

*Intersessional Meeting of
ICG/IOTWMS Regional Working Group
for the North-West Indian Ocean
30 May 2023*

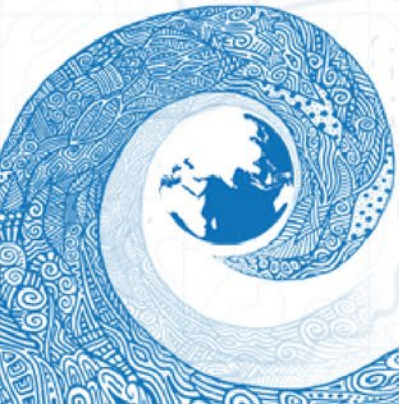


2018 Capacity Assessment of Tsunami Preparedness in the Indian Ocean – Implementation of Recommendations in the North-West Indian Ocean

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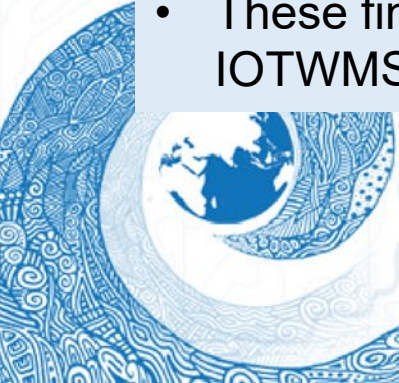
Acknowledgements:

ICG/IOTWMS Task Team on Capacity Assessment of Tsunami Preparedness



BACKGROUND

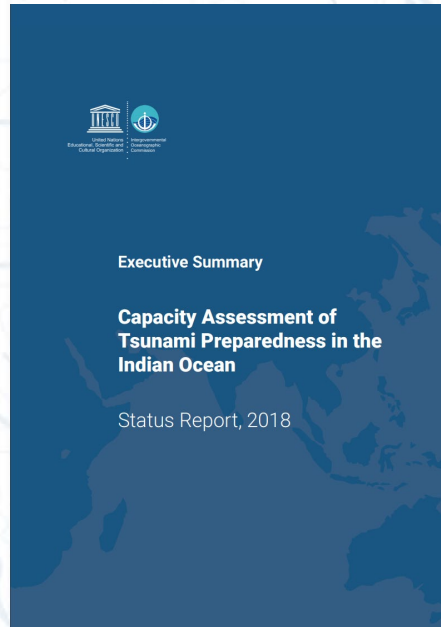
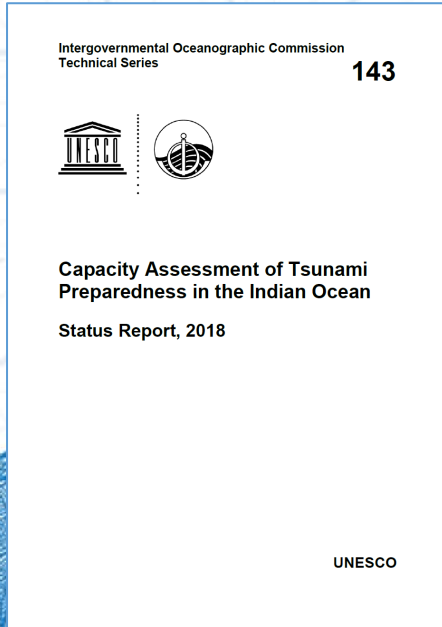
- In the aftermath of the 2004 Indian Ocean tsunami, IOC facilitated missions to assess the state of tsunami readiness in 16 affected countries.
- The findings were published in the 2005 Assessment of Capacity Building Requirements for an Effective and Durable Tsunami Warning and Mitigation System in the Indian Ocean (IOC/INF-1219)
- These findings provided critical inputs to the design and development of the IOTWMS.



