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UNESCO/IOC Tsunami Ready Recognition Programme



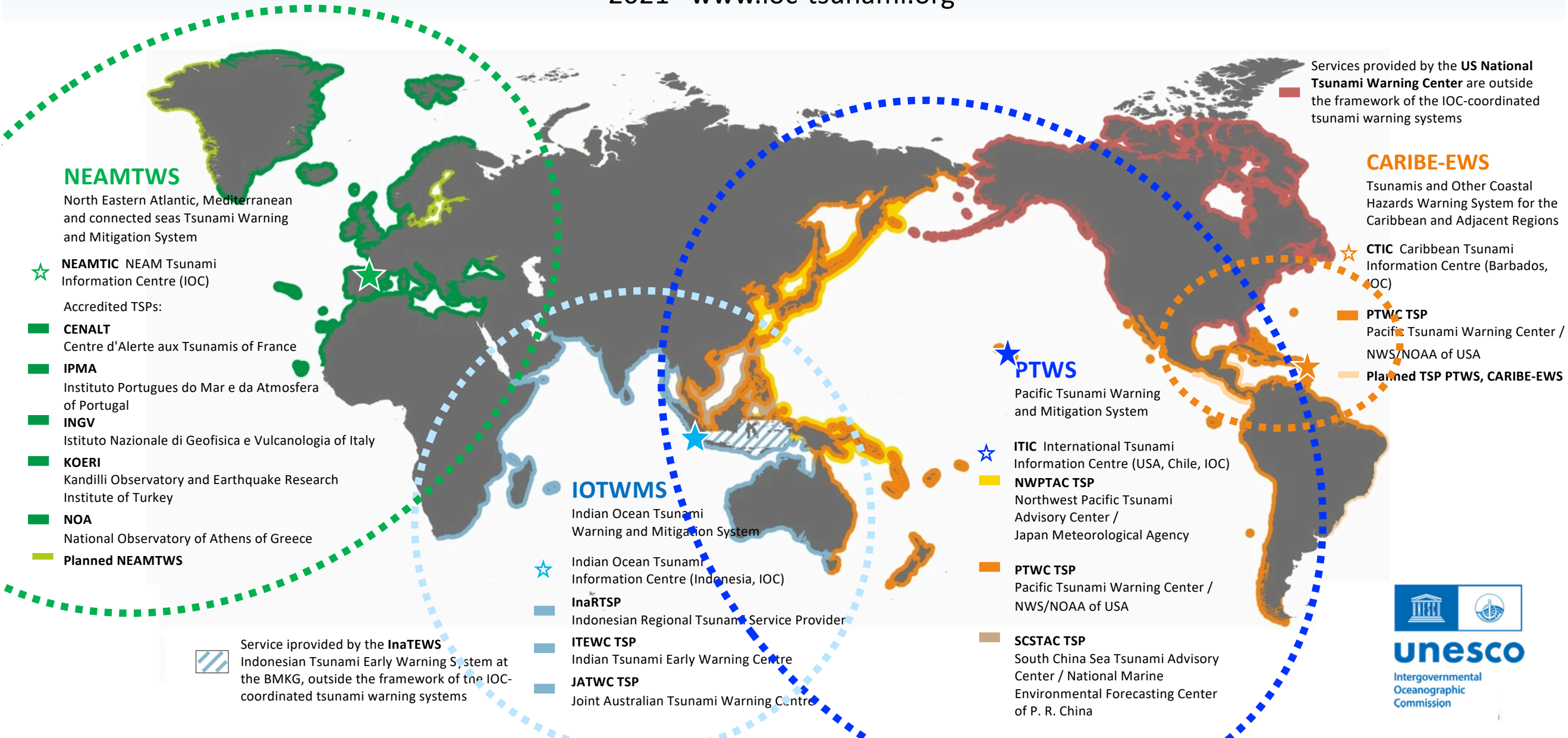
Progress and Next Steps

Dr. Laura Kong
International Tsunami Information Centre (ITIC)

