

Using Geo-referenced Information in Disaster Risk Reduction and Management in the Philippines

by Lorna P. Victoria
Advisor, Center for Disaster Preparedness

**Regional Workshop on Geo-referenced Disaster Risk Management
Information System for South-East and East Asia, and the Pacific**

Outline:

Use of GIS and Space Technology for Disaster
Risk Reduction: Mitigation and Preparedness
- Government and in Community Based DRR

Geoportal

Use of Space Technology During Disaster

Recommendations and Ways Ahead

Greater appreciation and applications of geo-referenced information in DRRM

- after recent experiences of major disasters

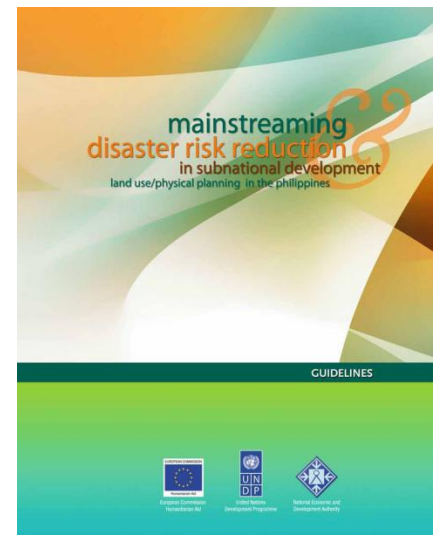


TD Winnie November 29, 2004



TS Ondoy September 26, 2009

- mainstreaming DRR in development planning and commitments to HFA



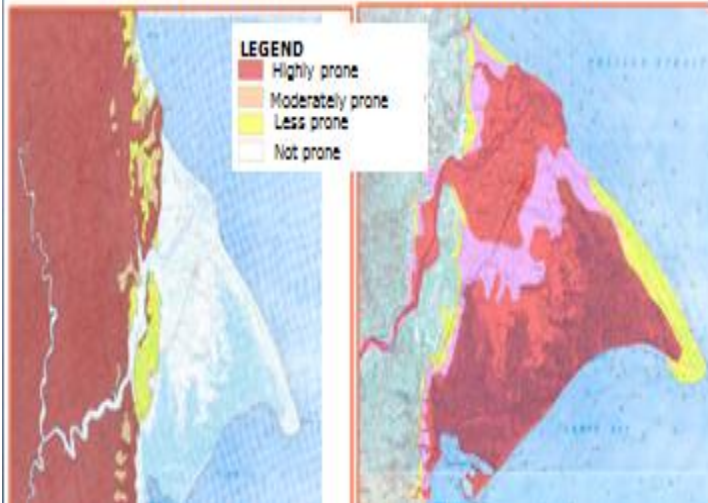
"Strengthening the Disaster Preparedness Capacities of REINA Municipalities to Geologic and Meteorological Hazards." or REINA Project as forerunner of the "Hazards Mapping and Assessment for Effective Community Based Disaster Risk Management (READY)" → **READY GMMA**

Samples of Products Provided under the REINA Project

RAIN-INDUCED

LANDSLIDE HAZARD MAP

FLOOD HAZARD MAP



Leyte Flood Map
2008 v01

“Enhancing Risk Analysis Capacities for Flood, Tropical Cyclone, Severe Wind and Earthquake hazards for Greater Metro Manila Area (**RAP**)

Collective Strengthening of Community Awareness on Natural Disasters (CSCAND) Agencies

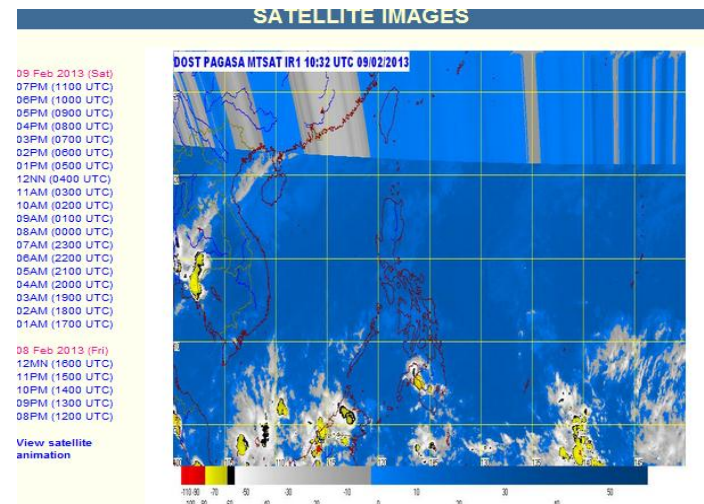
- Mines and Geosciences Bureau (MGB)
- National Mapping and Resource Information Authority (NAMRIA)
- Office of Civil Defense (OCD)
- Philippine Atmospheric, Geosciences and Astronomical Services Administration (PAGASA)
- Philippine Institute of Volcanology and Seismology (PHIVOLCS)



✓ *Use of Light Detection and Ranging (LiDAR)*

✓ *Use of Datasets on Hazard, Vulnerability, Exposure for risk analysis and mapping*

5 (of 8) Operational Doppler Radars input into the PAG-ASA Integrated High Power Computing System which also runs the WRF Model providing rainfall forecast up to 72 hours.



