



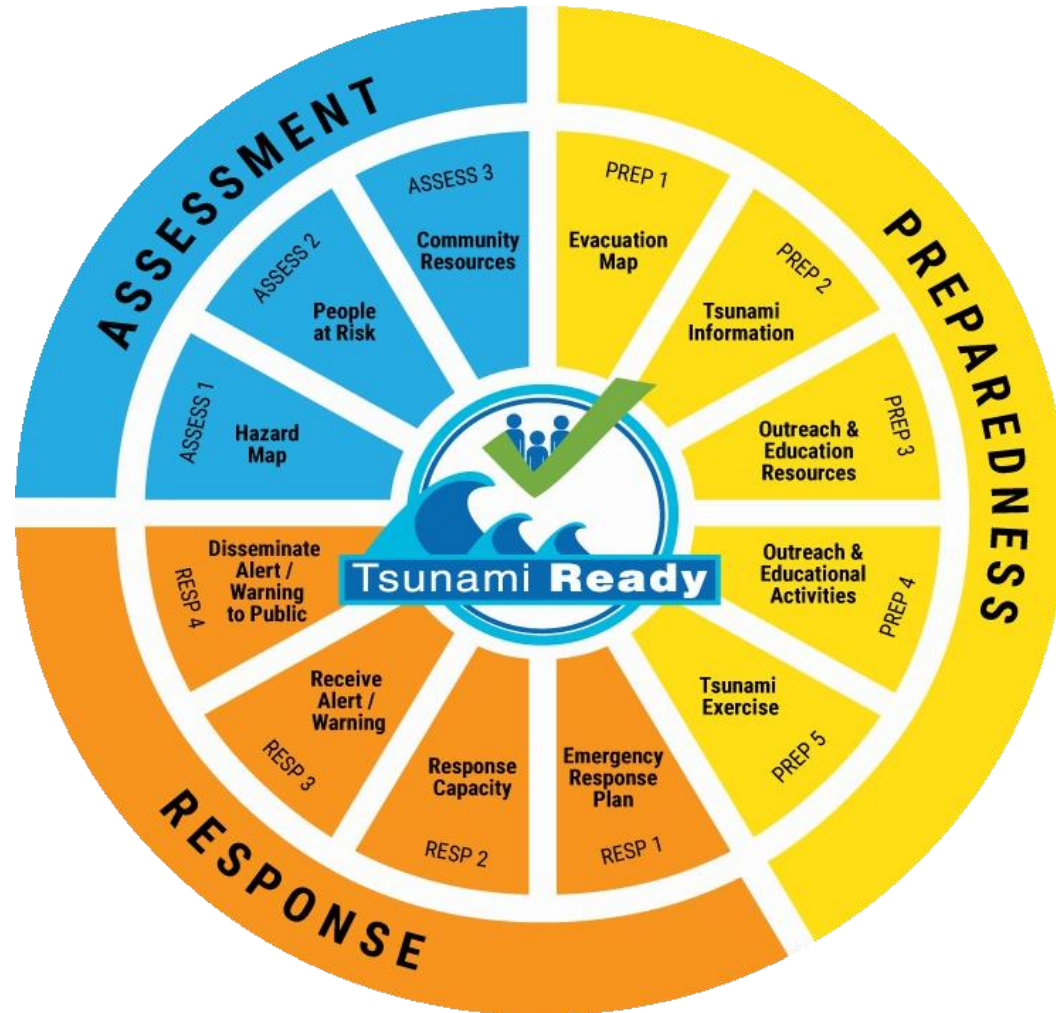
How to become Tsunami Ready ?

3.1 Establishing a National Programme

What is a community?
What resources are needed?