GLOBAL TSUNAMI WARNING AND MITIGATION SYSTEMS

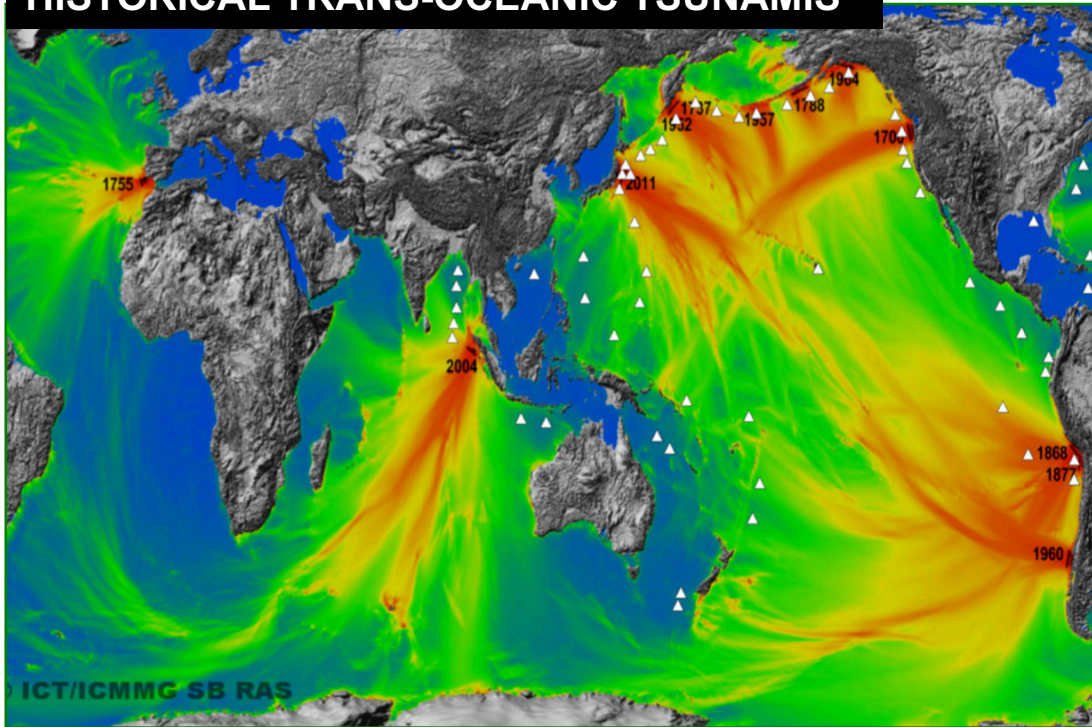
Intergovernmental Oceanographic Commission of UNESCO