METHODOLOGY

- 10 years later, the ICG/IOTWMS at its 10th session (Muscat, Oman) decided it was timely to conduct another capacity assessment of the Indian Ocean Member States.
- 12 years later, the ICG/IOTWMS at its 11th session (Putrajaya, Malaysia, 2017) decided to establish a Task Team to design and conduct an extensive online survey covering all aspects of the end-to-end tsunami warning and mitigation system.
- The online survey forms the dataset for the 2018 Status Report on Capacity Assessment of Tsunami Preparedness in the Indian Ocean.
- 20 Indian Ocean countries provided inputs to the survey

IOC TS-143: Capacity Assessment of Tsunami Preparedness in the Indian Ocean: Status Report, 2018



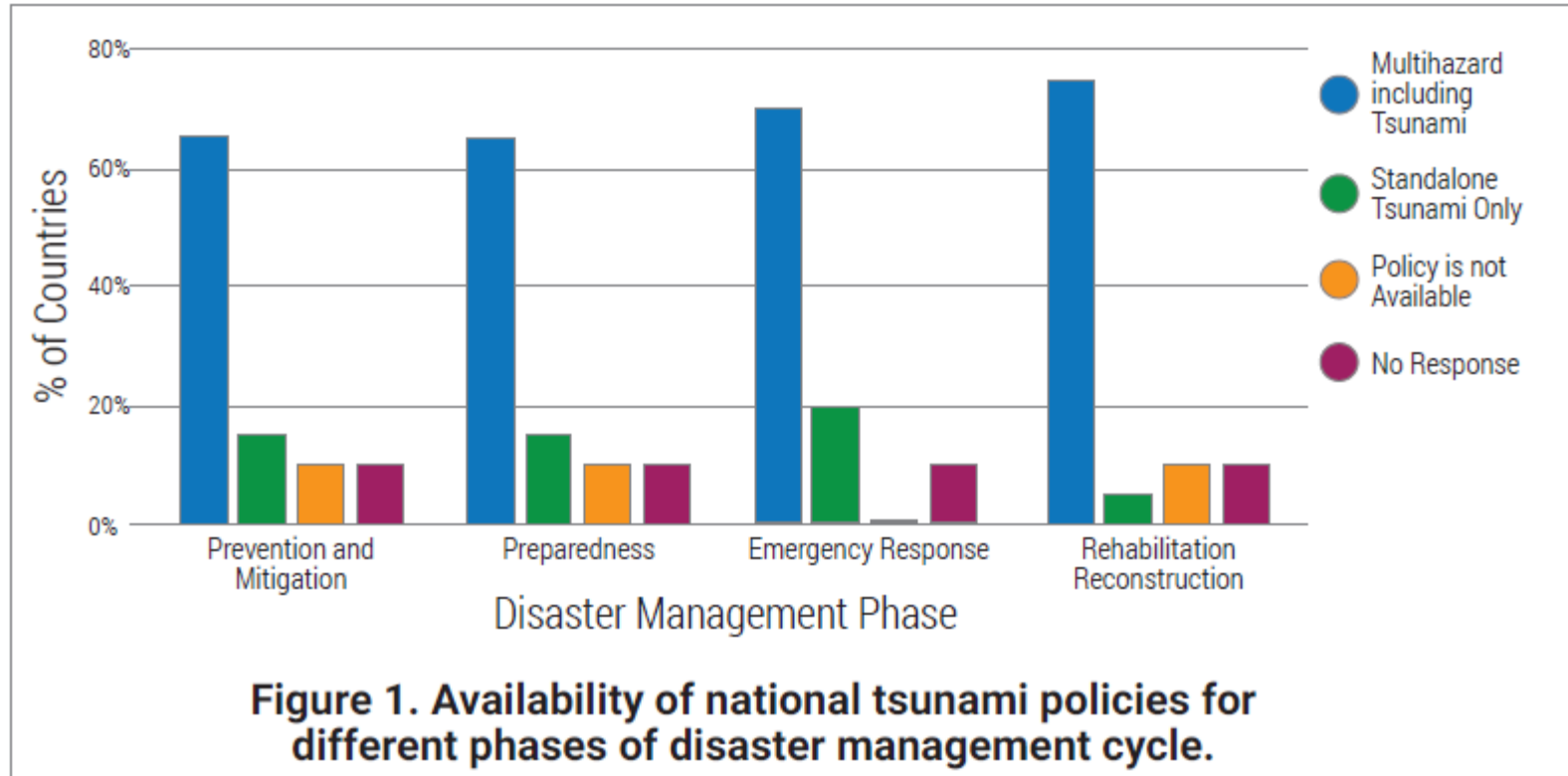
COMPARATIVE LISTS OF COUNTRIES SURVEYED
IN THE 2005 AND 2018 ASSESSMENTS
(by alphabetical order)

