











# Training Workshop on Tsunami Evacuation Maps, Plans, and Procedures and the UNESCO-IOC Tsunami Ready Recognition Programme for Indian Ocean Member States

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# TEMPP Discussion Guideline TEMPP B Discussion: Information for Tsunami Evacuation Plan and Reviewing Designated Hazard and Inundation Map

### **Objective:**

To help participants understand how to interpret an inundation map, discuss the validity of the data, and develop a hazard map for a tsunami evacuation zone. Participants will identify vulnerable groups and key elements in the community and determine the boundaries of the evacuation zone based on these findings.

## 1. Inundation Map Interpretation

- Study the Inundation Map carefully to understand the tsunami hazard it represents (e.g., wave heights, inundation levels, timeframes).
- Clarify how the inundation map was generated (e.g., models, data sources, assumptions). Discuss its limitations and uncertainties (e.g., accuracy, scope).
- Discuss what the inundation map shows—where tsunami waves are expected to reach, the areas affected by different wave heights, and the expected duration of flooding.
- Reflect on how valid the inundation map is for guiding evacuation decisions. Is it based on the latest data? How certain are the predicted wave heights and timing?
- What information is crucial for evacuation planning that the inundation map provides?
- What are the limitations of this map as a basis for evacuation planning?

### 2. Delimiting the Evacuation Zone

- Delimit the evacuation zone on the Base Map using the information from the inundation map.
  - Evacuation zone boundary: Consider areas that are at risk of flooding or damage from the tsunami. Determine a safe buffer zone, ensuring it includes areas likely to be

- impacted by the tsunami and additional safe areas for evacuation.
- What factors did you consider when deciding where to draw the evacuation zone boundary?
- How do you account for vulnerable groups in your evacuation zone design?

# Identify vulnerable groups and elements:

- Identify areas where vulnerable groups are located (e.g., elderly homes, hospitals, schools, people with disabilities).
- Highlight any other vulnerable elements such as critical infrastructure (e.g., hospitals, fire stations) or cultural heritage sites.
- Document and map these elements on the Base Map.
- Are there any challenges in selecting safe routes and evacuation zones based on the inundation map and the village's infrastructure?

### 3. Identification of Further Vulnerabilities

- Reflect on any additional vulnerabilities not captured by the inundation map, such as:
  - Socio-economic factors (e.g., informal settlements, accessibility issues for marginalized communities).
  - Infrastructure vulnerabilities (e.g., roads prone to landslides, bridges at risk of being destroyed).
  - Emergency response limitations (e.g., lack of communication infrastructure or evacuation vehicles).
- Identify and document any further aspects that could impact the evacuation process and the safety of the community.
- What additional vulnerabilities exist that are not reflected in the inundation map? How do they impact the evacuation plan?
- How can we address these vulnerabilities in the evacuation strategy?