

Managing Early Warning Systems for Tsunami Prone Communities: The Need for Participatory Approach

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After the last major tsunami in Indian Ocean, December 26, 2004 tsunami early warning systems have been realized as a very urgent issue to be installed in Indian Ocean. Nevertheless the issue of early warning systems (EWS) is not only about installing the high-tech parts of early warning systems but also about the process of disseminating EWS to people who are endangered by tsunami disaster as well as the right evacuation way when the disaster occurs. In relation to the dissemination of EWS, this research aims to develop appropriate implementation of knowledge and technology in managing EWS for tsunami prone communities. Two coastal communities in Indonesia and Japan are selected for this study to develop formalized and distinct lessons learned from each case. Since the implementation of knowledge and technology are better with the involvement of multi-stakeholders, social co-learning among the stakeholders is expected to be achieved in advance. Therefore, when a tsunami occurs, the EWS will be understood by the communities, who as a result will know how to act and evacuate in an effective and

quick way. This research applies participatory approach as it allows scientists to understand local perspective issues, including visualization of tsunami hazards, weaknesses in internal and external communication systems. In conclusion, this paper briefly discusses some relevant issues of participatory approach concerning implementation of tsunami early warning system.