2005 Assessment of Capacity Building Requirements for an Effective and Durable Tsunami Warning and Mitigation System in the Indian Ocean (IOC/INF-1219) – Consolidated Report for Countries Affected by the 26 December 2004 Tsunami	2018 Capacity Assessment of Tsunami Preparedness in the Indian Ocean –Status Report (IOC Technical Series, 143)
	Australia
Bangladesh	Bangladesh
Comoros	Comoros
	Overseas France (Indian Ocean)
	India
Indonesia	Indonesia
	Iran (Islamic Republic of)
Kenya	Kenya
Madagascar	Madagascar
Malaysia	Malaysia
Mauritius	Mauritius
Mozambique	Mozambique
Myanmar	Myanmar
Oman	Oman
Pakistan	Pakistan
Seychelles	
	Singapore
Somalia	
	South Africa ¹⁶
Sri Lanka	Sri Lanka
Tanzania	Tanzania
Thailand	Thailand
	Timor-Leste

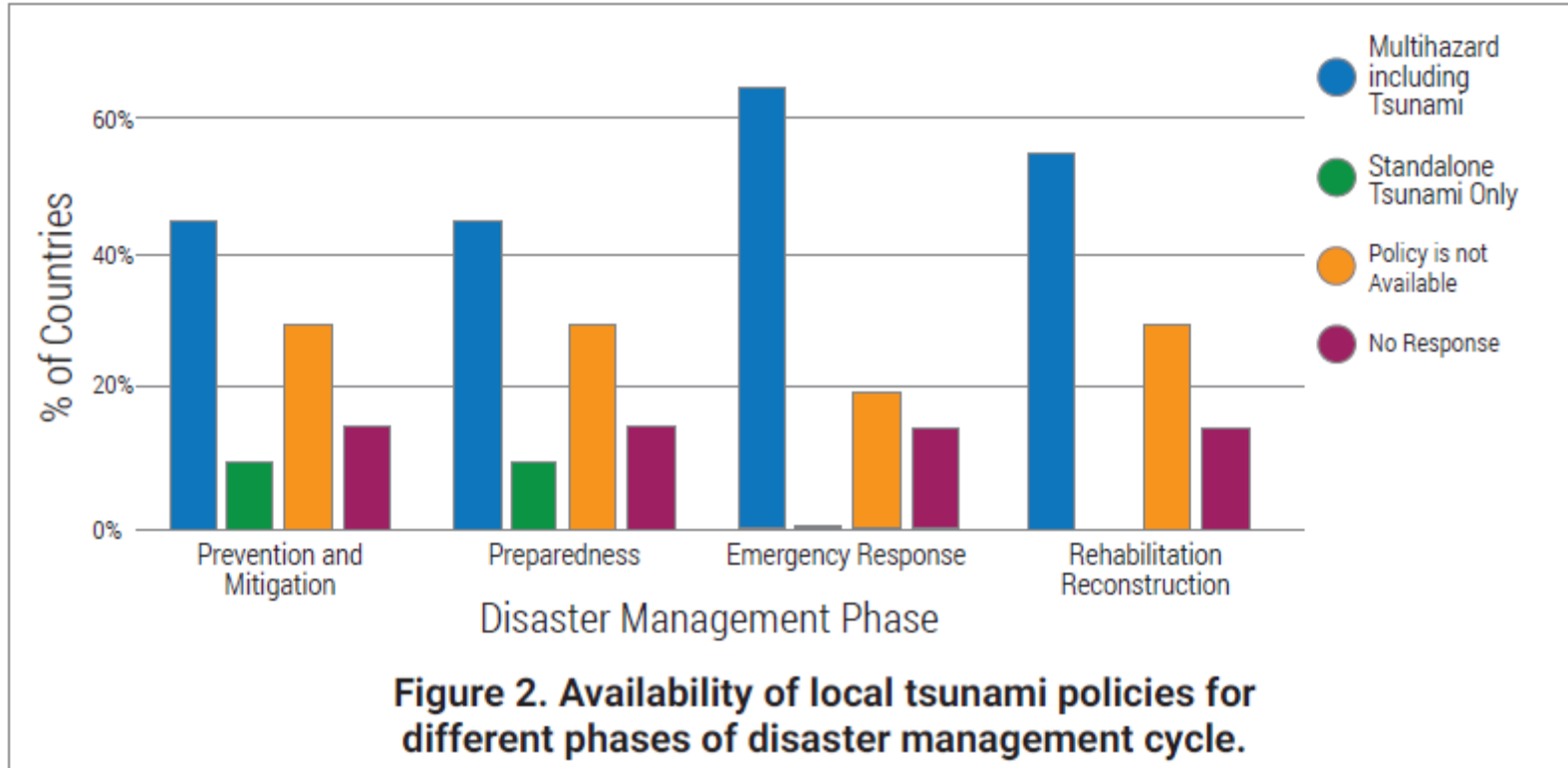
2018 CAPACITY ASSESSMENT REPORT

- The 2018 assessment provides a new baseline of the status of tsunami preparedness capacity in the region.
- The online survey include five sections: 1) Policies, plans and guidelines; 2) risk assessment and reduction; 3) detection, warning and dissemination; 4) public awareness, preparedness and response; 5) Recommendations to address policy gaps and support requirements
- The results indicate that there has been considerable improvement across all components of the IOTWMS since 2005
- It also identifies specific gaps and prioritises capacity development requirements at both regional and national levels
- A summary of each responding country is provided in Annex IV

