



NATIONAL GEOHAZARDS ASSESSMENT AND MAPPING PROGRAM (NGAMP)

DENR-MINES AND GEOSCIENCES BUREAU
North Avenue, Quezon City

Presented by:

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Director, DENR-MGB XI

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Senior Geologist, DENR-MGB CENTRAL

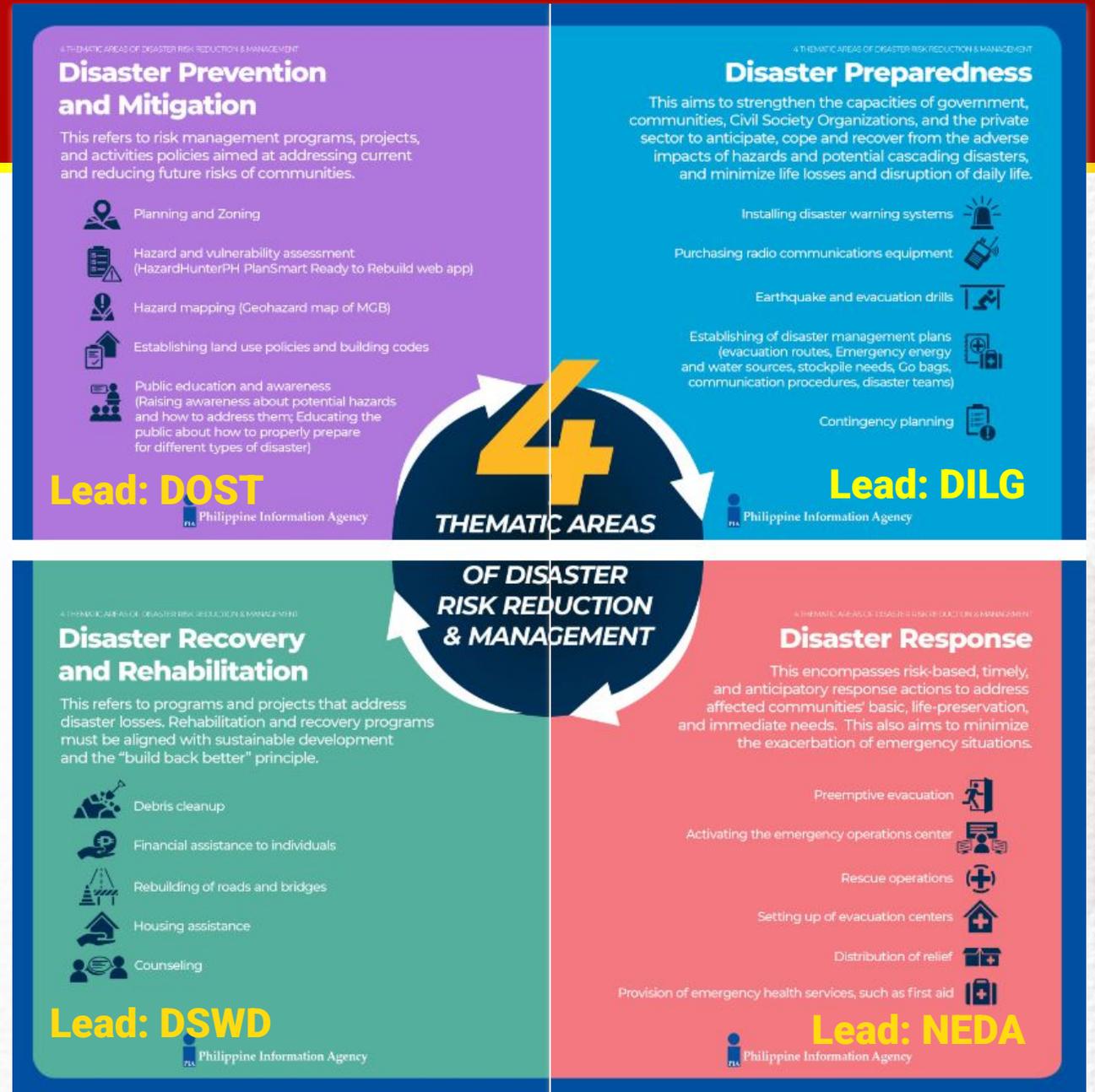
Paris and Toulouse, France, EU
October 11-20, 2025



Legal Basis

The law mandates the National Disaster Risk Reduction and Management Council (NDRRMC) to formulate the **National Disaster Risk Reduction and Management Plan (NDRRMP)** which enumerates four (4) priority areas with long term goals.

In the NDRRMP, the warning agencies (**DENR-MGB, PAGASA, PHIVOLCS**) are to provide information on areas susceptible or vulnerable to various geological hazards and to promote DRRM through the production and dissemination of IEC-related materials.



NATIONAL GEOHAZARDS ASSESSMENT AND MAPPING PROGRAM (NGAMP)

Current Activities

- 1:10,000-scale Rain-induced Landslide and Flood Hazards Susceptibility Maps
- Vulnerability and Risk Assessment
- Karst Subsidence Hazards Assessment and Mapping
- Coastal Hazards Physical Vulnerability Assessment and Mapping
- City/Municipal-wide Information, Education, and Communication Campaigns (IEC) and Distribution of IEC materials
- Provision of Geohazard Maps and Issuance of Advisories to LGUs
- Geohazard Operations Center

