

Tsunami Ready Philippines

Community-based Tsunami Preparedness Activities

South China Sea Region Tsunami Ready Related
Training Course | December 22-23, 2025



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CONTENT

BE AWARE!

BE PREPARED!

BE TSUNAMI READY!

How we co-implement

- Tsunami basics
- Why tsunami preparedness
- Why community-based
- Tsunami preparedness activities in the community



Tsunami! What to do ?

Run away from the shore towards higher grounds or farther inland!



*How?
Where?
When?*

Understanding Disaster Risk



Communicating Risk

R&D

Communication

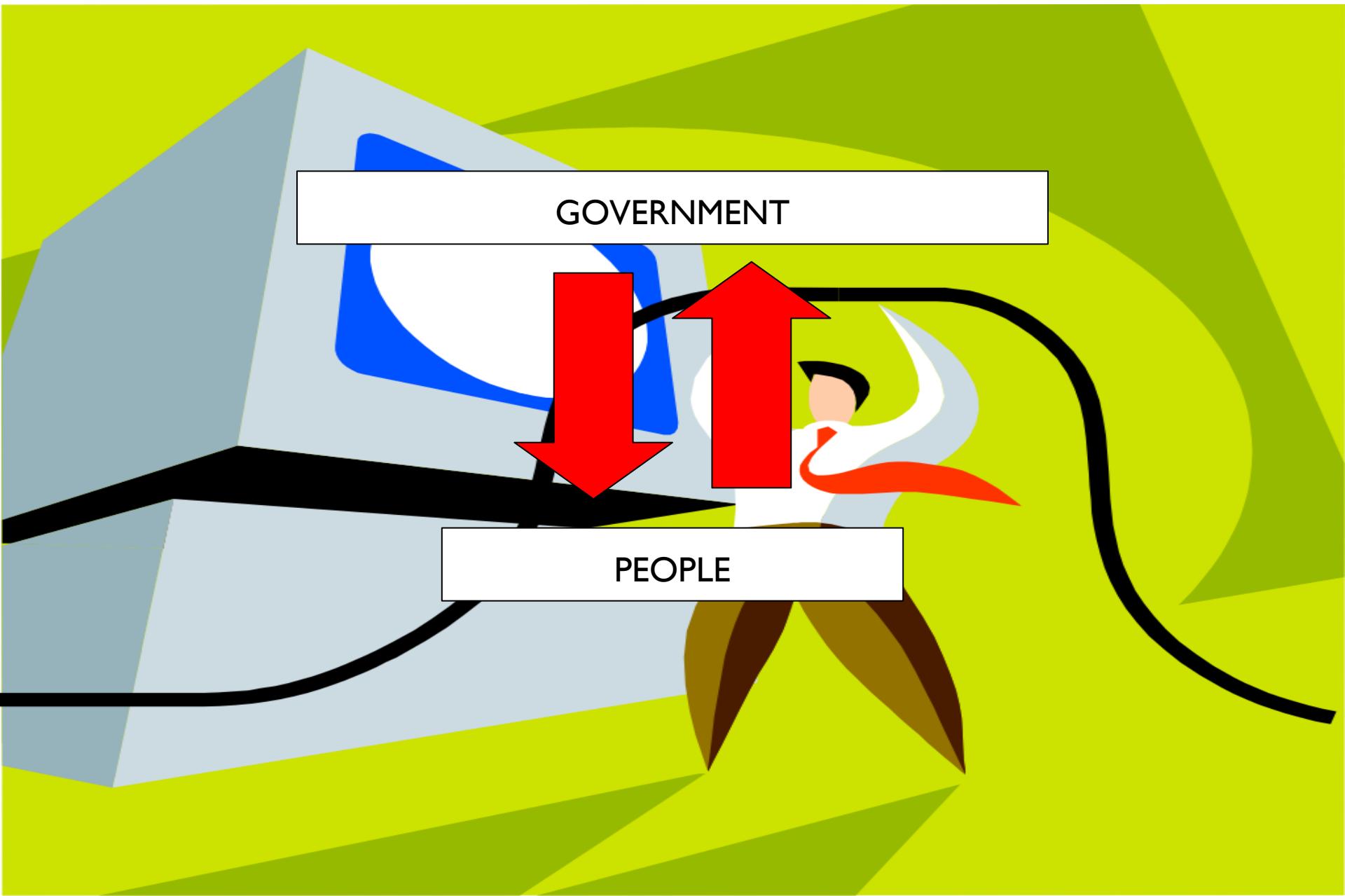
Materials development

Capacity building

Developing Risk Information materials

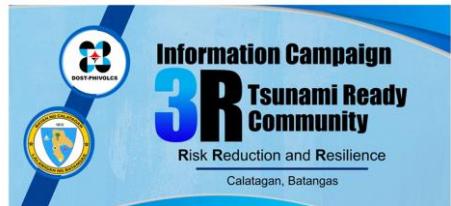


Together we can save lives...



