

# Effective Multi-hazard Early Warning System Across Multiple and Widely Dispersed Islands



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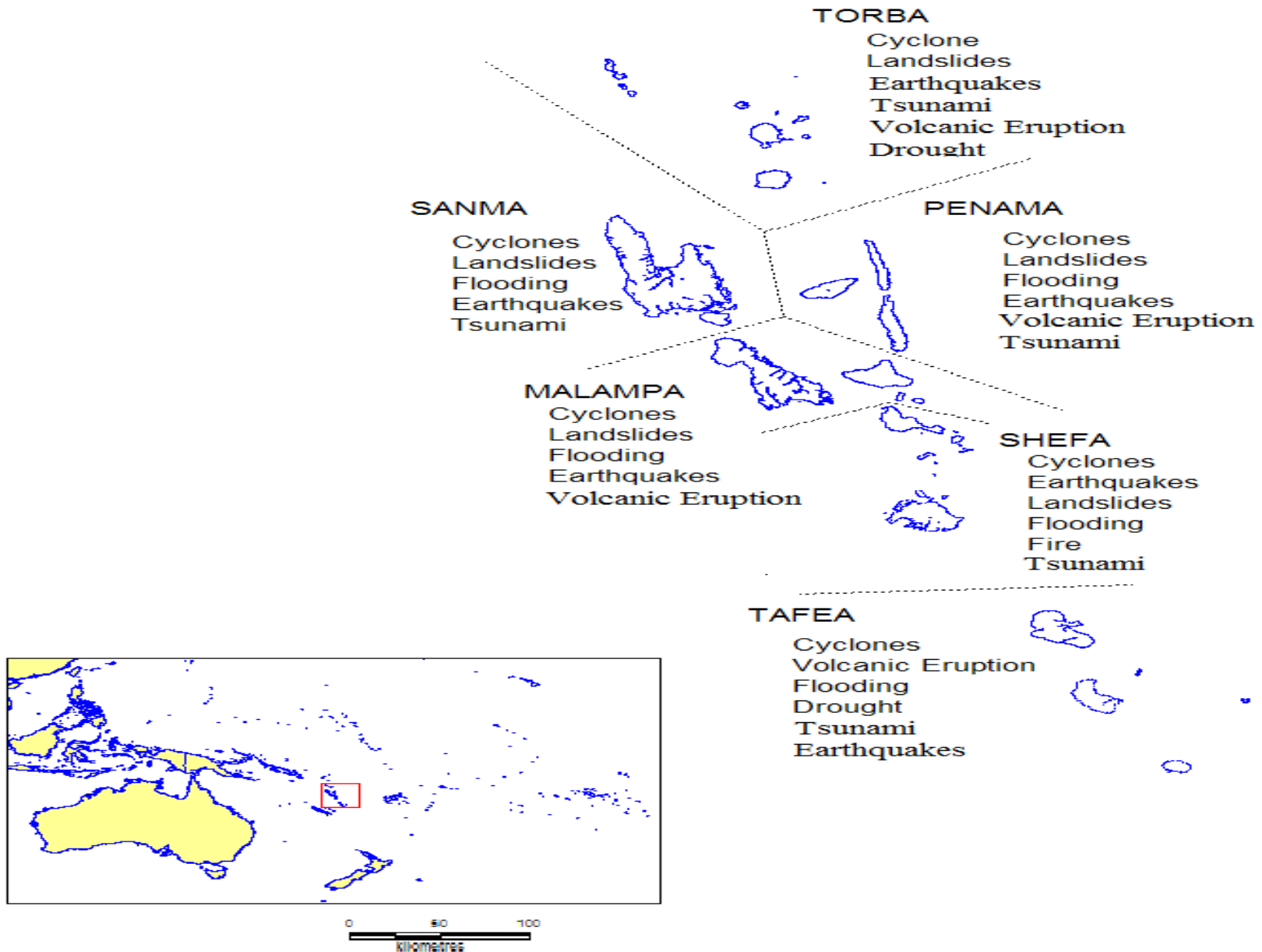
# Country Context

- ❖ Vanuatu comprises around 83 islands
- ❖ A total land area of 12,300 square kilometres spread over some 1,300 kilometres in a north to south direction.
- ❖ 2009 National Census record total population of 234,023
- ❖ 76% of total population live in rural villages of Vanuatu


Province	Main Islands	Land Area (Km <sup>2</sup> )	Demographic Info (2009 National Census)
Malampa	Ambrym, Malekula, Paama	2,779	36,724
Penama	Pentecost, Ambae, Maewo	1,198	30,819
Sanma	Santo, Malo	4,248	45,850
Shefa	Efate, Shepherd Islands	1,455	78,721
Tafea	Tanna, Aniwa, Futuna, Erromango, Anatom	1,628	32,540
Torba	Banks & Torres Islands	882	9359
TOTAL		12,190	234,013