Dr. Laura Kong
International Tsunami Information Centre (ITIC)
laura.kong@noaa.gov

UN OCEAN DECADE TSUNAMI PROGRAMME: 100% AT-RISK COMMUNITIES TSUNAMI READY



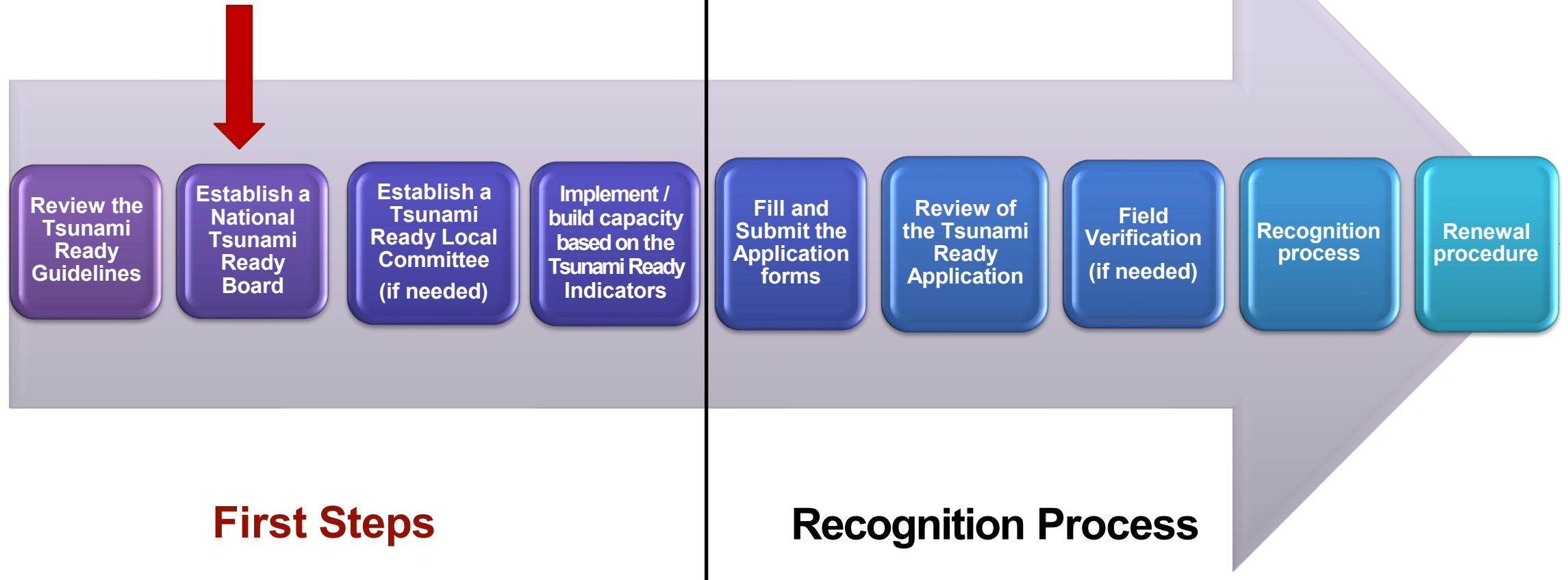
- ❑ **STRATEGY:**
Be Aware, Be Prepared
- ❑ **FRAMEWORK:**
 - Harmonized global guidelines UNESCO IOC Tsunami Ready
 - Performance-based Community Recognition
- ❑ **ACTION:**
National programs empower Communities
- ❑ **GLOBAL MEASURE**

National Programme - why

- **Provides overarching structure and governance**
- **Ensures consistency in readiness (standard), and sustainability that measurable at a global level**
(remember tsunamis are infrequent but deadly, so regular and continuous awareness and readiness essential)
- **Enables and facilitates**
 - **cross-sector cooperation (public and private, national to local),**
 - **capacity development opportunities (knowledge and skills, advanced degrees),**
 - **international assistance (funding, training, technology transfer)**

Main steps in Tsunami Ready process

National Programme



The National Tsunami Ready Board (NTRB)

National Tsunami Ready Board is comprised of, but not limited to, and depends on each country's settings:

- National and Local Disaster Management Office (NDMO and LDMO)
- National Tsunami Warning Centre (NTWC)
- Ministries, national agencies, institutions and other relevant organisations,
- NGOs for Community Based Disaster Risk Reduction (DRR) or Disaster Risk Management (DRM)
- Tsunami National Contact (TNC)
- Community Representatives (Non-decision Member)