BE AWARE!

Partnerships



Coordination Meeting for the 3R Campaign project – Tsunami Ready Community



3R Campaign Project conducted a community-level survey in all coastal barangays of Calatagan, Batangas



Consultations, Lectures, IECs, Workshops

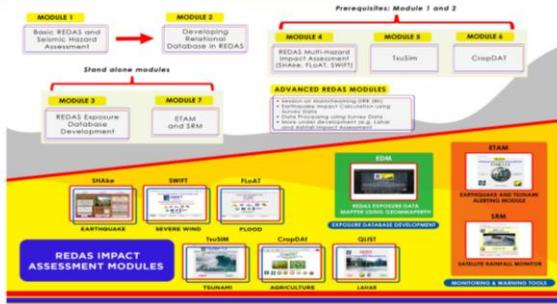


I ASSESSMENT (ASSESS)

- 1 **ASSESS-1.** Tsunami hazard zones are mapped and designated.
- 2 **ASSESS-2.** The number of people at risk in the tsunami hazard zone is estimated.
- 3 **ASSESS-3.** Economic, infrastructural, political, and social resources are identified.

Provision of tools

Hazard and Impact Assessment Software REDAS by DOST-PHIVOLCS



REDAS TsuSIM
Tsunami Simulation and Impact Module

can simulate tsunami hazard, perform simulation and animation, compute for tsunami impacts, and plot tsunami evacuation map.

The screenshot shows a map of the Philippines with a red and white hazard simulation overlay. Below the map are two smaller images: one showing a map of the Philippines with a green polygon labeled 'Breaching Site' and a red line, and another showing a 3D perspective view of a coastal area with a red evacuation route marked.

The GeoRiskPH Platform

Available to Public

HazardHunterPH
GEORISKPH

For one-stop-shop HAZARD ASSESSMENT SERVICE

GeoAnalyticsPH
GEORISKPH

VISUALIZATION & ANALYTICS
Development of Various Plans

Credential-based Access

GeoMapperPH
GEORISKPH

For the development of the NATIONAL EXPOSURE DATABASE
Pre- and Post-Disaster surveying

PLANSMART for Safe Schools
PLANSMART for Sustainable Human Settlements

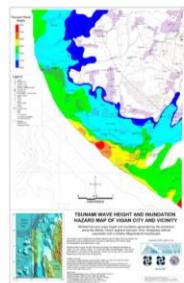
GeoAnalyticsPH

Enables analysis and visualization of the exposure of population and elements at risk to natural hazards

Generates summaries of hazards and risk assessments

Sample outputs include a bar chart titled 'Population Exposed to Tsunami' showing exposure by barangay, and a map titled 'Tsunami Hazard Map of Zamboanga City'.

Tsunami hazard and risk mapping



MAP PARAMETERS: DIGITIZE EVACUATION MAP, DEMOGRAPHIC DATA, HAZARDS DATA, VISUALIZE EVACUATION MAP, EXPOSURE DATA

Load Spatialite DB: C:\REDAS\TsuSim\DATA\REDAS_V1_ZAMBOANGA_DEL_NORTE_Q10\Q10\Q10_CITY_DB_Files\Zamboanga_City_Norte_PSA_2020_2b.db

Town/City: Tampakan
Brgy Name: Tampakan
Search Name:
Enter Brgy Name:
New Summary:

** * Barangay Demography Summary **
Brgy_Name = Miputak (Pop.)
Mun_Name = Dipolog City
Prov_Name = Zamboanga del Norte
TOT_POP = 7600
PERCENT_MALE = 49.5%
PERCENT_FEMALE = 50.5%
PERCENT_SINGLE = 52.2%
PERCENT_MARRIED = 45.9%
PERCENT_PHD = 0.7%
PERCENT_EDUCATED = 61.9%
PERCENT_AGE5_0_5 = 10.2%
PERCENT_AGE5_11 = 10.1%
PERCENT_AGE5_18_21 = 9.6%
PERCENT_AGE5_22_60 = 50.9%
PERCENT_AGE5_ABOVE_60 = 9.3%

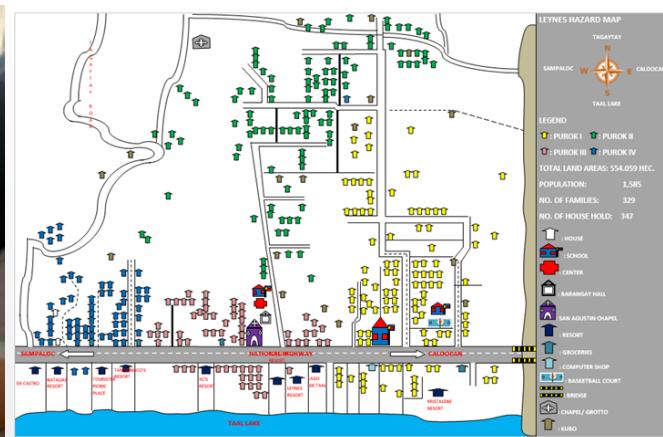
TsuSim 1.7
REDAS Tsunami and Hurricane Simulation Module



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Tsunami hazard and risk mapping



BE PREPARED!

