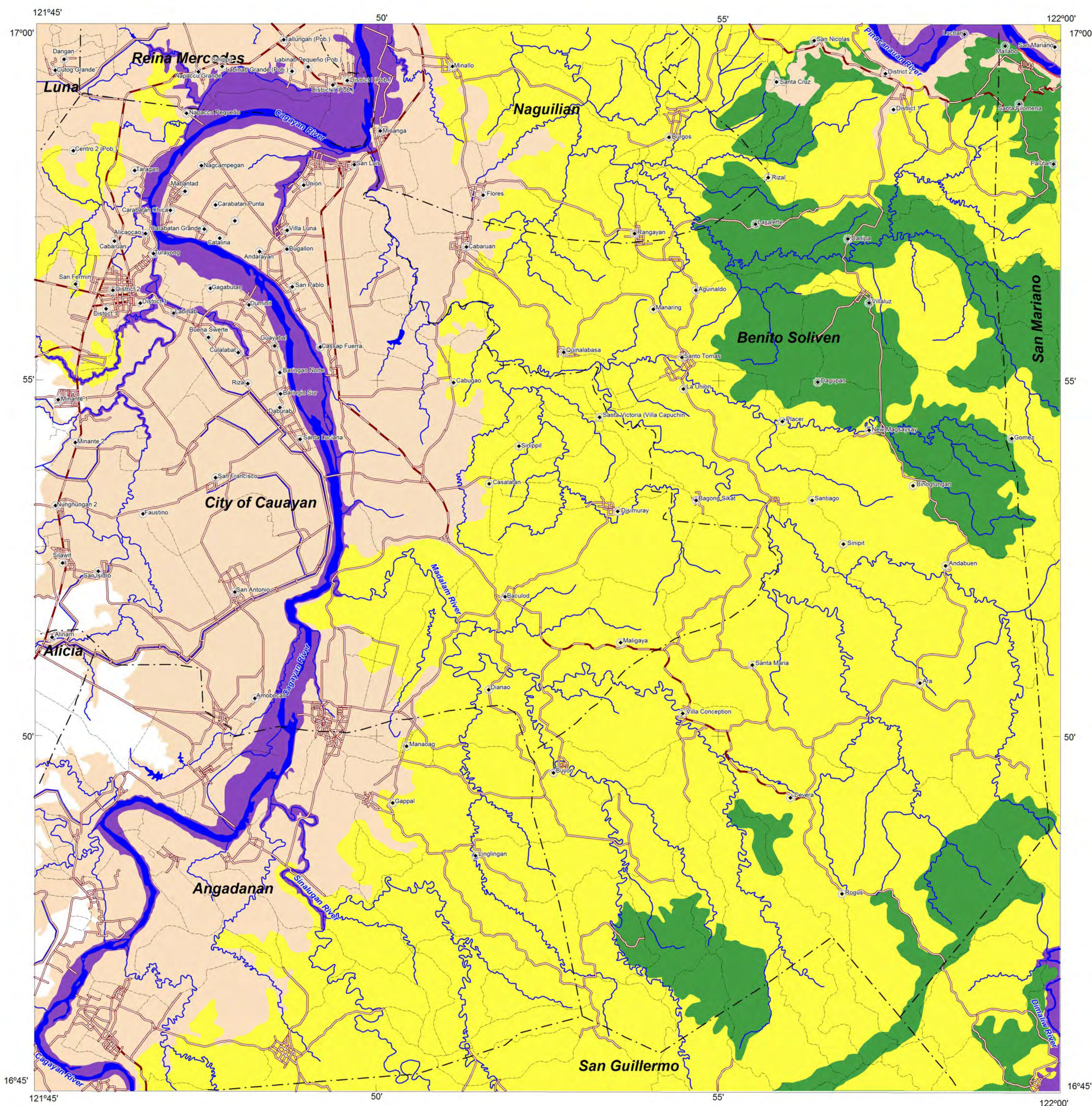
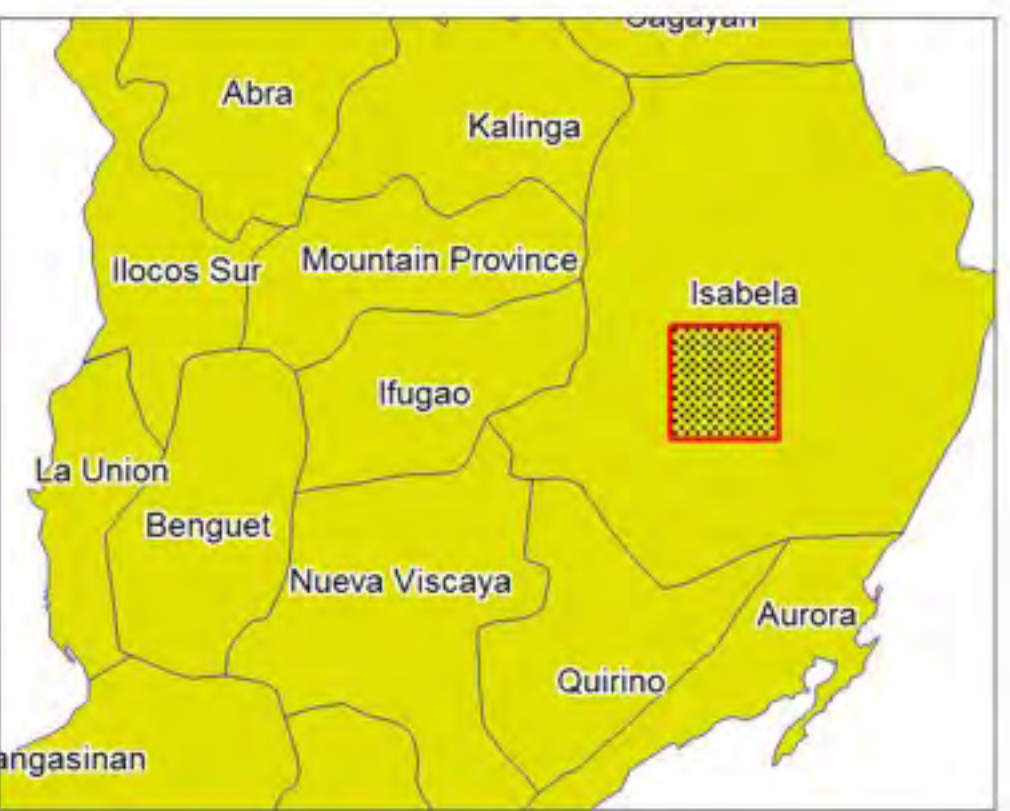


LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF CAUAYAN QUADRANGLE ISABELA PROVINCE, PHILIPPINES



INDEX MAP



LEGEND :

- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
- Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
- Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
- High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
- Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition

