Analysis of Urban Crime in Maitumbi Neighbourhood, North-Central, Nigeria

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The paper is aimed at assessing the nature (inherent pattern, form or the mode) of criminal offence in Maitumbi neighbourhood and also the impact (effect, aftermath result, and imprint) of crime on the location, this is done taking cognizance of an emphasis of urban planning which is ensuring the security and safety of life of the urban populace. The method employed in this research is the quantitative research method and quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys. The feeling of safety among residents in the study area is generally average as 66% profess feeling safe living in the neighbourhood and 64.3% profess feeling safe moving around at night in the neighbourhood, while, only 1.7% profess feeling unsafe living in the neighbourhood and 16.4% attest feeling unsafe moving around at night according to the respondents report 48.1% which represented persons below the age of 20 years were indicated to be perpetrators of criminal offences in the study area, followed by persons between 21-25 years with a percentage of 46.9% as criminal offenders in the study area. In view of the various urban crimes noticeable in the area, it is therefore, recommended that adequate equipping of the security personnel for effectiveness in execution of duties, deployment of officers from CID unit in patrolling the crime hotspots such as Angwan Roca, Gbedayi and FM this is a necessity in apprehending criminals and ameliorating the incessant occurrence of crime.

Keywords: Crime, Environment, Space, Neighbourhood, Spatial Pattern

Introduction

Crime and criminal activities cannot be divorced from the location of occurrence. The origins, pathways, and destinations of individuals are determined by physical environments. In urban environments, in particular, the built physical form of the city encourages (and often restricts) movement along specific, planned pathways, which connect the origin and destination points – residences, workplaces, schools, shopping and entertainment areas, to name a few (Brantingham & Brantingham, 1981, 1991). As urban structure determines the patterns of circulation so also does it shape patterns of criminal activity (Brantingham & Brantingham, 1995). Changes to the built urban environments, such as urban development, growth, decline or gentrification, are designed to shift the movement within and use of urban spaces; as such, these processes may have considerable impacts on the distribution of criminal activity.

Crime is a complex and multi-dimensional phenomenon (Breetzke & Horn, 2008). Crime typically includes behavioural, psychological, criminological, spatial (geographic), managerial, correctional and perceptual dimensions. It is also a destructive socio-economic phenomenon and the search for the rationale behind crime is an ongoing task.

Crime, described here as the breaking of laws, to which legitimate punishments are attached (Scott & Marshall, 2005) is a major social problem from which no known society is immune. In one of the earliest works with focus on the relationship between population density and the incidence of crime, Simmel (1905) theorized that the intensification of nervous stimulation that results from high population density in cities results in different forms of behaviours that negate the norms guiding behaviour. Put differently, high population density contributes to delinquency and crime in society.

Researchers, the world over, have explored different dimensions of crime, including types, trends, patterns, processes, causes, consequences and correctional approaches. Few of the most recent of these studies were reviewed to show what is known about the relationship between population density and crime across the globe in general and Nigeria in particular. A study shows that property crime rate and population size are related but population size has no correlation with violent crime rates (Nolan, 2004). Harries (2006) on the other hand found violent and property crimes to be correlated with population density. Another study by Baltagi (2006) shows that although crime rates tend to increase with population density, the correlation is not significant. Yet another study suggests that violent and property crime rates are positively associated with percentage of commercially zoned areas, percentage of one-person household and unemployment rate (Kepple & Freisthler (2012).

Other studies have revealed findings of different shades on the subject matter including one by Chamlin & Cochran (2004) which concludes that population size (not density) is a strong predictor of violent and property crime counts; and another by Christens & Speer (2005) which argues that population density is among the most significant negative predictors of violent crime per capita (Christens & Speer, 2005). Studies have also attributed crime to other factors such as unemployment (Edmark,

2005; Andresen, 2006; Omotor, 2009; Hassan *et al.*, 2012); absence/presence of tree canopy (Troy *et al.*, 2012); presence of young populations (Andresen, 2006); combination of industrial/commercial land use with household dwellings (Shopeju, 2006); urbanization, weak criminal justice system and negative role models (Hassan *et al.*, 2012).