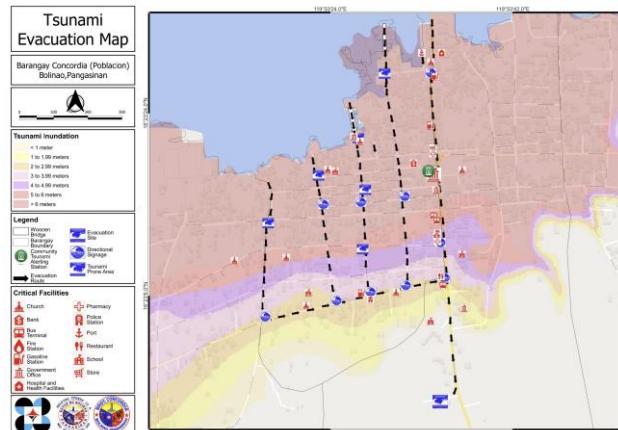
- Tsunami evacuation mapping
- Tsunami information and signage display
- Outreach and public awareness
- Community exercises

Workshops: Evacuation Planning



II | PREPAREDNESS (PREP)

- 4 PREP-1. Easily understood tsunami evacuation maps are approved.
- 5 PREP-2. Tsunami information including signage is publicly displayed.



Tsunami prone



Directional signage



Evacuation area



Local languages:
Filipino
Surigaonon
Boholanon
Waray



Workshops: Evacuation Planning

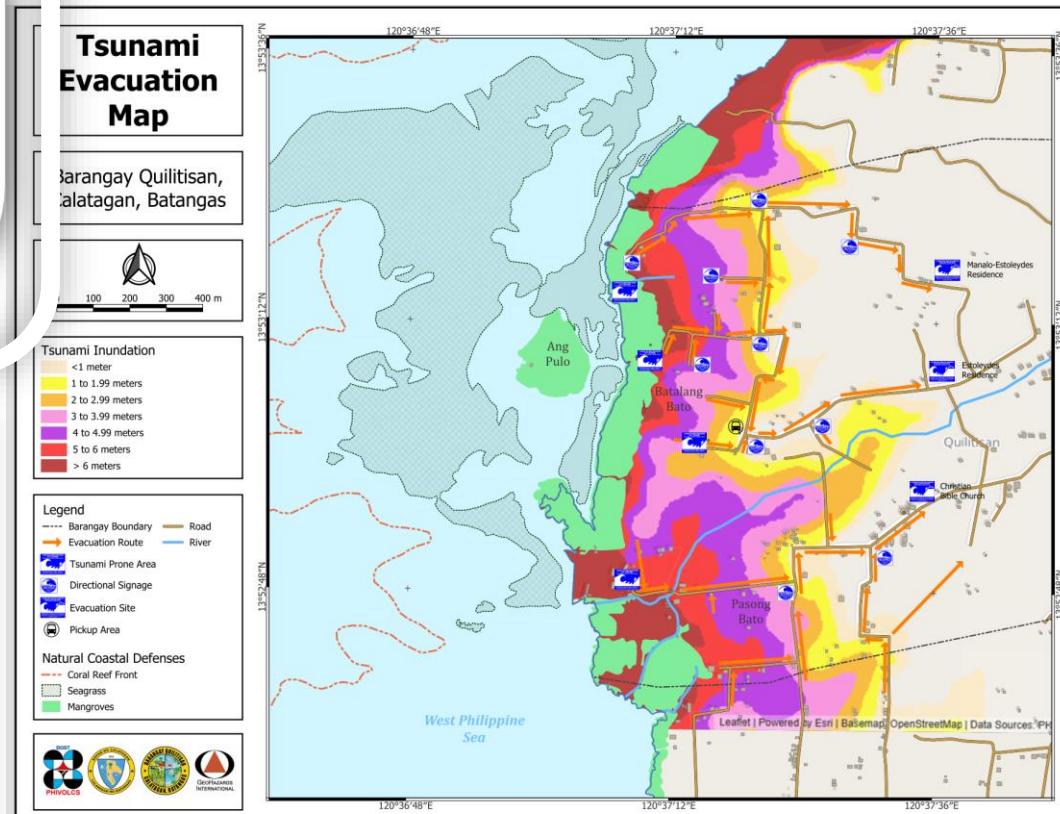


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Validation of evacuation maps and signage locations