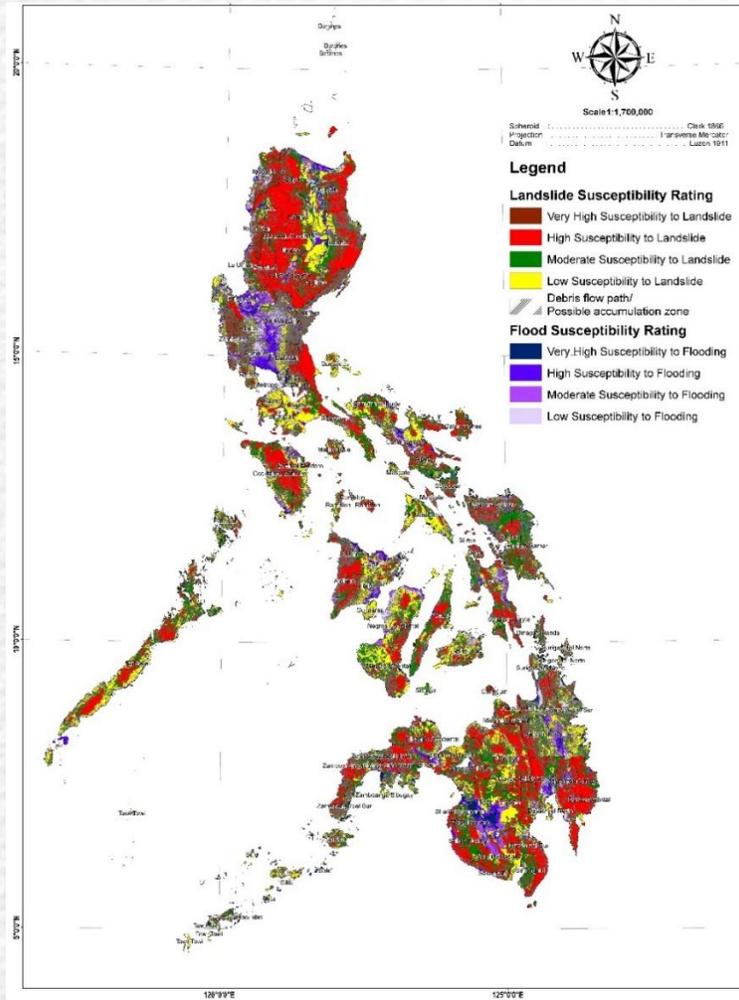


National Geohazards Assessment and Mapping Program (NGAMP) since 2006

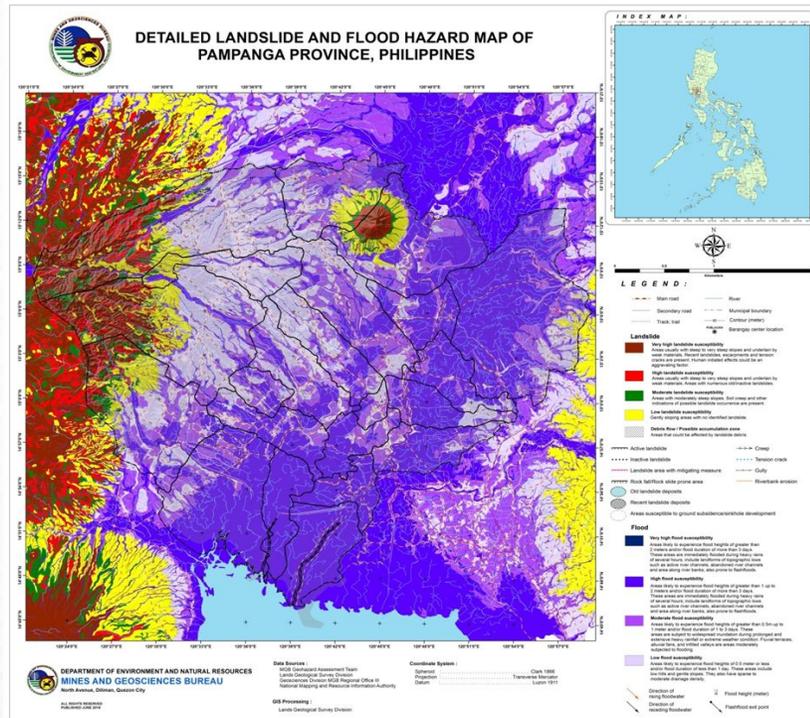
- To identify areas susceptible to various hydrometeorological hazards (rain-induced landslides; fluvial/river floods; coastal floods; relative sea-level rise; tidal floods; coastal erosion and storm surge)
- To increase public awareness of natural hazards in order to mitigate the negative impacts and for more rational development, planning and disaster management



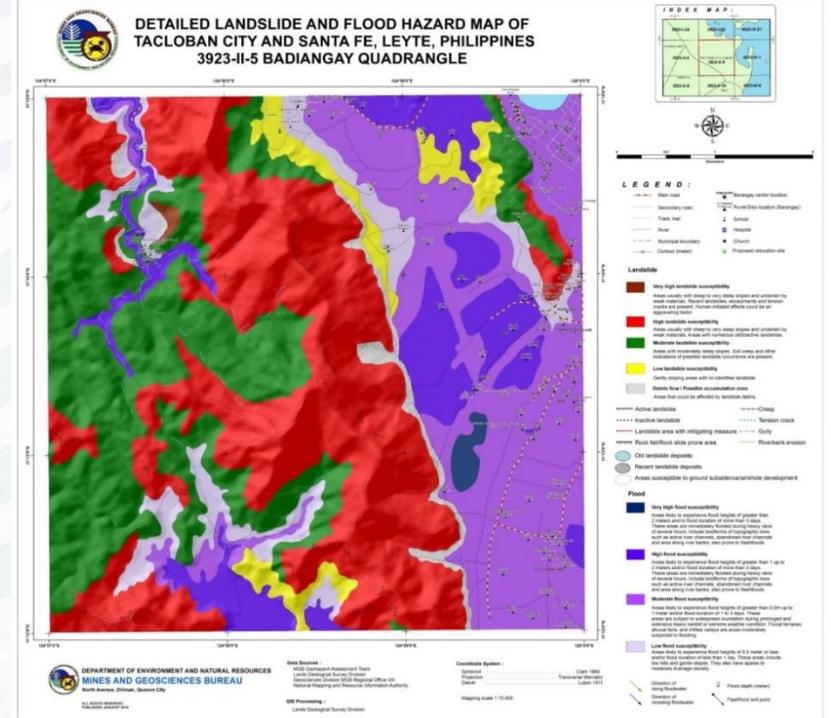
LANDSLIDE WARNING, FORECAST, AND MONITORING FOR PREPAREDNESS OF COMMUNITIES



PROVISION FOR 1:10K LANDSLIDE AND FLOOD HAZARDS MAPS (with corresponding reports)



1:50,000



1:10,000

LANDSLIDE AND FLOOD THREAT ADVISORY



Republic of the Philippines
Department of Environment and Natural Resources
MINES AND GEOSCIENCES BUREAU
 North Avenue, Diliman, Quezon City, Philippines
 Tel. No. (+63 2) 928-8642/ 928-8937 Fax. No. (+63 2) 920-1635 E-mail: central@mgb.gov.ph

LANDSLIDE AND FLOOD THREAT ADVISORIES

To: Brgy. Chairman
 Brgy.: Magangit
 Municipality/City: New Bataan
 Province of: Davao de Oro

Date: March 20, 2024

Dear Sir/Madam:

Please be advised that the Geohazards Mapping and Assessment Team (GMAT) of the Mines and Geosciences Bureau (MGB) has conducted **landslide and flood assessment** for the updating of 1:10,000 Scale Geohazard Map in your barangay. The following are the results and recommendations following the assessment:

Barangay	Purok/ Sitio	Landslide susceptibility rating	Geohazards assessment	Remarks/ recommendation
Magangit	Purok 5A and Purok 6	High	Purok 5A and Purok 6 in Barangay Magangit are situated on gently sloping terrain, bordered by mountainous regions prone to landslides. Numerous rivers traverse the barangay, and it is intersected by an active fault line. Within the barangay highly weathered rocks were observed and can be seen along the roadcuts going to Maragusan. These indicators can be correlated to the presence of an active fault in the area. The presence of these highly weathered rocks indicates that the slopes have already lost their strength thus	As the barangay has several river systems that are bounded by landslide-prone mountainous terrains, it is recommended to the Local Government Unit to highly monitor the presence of slope instability such as tension cracks, water seepages, presence of rills and gullies. Examples of such slope instability are shown below for your reference:  <i>Example of tension cracks</i> https://www.larimit.com/mitigation_measures/959/

increasing slope instability.

Several tension cracks and landslides were possibly triggered by the shearline event last January-February 2024.



Debris flow pathways were also observed at Purok 5A. Presence of water seepages were also mapped and recorded on these areas.

Tilted tree trunks as evidence of creep (i.e. slow downward movement of slope)
https://link.springer.com/chapter/10.1007/978-3-319-57774-6_1

It is a must to establish landslide warning signs along major road networks and highways to protect the residents and motorists going in and out of the municipality. **Any indication of slope instability along roads should be immediately reported to the local officials and the Mines and Geoscience Bureau (MGB) for geohazards assessment and provision of appropriate technical recommendations.**

A pre-emptive evacuation is strongly recommended to be enforced by the LGU especially for those residents and relevant assets living in the vicinity of areas demonstrating slope instability when bad weather conditions are expected or forecasted by the weather bureau. When NDRRMC EPR protocols have been downgraded, the LGU should still continue checking for signs of slope instability before allowing people to return to their dwellings.

Secondly, it is strongly advised that the upstream areas be checked regularly by the local officials because there might be landslides that can