One study has demonstrated that there is regional variation in rates of personal crime in Nigeria with the North-East having the highest rate and the South-West having the lowest rate. In addition, the study shows that the urban areas have higher rates of crime than the rural areas (Ikoh, 2011). This study seeks to solve the puzzle on state and regional variation in armed robbery cases in Nigeria. In a recent study in Nigeria, Omotor (2010) argued that population density is positively correlated to all forms of crime. The current study also seeks to interrogate this assertion by exploring the association between one form of crime, armed robbery and population density in a given year in which census was conducted in Nigeria. This takes away the need for projections which come with errors.

Although crime and violence are increasingly recognised as "major obstacles to the realisation of development objectives (Fajnzybler *et al.*, 1998), emphasis has prioritised obvious war and conflict manifestations rather than more long-term 'normalised' (Vanderschueren, 1996) crime and violence. However, the negative consequences of rapidly expanding crime rates (Vanderschueren, 1996) on economic development and productivity (especially in developing countries), has encouraged recent (albeit limited) research into non-war crime (Ayers, 1998). Distinguishing between crime and violence is necessary, for whilst 'crime' ("an act punishable by law") is dependent on specific laws (although most crimes receive international agreement); 'violence' enables broader definition as "the undue exercise of physical force" (Vanderschueren, 1996).

Realistically, globalisation of crime is crucial to Nigeria's rising crime rates, global 'organised' crime is not the focus of this paper. Rather, attention addresses the normalised property and personal "silent riots of everyday life" (Bourdieu, 1999). World-wide, the majority of urban crime is property-based (e.g. burglary, mugging), whilst violent personal crime (e.g. assault, murder, rape) forms 25-30% of offences (Moser & Holland 1997). Their validity in Nigeria is confirmed by the Nigeria Police Force Data, 2017: property crimes are most common (47.2% of crimes), followed by violent personal crimes (16.8%). Both types of crime encourage fear and insecurity, often according to specific urban spaces and social groups.

Despite general agreement that crime impedes development (Camerer *et al.,* 1998), there is minimal consensus regarding whether development reduces (Ayres, 1998) or encourages (Mdlwaine, 1999) crime. However, the complex causes of crime are beyond adequate attention here, as analysis addresses victims (real and potential), fear of crime and subsequent urban-form protections, rather than perpetrators (Moser & Clerke, 2001).

Crime is inherently a spatial phenomenon. Criminal offences and criminal offenders both exhibit a distribution in space with these two aspects traditionally forming the central concerns of environmental criminology (Bottoms & Wiles 2002). The theoretical underpinning of environmental criminology is that offences and offenders cluster together, and that within this context spatial randomness is the exception rather than the rule (Harries, 2006). Social structure theorists argue that people living in equivalent environments tend to behave similarly, and if the environment didn't influence human behaviour crime rates would be distributed equally across the social and geographical structure, which of course they are not (Siegel, 2001). In South Africa, empirical investigations into the spatial distribution of offenders and offences are sorely lacking.

The problems associated with simply adopting current theories of crime are well documented with researchers highlighting the fact that, the obvious problem is the inapplicability of many key theoretical concepts and assumptions (Willis *et al.,* 1999; Lynch & Groves, 1995). For example, Nigerian offenders may not subscribe to the generally agreed-upon principles of least-effort, familiarity, criminal range, safety zones and mental buffers, among others, in the selection of a target. Similarly, local offenders may experience adverse ecological factors, such as high residential mobility, differently to "international" offenders. In short, as part of a comprehensive critical theory of crime this country also requires a theoretical perspective to make sense of the spatial reality of crime.

Popular theory in the criminal justice sciences states that; crime is likely to occur when motivated offenders converge, suitable targets exist, and capable guardians are lacking (Cohen and Felson, 1979). What is more likely to occur is that motivated offenders will commit crime against suitable targets at certain places according to the environmental characteristics of those places that make it easier to complete the crime successfully and reap the rewards without punishment (Clarke and Felson, 1993). Routine activities theory is event focused, and apply the theory to practice. Policing of the urban environment should therefore, be focus on future events by anticipating and controlling the behavior of individuals no matter where they are or where they are traveling. This endeavor is very difficult, but what is more manageable for police agencies is to allocate resources to places that are most attractive to motivated offenders and to places where crime is most likely to occur given certain environmental characteristics (Weisburd, 2008).

