

OUR EXPERIENCE

How to get to the Safe Area?

Developing Tsunami Evacuation Plans in the Pilot Area of Java

BACKGROUND

In all tsunami prone areas, it is crucial that people know where the safe places are and how to get there. Therefore, all communities must have evacuation plans. The plan must contain at least an evacuation map and strategies to guide the evacuation process.

An evacuation map shows the location of hazard and safe areas in a region, as well as the routes from the hazard areas to the safe areas. The boundaries between hazard and safe areas need to be agreed upon and should be based on district evacuation or hazard maps. Ideally, the boundaries should follow easy to remember landmarks (like streets, rivers, hills, etc.), if possible.

Other features in the areas, such as critical facilities and infrastructures (bridges, factories, hospitals, schools, etc.) can be added to the map because their presence may hinder or facilitate the evacuation process. Any designated horizontal or vertical shelters should also be marked in the evacuation map.

THE CONCEPT OF EVACUATION PLANNING

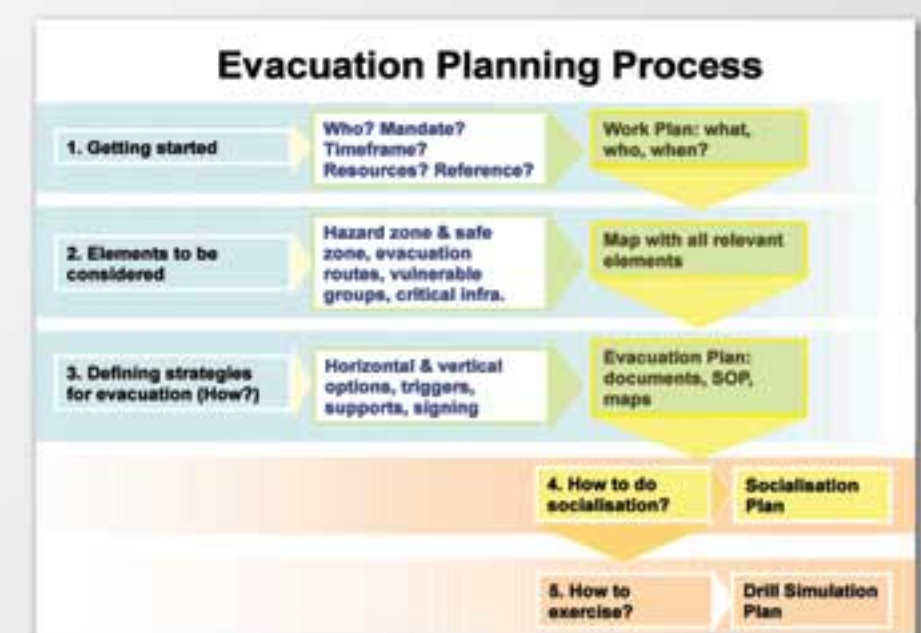
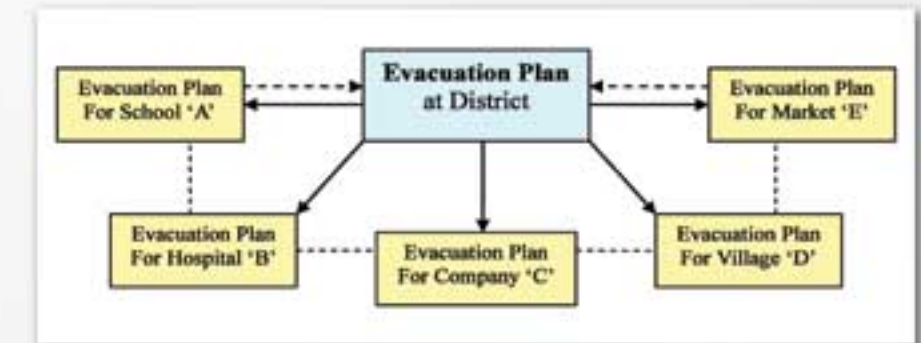
Tsunami evacuation planning at the grassroots level requires references. Ideally, an official evacuation map at the district level should be available and serve as a reference for community groups within the district to develop specific, detailed and operational maps for villages, sub-villages, schools, markets, companies, hospitals, or other types of community clusters.

