## Impact of flood and flood disaster management: the perception of smallholder farmers in Kelantan Malaysia

## **ABSTRACT**

Of all natural disasters occurring in most part of the world floods account for significant socio-economic losses especially to smallholder farming communities living along coastal and low-lying areas. Hence, flood disaster management systems, which seek to reduce the vulnerability and build the resilience among the affected communities has become critical given the growing effects of floods. However, perception of smallholder farmers on the impact of flood and flood disaster management were rarely sought. This paper therefore, examines the impact of flood on smallholder farmers' livelihood and the extent of flood disaster management programmes in Kelantan, Malaysia. Data were obtained from 344 affected smallholder farmers using multistage sampling technique and were analysed through the use of descriptive and factor analyses using SPSS and AMOS. The findings showed that flood has a negative impact on smallholder farmers' crop production and income. Further, it revealed that, smallholder farmers received more non-structural and short term recovery needs resources than structural and long term recovery resources. The implication of this study would help policy makers to facilitate more consistent and comprehensive long-term cost-effective strategies for an integrated flood management. In addition, it gives further insight to the academicians in the application of structural equation modelling (SEM) in the future research.

**Keyword:** Flood impact; Flood management; Smallholder farmers; Factor analysis