10 Steps to Enable a Successful Tsunami Response

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1) Develop understanding of tsunami risk.

- **Historical:**
  - Paleo Tsunami
  - Local Tradition
  - Written records from recent events

- **Scientific support:**
  - Inundation mapping
  - Locations of likely events
2) Develop an "end to end" Tsunami Warning System (TWS) Concept of Operations.

- Must be from earthquake detection to alerting in local areas
- Identify roles of:
  - Government (national)
  - Government (local)
  - Community leaders
  - Science agencies
  - Media
  - NGOs
- Describe types of warning
- May include thresholds & templates
3) Develop stakeholder coordination committees

- All stakeholders identified in Concept of Ops represented
- NDMO, local DMO facilitate
- Topics - Developments in relation to:
  - Tsunami risk knowledge
  - Monitoring and warning
  - Information dissemination
  - Evacuation planning
  - Response capability
4) Develop Tsunami Emergency Response plans, SOPs and checklists

- National & local levels
- Ensure integration of plans and SOPs between stakeholders
- Involve communities & private sector
5) Develop NTWC & NDMO Capability

**NTWC:**
- 24 x7 receipt of messages
- Immediate assessment
- Rapid issuing of warnings

**NDMO:**
- 24 X 7 receipt of warnings
- Immediate further assessment
- Decide & trigger public alerting
- Manage response
6) Develop Public Alerting Capability

- Media must be involved - build a “team” relationship
- Public alerting systems down to last km
- Public understanding and awareness is crucial:
  - Where will official warnings from
  - How will they be issued
  - When can they be expected
  - What to do when they are issued
7) Develop Evacuation Concept

- Evacuation zones and structures
- Mapping
- Signage
- Communities must be involved!
8) Develop Community Awareness & Preparedness

- Educational material & advertising
- School programme
- Community meetings
- Drills
9) Develop Exercise Programme

- Fixed schedule
- Organisational:
  - Tabletop
  - Functional
  - Full Scale
- Communities:
  - Drills
10) Develop Risk Reduction Policies

- Land use
- Key infrastructure – structural resilience, business continuity planning
- Continuously review & adjust risk assessments for major events
Thank You

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