Photo 2. Shows the creek and water source that can be affected by the debris

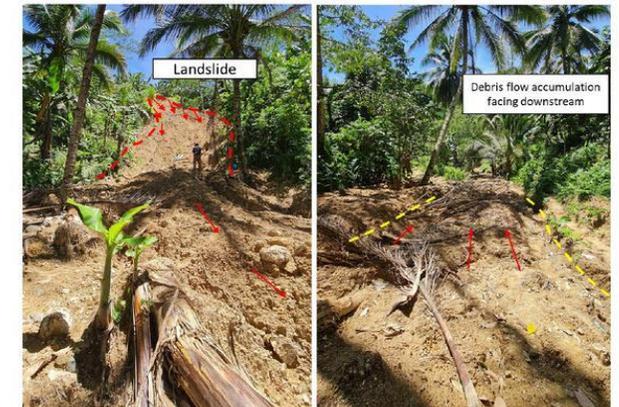
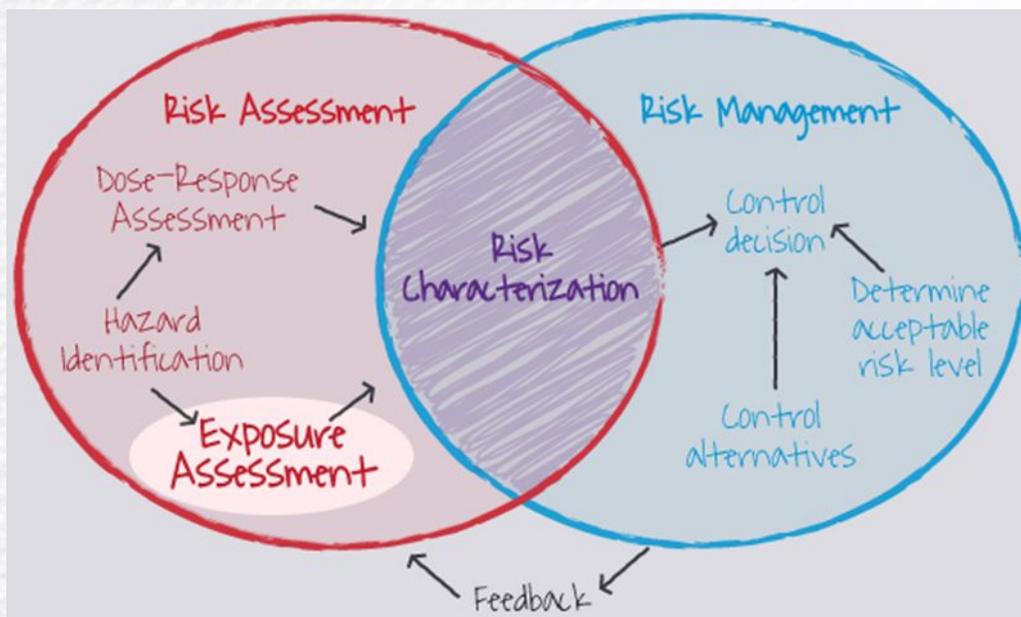


Photo 3. (left) Active landslide in Purok 5A, Barangay Magangit. It is triggered by the last shearline event last January-February 2024. The slope materials include gravel

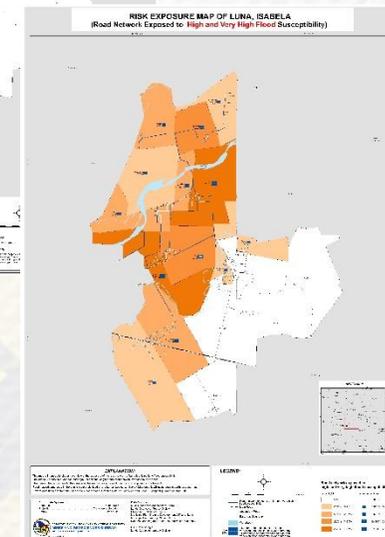
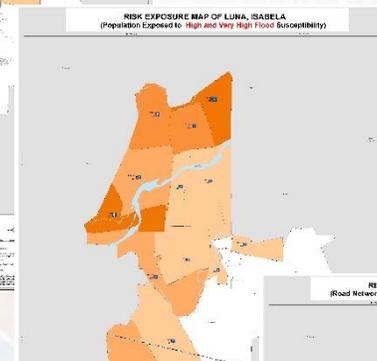


VULNERABILITY AND RISK ASSESSMENT (with updating of 10k Geohazard Maps)

To provide additional technical information on Risk Exposure to the Local Government Unit for risk-sensitive land-use, development, and disaster risk reduction and management plans and programs



RISK EXPOSURE
MAPS



TECHNICAL REPORT ON THE EXPOSURE MAPS ON POPULATION, BUILT-UP AREAS AND ROAD NETWORKS IN THE MUNICIPALITY OF JOSE ABAD SANTOS, DAVAO OCCIDENTAL

DECEMBER 2017

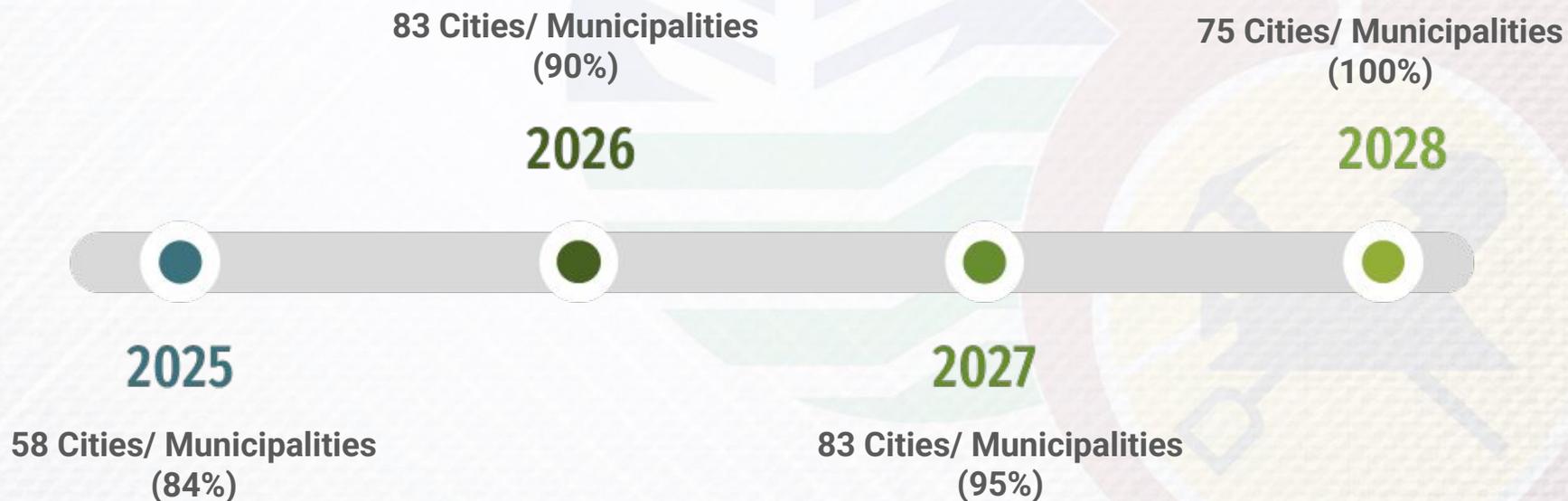
TECHNICAL
REPORT

ACCOMPLISHMENT AND TIMELINE

ACCCOMPLISHMENT AS OF END OF 2024

VULNERABILITY AND RISK ASSESSMENT	1,274 cities/municipalities (84%)
UPDATING OF THE 10K GEOHAZARD MAPS	903 cities/municipalities (60%)