Function, role, and responsibility:

- General oversight of Programme
- Advocate, supervise, support activities to implement Programme
- Manage resources for Programme
- Maintain consistency of Tsunami Ready guidelines
- Coordinate and liaise and link Tsunami Ready activities with technical institutions and organizations
- Direct and oversee service improvements to Tsunami Ready Programme
- Oversee National Tsunami Ready database

EXAMPLE

NATIONAL TSUNAMI READY BOARD - INDIA



National Board to implement and the monitor Tsunami Ready Recognition Programme and IOWave18 exercises in India

1 Director, INCOIS	Chairman
2 Representative from NDMA (Natl DMO)	Vice-Chairman
3 Representative from MHA (Natl ministry)	Member
4 Representative from MoES (Science)	Member
5 Representative from DMO, (State DMO) Andaman & Nicobar Islands	Member
6 Representative from DMO, Odisha (State DMO)	Member
7 Head-TWC, INCOIS (NTWC)	Member Secretary

National Tsunami Ready Action Plan

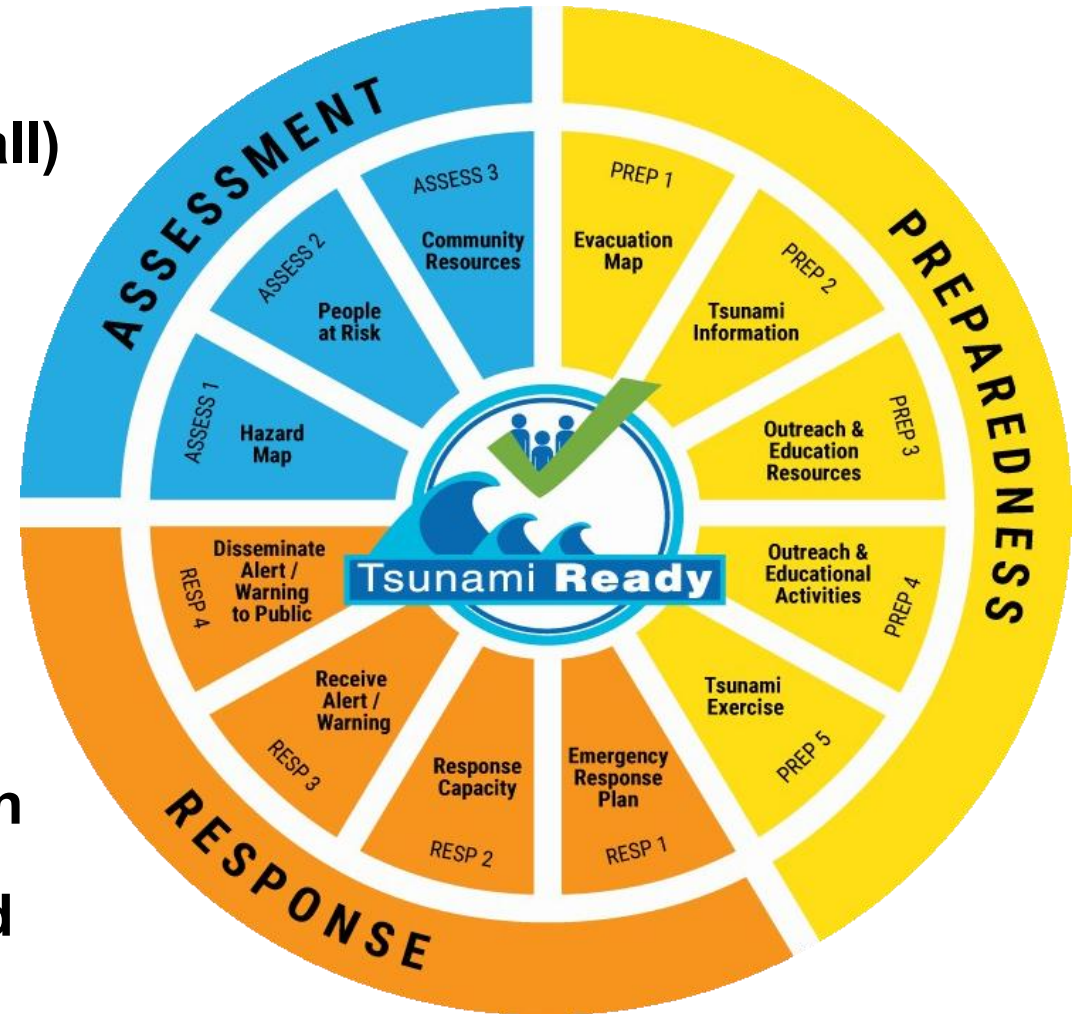


What are the resources needed?

1. Define Community
 2. Determine if Vulnerable – what is your criteria for hazardous? Risk tolerance - runup, inundation, people, infrastructure etc
 3. For each vulnerable Community, what resources (\$, Time, Skills, people) needed to achieve all 12 Indicators?
- ➡ In Total: How many, How long for each, How much?
- ➡ Find the resources !

Define your Community

- ❑ Recognition level is community that has capacity and authority (not too big or too small)
- ❑ Voluntary – need to have interest and commitment to complete
- ❑ Ability to receive and disseminate warnings according to SOPs
- ❑ Community has / commits to establish EOC or location to manage tsunami emergency
- ❑ Government Authority to apply for recognition
- ❑ Champions - advocate, address problems and challenges, keep process moving forward



Resource requirements

Resources required for implementing varies from country to country and community to community. For example, small community that already has hazard and inundation maps developed and systems in place to disseminate alerts requires far less resources than large community without access to these maps and systems. Experience in pilots varied \$5,000 to \$100,000.

Whether community has been selected by NTRB or has self-nominated, need for following resources should be considered when planning implementation:

1. Resources for **organising and coordinating** Tsunami Ready
2. Resources for **producing or updating** maps, plans, signage and educational and awareness material
3. Resources for Tsunami Ready Indicator **deliverables and activities**

1. Resources for organising and coordinating Tsunami Ready