These places have the greatest crime risk and in the long-standing debate in criminology concerning what promote crime; it is not enough to say that crime risk increases when the number of criminals

increases. What is more likely is that the crime risk at places that have criminogenic attributes is higher than at other places because these locations attract motivated offenders (or more likely concentrate them in close locations) and are conducive to allowing certain events to occur. This assessment is different from saying that crime concentrates at highly dense hotspots. It suggests, instead, that individuals at greater risk to commit crime will congregate at locations that are best suited for perpetrating it. This statement does not imply that more or better targets of crime exist, but, the conditions for criminal behaviour are better at these places than at others.

Brantingham and Brantingham (1981) provided important conceptual tools for understanding relationships between places and crimes. They referred to the "environmental backcloth" that emerges from the confluence of routine activities and physical structures overlaying areas (Brantingham & Brantingham, 1981). This backcloth is dynamic and can be influenced by the forces of "crime attractors" and "crime generators" which contribute to the existence of crime hotspots (Brantingham & Brantingham, 1995). Attractors are those specific things that attract offenders to places to commit crime. Generators refer to the greater opportunities for crime that emerge from increased volume of interaction occurring at these areas. The concentration of crime at specific places or hotspots is consistent with the idea of an environmental backcloth, is well supported by research (Eck, 2001; Eck et al., 2005; Harries, 1999; Sherman, Gartin, & Buerger, 1989), and comports with the daily findings of crime analysts in law enforcement agencies around the world (Weisburd, 2008). Crime hotspots indicate where behavior is clustered. Connecting criminal behavior to precursory environmental context is more challenging, but important for comprehensive crime analysis and forecasting efforts.

The paper is aimed at assessing the nature (inherent pattern, form or the mode) of criminal offence in Maitumbi neighbourhood and also the impact (effect, aftermath result, and imprint) of crime on the location, this is done taking cognizance of an emphasis of urban planning which is ensuring the security and safety of life of the urban populace. After which observations of factors which instigate criminal offence and factors which stifle the amelioration of crime incidences were noted and the solution acquired was used to produce up-to-date information on crime control in Maitumbi neighbourhood. In achieving the aim, the following objectives were employed; assess urban crime data of Maitumbi from year 2010 to 2016; examine nature of crime; ascertain the predominant age and gender of the offenders; and identify crime hotspots of the study area

Study Area
The study is primarily focused on Maitumbi district of Minna, Niger State. It is located within latitude 9º33´ north and longitude 6º33´ east of the Greenwich Meridian. It is situated in the guinea savannah geographical region of Nigeria, it is a relatively rocky area with average rainfall distribution of 1051.7mm peculiar to the guinea savannah region, and hence, the vegetation distribution is a mixture of tall trees, short trees and shrubs, wet season in the study area lasts 6-8months. The average sunshine intensity is 27.3º Celsius. The majority tribe is the Gbagyi with commonly spoken language to be Hausa; the neighbourhood is a mixture of both residential and commercial land use. The area has Maitumbi Primary school and Maitumbi Secondary school as government owned and several private schools. Businesses thrive in the location which is an incentive for adequate investment to be channelled; block industries and a Dana owned pharmaceutical industry is present and operational in the study area.
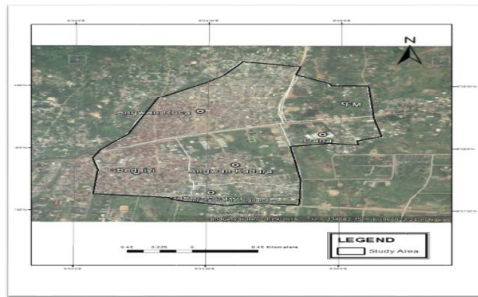
Figure 1: Maitumbi Neighbourhood
Source: Google Earth Imagery, 2017

Methodology

Assessing urban crime data of Maitumbi between the years 2010 to 2016 was obtained primarily from the Maitumbi Police divisional station, whilst examining the nature of crime was gotten from the data administered using questionnaire as well as the details of the report acquired from the divisional Police office. The predominant age and gender likewise were collected using the questionnaire and the Police crime report record collected in the cause of the survey, crime hotspots were determined from the report of the Police and the feedback of the respondents upon interaction in the process of the field survey.

