

Flood Damage Function Model for Residential area in Kuantan: A Preliminary Study

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Abstract.

Flood damage estimation is an essential element in the assessment of flood risk. However, the assessment of flood damage in developing countries is challenging due to the scarcity of historical data. An attempt has been made to assess the flood damages of 2013 Kuantan flood and to develop a flood damage function model based on the socio-economic and property characteristics of the study area. A field survey was conducted to gather damage data and information regarding the flood event using face to face interview technique. Age, household income, educational background, occupation and the distance from river have been identified as the most significant variables that influence the residential flood damages. A damage model to aid in the estimation of the structural and content damage have been developed. The preliminary results can be used in the future flood damage assessment works, especially in the development of flood damage function curve.

Keywords: Flood damage assessment, flood damage function curve, data scarcity, Kuantan, residential