- ✓ PAG-ASA Rainfall Warning Decision Support System
- ✓ Master Plan for Flood Management of Metro Manila and Surrounding Areas, other CSAND activities and flood hazard mapping

Using geo-referenced information at the local and community level

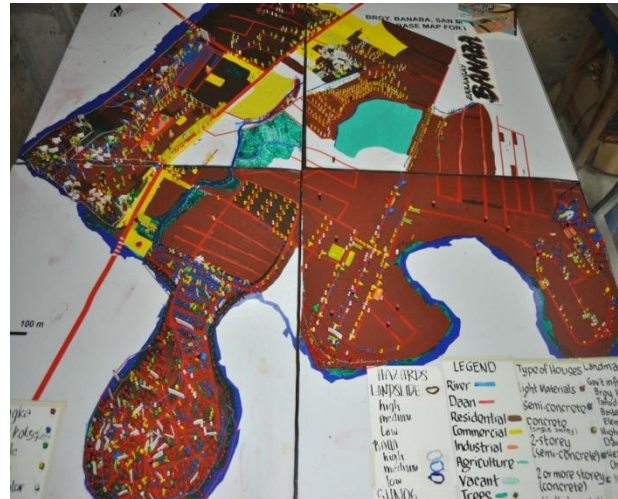
Use of participatory GIS in Naga City



A mobile GIS enables the community leaders to capture, store, update, manipulate, analyze, and display geographic information with the assistance from the City's GIS Personnel, these data are very essential in developing mitigation strategies

Naga City Disaster Risk Reduction and Management Office

Participatory 3Dimensional Mapping using Scaled Base Maps



Partnerships with the Academe



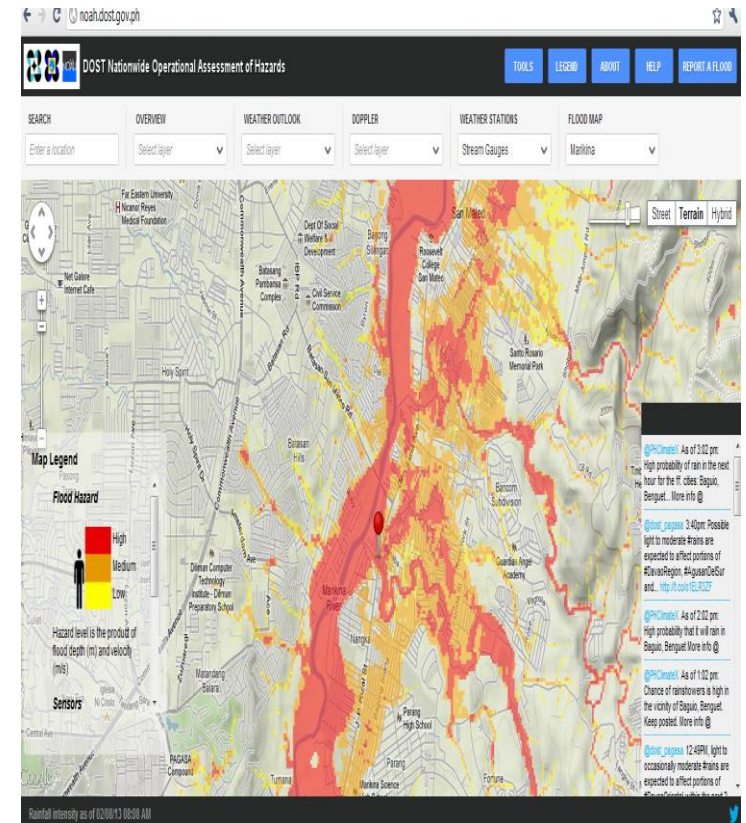
May 2011

Nationwide Operational Assessment of Hazards (Project NOAH)

✓ Weather Hazard Information Project (WHIP)

web portal

(<http://noah.dost.gov.ph>), which display real-time satellite, Doppler radar, ARG, and WLMS data to empower Local Government Units and communities to prepare against extreme natural hazards.



预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_7125