**Fast-tracking of VRA
& updating**



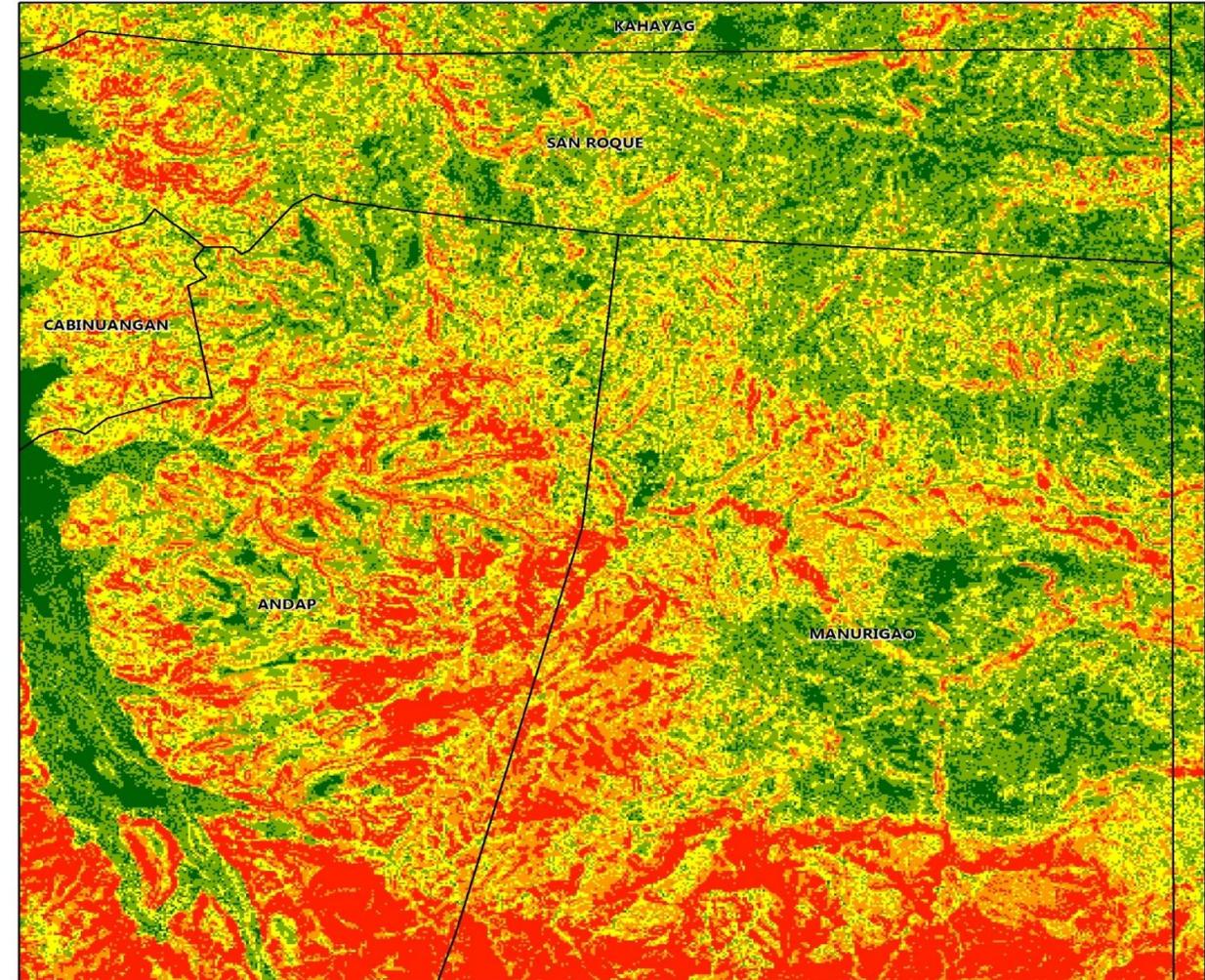
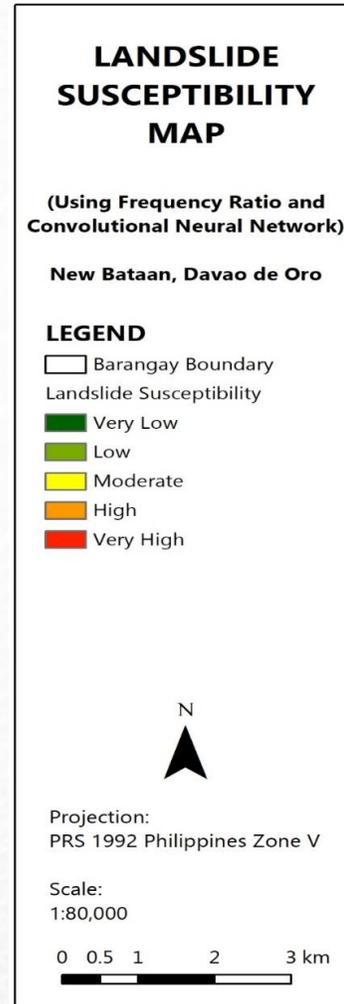
Total universe: 1515 cities/municipalities



Department of Environment and Natural Resources
Mines and Geosciences Bureau

MGB'S TRANSITION TO PROBABILISTIC MODELING USING MACHINE LEARNING/ARTIFICIAL INTELLIGENCE TO ENHANCE LANDSLIDE SUSCEPTIBILITY MAPS

- Aspect
- DEM (Elevation)
- Distance to Fault
- Distance to River (distance to gullies)
- Distance to Road
- Geomorphology
- Lithology
- LULC
- NDVI
- Plan Curvature
- Profile Curvature
- Rainfall
- Slope
- Soil
- SPI (Stream Power Index)
- TWI (Topographic Wetness Index)



Starting 2024 (Pilot area: New Bataan, Davao de Oro under the GCF Fund)



ACCOMPLISHMENT AND TIMELINE

ACCCOMPLISHMENT AS OF END OF 2024

KARST SUBSIDENCE HAZARD
MAPPING AND ASSESSMENT

204 (18%)

22 Cities/ Municipalities
(22%)

2026

22 Cities/ Municipalities
(26%)

2028

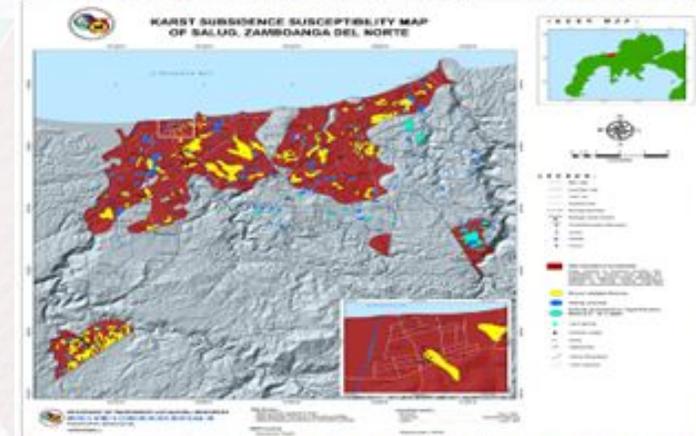
2025

22 Cities/ Municipalities
(20%)

2027

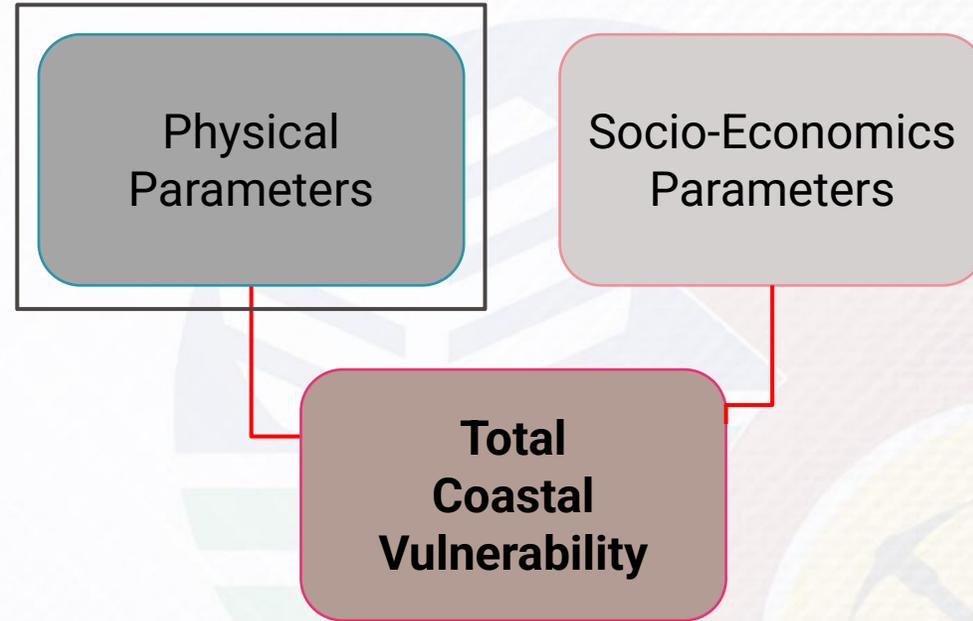
22 Cities/ Municipalities
(24%)

