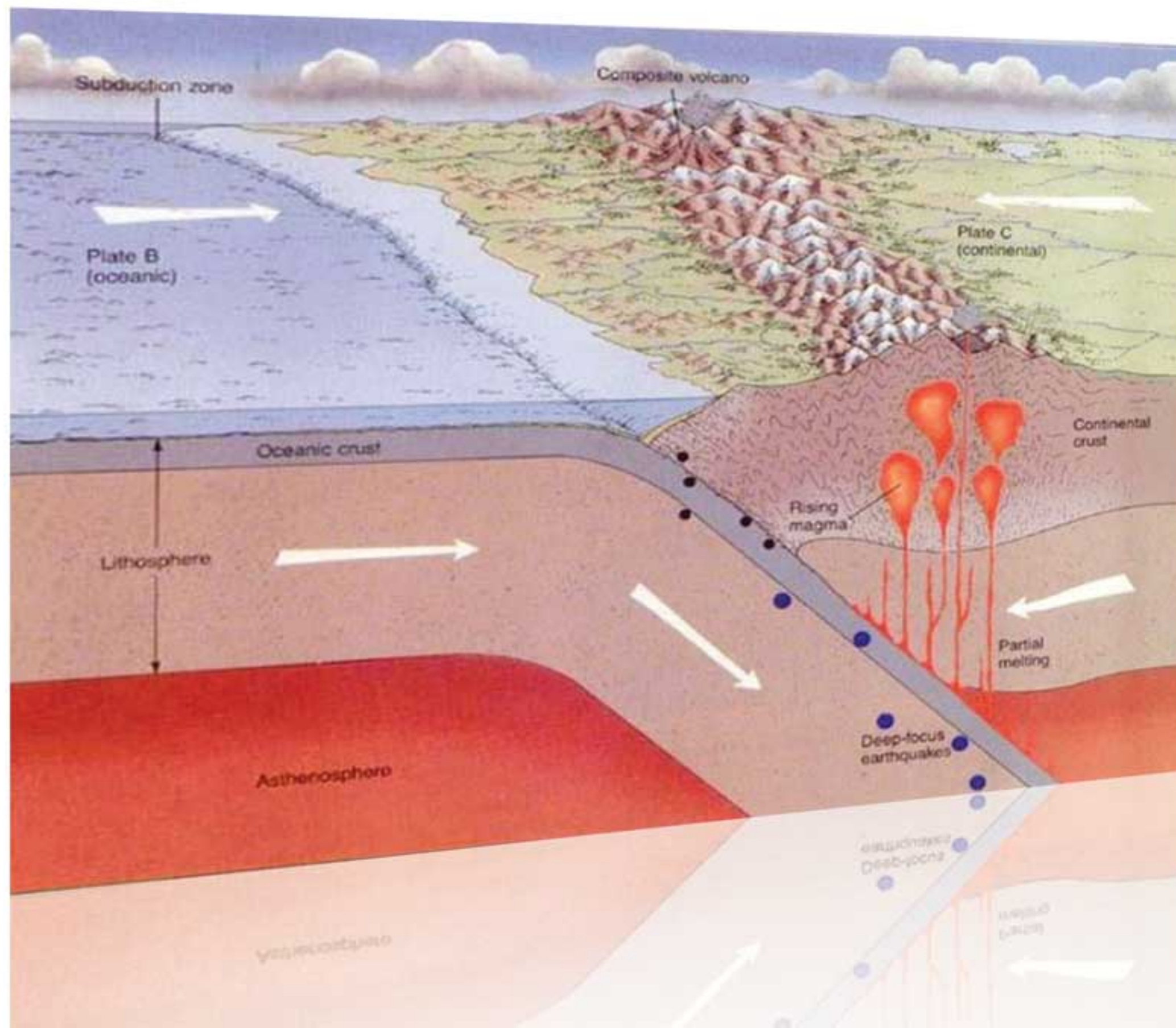


Checklist

gtz | IS
International Services



RISK KNOWLEDGE



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01. Introduction

The implementation of Tsunami Early Warning in Local Communities is a process, which depends on many factors and actors. Conducting this process requires an assessment of what is already in place, activity planning and progress monitoring. The presented checklist supports this process by providing a simple tool for local decision makers and other stakeholders. Adjusted to the Indonesian context, the checklist is based on the document “Developing Early Warning Systems: A Checklist” that was published by UN-ISDR as a result of the “Third International Conference on Early Warning - From concept to action” in 2006. Local actors can use the tool on their own, without external expertise or resources. However, it has to be kept in mind that self-assessments require a self-critical attitude and an open mind.

