Training/Workshop on

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

Hyderabad - India, 15-23 April 2025

Tsunami Evacuation Maps, Plans, and Procedures

TEMPP 06: Principles in Tsunami Evacuation Place

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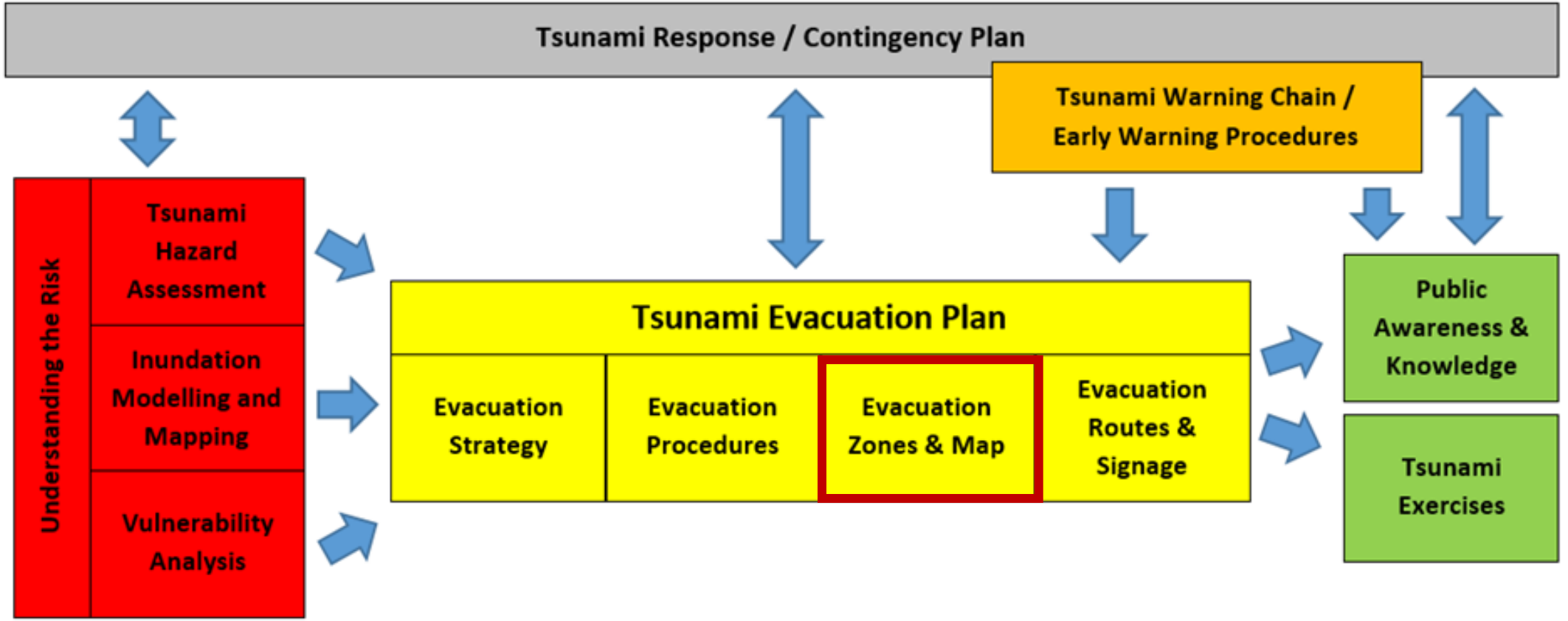
Key elements of a TEP



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Possible bases for selection of the site

- Site is outside of identified Tsunami Hazard Zone;
- Site can be reached by foot within the shortest possible time. Ease of egress by foot is the priority, including for special needs populations;
- The total area of site can hold the expected number of people (or certain percentage of population of the community if several sites are selected);
- Site can be easily identified by residents, for example a prominent hill, a school, an open park among others
- Evacuation routes should avoid areas that could suffer damages from strong earthquakes such as collapsed bridges, buildings, power lines and landslides, which may block routes and cause hazardous conditions.
- Route and site can accommodate special needs populations (portion of the public sector that is willing, yet incapable of leaving the Evacuating Zone).

