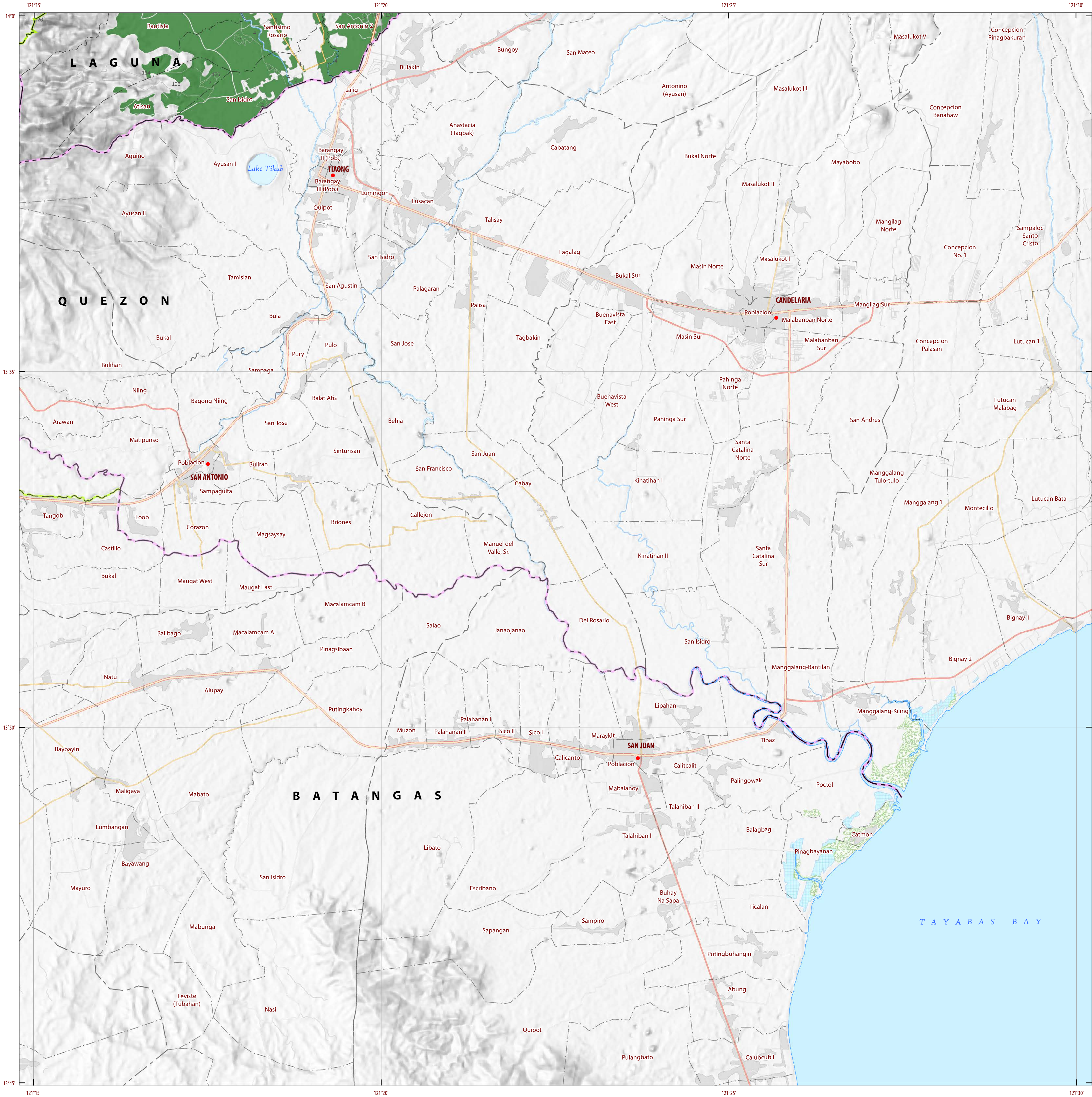
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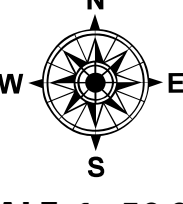
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Tel/Fax No.: (+632) 322-9534 E-mail: bswmcenter@da.gov.ph





LAND SUITABILITY MAP
ROBUSTA, LIBERICA
AND EXCELSA COFFEE

LAND RESOURCES EVALUATION AND SUITABILITY
ASSESSMENT OF STRATEGIC PRODUCTION AREAS



SCALE 1 : 50 000

00.512345

00.512345

Kilometers

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.

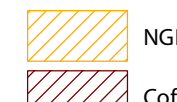
S3

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.

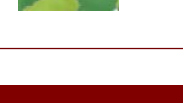
Not Suitable/ Not Relevant

OTHER SIGNS

 NGP Areas

 Coffee

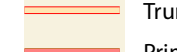
 Land limitation

 Land use

CONVENTIONAL SIGNS

ROADS

 Expressway

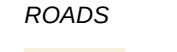
 Trunk line

 Primary

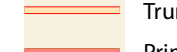
 Secondary

 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

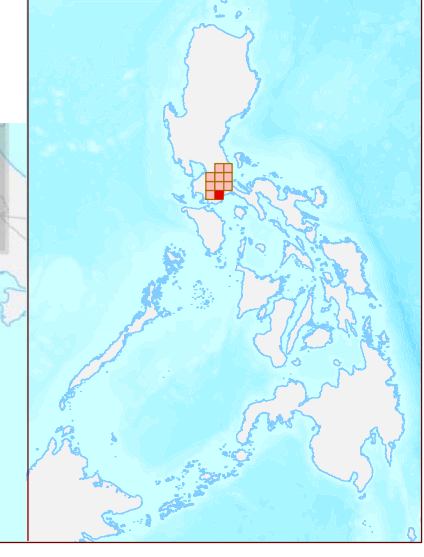
ADJOINING SHEETS

3228-I

3229-III3229-II3229-III

3228-IV3228-I

INDEX MAP



MISCELLANEOUS INFORMATION

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PROVINCE OF LAGUNA

Sheet 10 of 10

Sheet No. 3228-I