- Roads
- River
- Municipal boundary
- Barangay center location



0 1.5 3
kilometers

TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

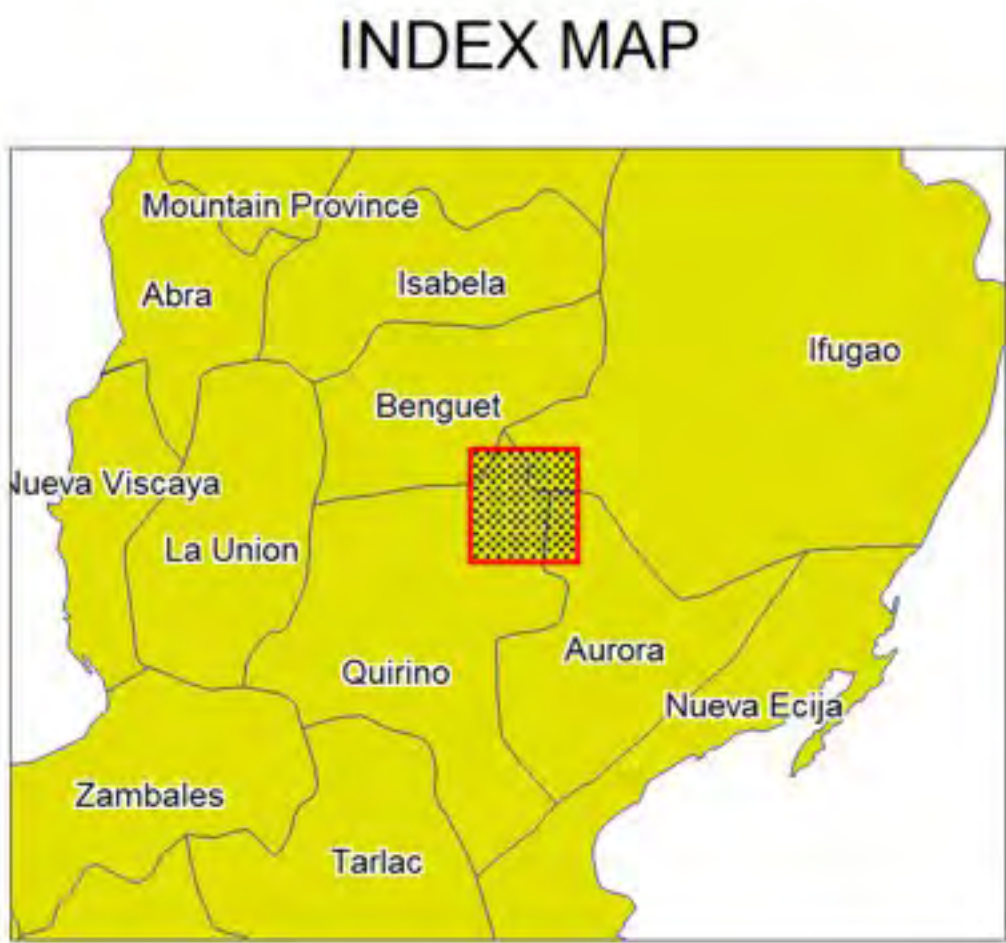
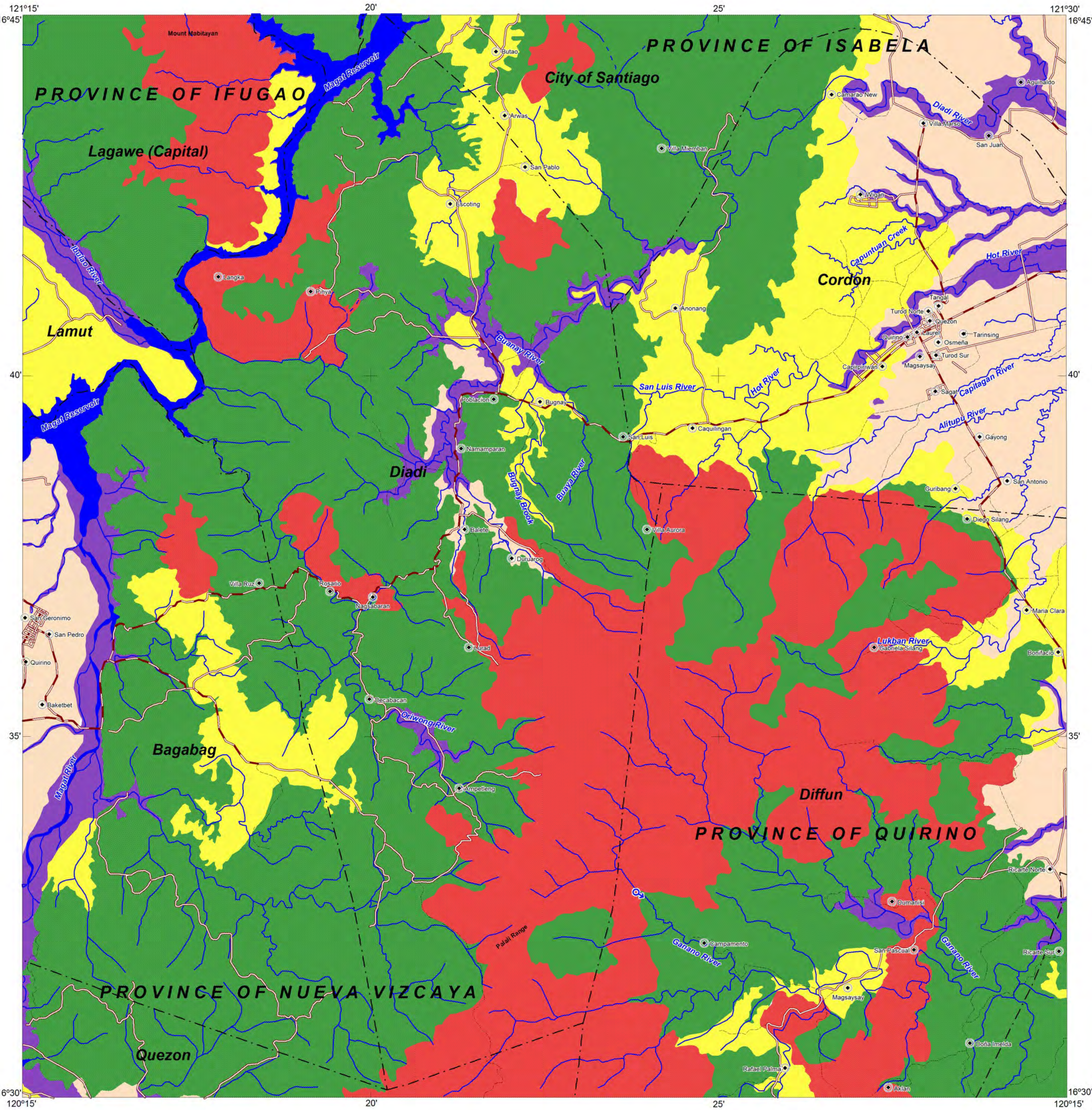
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7376 I "Cauayan Quadrangle"



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
MINES AND GEOSCIENCES BUREAU
LANDS GEOLOGICAL SURVEY DIVISION

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF CORDON QUADRANGLE ISABELA, QUIRINO, NUEVA VIZCAYA AND IFUGAO PROVINCES, PHILIPPINES



- LEGEND :**
- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
- Main Road
Secondary Road
Trail
River
Municipal boundary
Barangay center location
Flash flood exit point



0 1.5 3
kilometers

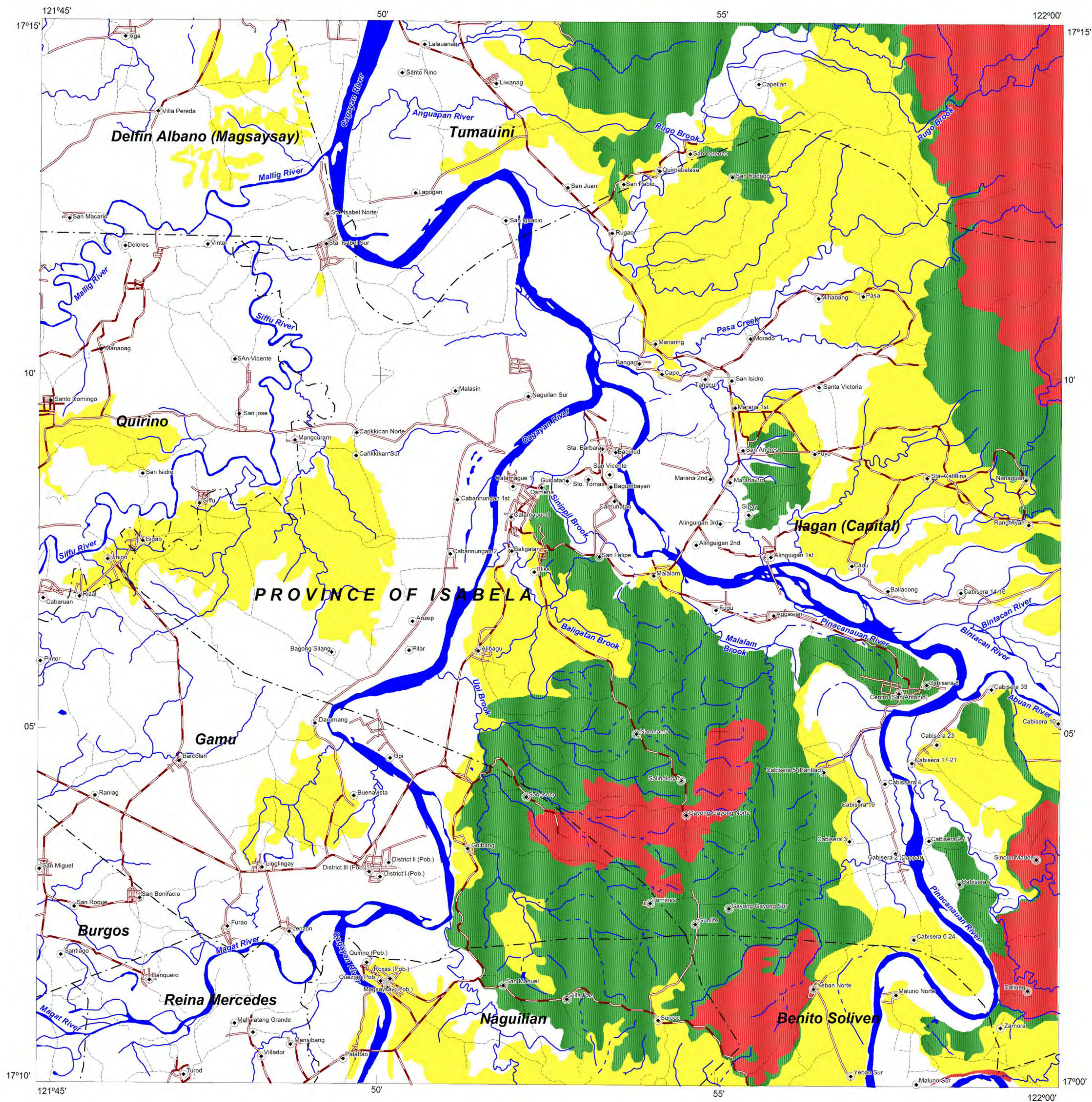
TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

