

ABSTRACT

Climate change poses significant challenges to urban infrastructure, particularly in managing storm water effectively. This project investigates the impacts of climate change on sustainable storm water management along Uhuru Highway in Nairobi, Kenya, including rising temperatures and increased rainfall intensity. Through comprehensive analysis of historical climate data, field surveys, and resident questionnaires, the project identifies a significant increase in heavy rainfall events over the past decade, revealing that existing drainage systems are inadequate, leading to frequent flooding and property damage. The study highlights gap in current management practices, such as lack of enforcement and insufficient maintenance funding. Recommendations include integrating green infrastructure and improving maintenance practices to enhance storm water system resilience. The project underscores the need for adaptive and sustainable storm water management to develop resilient urban infrastructure.