Community perceptions on the adoption of stormwater management practices in Kota Kinabalu, Sabah: A pilot study

ABSTRACT

The current practices have included the BMPs to improve urban stormwater quality while reducing critical flood events and stream erosion. However, uncontrolled development in Kota Kinabalu, Sabah, compromises the way water flows. Albeit with MSMA, the community perspectives are also important and should be studied. This work determines the community's perception of the stormwater management practice through a survey. Data collected from 56 respondents (with a varied range of working experiences in the private sector (64%) and government sector (36%)) were descriptively analyzed. With a mean of 2.39, most respondents have knowledge and understanding of stormwater management, despite various working experiences. The findings show that respondents agree that infrastructure developments (<90%) are vital when dealing with stormwater and that proper waste management (79%) should also be emphasized. Then the funding (27%) and enforcement (24%) were highlighted as the main barriers to proper stormwater management implementation. Lastly, with a mean of 3.3, most respondents agreed (39%) and strongly agreed (46%) that there is a need to improve the existing stormwater management practices. Considering stormwater as a valuable green alternate resource, we suggest a sustainable approach to monitoring stormwater quality and flooding events, such as green filtration and IoT integration.