Working map for a community (Brgy Quilitisan)



II | PREPAREDNESS (PREP)

6	PREP-3. Outreach and public awareness and education resources are available and distributed.
7	PREP-4. Outreach or educational activities are held at least 3 times a year.
8	PREP-5 A community tsunami exercise is conducted at least every 2 years

• Increase awareness on basic tsunami information



DOST-PHIVOLCS
information materials





Information Campaign

3R Tsunami Ready Community

Risk Reduction and Resilience

Brgy. Concordia, Bolinao, Pangasinan



Empowering the Next Generation



Tsunami Markers and Tsunami Catalogue



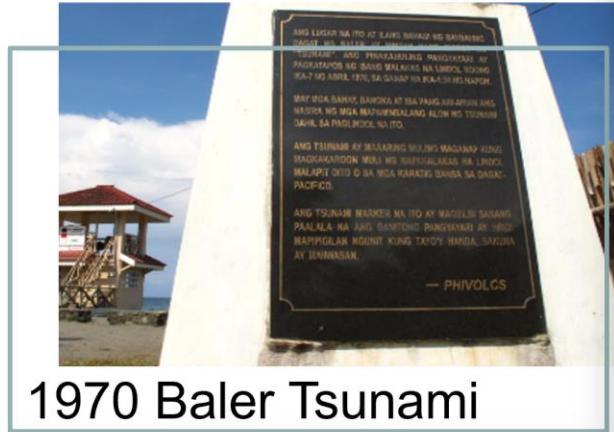
1994 Mindoro Tsunami



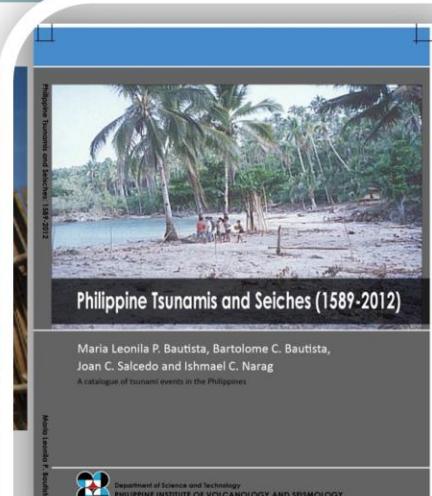
1976 Moro Gulf Tsunami



Community Tsunami
Alerting Station



1970 Baler Tsunami



Tsunami Catalogue



Commemoration of the 15 November 1994 M7.1 Mindoro Earthquake and Tsunami

Poster-making Contest





WORLD TSUNAMI AWARENESS DAY

5 NOVEMBER

PHIVOLCS InfoBit

TSUNAMI-READY BA ANG KOMUNIDAD MO?

Orientation on the
UNESCO-IOC Tsunami Ready Recognition Programme (TRRP)
and UNDRR World Tsunami Awareness Day (WTAD)

OCTOBER 28, 2024 1:00 - 4:00 PM
LIVE DOST-PHIVOLCS FACEBOOK

Makilahok sa
WORLD TSUNAMI
AWAWARENESS DAY
5 NOVEMBER

phivolcs.dost.gov.ph /PHIVOLCS @phivolcs_dost DOST-PHIVOLCS

WORLD TSUNAMI AWARENESS DAY 5 NOVEMBER

TSUNAMI! RUN for SAFETY

5 November 2024 | Start at 5:00 AM
Start at FGR Park → Finish at Baywalk, Central, City of Mati

REGISTER NOW

5KM

Register at Philippine Red Cross Davao Oriental Chapter
located at Hospital Drive, Brgy. Matiao, City of Mati
Contact number: LEAMOR TEMPLA - 09499335533

PHP 300.00
 RACE BIBS AND SINGLET

WORLD TSUNAMI AWARENESS DAY

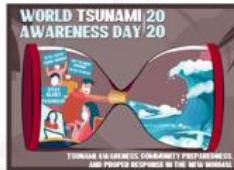
Digital-Poster Making Contest
5 November 2020



MARIANNE FAITH O. AVISO
1st PLACE
RTRMF-DVOREF, Palo, Leyte



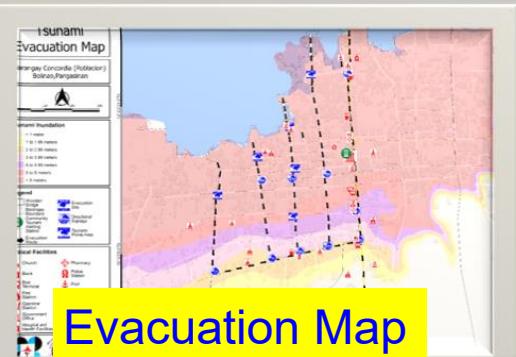
JANA PAULA V. RAMIREZ
2nd PLACE
Sto. Domingo National High School
Sto. Domingo, Albay Province



