

## Training-Modules for Tsunami Preparedness

Supporting evacuation planning, warning services and community outreach

### Background

Tsunamis may arrive at Indonesian shores within 20-40 minutes after the earthquake that has triggered it. In some locations arrival times can be even shorter. It is vital that individuals, families and institutions have the capacity to react in a quick and appropriate manner to avoid the damaging waves and their impacts. Therefore, local evacuation plans and warning arrangements are needed as well as self-protection arrangements. To achieve this, it needs the involvement of many stakeholders - from local authorities to community activists - and specific knowledge and skills.

To strengthen the capacities of these stakeholders five Training Modules have been developed and applied in a number of provinces and districts in Java, Bali and NTB in the frame of the PROTECTS project. The trainings address key elements for local tsunami preparedness and follow a structured approach to build up local tsunami preparedness.

The graphic below illustrates this structured approach, which is based on a step by step process to generate key elements (evacuation plans, warning arrangements) for local tsunami preparedness, and how different administrative levels are involved in accordance with their roles and responsibilities. The graphic also shows how the trainings relate to it.

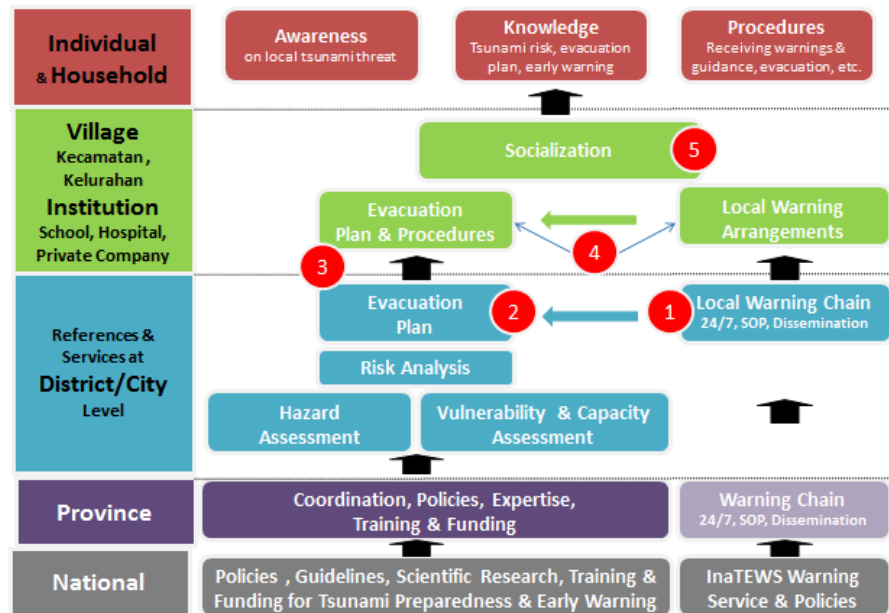
### The Trainings

The 2-day training for **Tsunami Early Warning Services at Local Emergency Operation Centres** ① targets operators and management staff at emergency control centres, who are in charge to implement, operate and improve local tsunami early warning services. The training is in line with the official Indonesian warning policies and procedures as defined within the Indonesian Tsunami Early Warning System (InaTEWS).

A 5-day training on **Tsunami Evacuation Planning at District Level** ② has been developed to prepare professional related to local disaster management to advise to and facilitate district tsunami evacuation planning processes. The topics covered by the training include basic concepts and principles of tsunami evacuation planning and follows a simple 5 steps approach as outlined in the related Guidebook "Planning for Tsunami Evacuation".



### Structured Approach in Tsunami Preparedness Capacity Development



Training for Local Warning Services

A 5-day Training on **GIS based Tsunami Evacuation Maps** ③ is targeted to local stakeholders with some experience in GIS application to improve their mapping skills with special attention on the requirements of tsunami evacuation maps. The training is based on the application of *Quantum GIS* and most effective when it is implemented back to back to on-going tsunami evacuation planning processes as participants can work on their own cases.

The 5 day Training for **Tsunami-Preparedness Facilitators (FaTmi)** ④ is tailor-made for districts which have already developed the basic references for tsunami preparedness, including an evacuation plan and warning mechanism at district level. The training aims to prepare individuals involved in local disaster management as facilitators in two tasks: a) to support the further development of detailed evacuation planning and warning arrangements at village or institutional level, and b) to prepare members from local communities to conduct community outreach activities on tsunami preparedness.

The 3 day training for **Community Outreach (KaTsumi)** ⑤ has been designed to prepare members from local communities to conduct public awareness and knowledge activities in their areas. The main objective is to share specific information on local tsunami risks, local evacuation and warning procedures as well as to encourage individuals and families to develop own emergency procedures at household level. Hence, this training is only implemented once solid local evacuation plans have been developed.

All training modules are tailor-made for the Indonesian context and have been validated and improved during numerous applications in Java, Bali and NTB involving key actors from local and national level.

### Further Implementation of Trainings

All five training modules are designed in a way that they can be replicated. Nevertheless, it is to be asserted that good training skills, solid technical expertise and experience are required for the implementation of these modules. Thus, for transfer and adaptation, it is recommended to seek the assistance of experienced trainers. A list of trainers can be found in the respective Fact Sheet or Training Manual for each training module.

The Training Manuals can be accessed in the **TSUNAMIKit** [www.gitews.org/tsunami-kit](http://www.gitews.org/tsunami-kit) (from June 2013). The complete package for each training module which includes trainer instructions, hand-outs, reference documents and training management tools are available at BNPB (all Modules) and BMKG (Training Module 1).

### Acknowledgement

A large number of individuals from local to national level were involved in the development process of these modules, either as trainers, resource persons, organizers or participants. We are especially thankful to BNPB, BMKG and LIPI, the BPBDs from the provinces and districts in East- and Central Java, Yogyakarta, Bali and NTB and their local working groups as well as DIM and GIZ DeCGG for their support.

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Evacuation Planning Training



Quantum GIS Training



Tsunami-Preparedness Facilitator Training



Community Outreach Training