

## Amphibious House, a Novel Practice as a Flood Mitigation Strategy in South-East Asia

### Abstract

The vulnerability of flooding in terms of exposing population and assets is increased dramatically over these decades. There are different strategies to prevent or mitigate the flood destructions in urban areas. Floating urbanization is a novel story which motivates people to face with flood rather than fighting with nature. This study proposed the new concept of the amphibious house in lowland area as a flood mitigation strategy. It evaluates the awareness and acceptance level of floodplain settlers to consider amphibious house as a safe shelter for dwelling in lowland area. The VBA programming has been used to develop a designing system for different type of amphibious house. The questionnaire survey was conducted between 6 lowland regions in Malaysia. The level of acceptance and suitability perceptions of the amphibious house were 3.08 and 3.33, which were in moderate level. There was significant higher interest for dwellers who know about floating houses on applying amphibious house.