Evacuation Modes

Horizontal evacuation

Evacuation on foot is usually the only option in urban areas to avoid traffic jams. In rural areas people may use motorbikes or cars if conditions allow

Vertical evacuation

Important option in urban flat coastal plains where safe areas are far away and when evacuation time is short. People use upper floors of strong or designated shelter buildings

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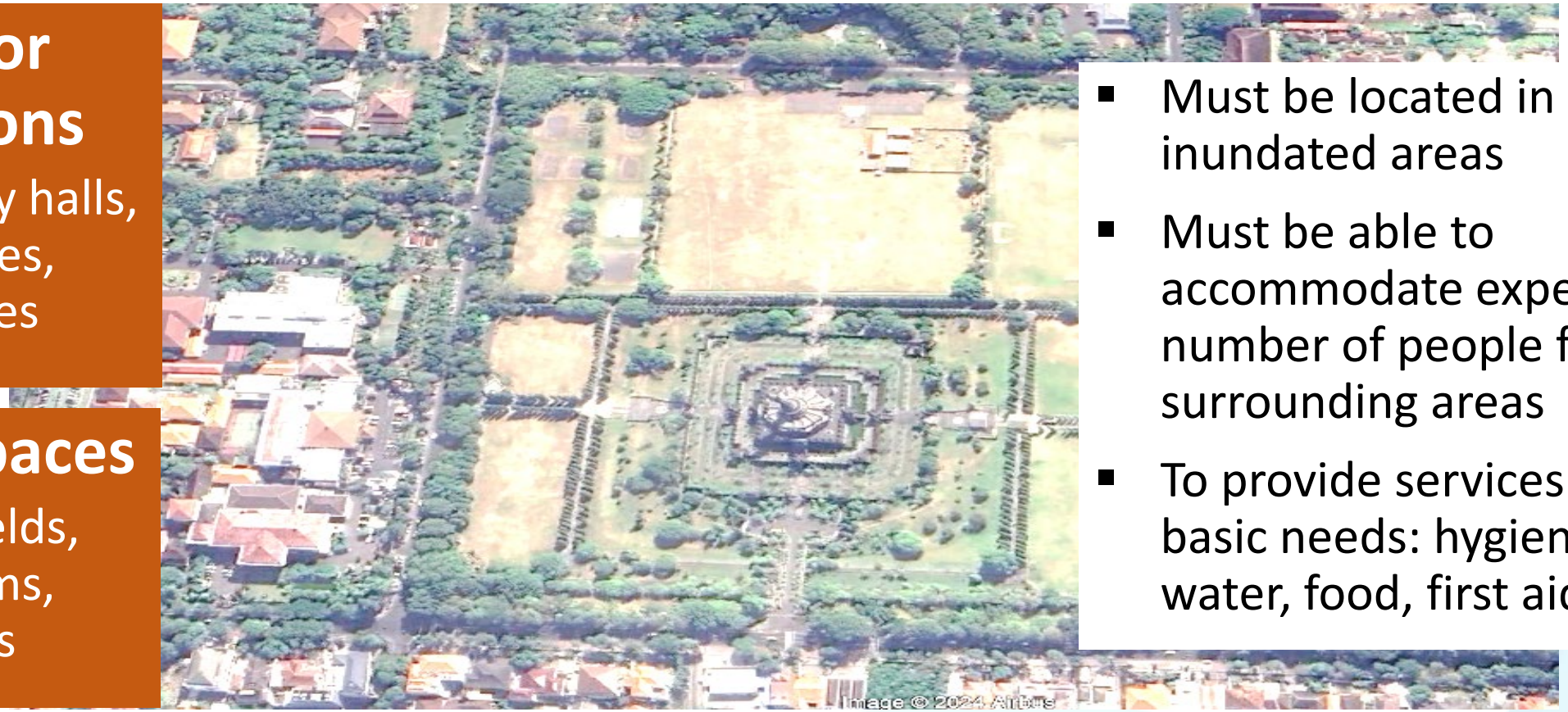
Assembly Areas

