Investigating the spatial relation between landuse and property crime in Kuching, Sarawak through location quotient analysis

ABSTRACT

Urban areas are often associated with higher crime rates, which is a growing concern among communities. This study aims to investigate the spatial relation between landuse and property crime in Kuching, Sarawak through location quotient analysis. Three methods were applied in this study: multiple buffer analysis, Pearson's correlation, and location quotient. Based on initial findings, there is an observed increase in crime levels as the distance from the centroid extends from 150 to 750 meters and decreases beyond 750 meters. The study findings reveal a strong and consistent positive correlation between property crime and land use areas across 2015-2017. Property crime is more prevalent in urban and associated areas compared to other land use categories. Offenders in Kuching often utilise various tools to break into houses and dig holes, break locks, climb gates, engage in snatch theft using motorcycles, and break car windows to steal handbags that are placed on the right seat. In certain locations, CCTV cameras are positioned far away from the target areas. All of these factors contribute to creating opportunities for offenders. Property crimes were more common during the daytime than at night as during the daytime, which may be attributed to more people being active outside their homes, providing criminals with easier targets. At night, people tend to stay home, and the opportunity for property crimes decreases. The study provides crucial geographic crime information to the Commission of Kuching North City Hall and the Council of the City of Kuching South to enhance urban safety.