DARLENE MARIZ L. SUNGLAO
3rd PLACE
Tagbilaran City Science High School
Bohol Province



Tsunami Exercise/Drills

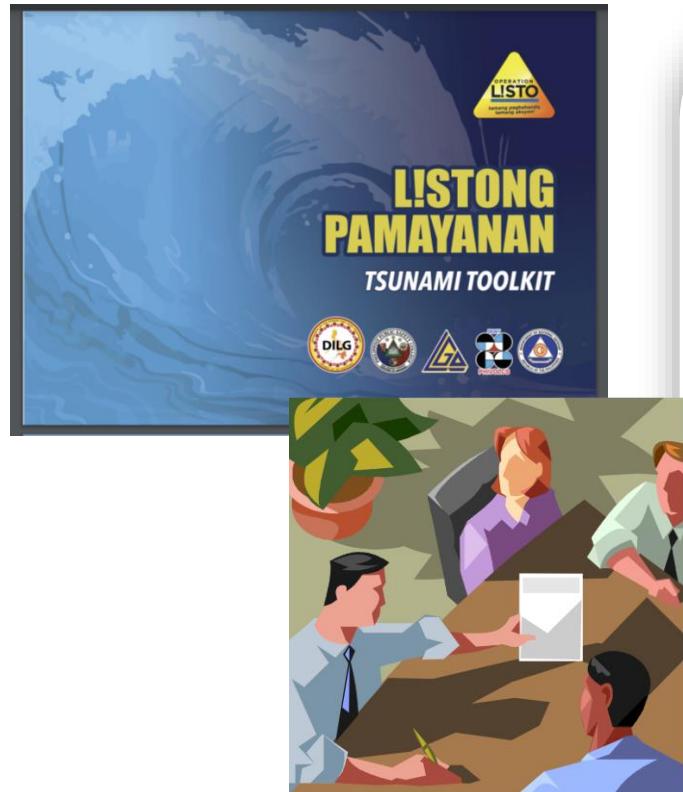


Other activities



BE TSUNAMI READY!

- Response Plan
- Emergency Operations center
- Communication

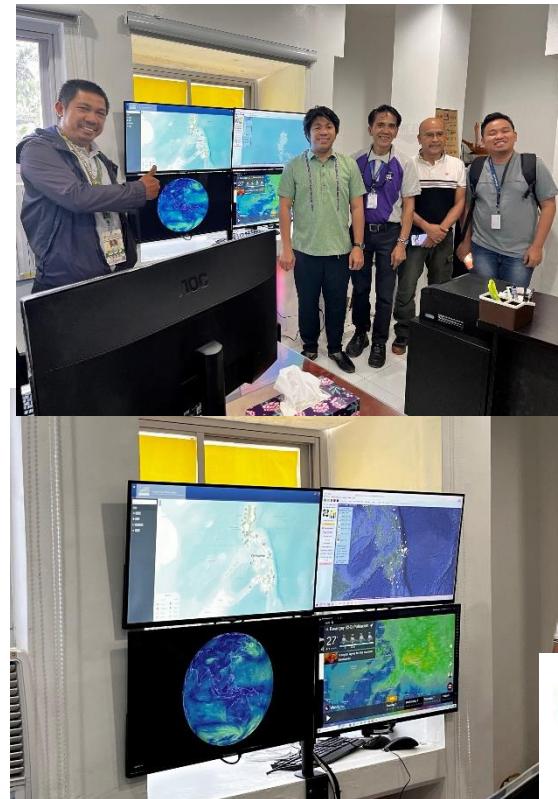
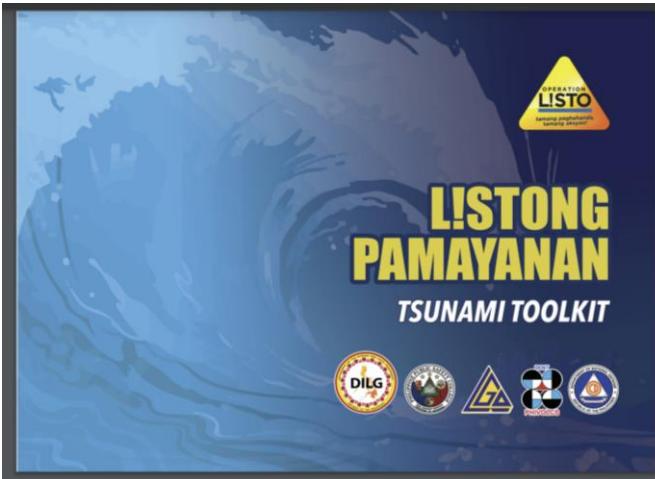


III

RESPONSE (RESP)

9	RESP-1. A community tsunami emergency response plan is approved.
10	RESP-2. The capacity to manage emergency response operations during a tsunami is in place.