01

Introduction

How to use?

The checklist document provides three means to assess, plan and monitor implementation. The table “key actors” is used to note down all actors that are involved in implementation.

Please use this table to note down the key actors and institutions that are involved in all activities related to Risk Knowledge and in which way.

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The grey box is used to assess progress and the priority for action.

Progress :	 not started yet	 first steps done	 ongoing process
	 nearly accomplished	 fully accomplished	
Action needed & Priority :	 high priority	 medium priority	 low priority



After each theme, the note pad for “Analysis” provides additional space to take notes and reflect about challenges, constraints and success stories within implementation and thereby helps to monitor and evaluate progress and find solutions.

02. Objective & Key Actors

Objective

The Objective of the checklist for the element Risk Knowledge is to:

Establish a systematic and standardized process to collect, access and share data, maps and trends on tsunami hazard and vulnerability

Please use this table to note down the key actors and institutions that are involved in all activities related to Risk Knowledge and in which way.

03. Five Themes Related to Risk Knowledge

The content of this checklist consists of five major themes related to Tsunami Risk Knowledge at the local level:

Theme 1: Organizational Arrangements Established

Theme 2: Tsunami Hazard Identified


Theme 3: Community Vulnerability Analyzed

Theme 4: Tsunami Risks Assessed

Theme 5: Information Stored and Accessible

Theme 1: Organizational Arrangements Established

Local communities will have to define whom to involve in risk assessments and how to coordinate these efforts. Roles and responsibilities of involved actors, as well as technical standards and methods, should be clarified. Special attention should be given to participatory approaches, especially for vulnerability assessments. Risk assessment products, like risk maps, should be validated and officially approved.

No.	Aspect	Progress	Action needed & Priority
1.	<p>Actors roles in vulnerability assessments</p> <p>Key local government agencies, and other actors involved in tsunami hazard and vulnerability assessments, identified and roles clarified (e.g. agencies responsible for economic data, demographic data, land use planning, social data, and coordination assigned to one local organization).</p>		
2.	<p>Local legislation</p> <p>Local legislation or government policy mandating the preparation of the tsunami hazard and vulnerability maps for the community in place.</p>		



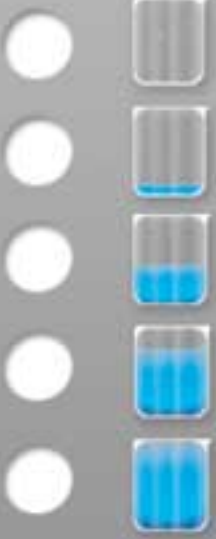

No.	Aspect	Progress	Action needed & Priority
3.	<p>Hazard, vulnerability and risk assessments method</p> <p>National standards for hazard, vulnerability and risk assessments are identified and accessible to local governments.</p> <p>Hazard, vulnerability and risk assessments are made at the local level applying customized methods that comply with national standards.</p>		
4.	<p>Population engagement</p> <p>Mechanism to actively engage population in local tsunami hazard and vulnerability analyses applied.</p>		

Analysis



Theme 2: Tsunami Hazard Identified

First of all, communities need to identify whether they are located in a tsunami prone area. It is important to know whether your community is at risk of a locally generated tsunami because they can reach the coast in a very short period of time. Knowledge about the possible impact of a tsunami on land is essential for preparedness planning. Hazard maps are important tools for further planning. For that purpose, historical data or models which simulate inundations for different scenarios can be useful.