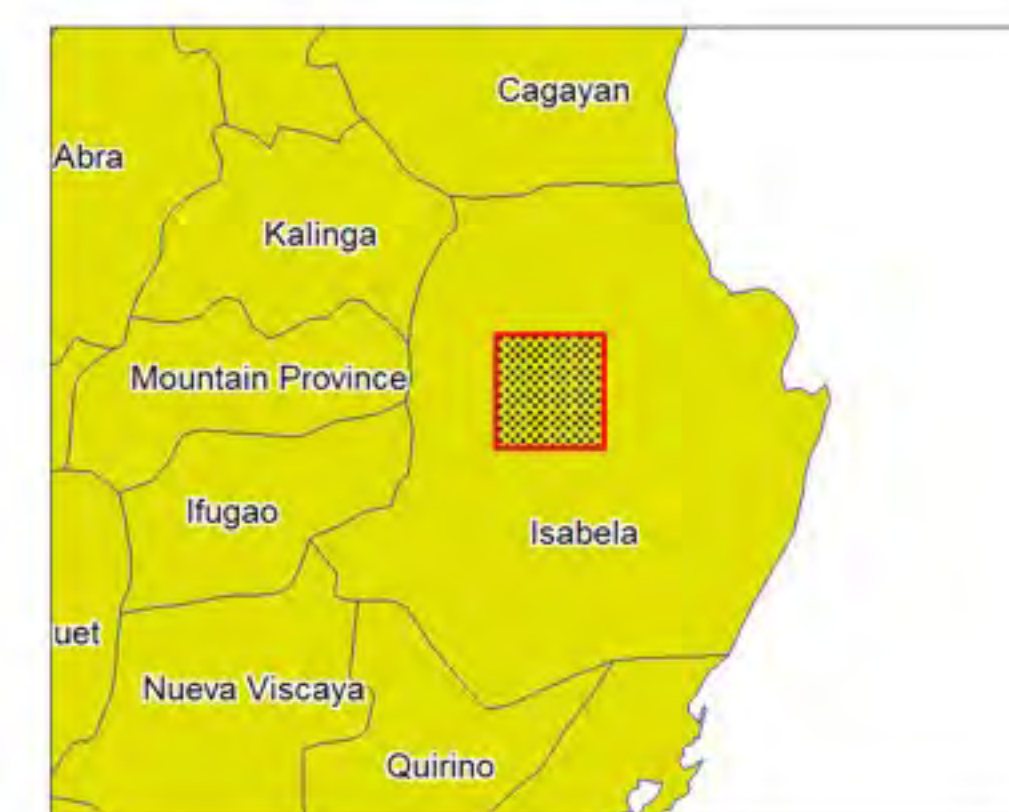
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7276 II "Cordon Quadrangle"

LANDSLIDE SUSCEPTIBILITY MAP OF ILAGAN QUADRANGLE ISABELA PROVINCE, PHILIPPINES



INDEX MAP



LEGEND :

High susceptibility to landslide

Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.

Moderate susceptibility to landslide

Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.

Low susceptibility to landslide

Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.

- Roads
- River
- Municipal boundary
- Barangay center location



0 1.5 3
kilometers

TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

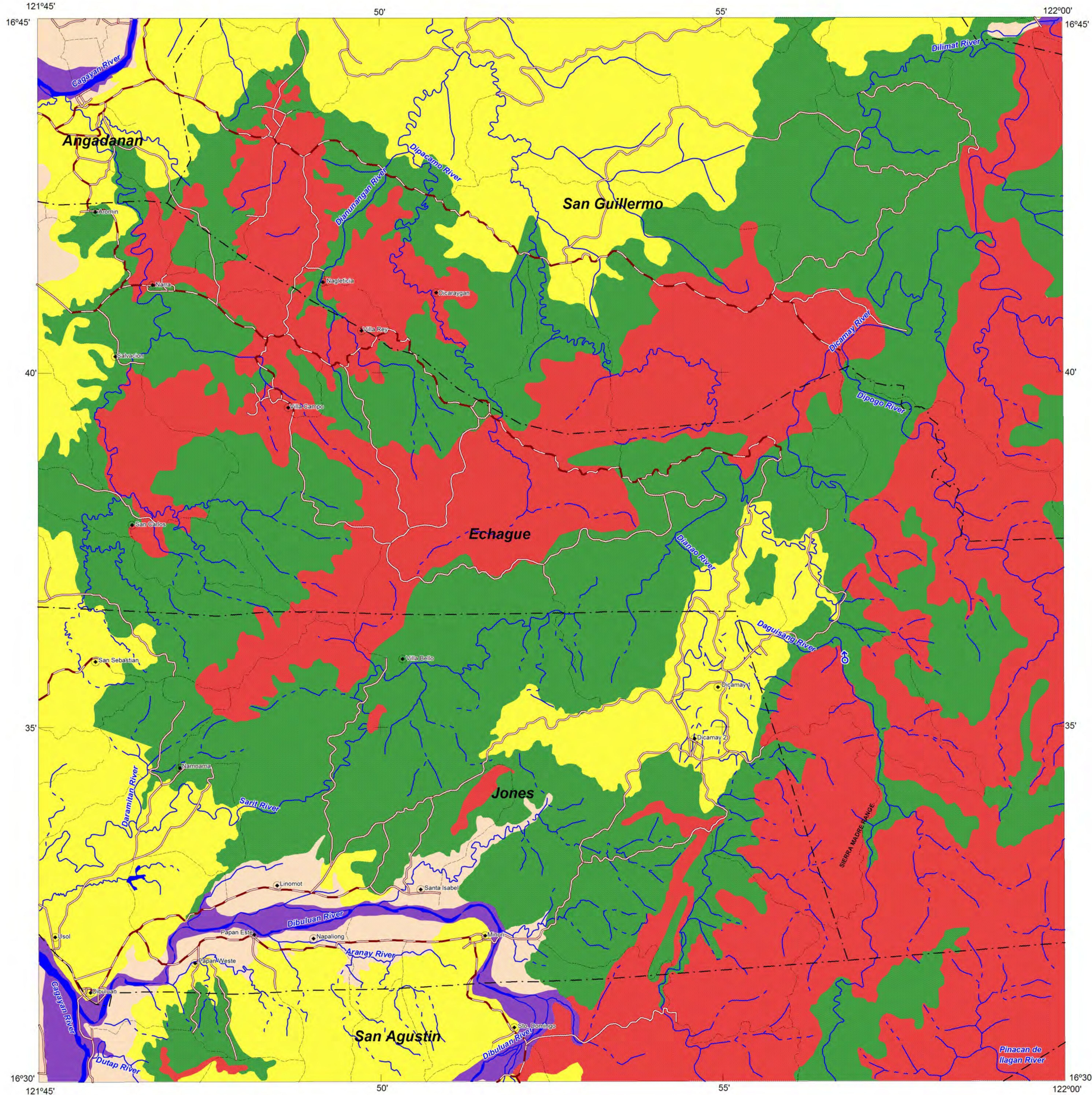
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7377 II "Ilagan Quadrangle"



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
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LANDS GEOLOGICAL SURVEY DIVISION

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF NAPALIONG QUADRANGLE ISABELA PROVINCE, PHILIPPINES



INDEX MAP



LEGEND :

- 
High susceptibility to landslide

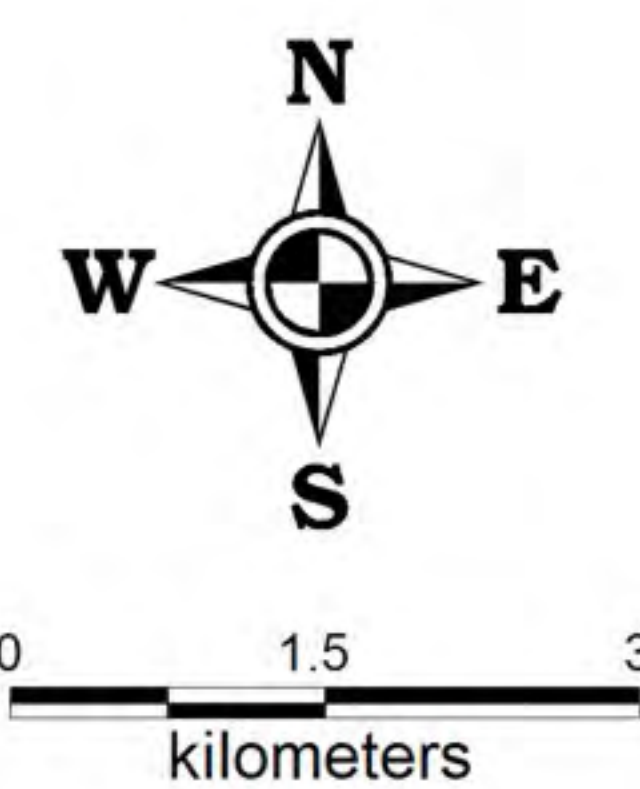
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - 
Moderate susceptibility to landslide

Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - 
Low susceptibility to landslide

Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - 
High susceptibility to flooding

Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains, include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - 
Low to moderate susceptibility to flooding

Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition
 -  Roads
 -  River
 -  Municipal boundary
 -  Barangay center location
 -  Flash flood exit point



TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7376 II "Napaliong Quadrangle"



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
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This map illustrates the geographical distribution of three major ethnic groups in the Cordillera region of Luzon, Philippines. The Ilocano population is represented by yellow shaded areas, primarily located in the western and central parts of the region. The Tagalog population is shown in green shaded areas, concentrated in the eastern and central parts. The Visayan population is indicated by orange shaded areas, found in the southern and eastern parts. Major cities and towns are marked with black dots and labeled, including Tabuk (Capital), Quezon, Santa Maria, Santo Tomas, and Delfino Albay (Magsaysay). The map also shows the Ilog River, Agno River, and other water bodies. The map is bounded by coordinates 121°30' to 121°45' East and 17°15' to 17°30' North.

