

Assessing flood risks and the coping strategy: a community adaptation in floodplain areas at Beaufort district in East Malaysia

ABSTRACT

Floodplains have become increasingly populated areas throughout Malaysia as shown in the case of Beaufort district situated in the state of Sabah at East Malaysia. This area is now exposed to flood hazards due to the rise of new settlements. Nonetheless, the community in the district has managed to survive and thrive with the prevalence of flood hazards. The aim of this study is to identify the risk of loss level faced by affected communities in the area as well as the coping strategies practised during floods. A survey consisting of 241 heads of households in four villages was conducted in Beaufort. The raw data was analysed using the chisquare, mean score and frequency. The study outcomes reveal that there are various risks of loss present in all villages such as the risk of death (RD), the risk of injury (RI), the risk of property loss (RPL) and the risk of loss of home infrastructure (RLSI). However, the assessed risk levels are low, even at a flood height of 2.5 metres. Two cases in Beaufort, Kampung Bingkul and Kampung Malugus prove that the accessibility of disruption risk remains low with the same flood height level. The affected communities have traditionally developed coping strategies for flood hazards such as owning a boat or building houses on stilts and attics. The research outcomes can assist relevant local authorities to improvise policies related to flood management in high-risk floodplain areas.