No.	Aspect	Progress	Action needed & Priority
1.	<p>Local characteristics of tsunami hazard</p> <p>Local characteristics of tsunami hazard (e.g. intensity, frequency and probability) analyzed and historical information evaluated.</p>		
2.	<p>Tsunami hazard maps</p> <p>Tsunami hazard maps developed to identify the geographical areas and communities that could be affected by tsunamis.</p>		

No.	Aspect	Progress	Action needed & Priority
3.	<p>Hazard, vulnerability and risk assessments method</p> <p>An integrated hazards map developed (where possible) to assess the interaction of tsunamis with other hazards.</p>		



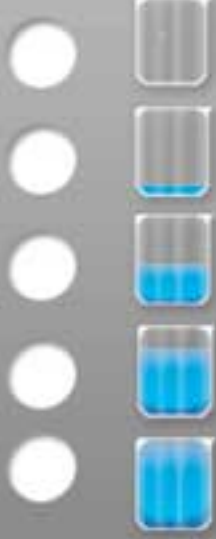

Analysis



Theme 3: Community Vulnerability Analyzed

Community Vulnerability Assessment (CVA) comprises the analysis of social, economic, environmental and institutional aspects. It will have to consider the elements at risk as well as available coping capacities. CVA requires the participation of local institutions and the population. There are many different methods available, including community based approaches.

No.	Aspect	Progress	Action needed & Priority
1.	<p>Community vulnerability assessments</p> <p>Community vulnerability assessments conducted for tsunami hazard.</p>		
2.	<p>Historical data and potential future</p> <p>Historical data resources considered in vulnerability assessments.</p> <p>Potential future tsunami events considered in vulnerability assessments.</p>		



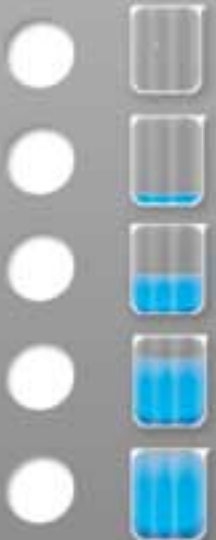

No.	Aspect	Progress	Action needed & Priority
3.	<p>Other factors</p> <p>Factors such as gender, disability, access to infrastructure, economic diversity and environmental sensitivities considered.</p>		
4.	<p>Documentation and mapping of vulnerabilities</p> <p>Vulnerabilities documented and mapped (e.g. people or communities and critical infrastructure along coastlines identified and mapped).</p>		

Analysis



Theme 4: Tsunami Risks Assessed

The tsunami risk assessment combines the information of the hazard and vulnerability assessments and points out the existing tsunami risk and risk factors, the underlying processes and causes and their social and spatial expression, as well as options for risk reduction and intervention.

No.	Aspect	Progress	Action needed & Priority
1.	<p>Interaction of tsunami hazard and vulnerabilities</p> <p>Interaction of tsunami hazard and vulnerabilities assessed to determine the risks faced by the local communities.</p>		
2.	<p>Community and private sector consultation</p> <p>Community and private sector consultation conducted to ensure risk information is comprehensive and includes historical and indigenous knowledge, as well as local information and national level data.</p>		

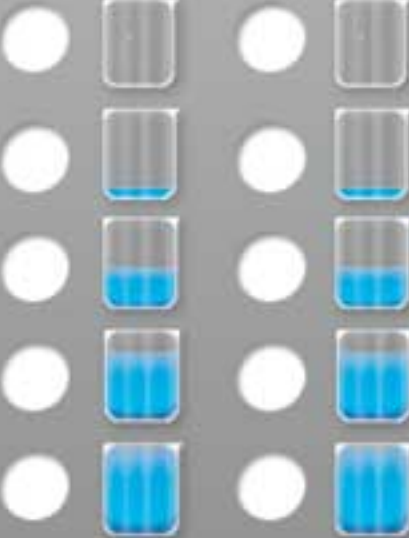



No.	Aspect	Progress	Action needed & Priority
3.	<p>Other risks</p> <p>Activities that increase risks identified and evaluated.</p>		
4.	<p>Integration into local risk management plans and warning messages</p> <p>Result of risks assessment integrated into local risk management plans and warning messages.</p>		

Analysis



Theme 5: Information Stored and Accessible

Information gathered during the assessments should be translated into tools for decision makers, planners and the general public. Generally, tsunami hazard, vulnerability and risk maps and reports are suitable outputs of the risk assessment process. These documents should be easily available and updated from time to time.

No.	Aspect	Progress	Action needed & Priority
1.	<p>Data Storage</p> <p>Data storage system is developed by an official institution.</p> <p>Tsunami hazard, vulnerability and risk maps and data are stored and available to the government, the public and the international community (where appropriate).</p>		
2.	<p>Data update</p> <p>Update developed plan and data regularly.</p>		

Analysis



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Tsunami Early Warning System



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