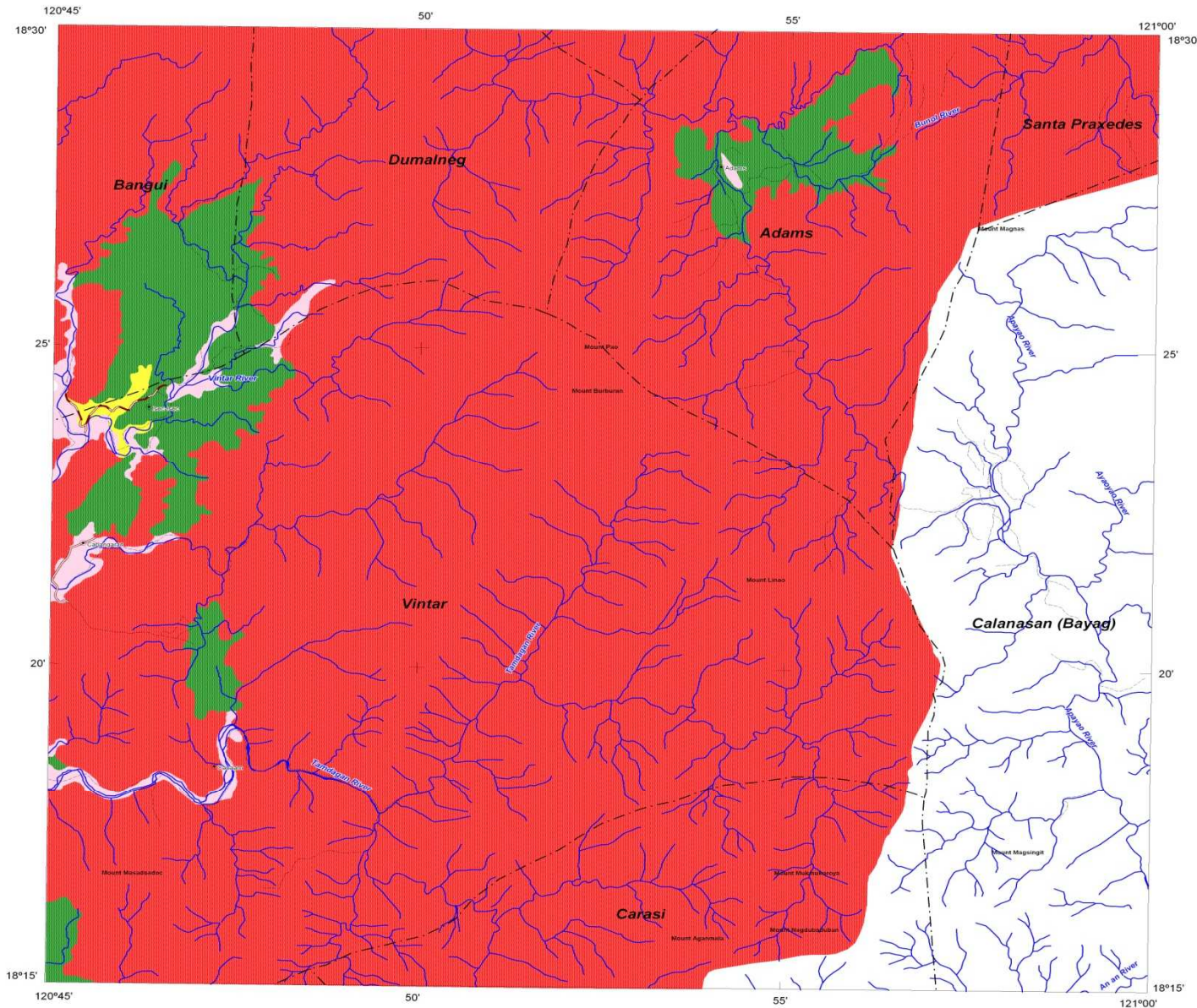
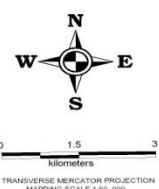


LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF ADAMS QUADRANGLE, ILOCOS NORTE PROVINCE, PHILIPPINES



- 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.
 - **Low susceptibility to flooding**
Areas with 0 to 0.5 meter flood height such as low hills and gentle slopes. They also have sparse to moderate drainage density.