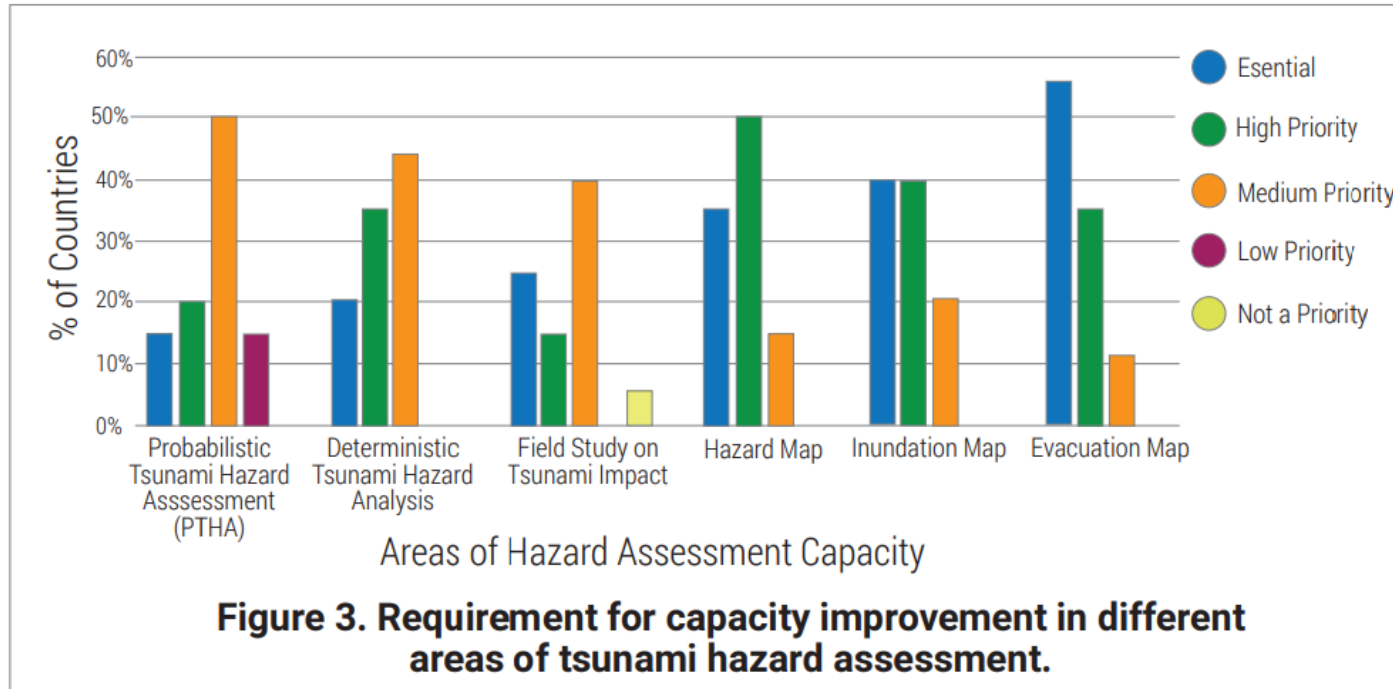
National Tsunami Policies



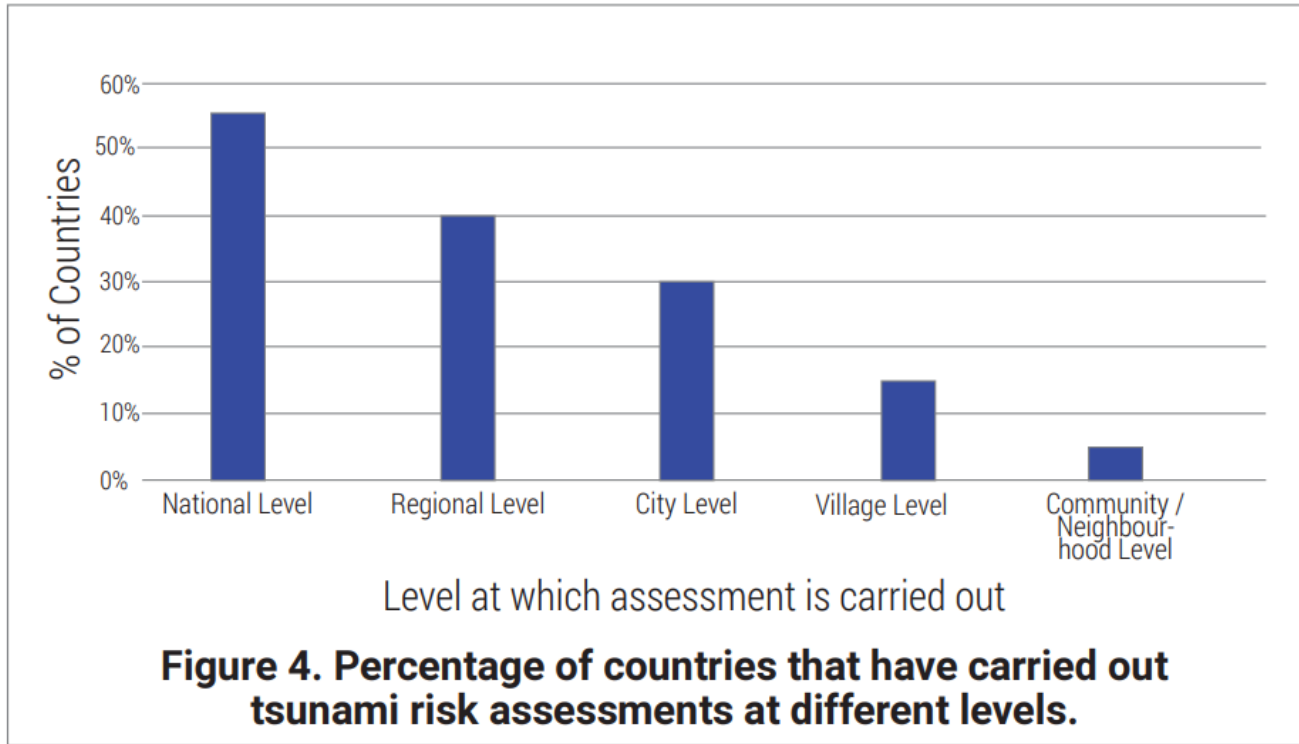
Local Tsunami Policies



