

COMMUNITY – BASED LANDSLIDE WATCH NETWORKS IN THAILAND

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Abstract

Abstract, Thailand is located in the tropical monsoon zone. Therefore torrential rain is common when storm and typhoon are approaching Thailand or neighborhood countries. Heavy rain in mountainous areas is very dangerous because it can cause landslide and flash flood. From the study of Department of Mineral Resources (DMR) of Thailand it suggests that there are approximately 6,500 villages in 54 provinces located in landslide hazard zones. In the last decade landslide data shows that number of landslide events and impacts seems to be increasing. This might be results from many factors ranging from the climate change to the change of settlement pattern. To solve landslide hazard problems, DMR has established local landslide watch networks or self-protection networks in risk areas. The networks are local people working for their communities or villages as volunteers. They were trained to have knowledge on landslide behaviors and how to observe it in upper stream. In monsoon season they will be guards at check point or foot of mountain where they can see water in stream clearly. When they detect signs of landslide for example rumbling sound, they will inform their head of village to warn other people in risk areas and downstream villages. Moreover, DMR established the Geohazards Operation Center (GOC) in Bangkok to monitor heavy rain and to coordinate with the local networks and relevant agencies. When heavy rain is approaching landslide prone areas, the GOC will disseminate landslide watch bulletin and inform the networks through television, radio, facsimile and mobile phone. The local landslide watch networks can also phone to the center to get more information and to report real time situation from their areas. Furthermore, the GOC coordinates closely with Thai Meteorological Department (TMD) in rainfall prediction, Office of The National Water Resources (ONWR) and Department of Disaster Prevention and Mitigation (DDPM) and governors in landslide management. To sum up, over the past 17 years since the landslide watch network has been established in Thailand, it can be clearly seen that the impact of landslide have been dramatically minimized.

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