- Roads
- River
- Municipal boundary
- Barangay center location

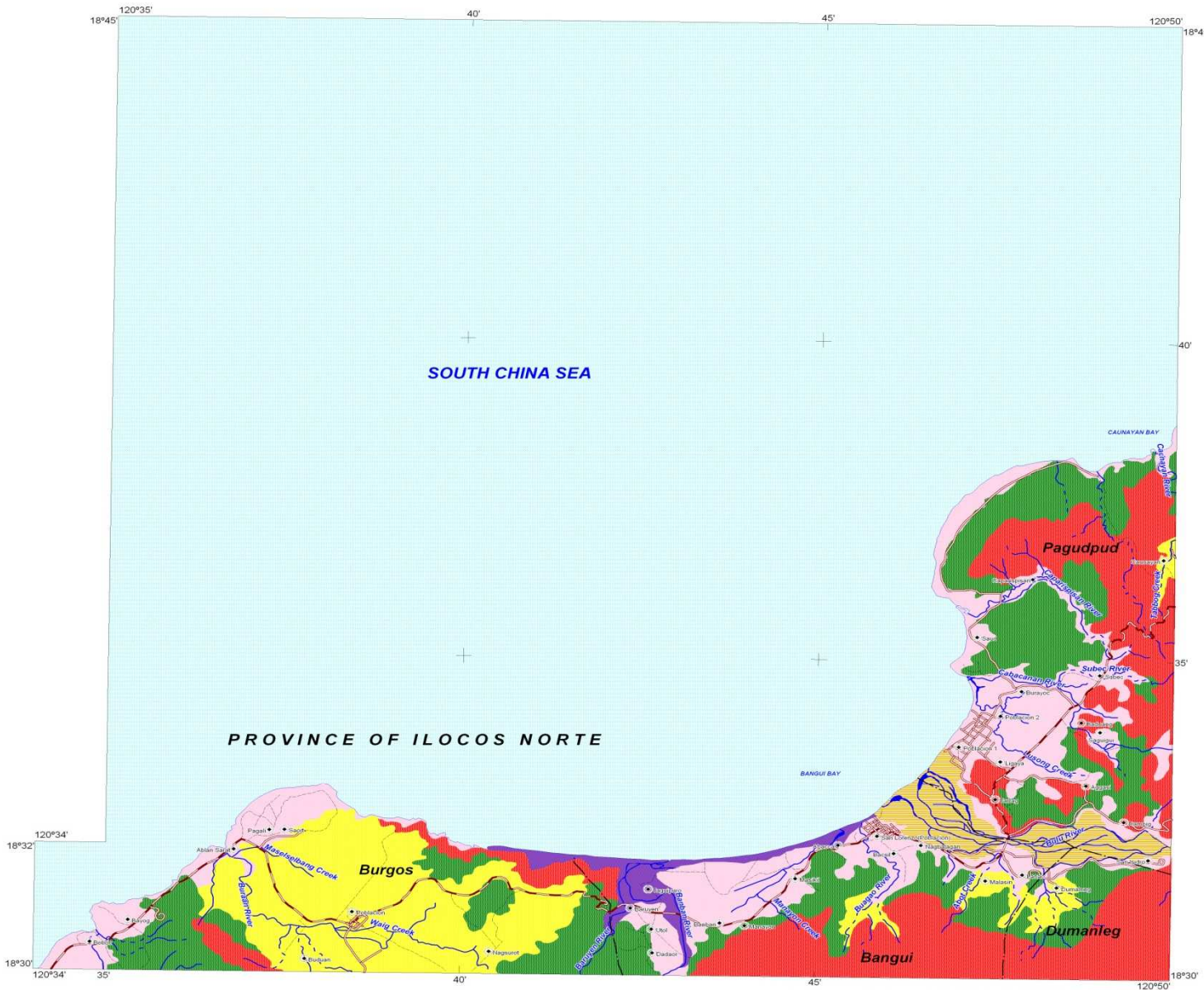


GIS Processing :
Lands Geological Survey Division

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

Base Map :
Sheet No. 7179 I "Adams Quadrangle"

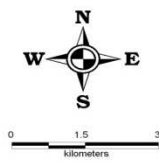
LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF BANGUI QUADRANGLE, ILOCOS NORTE PROVINCE, PHILIPPINES



LEGEND :

- **High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that could 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.
- **Moderate to high susceptibility to flooding**
Areas with greater than 0.5 meter flood height. These areas are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
- **Low susceptibility to flooding**
Areas with 0 to 0.5 meter flood height such as low hills and gentle slopes. They also have sparse to moderate drainage density.