 High susceptibility to landslides

Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.

 Moderate susceptibility to landslide

Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.

 Low susceptibility to landslide

Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.

 High susceptibility to flooding

Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.

 Low to moderate susceptibility to flooding

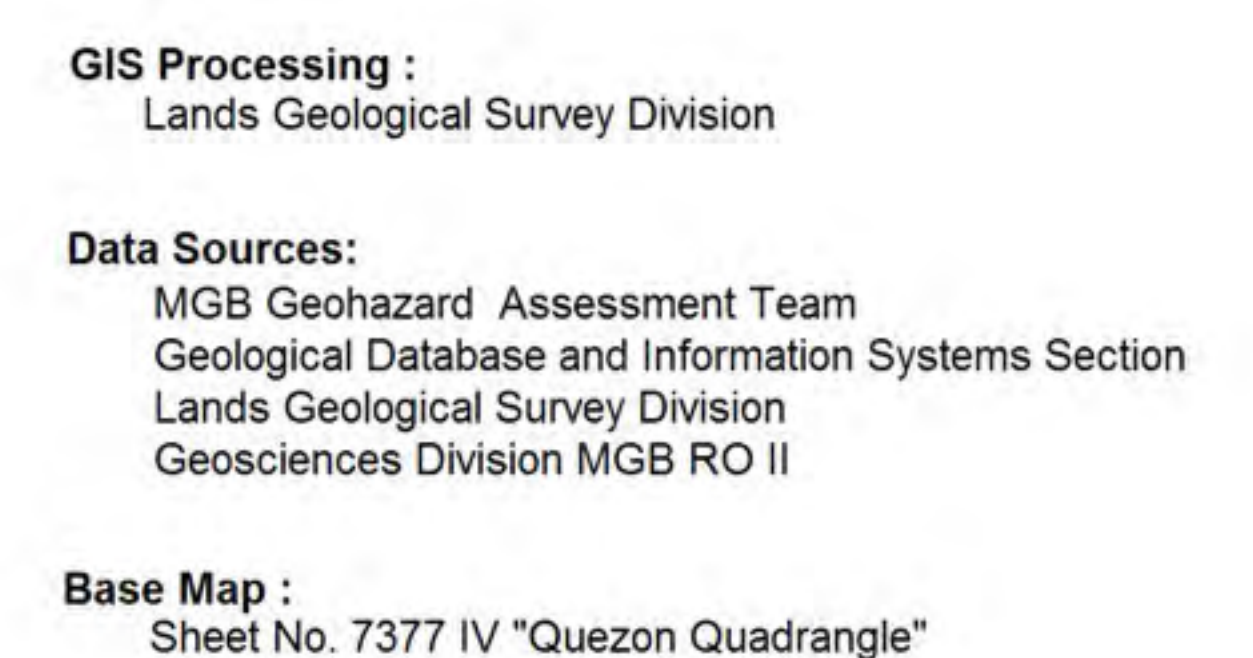
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition

 Roads

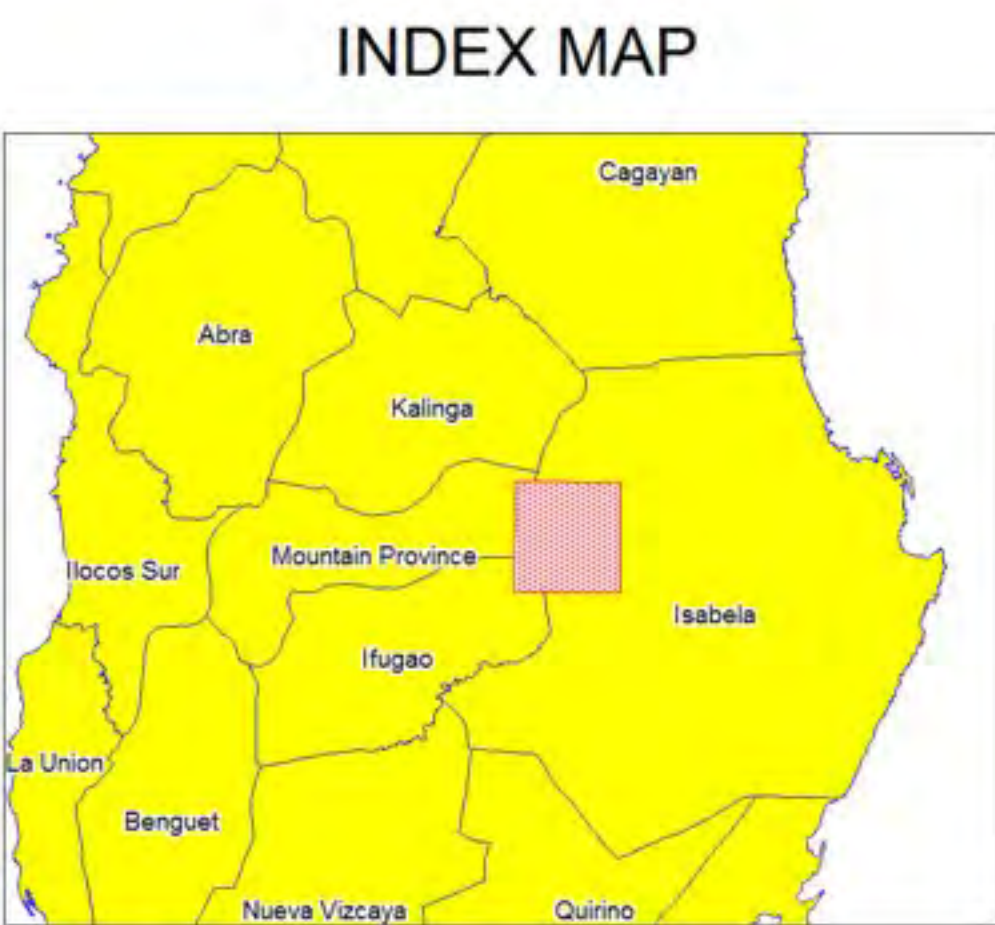
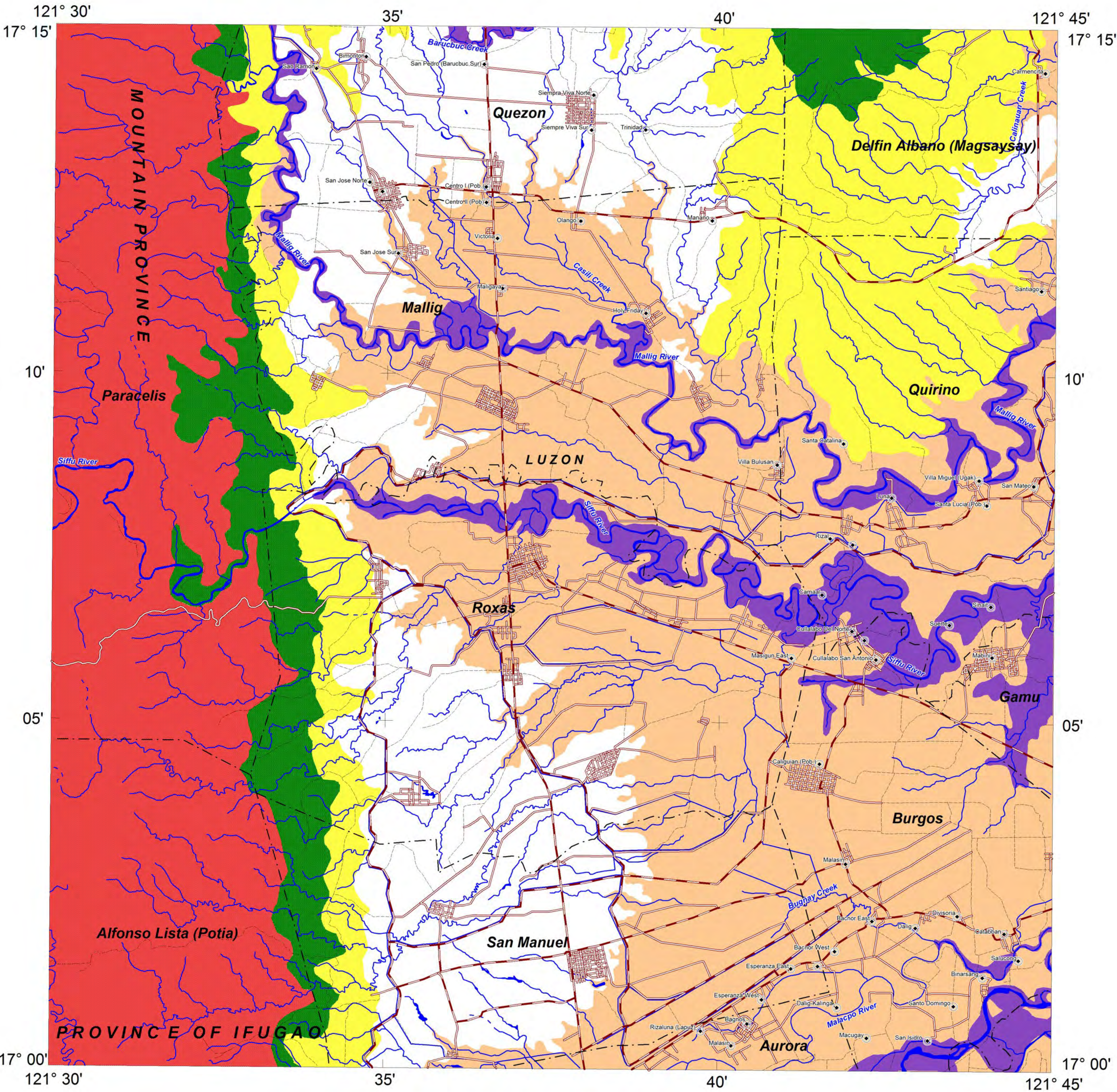
 River

 Municipal boundary

 Barangay center location



LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF ROXAS QUADRANGLE
MOUNTAIN PROVINCE, IFUGAO, AND ISABELA PROVINCES, PHILIPPINES



- LEGEND :**
- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition
 - Areas Not Susceptible to Flood**
Areas where elevation is greater than 20 meters.

