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Flood hazard mapping and its role on flood disaster management cycle

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Flood Hazard Map (FHM) especially prepared to facilitate smooth evacuation of people and their belongings during flood crisis has been found very effective. This tool is also introduced in some developing countries; however there is not much overwhelming response to its implementation and effectiveness. In the context of promoting community based disaster management, FHM can play a vital role and research & development should highlight its added values and propose a way forward of its adaptation in different natural, scenarios. This paper describes the major causes of massive destructions due to floods in developing countries and elaborates the usefulness of Flood Hazard Map under the framework of community based flood management, introducing a new approach of flood hazard mapping and its application. A field study was carried out in West Rapti river basin in Nepal. Inundation analysis was carried out by using 1D and 2D numerical models and in different scenarios such as considering influences of several natural and human made interventions in flood plain area. Community based flood risk map was developed based on local knowledge and simulated results. It is hoped that the idea is beneficial and catalyst to promote community based response for flood disaster management in developing countries, therefore helps agencies to develop operational strategy in advance.