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# What is UNESCO IOC Tsunami Ready Recognition Programme

## 2.1 Framework, Background, and History

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# Global Frameworks



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## Tsunami Ready In UN Ocean Decade of Ocean Science for Sustainable Development



UN Decade of  
Ocean  
Science for  
Sustainable  
Development  
2021-2030

**The Ocean  
We Need  
for the Future  
We Want**



## Societal Outcomes

- A Clean Ocean
- A Healthy and Resilient Ocean
- A Productive Ocean
- A Predicted Ocean
- **A Safe Ocean**
- An Accessible Ocean
- An Inspiring and Engaging Ocean



Enhance multi-hazard early warning services for all geophysical, ecological, biological, weather, climate and anthropogenic related ocean and coastal hazards, and mainstream community preparedness and resilience.



# Global Frameworks



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## SAFE OCEAN

Not oceans and shores that do not have coastal hazards (*i.e. Tsunami*).

..... is coastal area and ocean that is understood, observed, can be predicted, and where the people can continue to interact with the sea and oceans for their livelihood and lifestyle without having the fear of coastal hazards (*tsunamis*), as they already have the awareness, knowledge, preparedness, skills, and abilities to safe themselves in case of an emergency (*tsunami*)



Sustainable  
Development Goals  
2015-2030



UN Decade of Ocean Science  
for Sustainable Development  
2021-2030



13 OCTOBER  
INTERNATIONAL DAY  
FOR DISASTER RISK REDUCTION

Sendai  
Framework for  
DRR 2015 - 2030



World Tsunami  
Awareness Day

# Global Frameworks



## OCEAN DECADE TSUNAMI PROGRAMME

Seeking Major Advances in SCIENCE and PREPAREDNESS

# RESILIENCE!

New observational and analysis technologies to move from a **high-uncertainty** assumption-based capability to a **low-uncertainty** dynamic-based capability

### 1. Real-time impact forecasts

with

### 2. Deep community preparedness.

Tsunami disaster impacts are minimized, enabling rapid restoration of critical infrastructure and services

Comprehensive institutional & community preparedness and capacity building efforts aimed at achieving **IOC Tsunami Ready** designation across all socio-economic categories



# Global Frameworks

OCEAN DECADE TSUNAMI PROGRAMME  
Seeking Major Advances in SCIENCE and PREPAREDNESS

## THE MAIN SOCIAL OUTCOME

TO MAKE  
**100%**

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

BY  
**2030**

# Why do you need Tsunami Ready ?



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*An advanced tsunami early warning system will not save life if the community at risk does not have the knowledge and capacity to respond to the early warning.*



There is a high risk of loss of life and property in coastal communities with weak or no community preparedness for tsunami emergencies

In near-field\* tsunami situations, the community needs to react and take action without official warning or guidance

If the warning chain to the community is weak or broken, the community must be prepared to take action on its own initiative

Lack of or limited focus on community preparedness leaves a community more at risk during a tsunami event

\* When a tsunami arrives in less than 1 hour from its source. Usually within a 100 – 200km range of the epicentre

# History of Tsunami Ready



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## • US TsunamiReady® (2001, US NWS, NTHMP)

- Guidelines for standard level of capability to mitigate, prepare for, and respond to tsunamis.
- Promote community preparedness – minimize risk through better risk assessment, planning, education, warning communications
- 16 states, territories, 195 recognized Communities, 14 Supporters (1 Aug 2019). Local, tribal govt, or facility with authority to implement



## • UNESCO IOC Tsunami Ready (2016, UNESCO IOC TOWS-IX)

- Modelled after US TsunamiReady®
- Tsunami Ready Programme Guidelines (community performance-based recognition, not certification) available for use / adaption by ICG regions (e.g., Pacific) (adopted by ICG/CARIBE-EWS-X, May 2015)
- Global priority to increase focus on awareness in communities and among authorities through communication, exercises, training, information, preparedness and recognition programmes

# History of the Implementation of Tsunami Ready



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US National Weather Service of NOAA implemented the recognition programme TsunamiReady



2001

IOC Assembly approved UNESCO/IOC Tsunami Ready Recognition Pilot Programme



2015

The IOC Assembly approved the establishment of the IOC Ocean Decade Tsunami Programme including Tsunami Ready