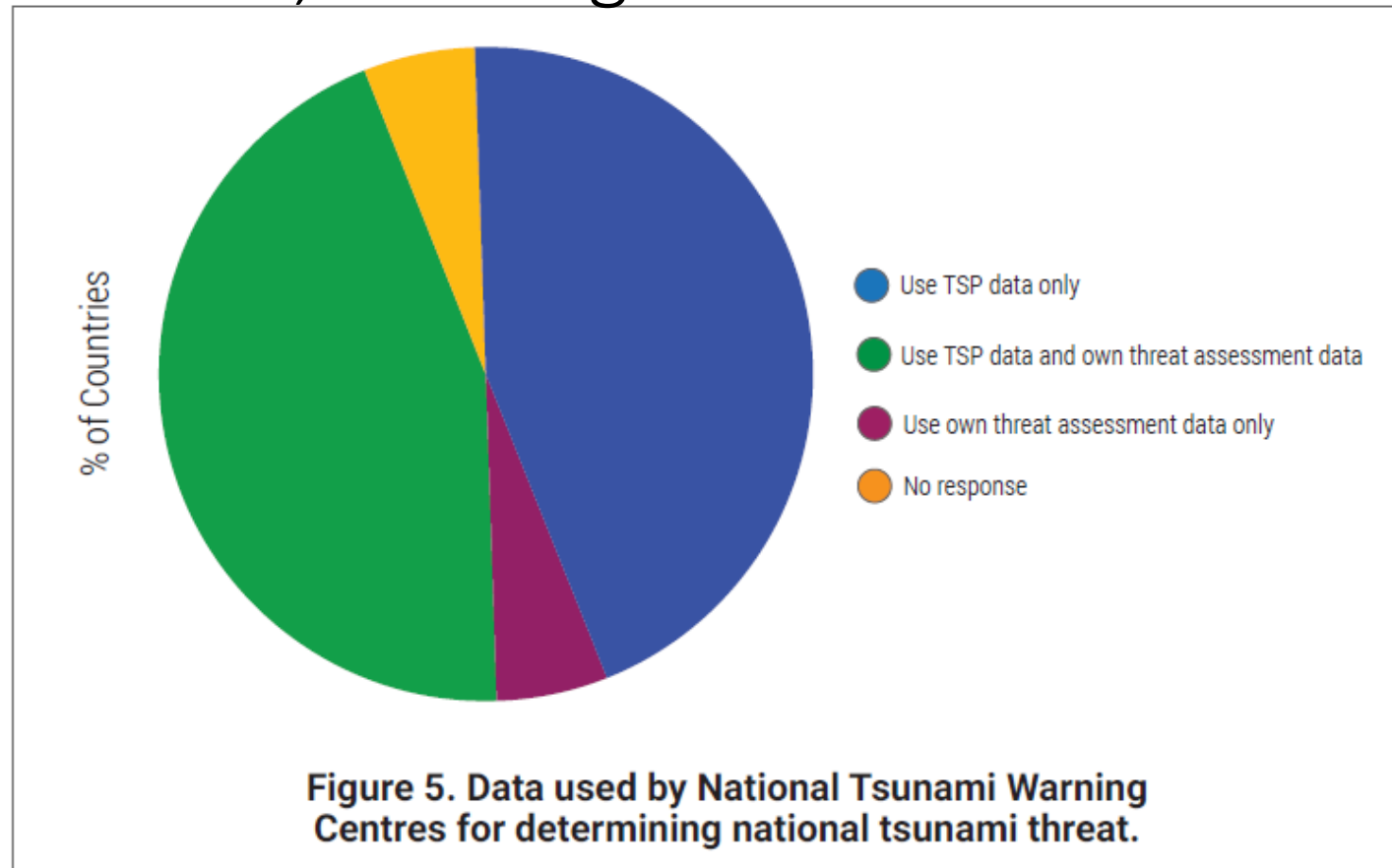
RISK ASSESSMENT AND REDUCTION



RISK ASSESSMENT AND REDUCTION



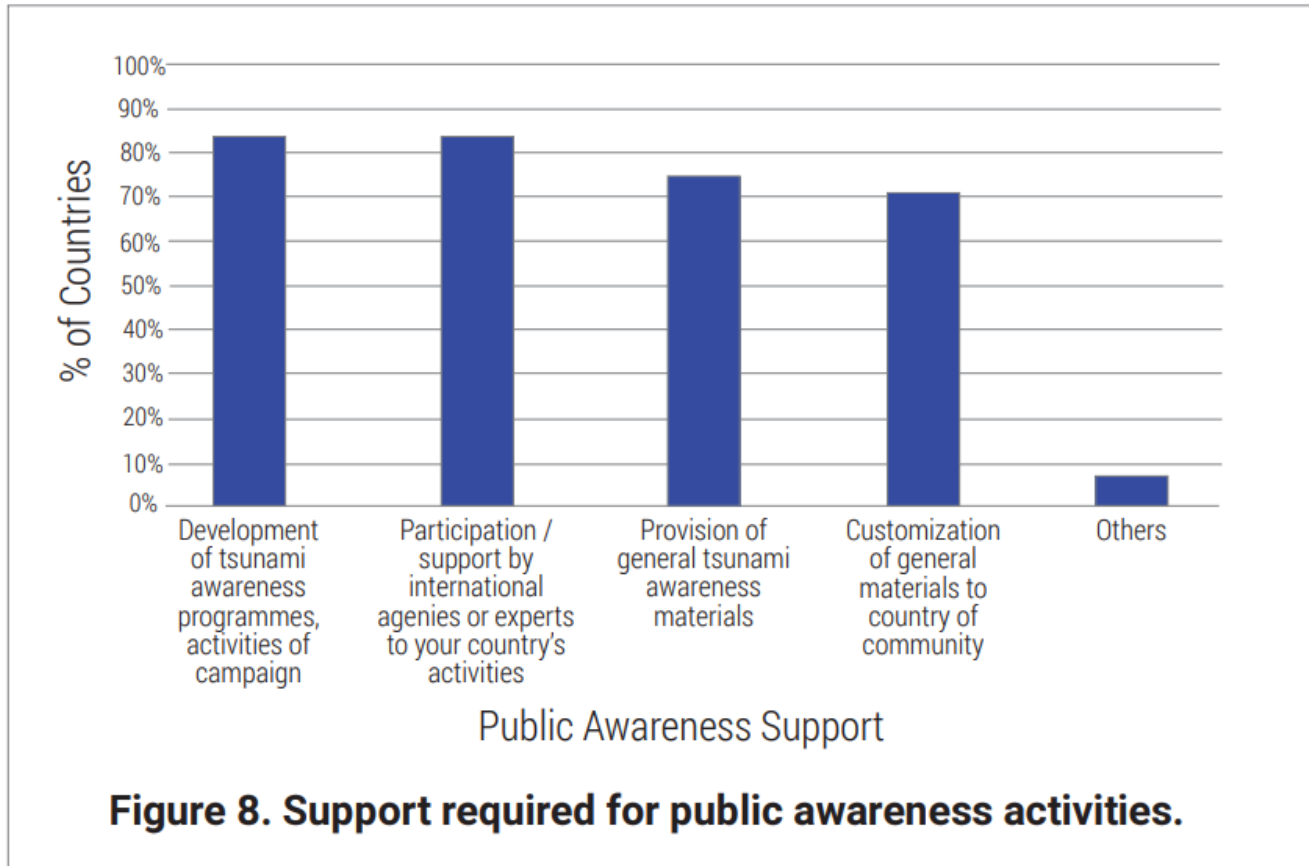
Detection, Warning and Dissemination



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AWARENESS, PREPAREDNESS & RESPONSE