Assisting communities in the development of plans and establishment of EOCs



III

RESPONSE (RESP)

11 RESP-3. Redundant and reliable means to timely **receive** 24-hour official tsunami alerts are in place.

12 RESP-4. Redundant and reliable means to timely **disseminate** 24-hour official tsunami alerts to the public are in place.

Establishing a tsunami warning system

key offices and officials



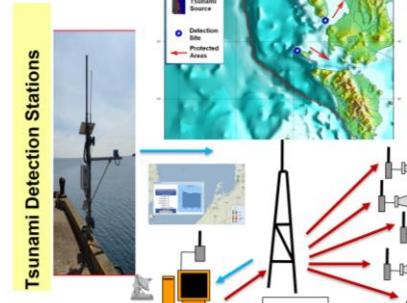
equipment

appropriate warning system scheme



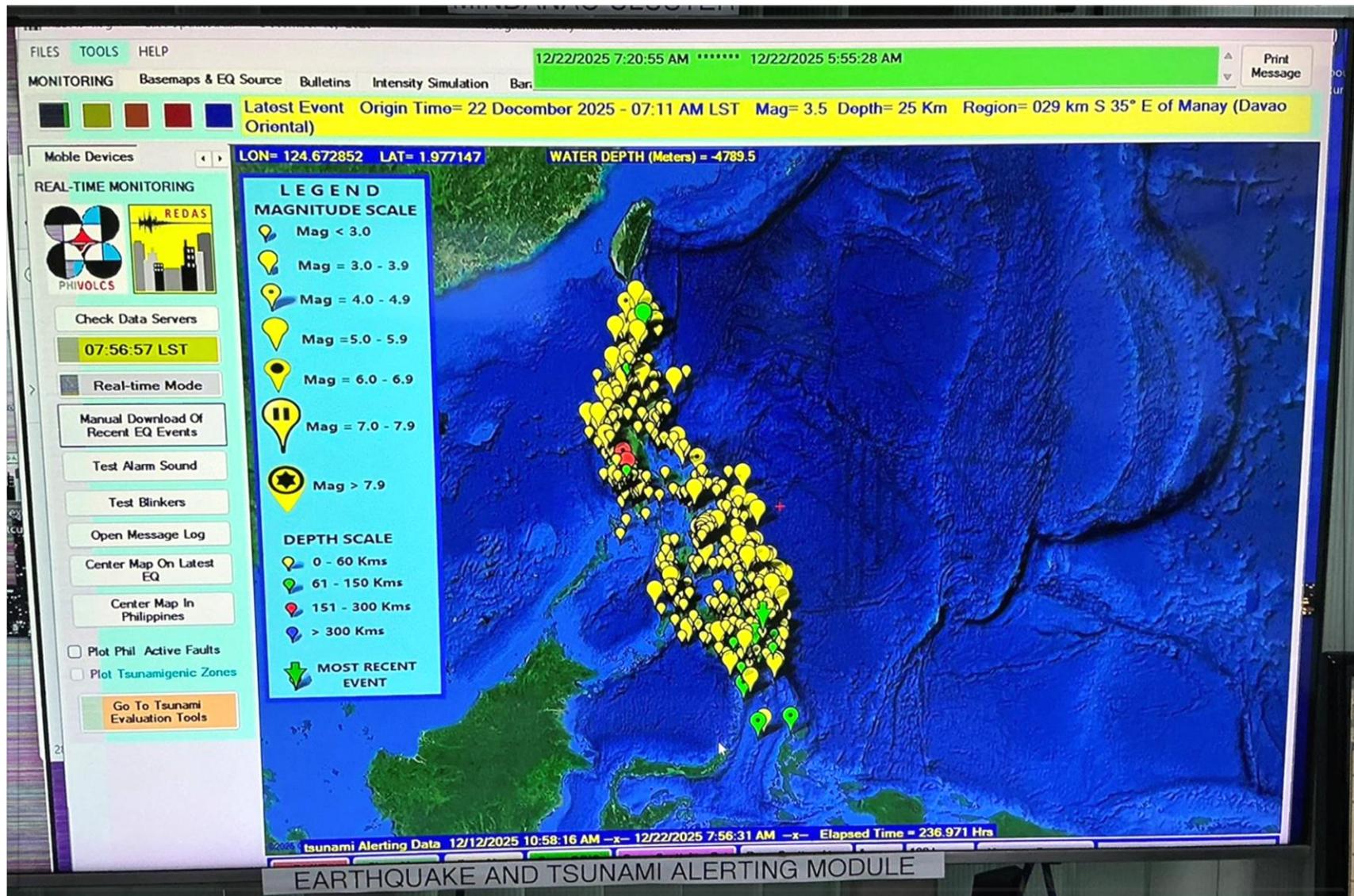
additional equipment

flow chart of information



Establish Tsunami Warning System