2021



100% At-Risk Communities Tsunami Ready

2030

2011

US NWS provided initial funding to support the joint NWS and UNESCO/IOC TsunamiReady pilot project in the Caribbean and the international community

2017



2021 United Nations Decade of Ocean Science for Sustainable Development 2030

United Nations declared the Decade of Ocean Science for Sustainable Development would be held from 2021 to 2030

2022

Establishment of the UNESCO/IOC Tsunami Ready Recognition Programme





# Benefits of Tsunami Ready Programme

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1. Strengthens tsunami preparedness of coastal communities
  - Improved assessments of Hazards, Risk, Inundation, and Evacuation
  - Improved early warning systems/warning chain
  - Improved public awareness, understanding of tsunami threat and preparedness
  - Tests awareness and preparedness through regular exercises
2. Strengthens preparedness for other hazards
3. Improves community planning
4. Encourages a consistent and sustainable approach to disaster risk reduction
5. Contributes to the aims of the Sendai Framework for Disaster Risk Reduction and Sustainable Development Goals
6. International recognition from UNESCO IOC as Tsunami Ready Community

# UNESCO IOC Tsunami Ready Approach



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Bring the ownership of preparedness to the community

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Ensure structural and systematic approach in building community preparedness

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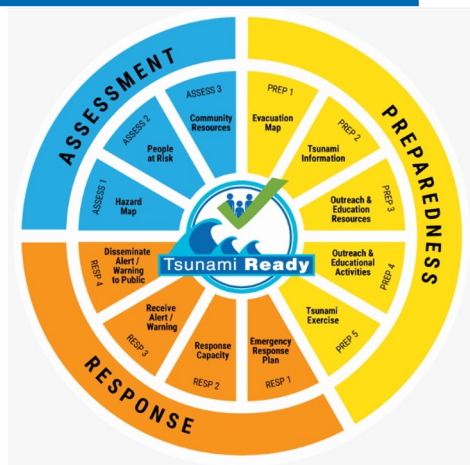
A collaborative effort to achieve a level of tsunami preparedness through the fulfilment of a set of established best practice guideline and indicators

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Tsunami Ready is implemented on a voluntary basis and entails a “bottom-up” process with the community taking the initiative to build its own capacity. This approach ensures ownership of the process that strengthens its sustainability



# Tsunami Ready Indicators



Tsunami Ready consists of 12 key indicators designed to strengthen local tsunami risk reduction capacity. The indicators are grouped into three categories:

## Assessment, Preparedness and Response

### 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

### 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

### RESPONSE (RESP)

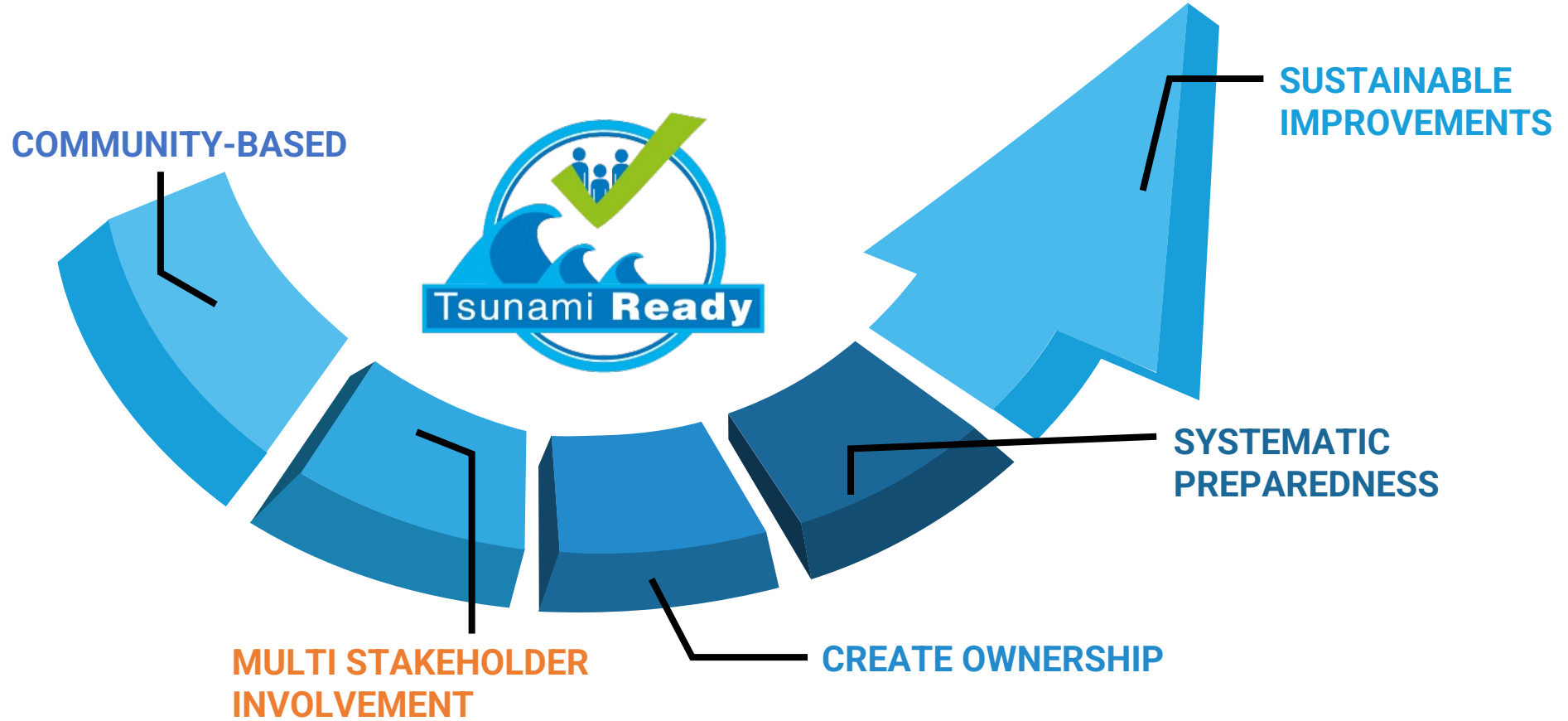
- 9 RESP-1. A community tsunami emergency operations plan is approved
- 10 RESP-2. The capacity to manage emergency response operations during a tsunami is in place
- 11 RESP-3. Redundant and reliable means to timely receive 24-hour official tsunami alerts are in place
- 12 RESP-4. Redundant and reliable means to timely disseminate 24-hour official tsunami alerts to the public are in place

# Summary



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# Tsunami Ready Disclaimer

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A Tsunami Ready recognition does not imply approval or promise that a community can or will perform at a certain level in case of a tsunami. Tsunami Ready recognition does not mean that a community is tsunami proof; it is rather an acknowledgment and recognition of the measures adopted by the community to cope with their tsunami risk

# Vinaka Vaka Levu

For more information:  
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IOTIC-BMKG Programme Office  
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# UNESCO IOC Tsunami Ready Recognition Programme

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Tsunami Ready is a community performance-based programme that facilitates tsunami preparedness as an active collaboration of the public (community), community leaders, and national and local emergency management agencies

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The main objective is to improve coastal community preparedness for tsunami emergencies, to minimise the loss of life, livelihoods and property, and to ensure a structural and systematic approach in building community preparedness

- **STRATEGY:**  
Be Aware,  
Be Prepared
- **ACTION:**  
National programmes  
Empower communities



# Why apply for Tsunami Ready recognition?


1. To appreciate the effort and achievements of the community
2. To motivate the community to continue to improve its level of preparedness
3. To enhance the sustainability of preparedness in the community
4. As leverage to for improvement and collaboration
5. To motivate others to follow the example of good practices



**Certificate of Recognition**  
**The Community of Venkatraipur**  
Ganjam District, Odisha, India

For successfully piloting the UNESCO-IOC Tsunami Ready Initiative  
in Venkatraipur, Ganjam District, India  
28 May 2020

  
Vladimir Ryabinin, PhD  
Assistant Director General and Executive Secretary  
UNESCO

  
Dr. Satheesh Shenoi, PhD  
Chair  
National Tsunami Ready Board of India

  
Prof. Dwikerita Karnawati, PhD  
Chairwoman  
UNESCO-IOC ICG/IO/TWMS



# Benefits of UNESCO IOC Tsunami Ready Recognition

1. Prestige, as a community that has set good example of best practices and is internationally recognized as Tsunami Ready
2. Included in the Global Map of Tsunami Ready Communities
3. Potential economic benefits, in terms of increased investment and tourism

