

Storm Water Drainage Deficiencies and Flood Risk Accumulation in Dar es Salaam

The study focused on the assessment of storm water drainage deficiencies and flood risk accumulation in Dar es Salaam. This study area, particularly involved the following selected locations; Vingungti, Ubungo, Mchikichini, Magomeni, Kigogo, Kariakoo, Jangwani, Hanna Nassif and Buguruni ward. The objectives of this study include: to identify areas most prone to flooding hazard, to assess the existing quality and quantity status of storm water drainage system, to examine the causes and effects of flood risk accumulation, to evaluate current flood risk management measures in the case study and to analyze improvement needs and options that are applicable in selected locations in the case study. Exploratory and descriptive types of methods were used to describe and study existing conditions and coverage and storm water drainage deficiencies respectively. Data collection methods were carried out using both primary and secondary data sources but the secondary data source was only relevant to reinforce the primary data, which was accomplished with the help of topographic maps and a check list. The collected data were analyzed and presented using Microsoft-Excel, SPSS and GIS. The findings of this study include: the major causes of flooding which were found to be storm water deficiencies namely; the blockage of storm water drainage, maintenance and inability to discharge water, Loss of property and occasional loss of life, disease and destruction of public infrastructure were some of the flood risks observed during the study. This study strongly recommends improvement in the management of storm water drainage and integrated solid waste management to prevent overflowing of flood as a result of blockage of drains.

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