Total universe: 1145 cities/municipalities





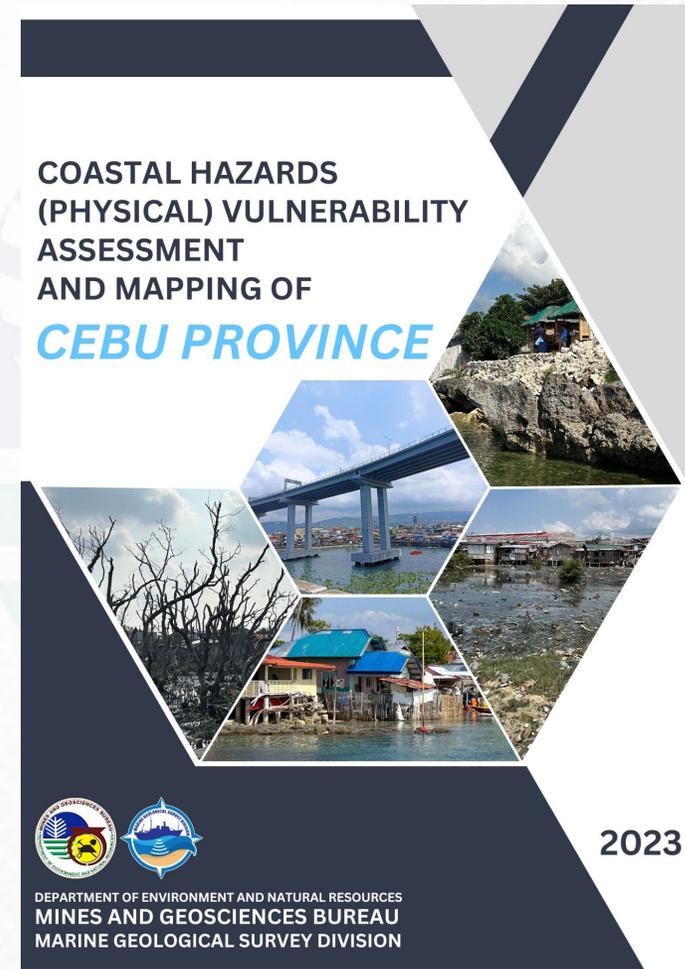
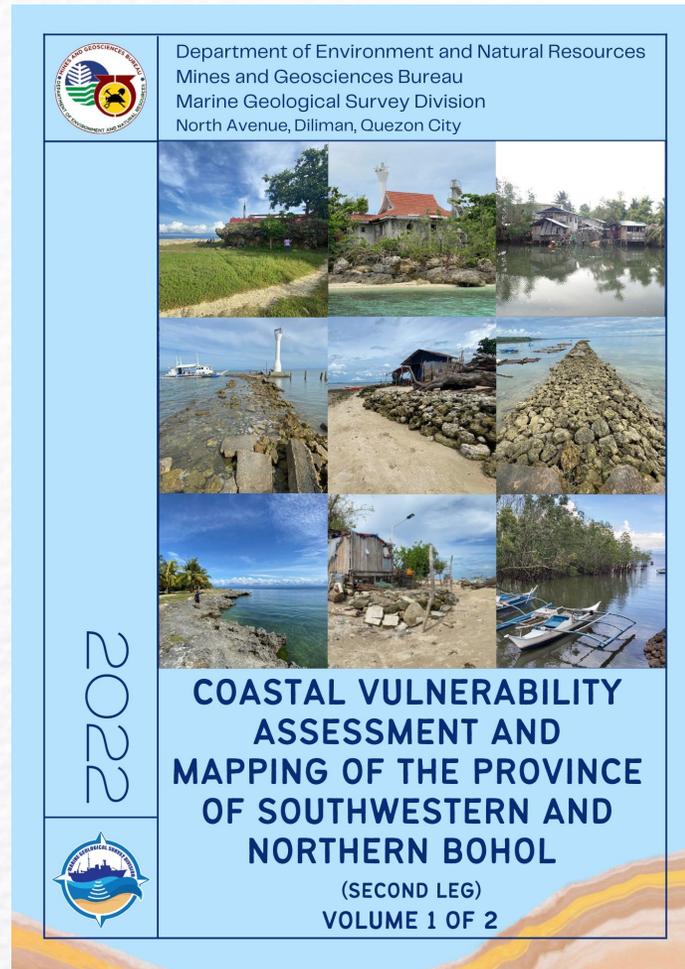
Coastal Vulnerability



Physical dimension of vulnerability:

- ❖ Natural coastal conditions (e.g., geologic/geomorphologic characteristics; meteorologic conditions)
- ❖ Anthropogenic activities that modify the physical conditions

Issuance of Coastal Geohazards Technical Report to the Local Government Units



...for integration/consideration in their long-term land use and development plans

Community-based advisories issued



Republic of the Philippines
 Department of Environment and Natural Resources
MINES AND GEOSCIENCES BUREAU
 North Avenue, Diliman, Quezon City, Philippines
 Tel No. (+83 2) 928-8842 / 9288937 Fax No. (83 2) 920-1635 E-mail: central@mgb.gov.ph

COASTAL GEOHAZARD ADVISORY

Date: 19 July 2022

To: **THE CHAIRPERSON**
 Barangay Magdangog
 Municipality of Calape
 Province of Bohol

Dear Chairperson:

Please be advised that the Coastal Geohazards Mapping and Assessment Team of the Mines and Geosciences Bureau (MGB), has conducted geohazard assessment in your barangay. The following are the results and recommendations following the assessment:

Barangay	Sito (Specific Location)	Coastal Hazards Vulnerability	Geohazard Assessment	Recommendations (to all coastal areas of the barangay)
Barangay Magdangog	Barangay proper	Moderate to High	<p>The barangay is founded on a relatively young, uplifted reefal carbonate rock that serves as the bedrock of the coastal plain characterizing the island. Much of the populace resides inland (at least 30 meters from the shoreline)</p> <p>The fine sandy beach of Barangay Magdangog is experiencing erosion. Wave escarpment attributed to Typhoon Odette is notable. The gentle slope gradient all the more makes the area prone</p>	<p>In all places of the barangay, the LGU should monitor for indications of ground subsidence (e.g., tilting of walls, doors and windows; development of cracks on walls and floors; displacement of the ground) resulting from subsurface development of cavities, including caverns. The barangay should also monitor for sinkhole collapse. These features are common in areas underlain by relatively young carbonate rocks, as in the case of the barangay. Indications of such ground instability should be reported to the LGU and the Mines and Geosciences Bureau.</p>

BARANGAY MAGDANGOG, CALAPE, BOHOL



Photo 1. View looking southeast of an eroding beach as indicated by wave escarpment at Barangay Magdangog proper (arrow indicated). Owing to the gentle gradient of the coastal slope, the barangay and property owners are advised to retain a setback or easement zone of at least **20 to 25 meters from the highest high tide line** as part of the long-term management plan. Further build up along the coast as shown is strongly discouraged. (GPS (Luzon 1911): 9°54'9.2"/123°48'51.1")



Photo 2. Another view looking northwest of the beach at Barangay Magdangog. (GPS (Luzon 1911): 9°54'9.2"/123°48'51.1")

...recommended setback/No Build zone included

City/Municipal-wide Information, Education, and Communication Campaigns (IEC) and Distribution of IEC materials



IEC MATERIALS

Landslide o Guho
Alamin ang mga lugar na may peligro sa Landslide

Iba ang Ready!
Alamin ang Mga Lugar na May Pangalana sa Landslide

BAHA
An natural na pag-paaw hin tabig na natural na araglan (isap, sapag, ngan dagat).

ANO IT ANGAY BUHATON?

UGSA MEINTRAS KAHUMAN

PAGKAHUGNO SA YUTA SA MGA LUGAR NGAY NAYAY LIMESTONE/GUISO/ANAPOG TUNGOD PAGKAHUGNO SA BUNG-AW O BITO

Karst
Ang pagkawala ng lupa sa karst ay nangyayari dahil sa pagkawala ng lupa sa mga lugar na may karst. Ang pagkawala ng lupa sa karst ay nangyayari dahil sa pagkawala ng lupa sa mga lugar na may karst.

Karst Subsidence
Ang pagkawala ng lupa sa karst ay nangyayari dahil sa pagkawala ng lupa sa mga lugar na may karst.

Mga hugaway sa Sinkhole

MGA TIMAILHAN SA POSIBLENG PAGKAHUGNO

UNSAY MGA ANGAY BUHATON??