REDAS-Earthquake and Tsunami Alerting Module

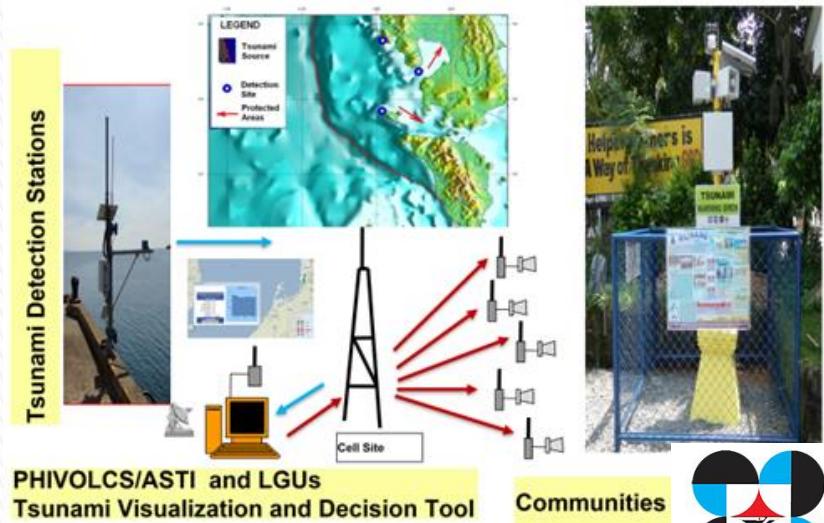
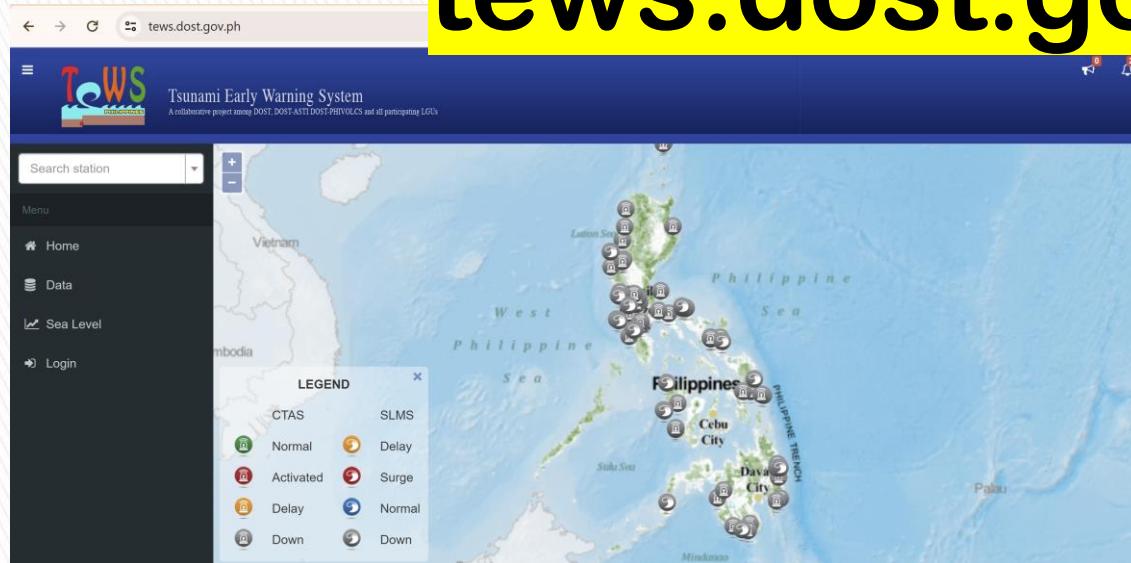


Sea Level Monitoring Stations Community Tsunami Alerting Stations



Community Tsunami Alerting Stations

tews.dost.gov.ph



The 1976 M8.1 Moro Gulf Earthquake & Tsunami

Tsunami Accounts:

Sequence of Events

- ❖ *A violent shock that awaken people and make standing & walking difficult*
- ❖ *unusually deep recession of the sea*
- ❖ *A strong prolonged approaching sound*
- ❖ *arrival of waves!!!*

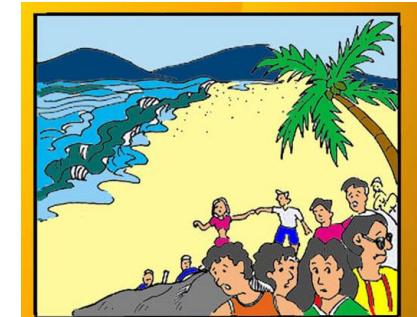
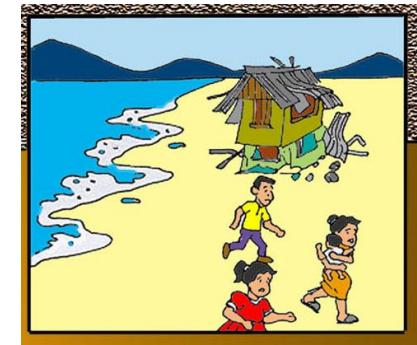
Tsunami!