2021 www.ioc-tsunami.org

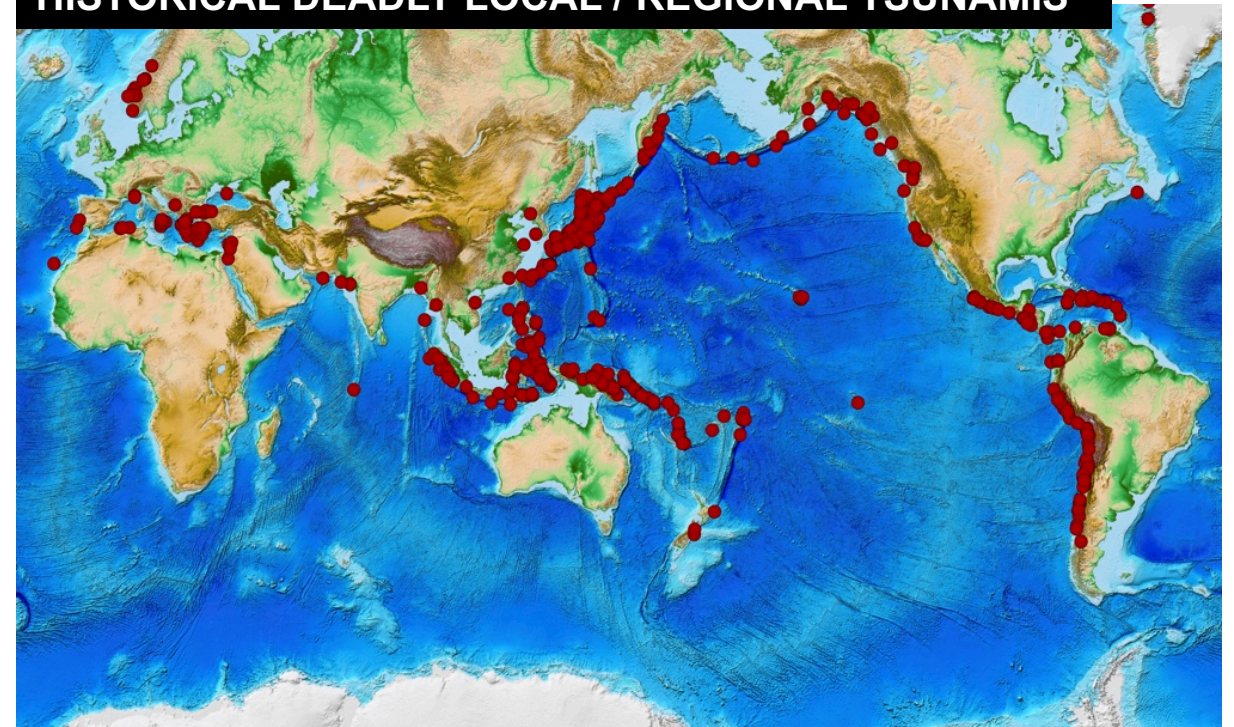


PACIFIC TSUNAMIS

HISTORICAL TRANS-OCEANIC TSUNAMIS



HISTORICAL DEADLY LOCAL / REGIONAL TSUNAMIS



- ❑ 69% of world's tsunamis in Pacific and marginal seas
- ❑ 99% of deaths in Pacific from Local or Regional Tsunamis (90% globally)



OCEAN DECADE TSUNAMI PROGRAMME

A SAFE OCEAN

THE MAIN SOCIETAL OUTCOME

TO MAKE
100%

OF COMMUNITIES AT RISK
OF TSUNAMI PREPARED FOR
AND RESILIENT TO TSUNAMIS

BY
2030

- *Tsunami Coalition: collaborative with critical UN stakeholders, civil protection, others ==> Raise profile. Facilitate resourcing*
- *Capacity Development: augmented through IOC Ocean Teacher Global Academy (OTGA) ==> Global reach, deep curricula*

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



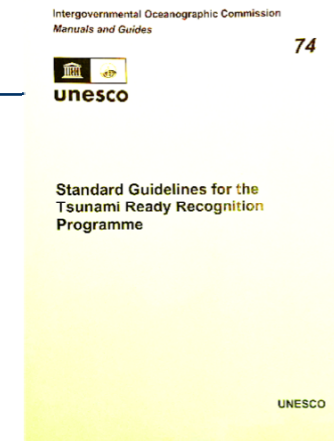
TSUNAMI READY INDICATORS	
I	ASSESSMENT (ASSESS)
1	ASSESS-1. Tsunami hazard zones are mapped and designated.
2	ASSESS-2. The number of people at risk in the tsunami hazard zone is estimated.
3	ASSESS-3. Economic, infrastructural, political, and social resources are identified.
II	PREPAREDNESS (PREP)
4	PREP-1. Easily understood tsunami evacuation maps are approved.
5	PREP-2. Tsunami information including signage is publicly displayed.
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 two years.
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.
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.

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



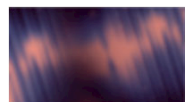
How to get Tsunami Ready

- ❑ **Standard Guidelines for the Tsunami Ready Recognition Program** (IOC Technical Series 74, 2022)
- ❑ **Facilitated by IOC Tsunami Information Centres**
Contact International Tsunami Information Centre (ITIC, itic@unesco.org, laura.kong@noaa.gov)
- ❑ **Tsunami Ready web site – information, resources**
www.tsunamiready.org