# Distribution of Natural Hazards Per Province



# Institutional Arrangement



24hr Multi-hazard NEWC

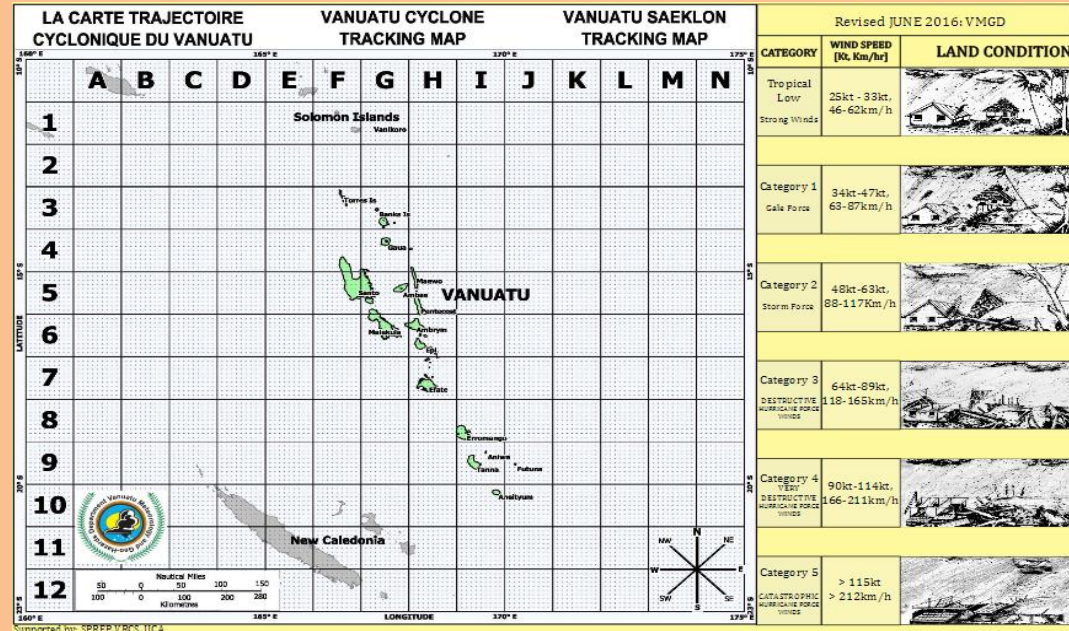
NEOC & Telecom/Media

Provincial Operation Centres

Community Disaster and  
Climate Change Committees

# Cyclone Early Warning System

- 24 hours forecasting  
NEWC
- Warning & Information Dissemination mediums – (SMS, Radio FM/Shortwave, FB, Webpage, TV, Tele radio system, call center)
- Tools – Tracking map
- Colour Alert system



• 48 to 24 hours preparation

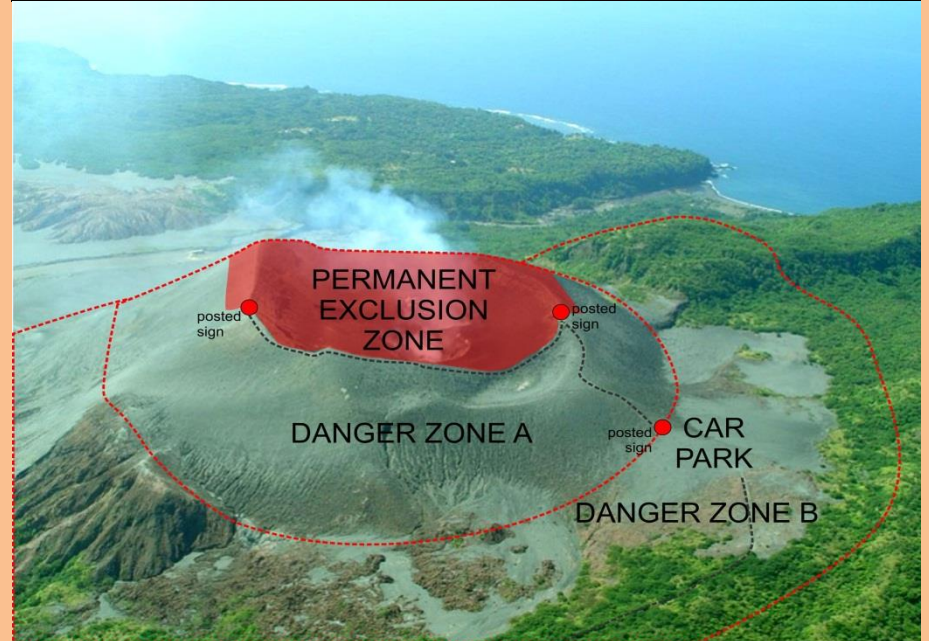
• 12 to 6 hours preparation

• Cyclone imminent



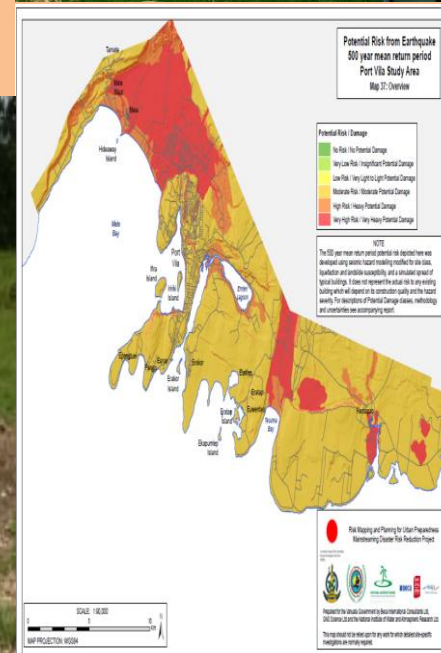
# Volcano Early Warning System

- 24 hours observation - NEWC
- Volcano monitoring – CCTV live streaming
- Warning & Information Dissemination mediums – (SMS, Radio FM/Shortwave, FB, Webpage, TV, Tele radio system, call center)
- Volcano alert system
- Volcano hazard maps



# Earthquake/Tsunami Early Warning System

- 24 hours observation - NEWC
- Seismic monitoring network – live feed
- Tsunami siren system/evacuation signage/information boards/community evacuation plans
- Warning & Information Dissemination mediums – (SMS, Radio FM/Shortwave, FB, Webpage, TV, Tele radio system, call center)



# Challenges

- Budget constraint to expand systems country wide (80 islands)
- Multi-hazard risk mapping not country wide
- Physical planning (zoning and land use)
- Back-up early warning systems