

A SPATIO-TEMPORAL STUDY OF ACCESSIBILITY TO POLICE SERVICES AND FACILITIES IN SAGBAMA LOCAL GOVERNMENT AREA, BAYELSA STATE, NIGERIA

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Abstract

This study applied geospatial techniques in examining the spatial distribution of police services and facilities in Sagbama Local Government Area (LGA) of Bayelsa State, Nigeria. Data on the geographical coordinates of the police facilities were acquired through Global Positioning System (GPS). The location of a police station at an appropriate place is influenced by different parameters, such as crime-prone areas, distance from major rivers/roads, and the presence of influential people and politicians, political influence and industrial development. Data pertaining to the strength of the LGA police were obtained from the Sagbama Police Division through the approval of the Bayelsa State Police Commissioner. An administrative map of the study area was obtained from the Ministry of Land and Survey, Bayelsa State, which was used as a base map. The data were analyzed using descriptive (frequency tables, simple ratio) statistics. Nearest Neighbour Analysis (NNA) was used to derive the pattern of distribution of the police facilities. The buffer operation was used to examine the area of coverage of police facilities. Findings of the study revealed the existence of 6 police divisions/stations. The findings revealed that the police - population ratio continue to drop from 2014 to 2018. The NNA result of the spatial pattern of police divisions/stations produced a dispersed point pattern at 0.01% significance level with the Nearest Neighbour Ratio (NNR) of 1.59. Furthermore the analysis showed that 5 administrative wards were well served while 9 others were underserved, most of them situated in the extreme northern and southern part of the study area. The study therefore recommends that the number of staff attached to political officials should be decreased by the police authority, while those attached to individuals who are not entitled to personal police security should be removed and attempts should be made to recruit more individuals into the police force to be deployed to the region.

Keywords: Police Facility, Crime, Spatio-Temporal Analysis, Sagbama, Bayelsa