- Main Road
- Secondary Road
- Trail
- River
- Municipal boundary
- Barangay center location



0 1.5 3
kilometers

TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

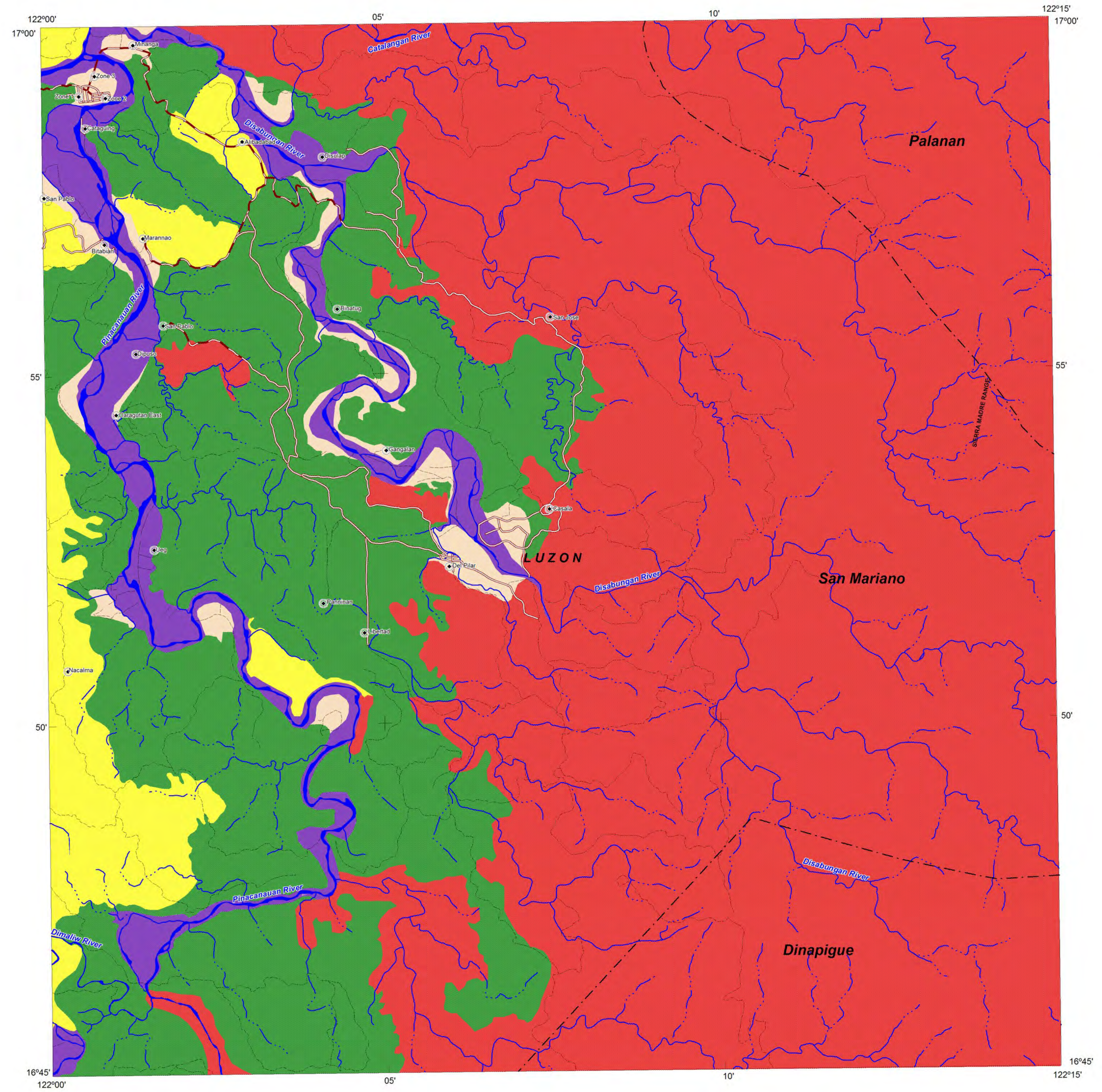
GIS Processing :
Lands Geological Survey Division

Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO CAR

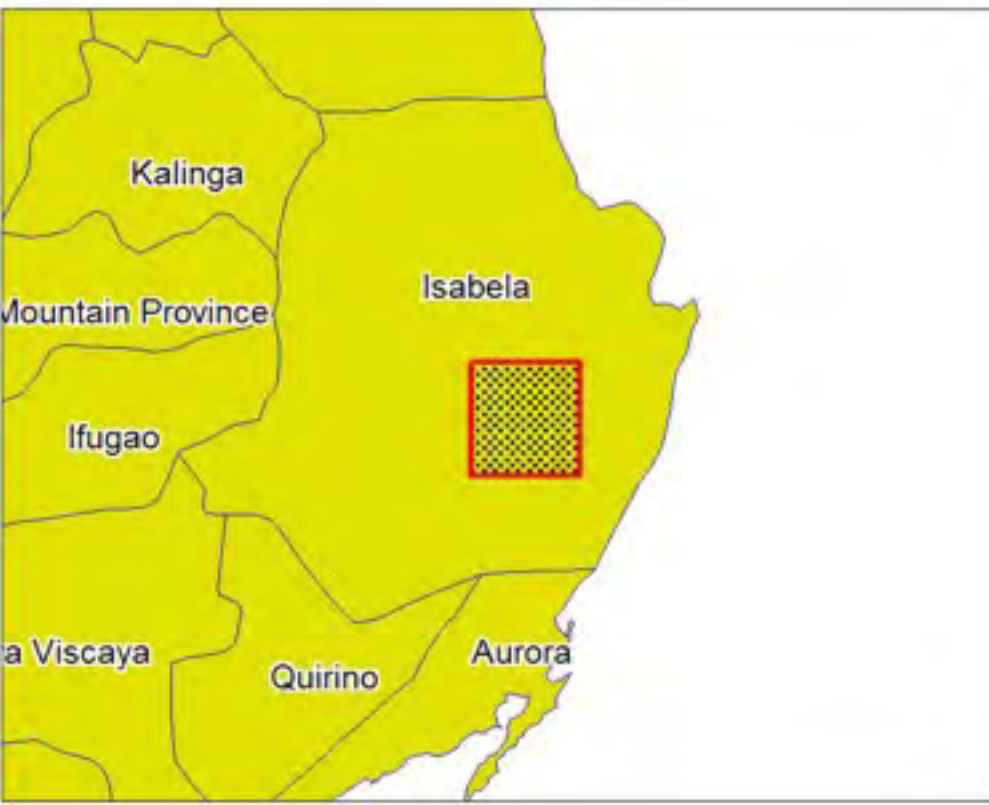
Base Map :
Sheet No. 7377 III "Roxas Quadrangle"

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
MINES AND GEOSCIENCES BUREAU
LANDS GEOLOGICAL SURVEY DIVISION

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF SAN MARIANO QUADRANGLE ISABELA PROVINCE, PHILIPPINES

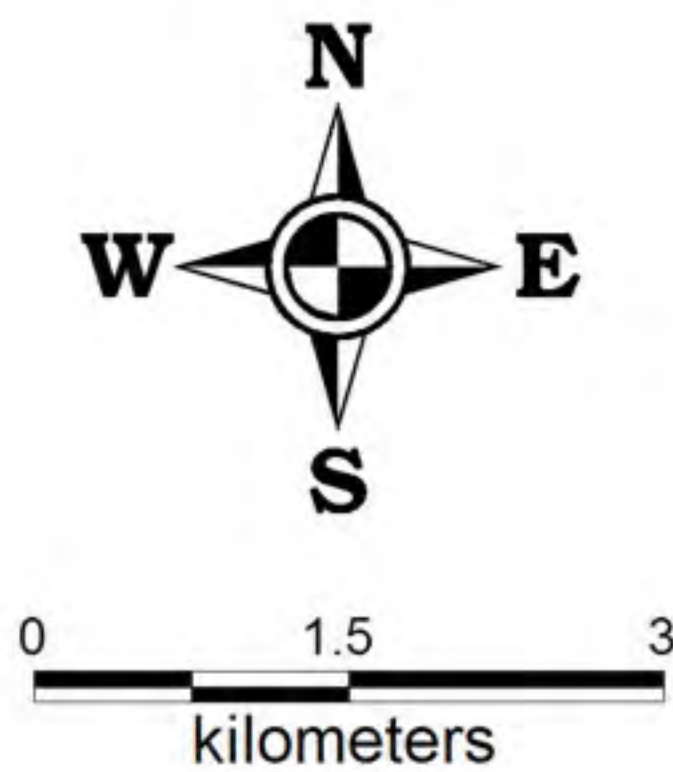


INDEX MAP



LEGEND :

- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition
- Roads
River
Municipal boundary
Barangay center location



TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

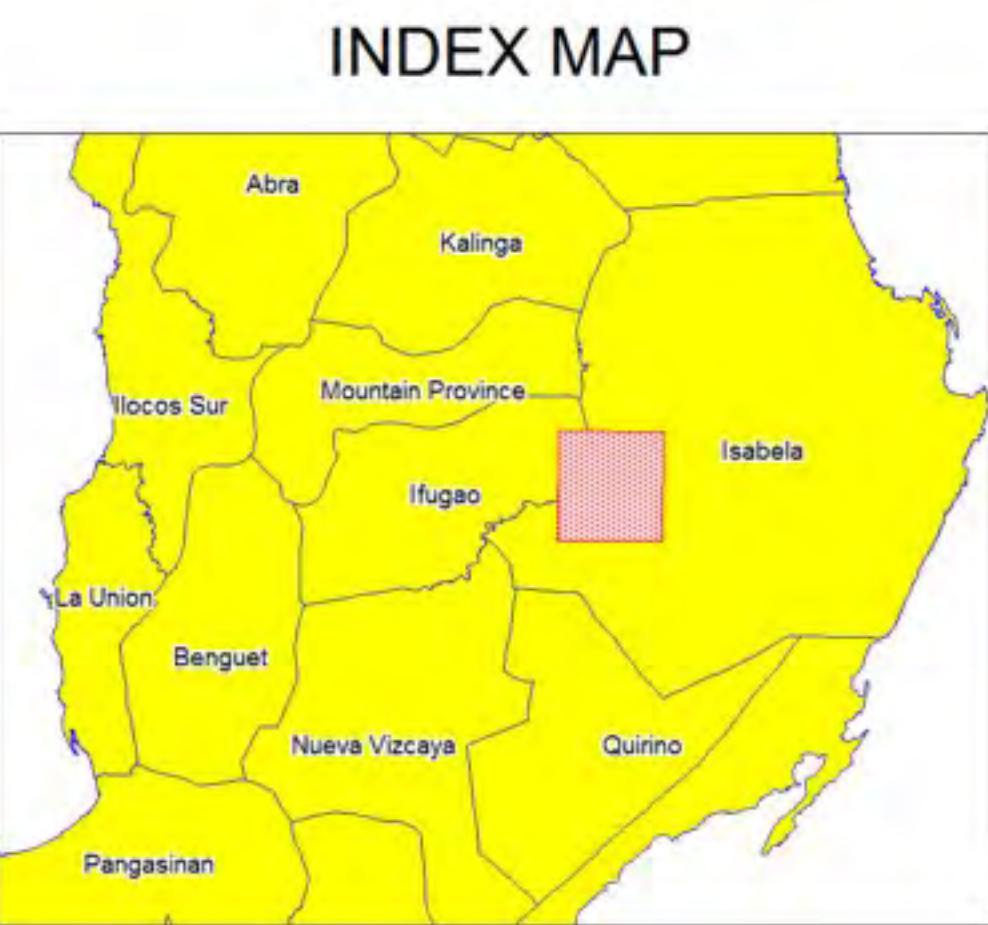
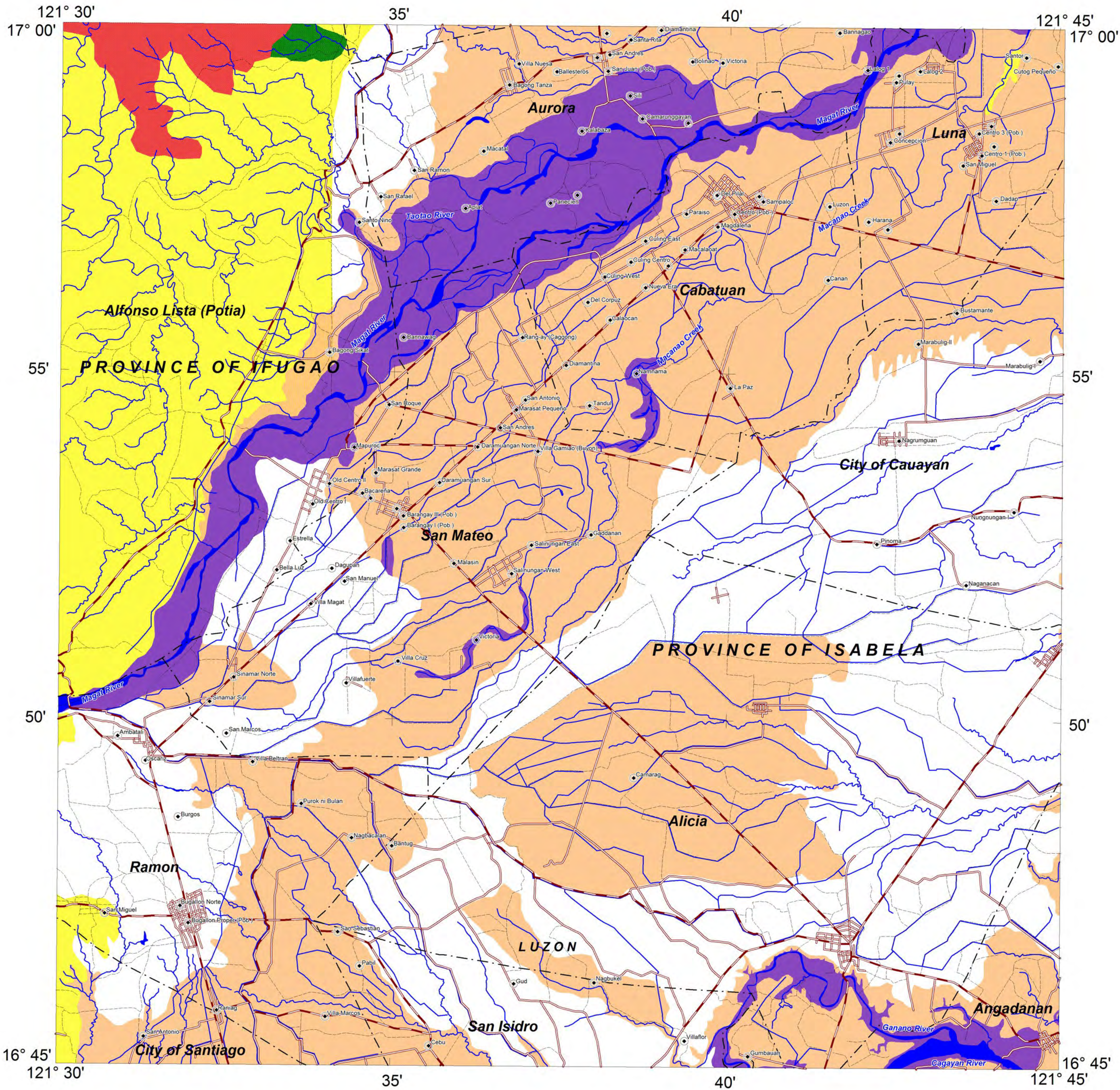
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7476 IV "San Mariano Quadrangle"



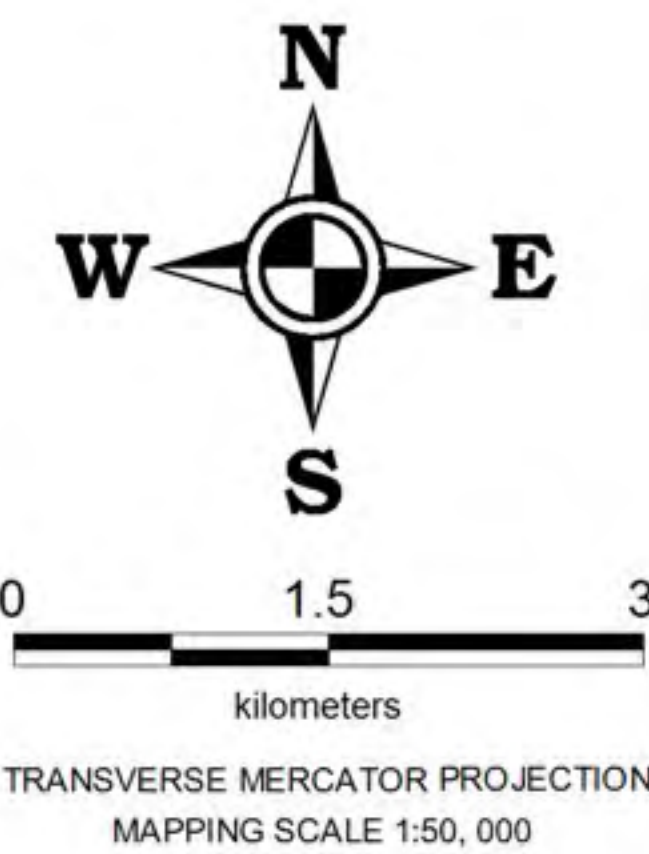
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
MINES AND GEOSCIENCES BUREAU
LANDS GEOLOGICAL SURVEY DIVISION

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF SAN MATEO QUADRANGLE
IFUGAO AND ISABELA PROVINCES, PHILIPPINES



- LEGEND :**
- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition
 - Areas Not Susceptible to Flood**
Areas where elevation is greater than 20 meters.