- Roads
- River
- Municipal boundary
- Barangay center location



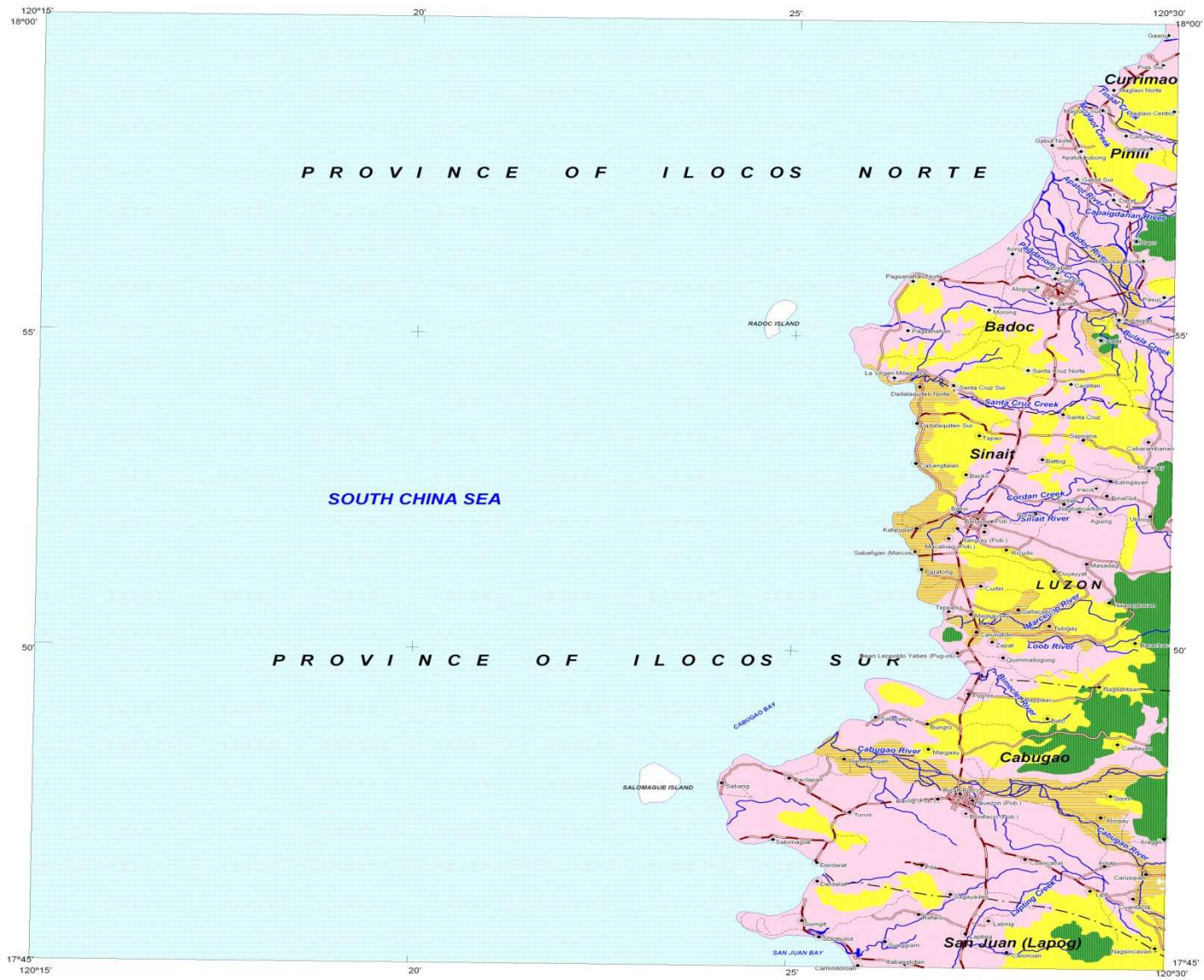
TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

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 1

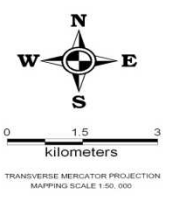
Base Map :
Sheet No. 7180 III "Bangui Quadrangle"

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF CABUGAO QUADRANGLE, ILOCOS SUR PROVINCE, 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.
 - Moderate to high susceptibility to flooding**
Areas with greater than 0.5 meter flood height. These areas are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
 - Low susceptibility to flooding**
Areas with 0 to 0.5 meter flood height such as low hills and gentle slopes. They also have sparse to moderate drainage density.
- Roads
 - River
 - Municipal boundary
 - Barangay center location