Although evacuation planning in principle is the responsibility the local authorities, it is necessary to involve all local stakeholders related to disaster management and emergency response in the planning process. The produced plans must be endorsed and disseminated to the public.

Although the plan constitutes a collective strategy to prevent loss in a tsunami, it remains an individual decision, and responsibility to comply with the evacuation plan when a tsunami is about to strike. This is the reason why it is important to encourage people to get involved voluntarily in the community-level evacuation planning and to make sure that they understand the overall plans. It is advisable that the plan is then exercised together.

WHAT HAS BEEN ACHIEVED?

The first step was the development of tsunami evacuation maps at district levels in 2008. The maps for the three districts of Bantul, Kebumen and Cilacap were produced by the local working groups with guidance from the project team. The



evacuation maps were based on the tsunami hazard maps developed jointly by local stakeholders: Ministry of Marine and Fishery (DKP), University of Gajah Mada and GTZ IS.

The development process followed a 5-step approach. The first three steps guide the production of the evacuation plans: maps and strategies. Steps 4 and 5 concern the socialisation of the evacuation planning and the practising of the plans.

The district evacuation plans were then brought to the communities in the pilot villages of Poncosari and Gadingsari (Bantul), Karang Gadung and Ayah (Kebumen), and Jetis, Bunton, Tegal Kamulyan and Teluk Penyu (Cilacap). A number of community representatives (village administrators, school teachers, youth leaders, fishermen, etc.) voluntarily participated in the evacuation planning for their villages. They contributed recent data and information related to their living areas that was needed to draw up realistic community evacuation plans.

Upon completion, the community evacuation plans were disseminated to the public through awareness raising events. To date, Bantul is the only district in the Pilot Area of Java that has conducted a tsunami drill to practise the produced evacuation plan (2008). The evaluation of the drill was then used to review the plan. Evacuation plans are “living documents” that should be periodically revisited, revised and re-exercised jointly.

