

## **ABSTRACT**

The purpose of this study was to assess the role of Geographic Information Systems (GIS) technology on drug trafficking crime control in Tanzania, with a focus on the case study of Dar es Salaam city. Specifically, the study aimed to assess the influence of Technological innovations, competences of law enforcement team to the effective use of GIS technology and management related contributions for using GIS technology on drug trafficking crime control in Dar es Salaam, Tanzania. In terms of literature review the study adopted Crime Pattern Theory and environmental criminology theory. The study adopted descriptive research design which allowed a detailed description and analysis of the variables under study. The sample of the target population composed of 148 respondents who are employees of DCEA Kinondoni and Kinondoni Central Police station. The study used questionnaire as the primary research instrument. The data were coded as per objectives to give distinct differences and multivariate regression was done to look at the relationship of the variables. Presentation also was done through their calculated mean, frequency, standard deviation and the correlation analysis of the data collected. The study concludes that; there is a positive perception of management-related contributions in utilizing GIS technology for drug trafficking crime control. Respondents have confidence in resource allocation, planning, and decision-making processes. Nevertheless, there may be areas for improvement, particularly in terms of regular evaluation and performance monitoring. Moreover, these results underscore the critical role of effective management practices in shaping crime control strategies. By emphasizing and enhancing management practices related to crime control efforts, law enforcement agencies and relevant authorities can potentially achieve more effective outcomes in their endeavors to combat drug trafficking. Recommendation from the study includes; the government should prioritize Technology Integration by allocating resources and establish policies that prioritize the integration of advanced technologies, particularly GIS, within law enforcement agencies. This will bolster efforts to combat drug trafficking and enhance overall public safety and invest in training programs by supporting and fund comprehensive training programs for law enforcement officers to ensure they are well-prepared to handle technological tasks, with a specific emphasis on GIS proficiency. The policy makers to formulate Technology-Centric Policies by developing policies that promote the integration of advanced technologies in law enforcement practices.