

Rethinking Urban Floodplain Management: The Case of Colombo, Sri Lanka

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Abstract : The impact of recent floods become significant, and the extraordinary flood events cause considerable damage to lives, properties, environment and negatively affect the whole development of Colombo urban region. Even though the Colombo urban region experiences recurrent flood impacts, several spatial planning interventions have been taken from time to time since early 20th century. All past plans have adopted a traditional approach to flood management, using infrastructural measures to reduce the chance of flooding together with rigid planning regulations. The existing flood risk management practices do not operate to be acceptable by the local community particular the urban poor. Researchers have constantly reported the differences in estimations of flood risk, priorities, concerns of experts and the local community. Risk-based decision making in flood management is not only a matter of technical facts; it has a significant bearing on how flood risk is viewed by local community and individuals. Moreover, sustainable flood management is an integrated approach, which highlights joint actions of experts and community. This indicates the necessity of further societal discussion on the acceptable level of flood risk indicators to prioritize and identify the appropriate flood management measures in Colombo. The understanding and evaluation of flood risk by local people are important to integrate in the decision-making process. This research questioned about the gap between the acceptable level of flood risk to spatial planners and to the local communities in Colombo. A comprehensive literature review was conducted to prepare a framework to analyze the public perception in Colombo. This research work identifies the factors that affect the variation of flood risk and acceptable levels to both local community and planning authorities.

Keywords : Colombo basin, public perception, urban flood risk, multi-criteria analysis

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