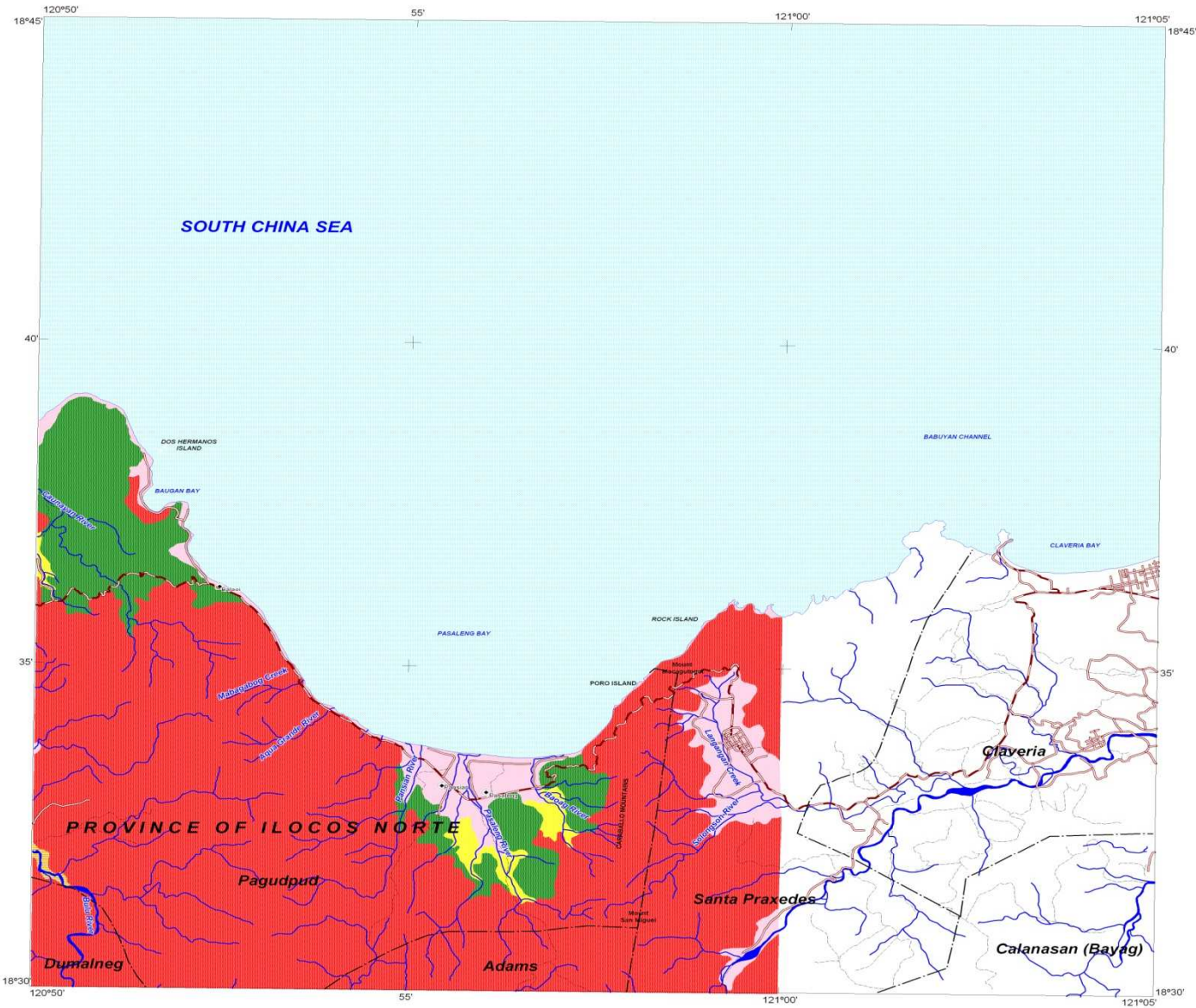
GIS Processing :
Lands Geological Survey Division

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

Base Map :
Sheet No. 7078 I "Cabugao Quadrangle"



LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF CLAVERIA QUADRANGLE, ILOCOS NORTE 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.
- **Moderate to High susceptibility to flooding**
Areas with greater than 0.5 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
- **Low susceptibility to flooding**
Areas with 0 to 0.5 meter flood height such as low hills and gentle slopes. They also have sparse to moderate drainage density.