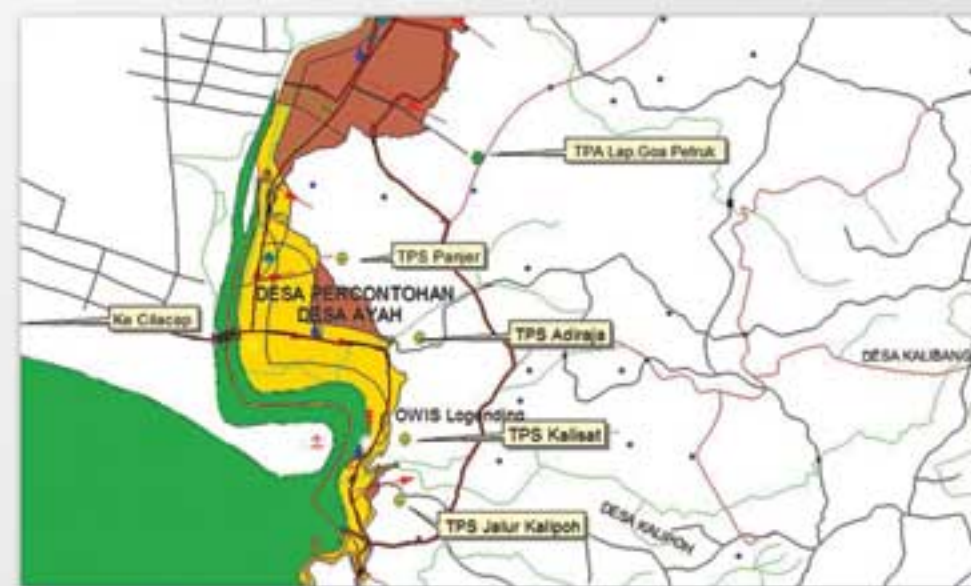
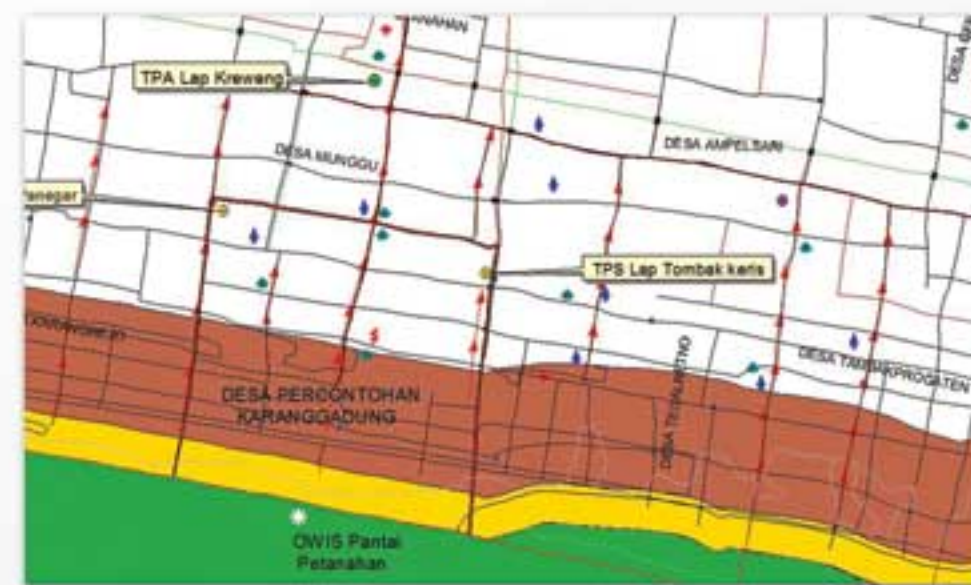
LESSONS LEARNT & POTENTIAL FOR REPLICATION

The development of the district and community evacuation plans has filled a critical gap related to tsunami preparedness in the communities of Bantul, Kebumen and Cilacap. The overall production process took considerable time, as the local stakeholders involved were relatively new to the subject, but highly motivated to play key roles in the finalisation and implementation of their own evacuation plans. The overall process was documented.

In 2010, this experience is being replicated in the two neighbouring districts of Purworejo and Ciamis. As a first step, the two districts started to develop tsunami hazard maps, as the reference for district evacuation plans. The replication receives support from the districts with experience. The process will also be documented, and is hoped to provide further experience and lessons for future wider replication.

ACKNOWLEDGEMENTS

The development of the evacuation plans is a joint effort of all local working groups members of Bantul, Kebumen and Cilacap, as well as the related local government institutions (BAPPEDA, Statistics Bureau, Police, Military, Social Works Office, etc.), the village institutions and the people in the pilot villages of Poncosari, Gadingsari, Karang Gadung, Ayah, Jetis, Bunton, Tegal Kamulyan, and Teluk Penyu.



Author:
Benny Usdianto
benusd@hotmail.com

Published by:
Deutsche
Gesellschaft für
Technische
Zusammenarbeit
(GTZ) GmbH

**Photos, maps
& graphics:**
© GTZ IS-GITEWS

GTZ Office Jakarta
Menara BCA 46th Floor
Jl. M.H. Thamrin No.1
Jakarta 10310
T: +62-21-2358 7111
F: +62-21-2358 7110
E: gtz-indonesien@gtz.de
I: www.gtz.de/indonesia

Further information:
www.gitews.org/tsunami-kit
KESBANGPOLLINMAS, Bantul
daryanto_dwi@yahoo.co.id
KESBANGLINMASSOS, Kebumen
abu_zaidan@yahoo.co.id
BPBD, Cilacap
oyosartoyo@yahoo.co.id or.id
GITEWS: www.gitews.org