

The Study of Flood Resilient House in Ebo-Town

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Abstract : Flood-resistant house is the key mechanism to withstand flood hazards in Ebo-Town. It emerged simple yet powerful way of mitigating flooding in the community of Ebo- Town. Even though there are different types of buildings, little is known yet how and why flood affects building severely. In this paper, we examine three different types of flood-resistant buildings that are suitable for Ebo Town. We gather content and contextual features from six (6) respondents and used this data set to identify factors that are significantly associated with the flood-resistant house. Moreover, we built a suitable design concept. We found that amongst all the theories studied in the literature study Slit or Elevated House is the most suitable building design in Ebo-Town and Pile foundation is the most appropriate foundation type in the study area. Amongst contextual features, local materials are the most economical materials for the proposed design. This research proposes a framework that explains the theoretical relationships between flood hazard zones and flood-resistant houses in Ebo Town. Moreover, this research informs the design of sense-making and analytics tools for the resistant house.

Keywords : flood-resistant, slit, flood hazard zone, pile foundation

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