Indoor locations

Community halls, mosques, temples

Open spaces

Sport fields, stadiums, parks



- Must be located in non inundated areas
- Must be able to accommodate expected number of people from surrounding areas
- To provide services for basic needs: hygiene, water, food, first aid, …

Safe Area for Permanent Shelter

- Land owned by government
- Open spaces

Difficult to evacuate areas

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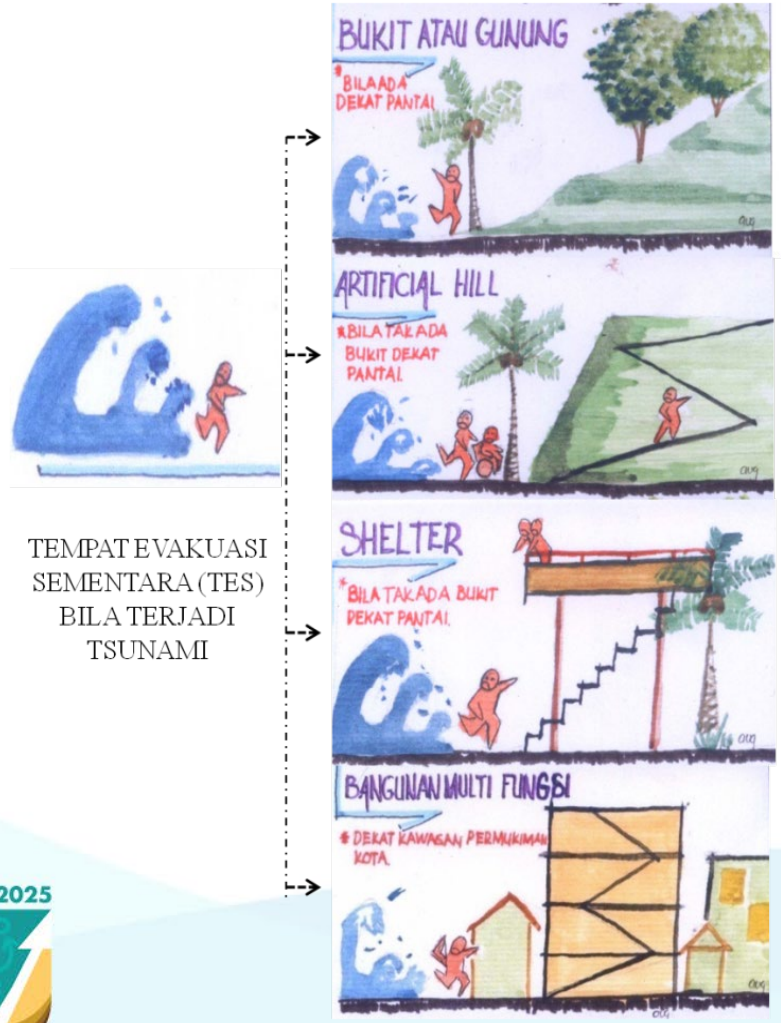
Tsunami Ready

Types of Tsunami Vertical Evacuation Shelter (TVES)



1. *existing natural hill*
2. *artificial hill*
3. **Existing building (check check and check)**
4. **New designated building for TVES**
5. **Single purpose TVES building**
6. **Multipurpose TVES building**
7. *Fly over*
8. *Etc.*

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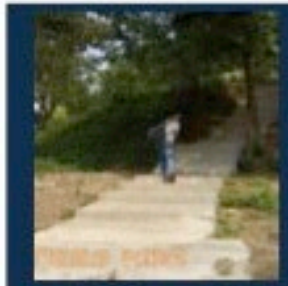
Decision for Type of TVES



If you have existing Hill with sufficient height

If you have existing building with sufficient height and its strength toward seismic and tsunami load as requested in Structural Design Criteria

- If ETE > (ETA – TEW)
- If No Natural Hill and No Existing Buiding complied with design criteria

1. Single Purpose TVES

2. Multi Purpose TVES

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Thank you

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