AWARENESS, PREPAREDNESS & RESPONSE

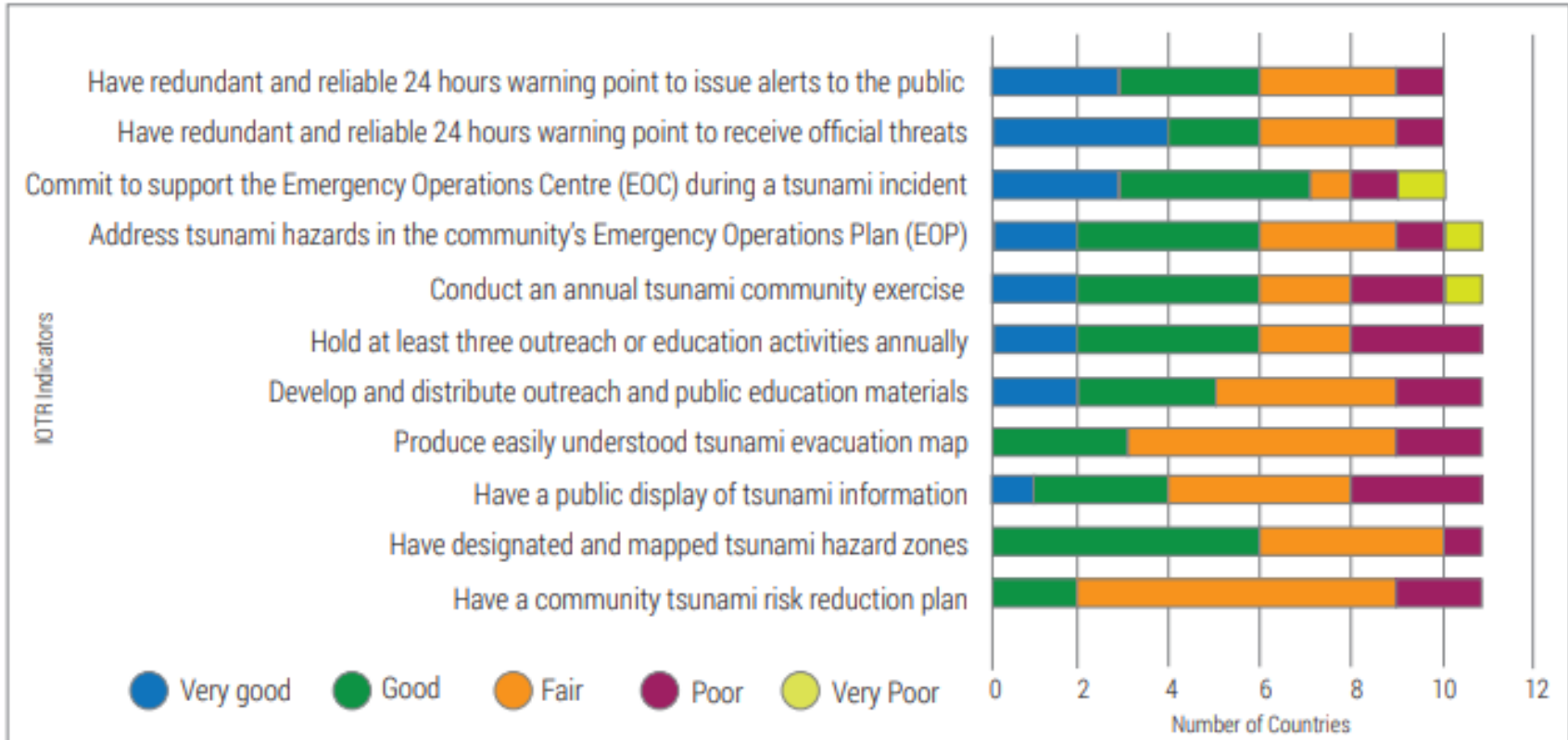


Figure 9. Status of Indian Ocean Tsunami Ready Indicators.

Key Recommendations, Progress & Gaps (1)

- Support for development of policies, plans, and guidelines within a multi-hazard framework → Most North-West Indian Ocean countries operate within an operational multi-hazard framework.
- Carry out tsunami hazard and risk assessments and increase the capacity of people to undertake this work → PTHA for the North-West Indian Ocean completed within the NWIO project; further capacity development and knowledge sharing required
- Carry out tsunami evacuation, hazard, and inundation mapping with a view to create associated maps → being undertaken within the NWIO project, phase 2c over the next 12 months and UNESCO-IOC Tsunami Ready Recognition Programme
- Provide support for analysing real-time seismic and sea-level data → Further capacity development required (online and onsite learning).

Key Recommendations, Progress & Gaps (2)

- Provide support for tsunami modelling to support generation of threat forecasts → Further capacity development required (online and onsite learning).
- Conduct more exercises to review and test SOPs → IOWave20, IOWave23, NWIO Project Phase 2c evacuation drills in March 2024.