Again, resources required will vary considerably but following resources should be considered:

- **Designated responsible person** to coordinate and document Tsunami Ready implementation in community
- **Local technical consultant** to support implementation of Tsunami Ready at local level
- Public space for meetings with local people
- **Resources for coordination** with schools and local authorities
- **Legal knowledge** and capacity to advise on legal aspects of implementing Tsunami Ready

2. Resources for producing or updating maps, plans, signage and educational and awareness material

- **Data for developing hazard, inundation and evacuation maps, including bathymetric and topographic data, statistics and demographic data on population distribution, vulnerabilities etc.**
- **Preparation of science-based hazard and evacuation maps. This may require expert numerical modelling assistance as well as GIS tools**
- **Development of tsunami emergency response plans at local level**
- **Tsunami evacuation signage and public information displays**
- **Community tsunami education and awareness material**

3. Resources for Tsunami Ready deliverables and activities

- Community activities for working on the indicators: **coordination meetings, workshops, training and working groups**
- Acquisition and **maintenance of equipment** for reception and dissemination of tsunami alerts
- Establishing, restoring and **maintaining evacuation sites and routes**
- Resources to conduct tsunami **annual outreach** campaigns and **biennial exercises**
- **Capacity development** to operate, monitor and analyse tsunami threat information and issue alerts, develop SOPs, educational and awareness activities and communications systems

Challenges – feedback experience

As would be expected in piloting and implementing a comprehensive and complex programme involving many actors at regional, national and local levels, range of challenges encountered.

UNESCO IOC welcomes feedback from communities and countries so that it can continue to adapt and improve implementing guidelines

- **Convincing community and all stakeholders** to implement can be a challenge
- **Lack of resources in community capacity building** as part of end-to-end tsunami early warning system
- **Priority on other hazards** deemed to be higher priority
- **Difficulty in linking** to other national programmes that view Tsunami Ready as as redundant
- **Building ownership within community**, since disaster viewed as responsibility of authorities rather than communities themselves (Empower Communities)
- Establishment of **national-level recognition bodies**

Thank you Salamat po

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