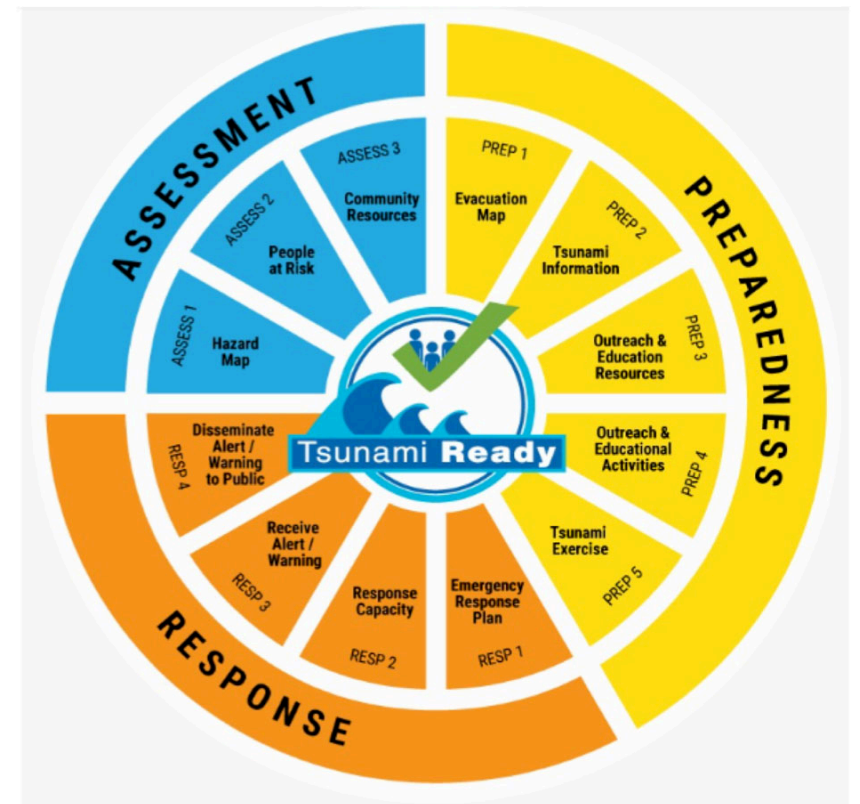
Be Safe. Be Prepared. Get Pacific Tsunami Ready!
LINKS: [Pacific Islands](#) [Western Pacific](#) [Eastern Pacific](#)

Click below
for video
PICT



PICT Regional Training on the UNESCO/IOC Tsunami Ready Recognition Programme - 30 January - 01 February 2023

- 11 PICT – 40+ participants
- Trainers – ITIC, IOTIC, SPC, NOAA
- Introduce UNESCO IOC Tsunami Ready Recognition Programme for implementation (PICT)
 - What is Tsunami Ready Recognition Programme? Background, history, motivation, benefits
 - How to become Tsunami Ready? Tools and resources available
 - What are the Tsunami Ready Indicators (Assess, Prepare, Respond) – how to achieve, challenges and solutions
 - Next steps and action – country capacity, needs, challenges



Country Tsunami Ready Worksheets

Jumpstart implementation

- **Overviews** to assist in identifying **existing capacity, gaps, and resources** for each Indicator
- **Details** to assist in further identifying resources, activities, and **actions that typically take place** for each Indicator.

TSUNAMI READY INDICATORS STOCKTAKE		
TSUNAMI READY INDICATORS	Existing Capacity	Gaps
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		
II PREPAREDNESS (PREP)		
4 PREP-1. Easily understood tsunami evacuation maps are approved		
5 PREP-2. Tsunami information including signage is publicly displayed		
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 two years		
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		
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		

Summary to date based on Training

- **Based on 3-day Training**
 - Do you have the necessary resources and skills to achieve each Indicator
 - Online survey – Countries / Territories still need submit their surveys!

- **Summary to date**



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Summary to date:

**Capacity to Implement
Tsunami Ready TR Indicators
In Pacific**

Responding Countries

- 1. Federated State of Micronesia 1**
- 2. Federated State of Micronesia 2**
- 3. Federated State of Micronesia Pohnpei State**
- 4. Fiji**
- 5. French Polynesia**
- 6. Kiribati**
- 7. Nauru**
- 8. New Caledonia**
- 9. Samoa**
- 10. Solomon Islands**
- 11. Tonga**
- 12. Vanuatu**

Does your country have an interest to implement the IOC-UNESCO Tsunami Ready Recognition Programme (TRRP)?

Yes **12**

Does your country already have the National Tsunami Ready Board

Yes **3**

No **9**

Have the community(ies) interested to implement TRRP been identified

Yes **8**

No **4**

There is a list of the communities the country identified

Based on the Identified Communities:

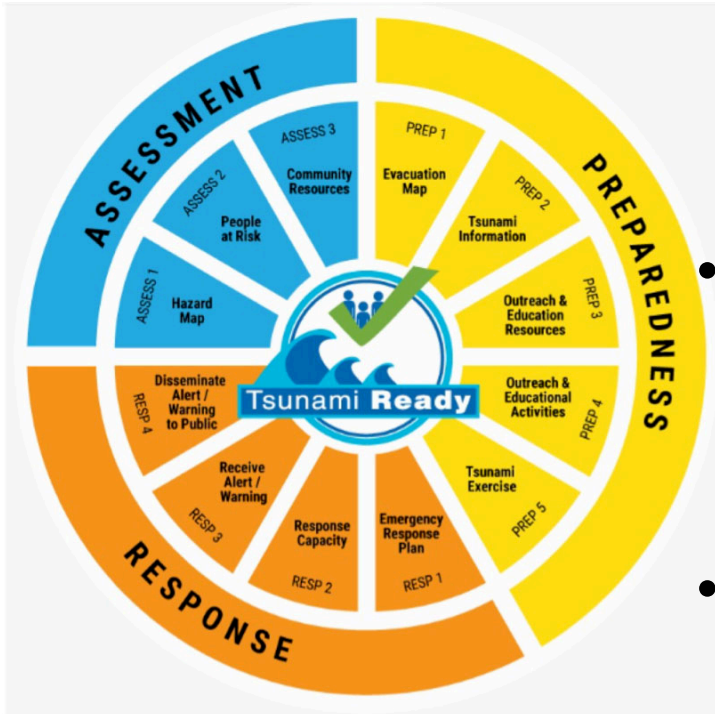
Has there been any tsunami awareness and preparedness activities in those community(ies)?

Yes **11** No **1**

Has there been any tsunami hazard assessment undertaken in those communities?

Yes **6** No **6**

Capacity to develop or strengthen the IOC-UNESCO Tsunami Ready Indicators



- Can be easily done through national and/or local resources (mobilize national expertise and funding)
- Can be done through national and/or local resources but need ITIC and/or ICG/PTWS technical expertise support
- Need technical expertise and support through ITIC and/or ICG/PTWS regional activities
- Need ITIC and/or ICG/PTWS technical expertise and support through national activities

ASSESSMENT INDICATORS	Can be easily done through national and/or local resources (mobilize national expertise and funding)	Can be done through national and/or local resources but need technical expertise support	Need technical expertise and support through ITIC – ICG/PTWS regional activities	Need ITIC – ICG/PTWS technical expertise and support through national activities
Capacity to develop tsunami hazard map	6	3		3
Train the community on information on the estimate number of people that live in the tsunami hazard zone.	6	3	3	
Train the community on inventory of available economic, infrastructural, political and social resources to reduce tsunami risk at the community level	6	3	3	

PREPAREDNESS INDICATORS	Can be easily done through national and/or local resources (mobilize national expertise and funding)	Can be done through national and/or local resources but need technical expertise support	Need technical expertise and support through ITIC – ICG/PTWS regional activities	Need ITIC – ICG/PTWS technical expertise and support through national activities
Work with the community to develop tsunami evacuation maps, plans and procedures at community level	6	3		3
Work with the community to develop a public display of tsunami information.	4	8		
Work with the community to develop local context outreach and public education materials	6	6		
Train and build capacity of community to be able to organize and implement outreach and education activity	4	8		
Train and build capacity of community to be able to organize and implement tsunami exercise	6	3	2	1

RESPONSE INDICATORS	Can be easily done through national and/or local resources (mobilize national expertise and funding)	Can be done through national and/or local resources but need technical expertise support	Need technical expertise and support through ITIC – ICG/PTWS regional activities	Need ITIC – ICG/PTWS technical expertise and support through national activities
Train and build capacity of community to develop community Emergency Operation Plan	6	5	1	
Train and build capacity of community to manage 24/7 tsunami emergency response operation	6	4		2
Work with the community to develop mechanism (means and procedure) to receive 24/7 tsunami warning	5	5	1	1
Work with the community to develop mechanism (means and procedure) to disseminate 24/7 tsunami warning to the community	5	6		1

Challenges

- Funding
- Identification of expertise
- Inundation maps,
- change of administration,
- land issues
- Technical expertise,
 - May not be a priority for decision makers,
 - Duplication between NTRB and Tsunami Working Group;
 - Full representation of stakeholders at the NTRB;
 - Availability of personnel to roll out the program,
 - Lack of community willingness
- Data bathymetry,
- Communication
- Challenges are lack of data,
- Developing public awareness
- village /community commitments,



THANK YOU

Vinaka Vaka Levu

For more information:

web: tsunamiready.org

e-mail: itic@unesco.org

Dr. Laura Kong
International Tsunami Information Centre (ITIC)