- Develop tsunami awareness campaigns → IOWave Exercises, Global Disaster Risk Reduction Day on 13 October; World Tsunami Awareness Day on 5 November, evacuation drills in March 2024.
- Customization of general tsunami education materials to country / community → Ongoing; NWIO Project Phases 2b and 2c – translation of key education materials, manuals, and guides
- Support countries in improvement of SOPs → Ongoing; NWIO Project Phases 1 and 2a; ICG/IOTWMS SOP workshop in July 2023.

Conclusions

- Through the NWIO project *Strengthening tsunami early warning in the North-West Indian Ocean through regional cooperation*, the region has made much progress since the 2018 Capacity Assessment of Tsunami Preparedness in the Indian Ocean region.
- Since 2018, development highlights in the NWIO include the Makran Probabilistic Tsunami Hazard Assessment, seismic data sharing, Standard Operating Procedure (SOP) development, and enhanced tsunami warning chains.
- The second phase of the NWIO project is focusing on development of hazard, inundation, and evacuation maps.
- The project work feeds into the UNESCO-IOC Tsunami Ready Recognition Programme.
- Exercise IOWave23 (4-25 October) will provide an opportunity to test and refine national tsunami warning chains and SOPs.

**“A tsunami can strike at any time.
We must always be ready.”**

Thank you.

***Nora Gale and Rick Bailey
UNESCO-IOC ICG/IOTWMS Secretariat***

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