- 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 1

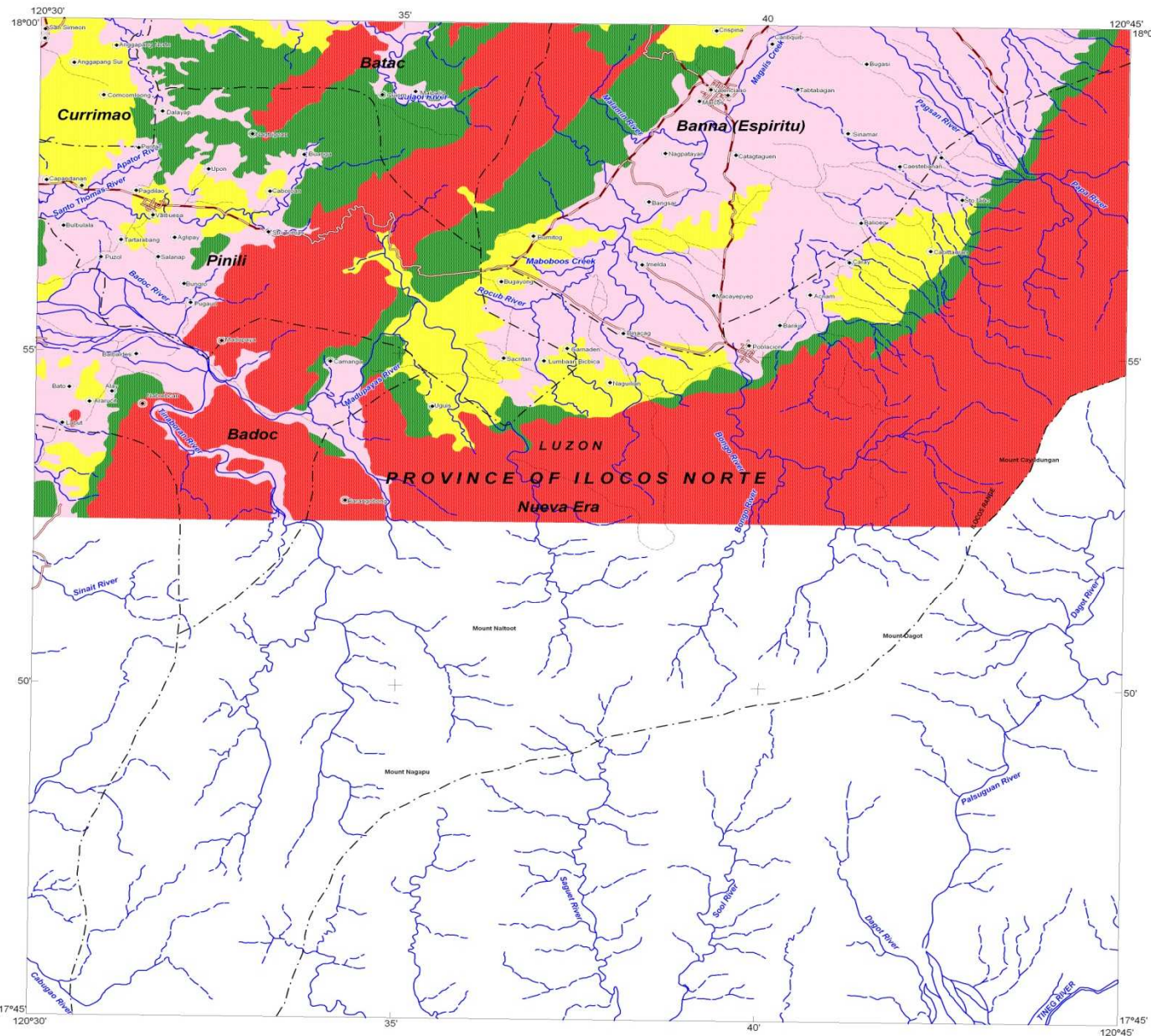
Base Map :
Sheet No. 7180 II "Claveria Quadrangle"



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

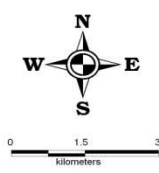
LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF ESPIRITU QUADRANGLE, ILOCOS NORTE PROVINCE, PHILIPPINES

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.
- **Low Susceptibility to Flooding**
Areas with 0 to 0.5 meter flood height such as low hills and gentle slopes. They also have sparse to moderate drainage density.
- Roads
- River
- Municipal boundary
- Barangay center location