SHAKE

DROP

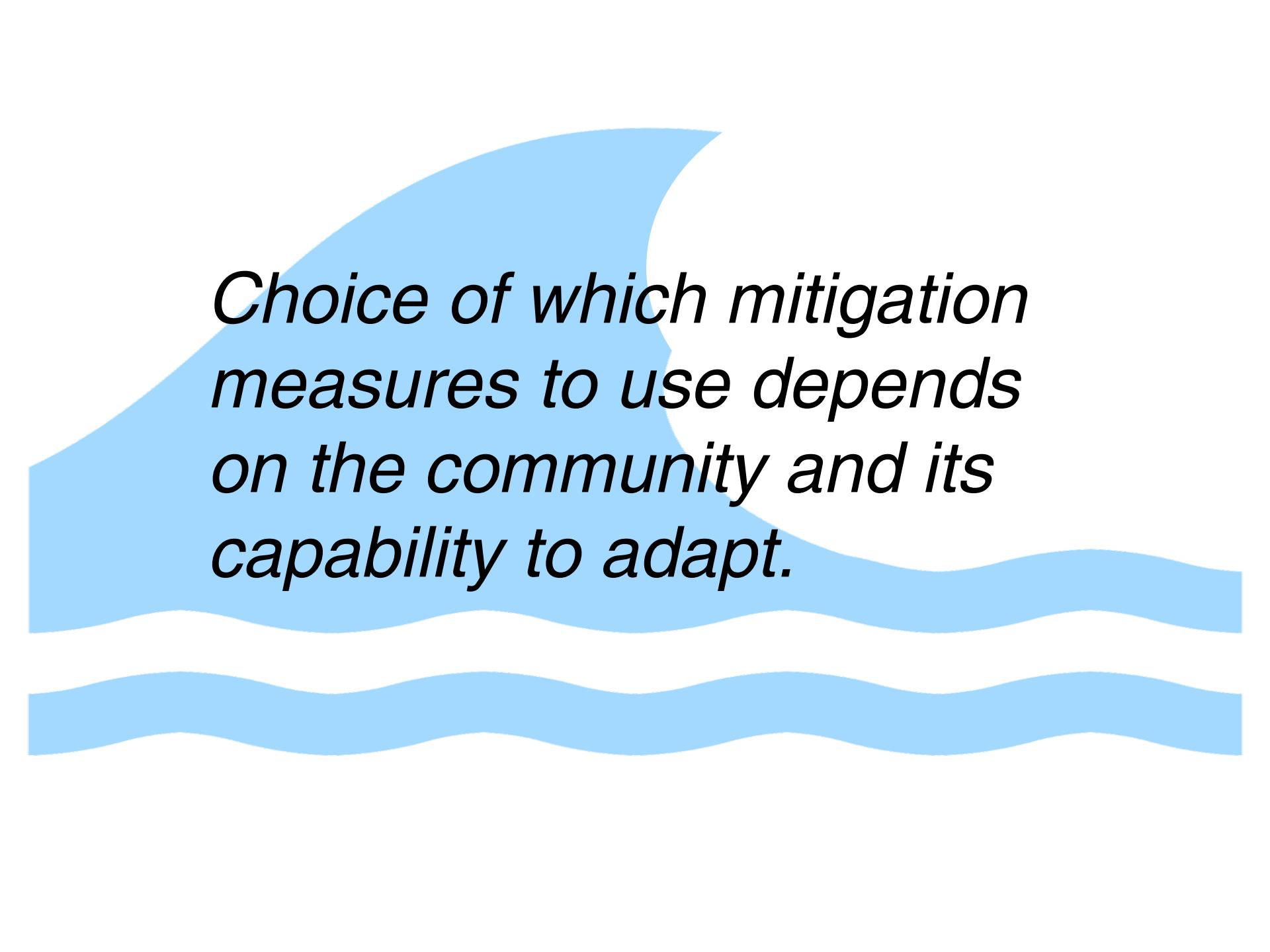
ROAR

Natural Signs of an impending local tsunami



Summary

- Co-implement activities with the communities
- Make communities aware on hazards and its impacts
- Co-create solutions through community activities
- Do exercise
- Sustain



*Choice of which mitigation
measures to use depends
on the community and its
capability to adapt.*



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[DOST - PHIVOLCS](https://www.youtube.com/DOSTPHIVOLCS)



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