ANIA TI ARAMIDEN?

SABAY/ KASANGAWAN

KABAYATAN

KALPASAN

COASTAL INUNDATION

Tsunami

Storm Surge

Tidal Flooding

RISING SEA LEVEL AND COASTAL EROSION

SOME FIELD MANIPULATIONS OF RISING SEA LEVEL AND COASTAL EROSION

COMMON AND WIDESPREAD ACTIVITIES THAT CONTRIBUTE TO COASTAL EROSION

STRUCTURES BUILT PERPENDICULAR OR PARALLEL TO THE SHORE

Mitigating Coastal Erosion & Coastal Inundation through COASTAL DEFENCES

Hard Engineering

Soft Engineering

COASTAL DEFENCES

KARST SUBSIDENCE

DULOY NG PAGKASAG NG SINKHOLE

ANUNANG MGA KARANWANG SINALES NG PAGKASAG NG SINKHOLE

ANUNANG MGA KARANWANG SINALES NG PAGKASAG NG SINKHOLE

ANO ANG LANDSIDE O PAGGUHO?

ANO ANG PAGKASAG NG SINKHOLE?

ANO ANG PAGKASAG NG SINKHOLE?

SCAN ME



ANO ANG BAHAY?

ANO ANG BAHAY?

IEC HAZARDHUNTERPH (DOST-PHIVOLCS)

The screenshot displays the HazardHunterPH app interface. On the left, there are navigation menus for TOOLS, DISPLAY OPTIONS, SELECT BASEMAP, SELECT HAZARD/S, SELECT EXPOSURE INFORMATION, and VOLCANO HAZARDS INFORMATION. The main map shows the Philippines with various hazard zones in red and yellow. On the right, an 'ASSESSMENT RESULT' panel provides details for seismic and volcanic hazards, and a 'HYDRO-METEOROLOGICAL HAZARD ASSESSMENT' table.

HAZARD	ASSESSMENT	EXPLANATION AND RECOMMENDATION
Flood	High Susceptibility; 1 to 2 meters flood height and/or more than 3 days flooding	Areas with high susceptibility to floods are likely to experience flood heights of 1 meter up to 2 meters and/or flood duration of more than 3 days. Sites including active river channels, abandoned river channels, and areas along riverbanks, are immediately flooded during heavy rains of several hours and are prone to flash floods. These may be considered not suitable for permanent habitation but may be developed for alternative uses subject to the implementation of appropriate mitigation measures after conducting site-specific geotechnical studies as deemed necessary by project engineers and LGU building officials. The implementation of appropriate mitigation measures as deemed necessary by project engineers and LGU building officials is recommended for areas that are susceptible to various flood depths. Site-specific studies including the assessment for other types of hazards should also be conducted to address potential foundation problems.

MGB RIL and flood maps are also accessible through GeoRiskPH

Republic of the Philippines
Department of Environment and Natural Resources
MINES AND GEOSCIENCES BUREAU

DATE: 26 September 2021, 8:56 pm
LOCATION: City of Malabon, Third District
COORDINATES: 14.66530, 120.95140

HYDRO-METEOROLOGICAL HAZARDS ASSESSMENT

Note: When scanning the QR code, the assessment results in the website might vary from the results stated in this report due to updates in the data in the GeoRiskPH database. You may refer to the report available upon scanning the QR code for the updated assessment results.

Scan to view location

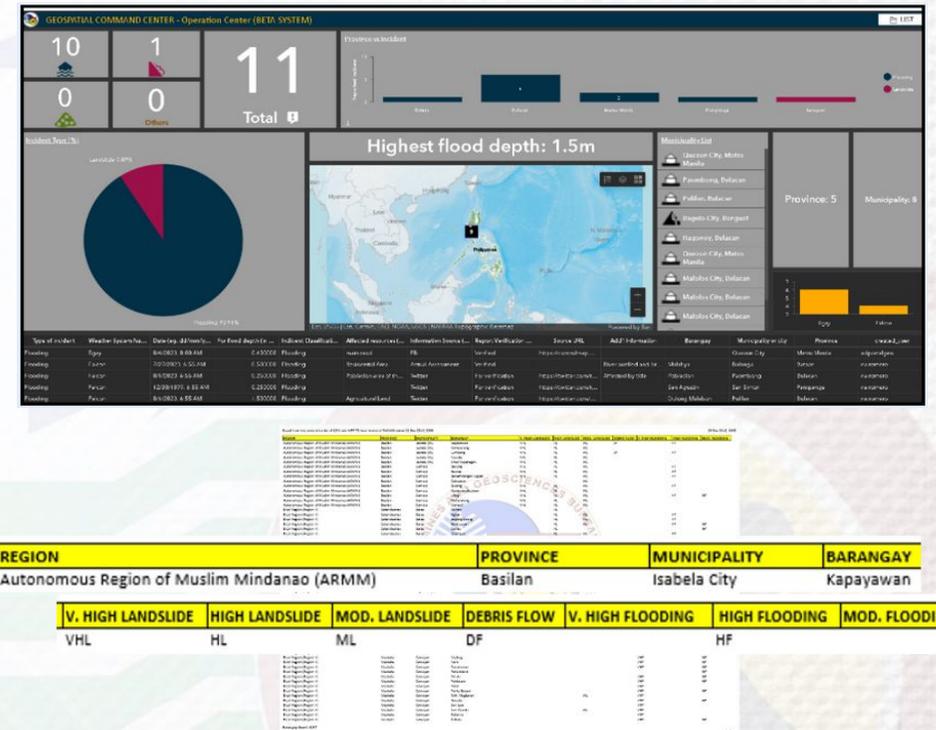
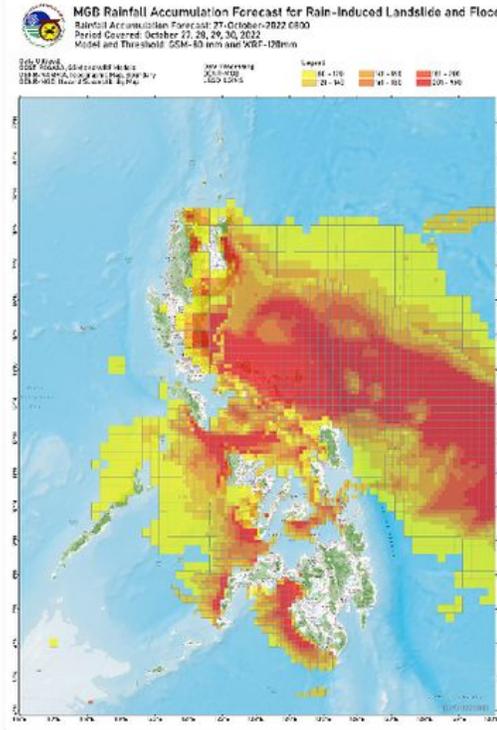
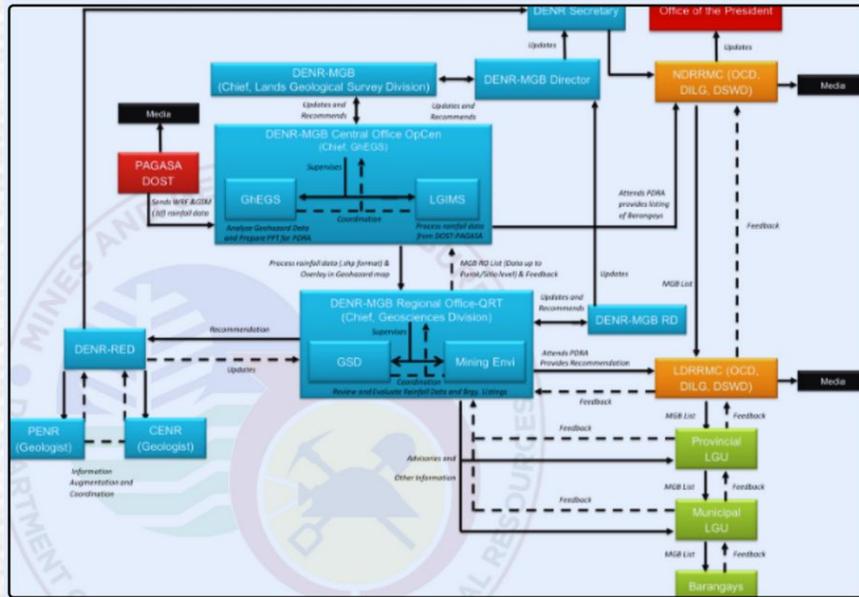
This report was generated through GeoRisk Philippines' HazardHunterPH app. This report is not for sale. To obtain an official document for legal purposes, or for the assessment of sites for development, request for an Official Geohazard Certification or Site Investigation on Rain-induced Landslide and Flood hazards from the Mines and Geosciences Bureau (MGB) by sending an email to central@mgb.gov.ph.