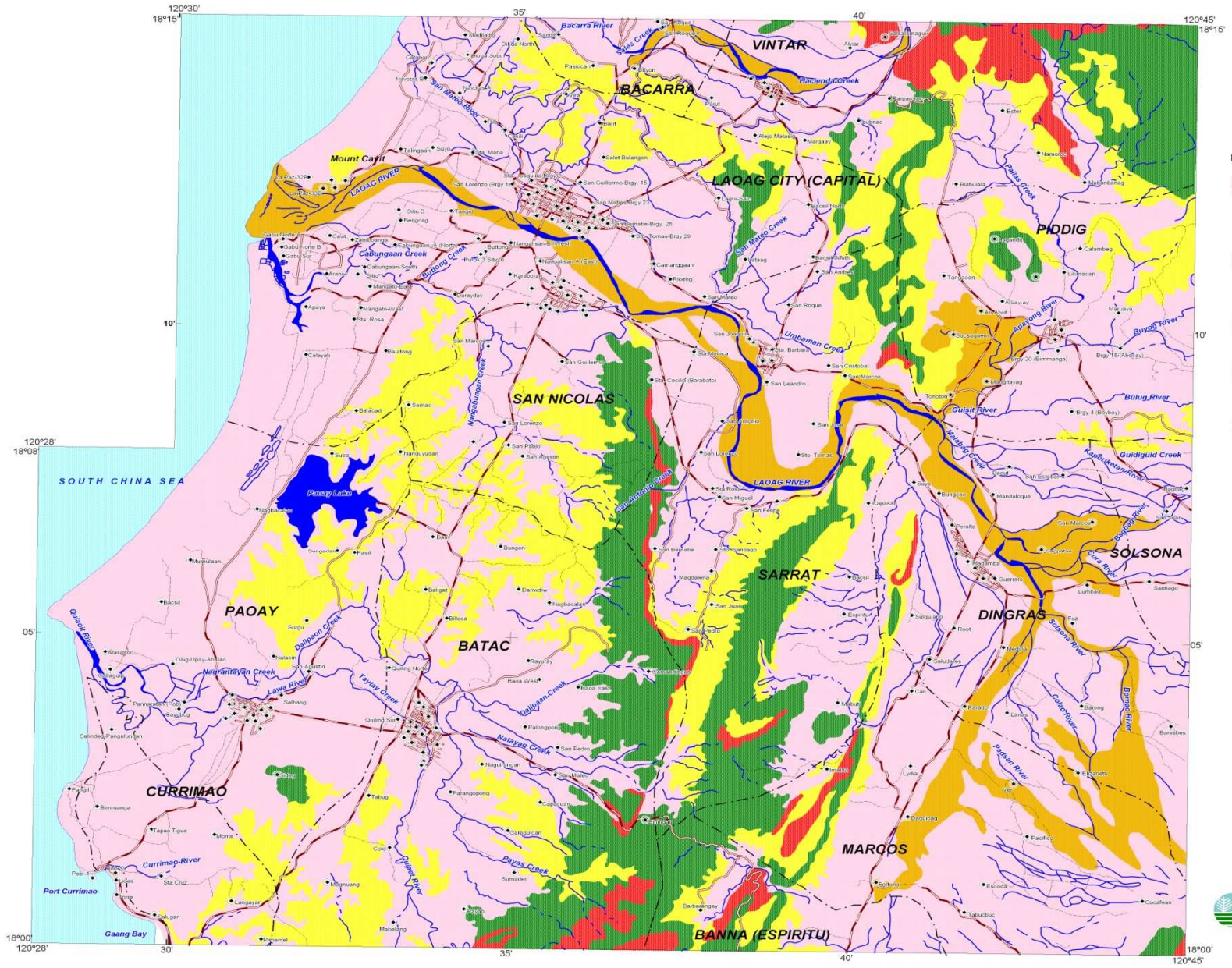
TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

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 RC 1

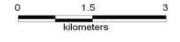
Base Map :
Sheet No. 7178 IV "Espiritu Quadrangle"

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF LAOAG QUADRANGLE, ILOCOS NORTE 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.
 - **Moderate to high susceptibility to flood**
Areas with +0.5 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
 - **Low susceptibility to flood**
Areas with 0 to 0.5 meter flood height such as low hills and gentle slopes. They also have sparse to moderate drainage density.