- Main Road
- Secondary Road
- Trail
- River
- Municipal boundary
- Barangay center location

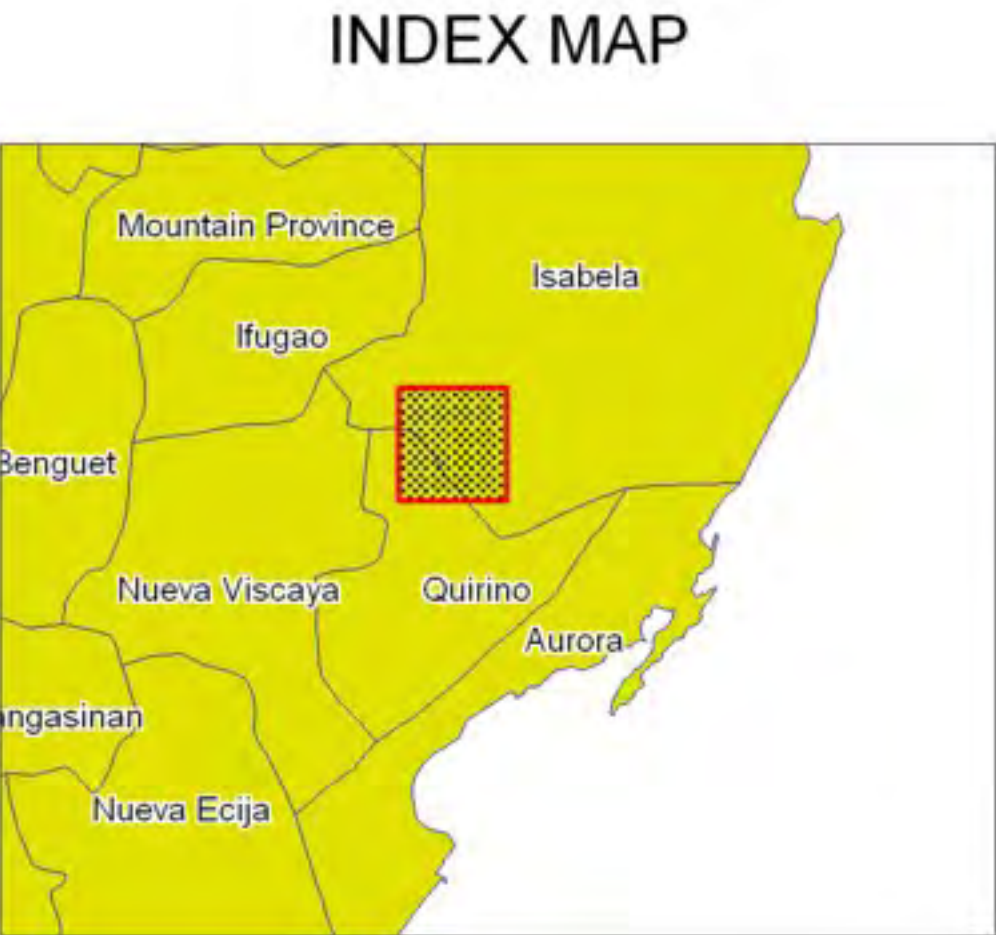
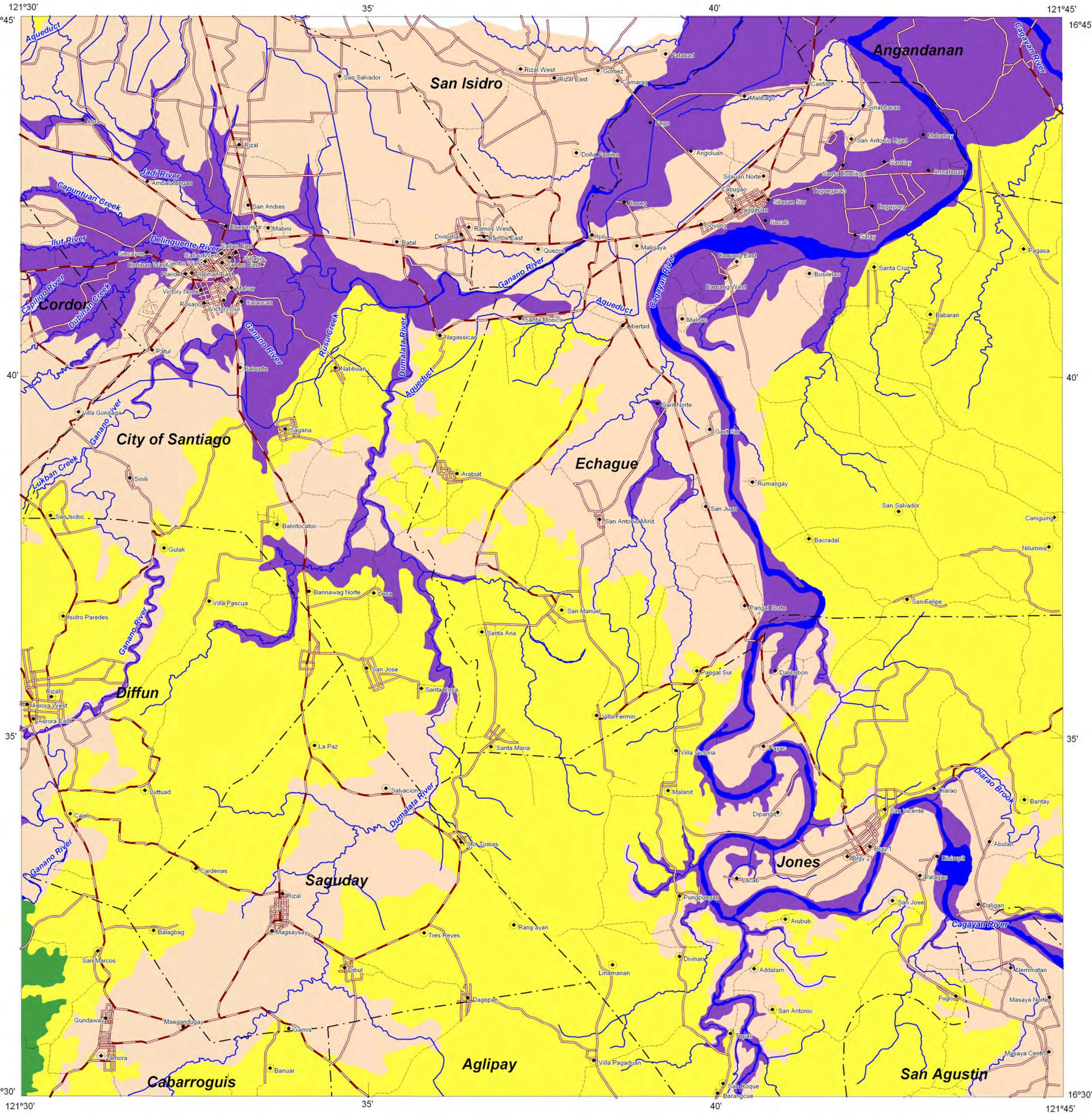


GIS Processing :
Lands Geological Survey Division

Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO CAR

Base Map :
Sheet No. 7376 IV "San Mateo Quadrangle"

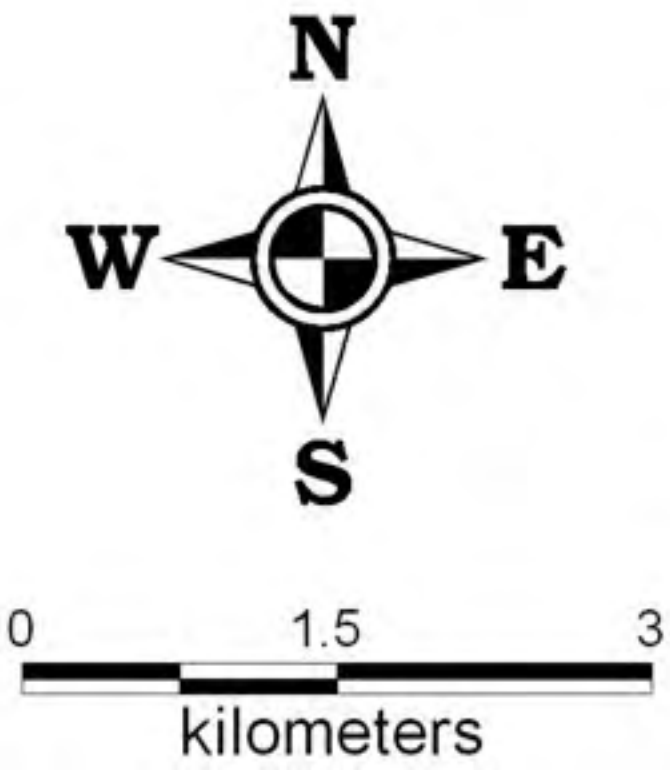
LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF SANTIAGO QUADRANGLE ISABELA AND QUIRINO PROVINCES, PHILIPPINES



LEGEND :

- Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
- Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
- High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
- Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition

- Roads
- River
- Municipal boundary
- Barangay center location



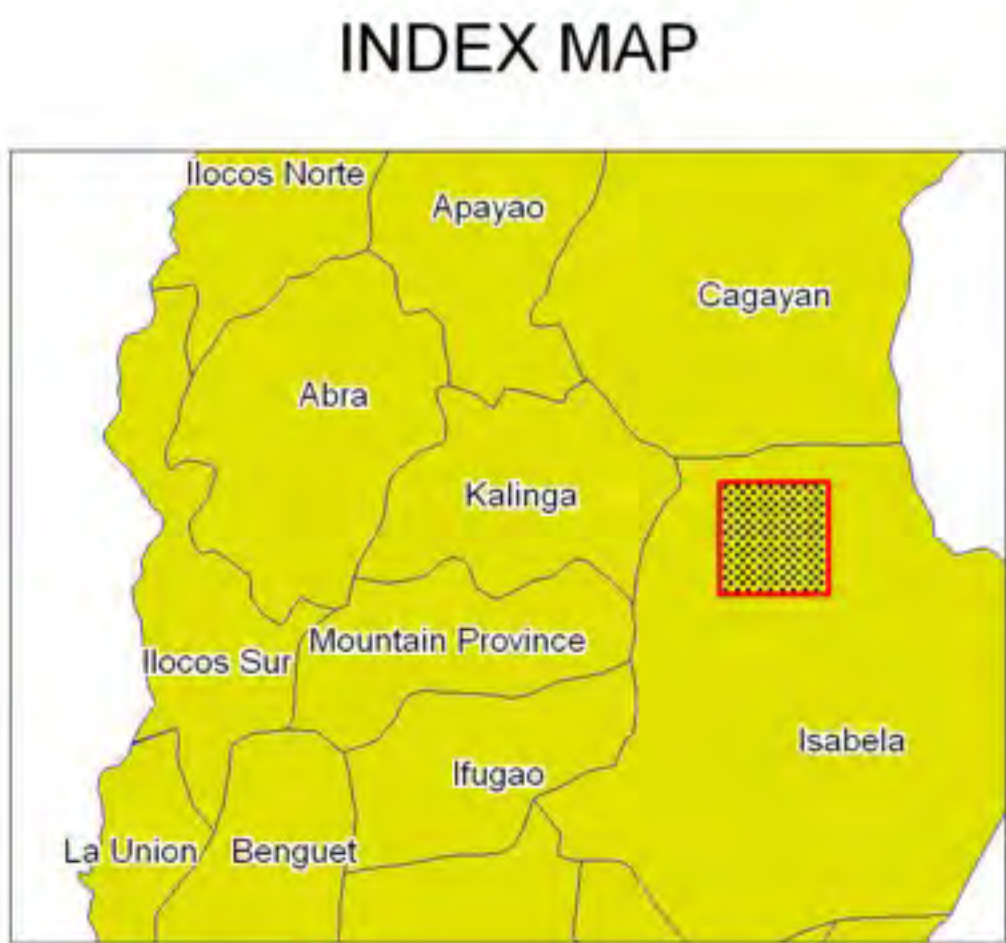
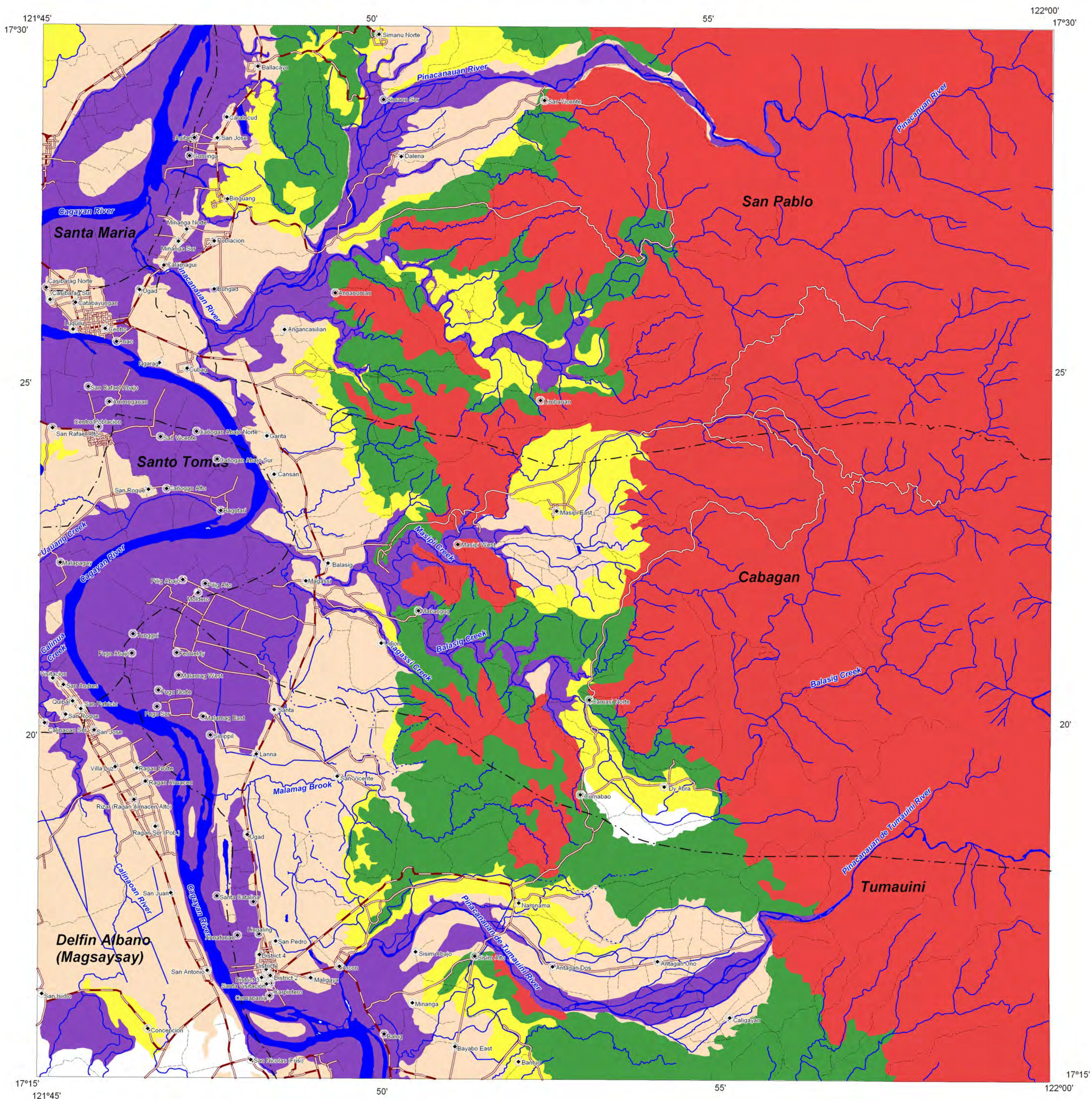
TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50, 000

GIS Processing :
Lands Geological Survey Division

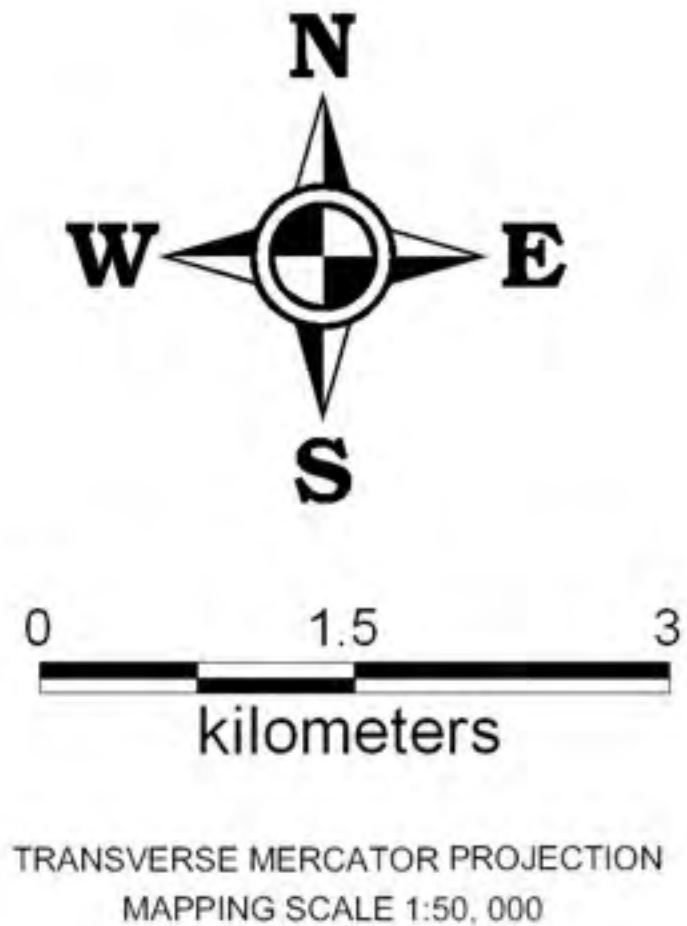
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7376 III "Santiago Quadrangle"

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF TUMAUNI QUADRANGLE ISABELA PROVINCE, PHILIPPINES



- LEGEND :**
- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
- Roads
 River
 Municipal boundary
 Barangay center location



GIS Processing :
Lands Geological Survey Division

Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7377 I "Tumauni Quadrangle"