MGB OPERATIONS CENTER



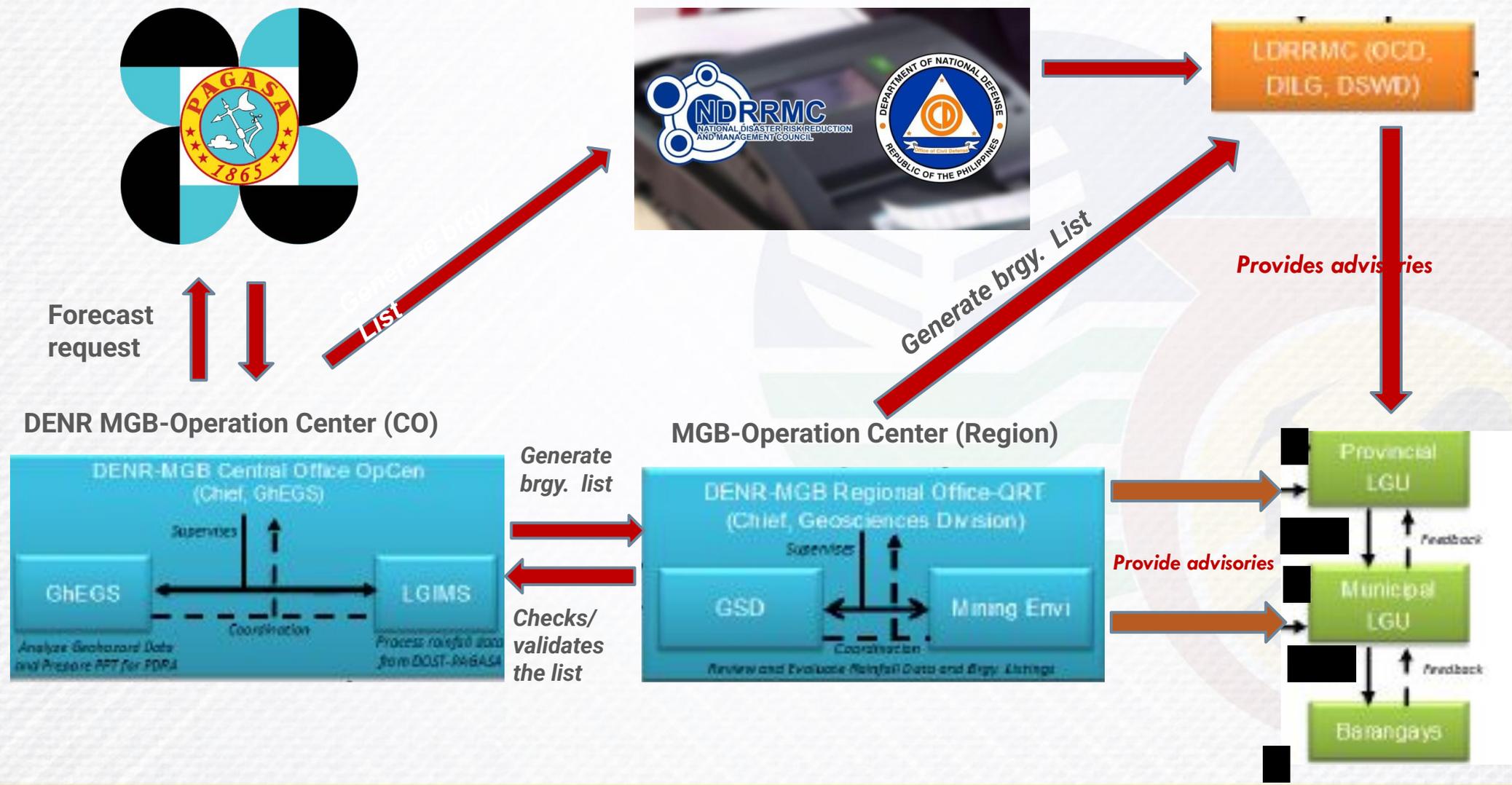
Geohazard Operations Center



- Processing of rainfall data from DOST-PAGASA to generate the list of barangays that may be affected by flood and rain-induced landslide to various stakeholders
- Issuance of Geohazard Advisory and infographics on what to do before, during and after flood and landslide
- Monitoring of flood and landslide incidents across the country through the MGB Central and Regional Offices
- Conduct of rapid geohazard assessment and post-disaster geohazard assessment



GENERAL FLOW OF FLOOD AND LANDSLIDE WARNING (NDRRMC PROCESS)





GEOHAZARD THREAT ADVISORY # 1
FOR: TY MITCHY (I.I.)

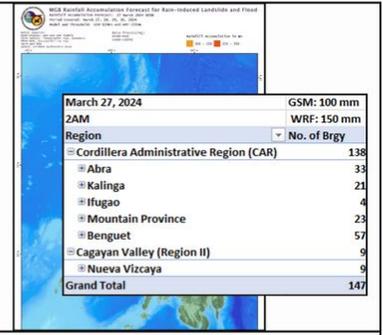
FOR APEX MINING CO.
 DATE:000000

TO WHOM IT MAY CONCERN,

While the current track forecast shows that **TY MITCHY** will remain offshore over the waters east of Davao and CARAGA Regions, the forecast confidence cone shows that a landfall scenario over Maco and Surigao City is not ruled out. Additionally, TY MITCHY is forecast to intensify in the next 12 hours into a Super Typhoon. Throughout its duration within the PAR, it may continue to steadily intensify and reach a Super Typhoon category by late Monday or early Tuesday as it moves over the Philippine Sea east of Luzon.

WARNING

This is an advisory pertaining to the 24-HR PUBLIC WEATHER FORECAST issued by DOST-PAGASA on 000000 at 0200H - "TY MITCHY IS AFFECTING DAVAO AND CARAGA REGIONS". Under this conditions, flooding, rain-induced landslides and debris flows are possible to occur especially on areas categorized as Highly to Very Highly Susceptible to the said geohazards as identified in the Flood and Rain-induced Landslide Susceptibility Maps of the DENR-MGB.



RECOMMENDED

- You are hereby advised to activate your respective EMERGENCY RESPONSE and PREPAREDNESS TEAMS in instances of untoward incidents in your Area of Responsibility (AOR) attributed to this weather disturbance.
- It is also strongly advised that the mining companies within the Davao and CARAGA Regions to coordinate with your host LGUs/communities and work hand in hand in enforcing your preparedness and response protocols to minimize and/or lessen the impacts of geohazards that can be triggered by the above climatological condition.

You are required to acknowledge receipt of this advisory through this email address: mgbxipcen@mgb.gov.ph/opcen@mgb.gov.ph

Approved by: Bayaning Mas Puyat
 Prepared by: Bayaning Puyat

023-456-7890 0202-02220 opcen@mgb.gov.ph



Threat Advisory for the Mining Companies

REGIONAL GEOHAZARD THREAT ADVISORY # 1
FOR: TY MITCHY (I.N.)