- Roads
- River
- Municipal boundary
- Barangay center location



TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

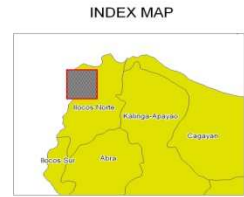
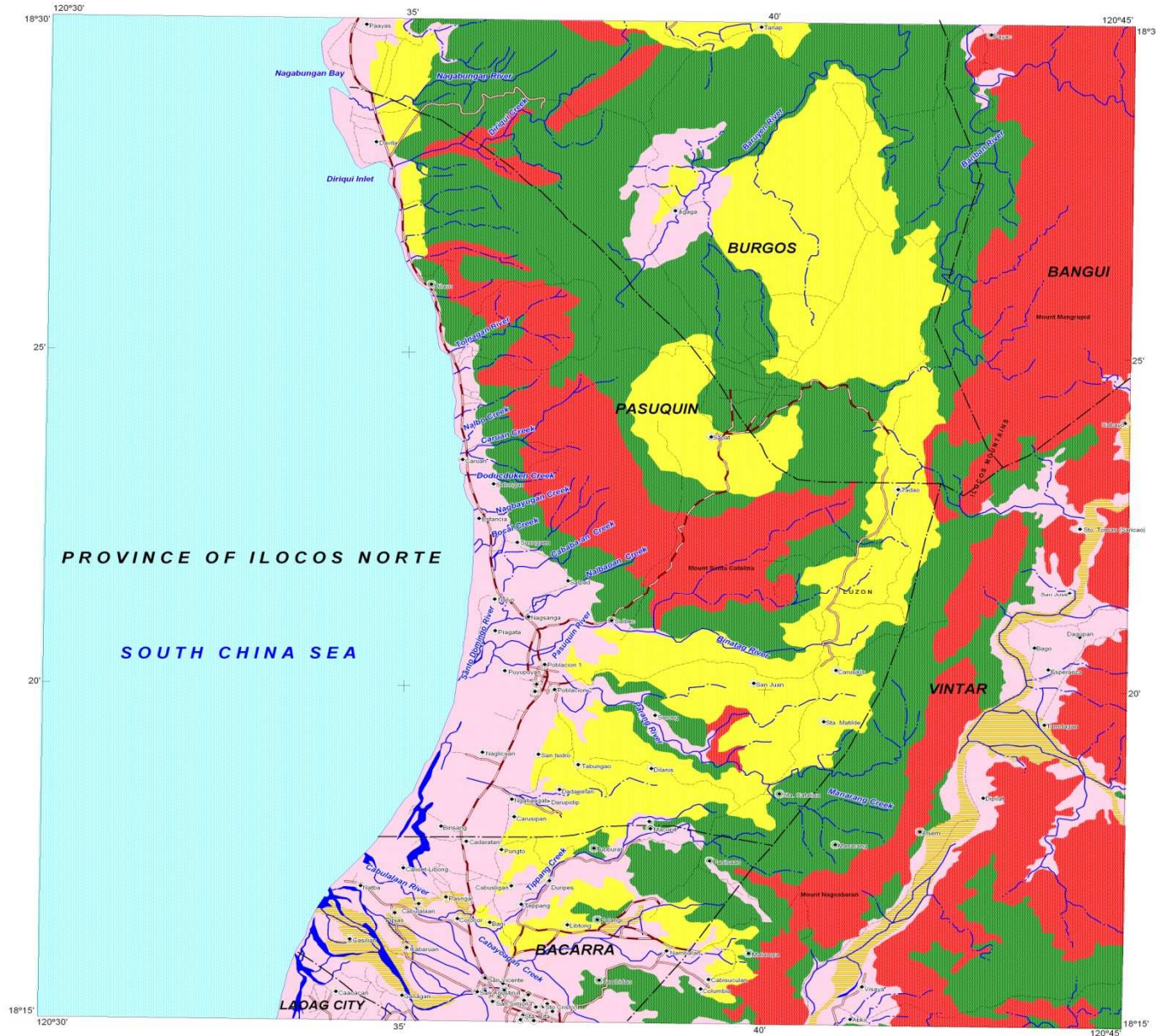
Data Sources:
MGS Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB ROC I

Base Map :
Sheet No. 7179 III "Laoag Quadrangle"



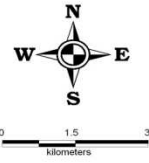
LANDS GEOLOGICAL SURVEY DIVISION
MINES AND GEOSCIENCES BUREAU
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF PASUQUIN QUADRANGLE, ILOCOS NORTE 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.
- **Moderate to high susceptibility to flooding**
Areas with greater than 0.5 meter flood height. These areas are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
- **Low susceptibility to flooding**
Areas with 0 to 0.5 meter flood height such as low hills and gentle slopes. They also have sparse to moderate drainage density.
- Roads
- River
- Municipal boundary
- Barangay center location



TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :

Lands Geological Survey Division

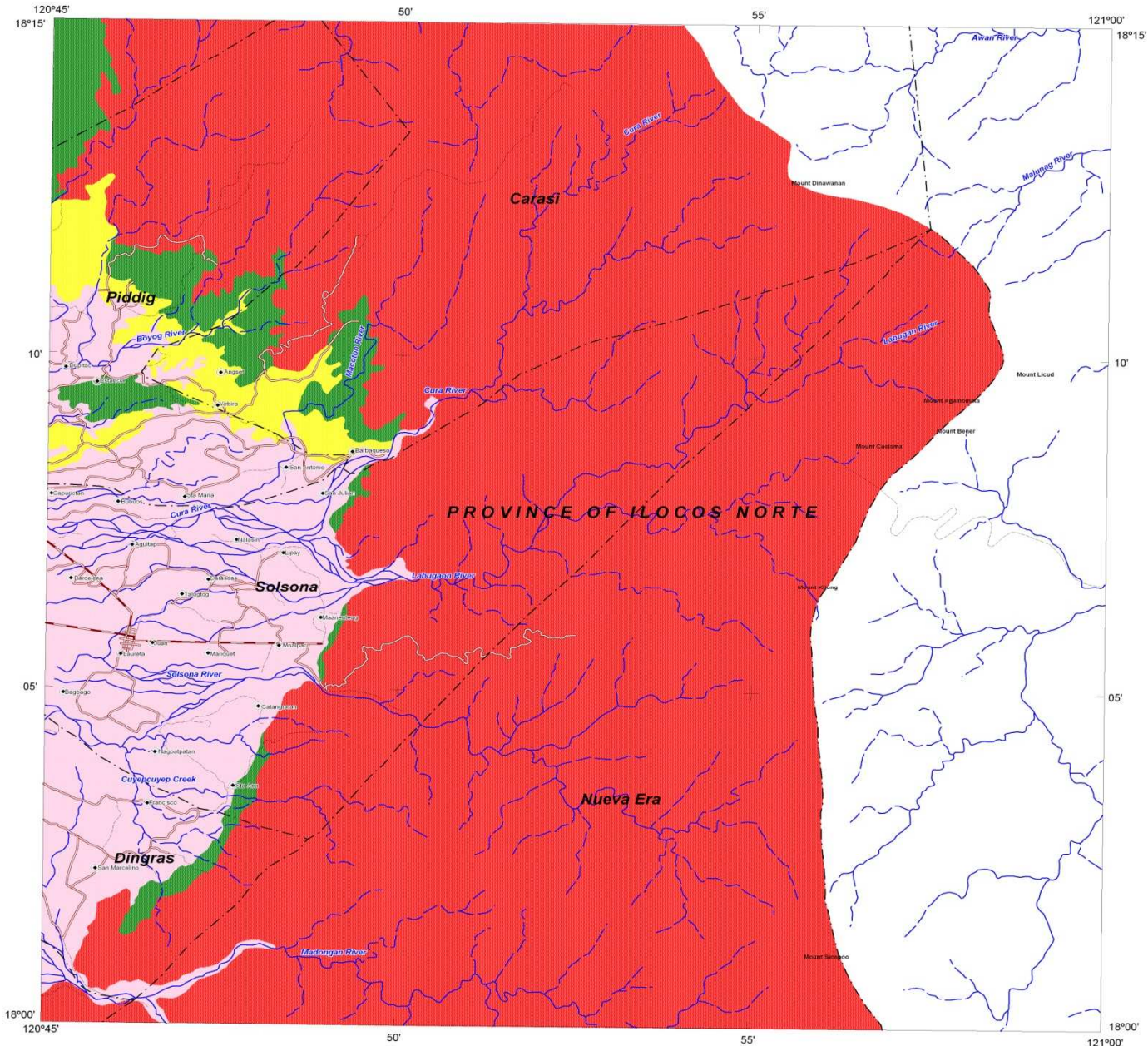
Data Sources:

MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO I

Base Map :

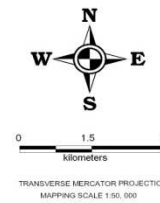
Sheet No. 7170 IV "Pasuquin Quadrangle"

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF SOLSONA QUADRANGLE, ILOCOS NORTE 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.
- **Low Susceptibility to Flooding**
 Areas with 0 to 0.5 meter flood height such as low hills and gentle slopes. They also have sparse to moderate drainage density.
- 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 I

Base Map :
Sheet No. 7179 II "Solsona Quadrangle"