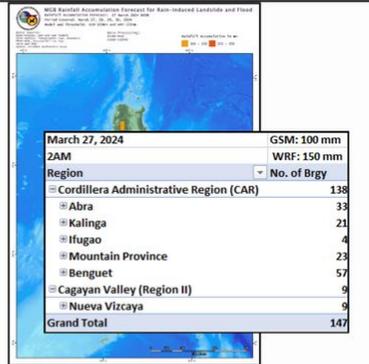
FOR THE MUNICIPAL MAYORS OF NEW BATAAN, MACO AND COMPOSTELA
 DATE:000000

DEAR MAYOR,

While the current track forecast shows that **TY MITCHY** will remain offshore over the waters east of Davao and CARAGA Regions, the forecast confidence cone shows that a landfall scenario over Maco and Surigao City is not ruled out. Additionally, TY MITCHY is forecast to intensify in the next 12 hours into a Super Typhoon. Throughout its duration within the PAR, it may continue to steadily intensify and reach a Super Typhoon category by late Monday or early Tuesday as it moves over the Philippine Sea east of Luzon.

WARNING

DOST-PAGASA's forecast rainfall is generally higher in elevated or mountainous areas. Under these conditions, flooding and rain-induced landslides are most likely to occur in areas that are highly or very highly susceptible to geohazards as identified in the DENR-MGB Flood and RIL susceptibility maps. To add, localities that experienced considerable amounts of rainfall for the past several days may also experience various levels of flooding especially those areas being transected by major river systems.



RECOMMENDED

1. Most areas within **Davao de Oro**, **New Bataan in particular**, have already exceeded the normal amount of cumulative rainfall brought about by the Southwest Monsoon (insert [gdrive link to the Cumulative RF Map](#)). As such, residents living in areas with high susceptibility to landslides (you can specify based on the [cumulative map](#)) should have already been notified by the Municipal Local Government Unit of New Bataan through the Municipal Disaster Risk Reduction and Management Office (PDRMO) that continuous heavy and prolonged rains could trigger landslides caused by the water saturated condition of the soils and slopes. For guidance, the PLGUs should refer to the List of Barangays issued by this Office on dd/mm/yr at 00:00 Link:<https://xxxxxxx> Insert a google drive link here for the list).

Approved by: Bayaning Mas Puyat
 Prepared by: Bayaning Puyat

023-456-7890 0202-02220 opcen@mgb.gov.ph



Threat Advisory for the Municipal Mayors

REGIONAL GEOHAZARD THREAT ADVISORY # 1
FOR: TY MITCHY (I.N.)

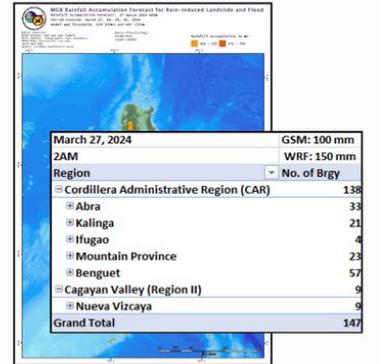
FOR THE PROVINCIAL GOVERNORS OF DAVAO DE ORO, DAVAO ORIENTAL, SURIGAO DEL SUR, SURIGAO DEL NORTE
 DATE:000000

FOR THE GOVERNOR

While the current track forecast shows that **TY MITCHY** will remain offshore over the waters east of Davao and CARAGA Regions, the forecast confidence cone shows that a landfall scenario over Surigao City is not ruled out. Additionally, TY MITCHY is forecast to intensify in the next 12 hours into a Super Typhoon. Throughout its duration within the PAR, it may continue to steadily intensify and reach a Super Typhoon category by late Monday or early Tuesday as it moves over the Philippine Sea east of Luzon.

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Approved by: Bayaning Mas Puyat
 Prepared by: Bayaning Puyat

023-456-7890 0202-02220 opcen@mgb.gov.ph



Threat Advisory for the Provincial Governors



RAIN-INDUCED LANDSLIDE AND FLOODING ADVISORY

as of 01 October 2025, 8:00 PM (Valid from 01 to 04 October 2025, 8:00 PM)

FOR THE WHOLE PHILIPPINES

TOTAL NO. OF BARANGAYS: **2,586**

FIND YOUR BARANGAY



Visit this QR Code and check if your Barangay is included in the list of areas susceptible to rain-induced landslides and floods.

EARLY WARNING, EARLY ACTION:
Preparing for Rain-Induced Landslides and Flooding

RAIN-INDUCED LANDSLIDE

A rain-induced landslide is the downward movement of rock or soil due to heavy and continuous rain. It may cause damage to property, suffocation, injury, or death.

FLOODING

Flooding happens when usually dry land gets covered with water because rivers, lakes, or seas overflow. Floods may cause injury, electrocution, diseases, drowning, or death.

WARNING SIGNS FOR LANDSLIDES

FLOOD-PRONE AREAS

HOW TO STAY SAFE

PREPARE NOW

- Monitor weather forecasts
- Prepare a go bag with your essentials
- Contact your barangay, if there is a possibility of a landslide

SURVIVE DURING

- Move away from the landslide's path
- Seek cover under a sturdy table if caught indoors

BE SAFE AFTER

- Stay away from the landslide area
- Have your home inspected before reoccupation
- Report damaged structures to the authorities

HOW TO STAY SAFE

PREPARE NOW

- Monitor weather forecasts
- Prepare a go bag with your essentials
- Clear waterways of debris
- Secure your family's emergency kit
- Disconnect electrical appliances and documents

SURVIVE DURING

- Move to higher ground
- Do not cross flooded areas
- Check body parts that come in contact with floodwater
- Follow evacuation instructions
- Turn off your home's electricity and gas wires

BE SAFE AFTER

- Do not return home until declared safe
- Inspect your home before reoccupation
- Repair damaged utility lines
- Seek necessary medical care
- Dispose of stagnant rainwater



MAKE YOUR COMMUNITY SAFE

Report possible landslides to local authorities or to central@mgb.gov.ph or 8-667-6700

To know all other hazards surrounding your area, visit HazardHunterPH by the Department of Science and Technology hazardhunter.georisk.gov.ph

RAIN-INDUCED LANDSLIDE AND FLOODING ADVISORY

as of 01 October 2025, 8:00 PM (Valid from 01 to 04 October 2025, 8:00 PM)

NATIONAL CAPITAL REGION (NCR)

HAZARD SUSCEPTIBILITY RATINGS

CITY/MUNICIPALITY (National Capital Region)	LANDSLIDE (TOTAL NO. OF BRGAYS)		FLOODING (TOTAL NO. OF BRGAYS)		
	VERY HIGH	MODERATE	VERY HIGH	HIGH	MODERATE
1. City of Manila	0	0	37	55	111
2. City of Marikina	0	0	14	13	9
3. City of Pasig	0	0	4	1	1
4. City of Quezon	0	10	71	83	110
5. City of Caloocan	0	2	39	51	82
6. City of Malabon	0	0	19	20	18
7. City of Navotas	0	0	16	2	15
8. City of Valenzuela	0	0	30	33	27

FIND YOUR BARANGAY



Visit this QR Code and check if your Barangay is included in the list of areas susceptible to rain-induced landslides and floods.

EARLY WARNING, EARLY ACTION:
Preparing for Rain-Induced Landslides and Flooding

RAIN-INDUCED LANDSLIDE

A rain-induced landslide is the downward movement of rock or soil due to heavy and continuous rain. It may cause damage to property, suffocation, injury, or death.

FLOODING

Flooding happens when usually dry land gets covered with water because rivers, lakes, or seas overflow. Floods may cause injury, electrocution, diseases, drowning, or death.

WARNING SIGNS FOR LANDSLIDES

FLOOD-PRONE AREAS

HOW TO STAY SAFE

PREPARE NOW

- Monitor weather forecasts
- Prepare a go bag with your essentials
- Contact your barangay, if there is a possibility of a landslide

SURVIVE DURING

- Move away from the landslide's path
- Go to a safer or higher ground
- Seek cover under a sturdy table if caught indoors

BE SAFE AFTER

- Stay away from the landslide area
- Have your home inspected before reoccupation
- Report damaged structures to the authorities

HOW TO STAY SAFE

PREPARE NOW

- Monitor weather forecasts
- Prepare a go bag with your essentials
- Clear waterways of debris
- Secure your family's emergency kit
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SURVIVE DURING

- Move to higher ground
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THANK YOU!

MINES AND GEOSCIENCES BUREAU

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