The study adopted theoretical framework for explanations on the assessment of the spatial pattern of urban crime, this is to compare already postulated theories as regards patterns of spatial crime in urban areas and its significance in the explanations of the possible factors responsible for crime and criminality tendencies within a location and among individuals.

The method employed in this research is the quantitative research method and quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys. With a sample size of 19,572 persons with sampling technique adopted is the systemic random sampling technique and the number of questionnaires to be administered as derived from Abraham et.al formula $\frac{N}{1+N(e)2}$ is 392, howbeit 241 questionnaires were administered measuring 61.5% success. Additional information/data was however obtained from Maitumbi divisional Police station, a total of 90 recorded criminal cases. This is employed to address the four objectives which are meant to achieve the aim of the paper.

Table 1: Data Analysis and Presentation

Objectives	Data Required	Data Source	Method of data analysis	Method of presentation
Assess urban crime data of Maitumbi from the year 2010 to 2016	Secondary data	Crime Report	Descriptive analysis	Tables and Charts
Examine the nature of crime.	Primary data and Secondary data	Crime report sheet/records and administered questionnaire	Descriptive analysis	Charts and tables
Ascertain the predominant age and gender of the criminals	Secondary data	Crime report sheet/records	Descriptive analysis	Charts and tables
Identify crime hotspots of study area and prepare an updated urban crime database for Maitumbi.	Secondary data	Previous project and Crime report sheet/records	Geospatial analysis	Maps

Analysis and Discussion
Analysis of Urban Crime
Assessing the crime information of Maitumbi neighbourhood between the years 2010 to 2016, the sex distribution of the respondents taken, the distribution taken was to avoid any bias in the sex distribution, although, the sampling technique for the dissertation is random sampling. The age distribution likewise was random, due to the sensitivity of the topic being discussed adult respondents were mostly interviewed, a bulk of the respondents were between the ages 36 to 45 years with a frequency of 69 persons and a percentage of 28.6, followed by respondents between the age 26 to 35 years with percentage of 27.4 and a frequency of 66 while persons between age 18 to 25 years had a percentage of 24.1 and a frequency of 58 persons. Respondents' identity was also collected; this information revealed that both indigenes and non-indigenes are victims of crime at some point based on the wide variety of data gotten, and also according to the information gathered from Maitumbi Police divisional office revealed that both indigene and non-indigene are perpetrators of criminal offence. The longevity of residents' stay in the study area is also a key consideration for ascertaining the crime data, the pattern of criminal occurrence can be justified by the persons who have resided in the study area for a long period of time; 123 out of the total interviewed population of 241 had resided in Maitumbi above 10 years. This thus authenticates the responses gotten. Access to security personnel's/operatives by crime victims within the study area in cases of incidence is professed to have improved significantly, outlining that crime situation without the presence of the security outlet several years back and the crime situation now with the presence of the security outlet has experienced immeasurable improvement. The medium of connecting with the operatives and their responses has generally improved.

Table 2: Category and Type of Crime from 2010-2017

Crime Category	Type of Offence
Crime Against Person	Armed Robbery, Abduction, Assault, Breach of Trust, Causing Hurt, Cheating, Criminal Force and Rape
Property Crime	House Breaking, Possession of Hard Drug, Shop Breaking, Theft and Trespass
Crime Against Public Order	Impersonation, Inciting Disturbance, Mischief and Public Disturbance

Nature of Urban Crime and Offences
Examining the nature of crime in the study area had several factors overviewed among which are the trend of crime, frequency of crime incidence, predominant period of occurrence, feelings of safety living in neighbourhood and moving around the neighbourhood at night. The trend of crime in the study area has thus; subsided with the findings from the research however this does not negate the presence of criminal activities in the study area. Crime frequency likewise in the study area is infrequent that is crime occurrence does occur but not on a frequent/incessant pattern. The predominant period of criminal offence has a percentage of 54 for criminal activities perpetuated in the night period followed by crime occurrences in the afternoon which is 24%, the respondents selected this period of the day attesting that offenders indulge in this criminal activity when property owners/ home owners are out to work. On a general basis the feeling of safety among residents in the study area is generally average as 66% profess feeling safe living in the neighbourhood and 64.3% profess feeling safe moving around at night in the neighbourhood while only 1.7% profess feeling unsafe living in the neighbourhood and 16.4% attest feeling unsafe moving around at night.
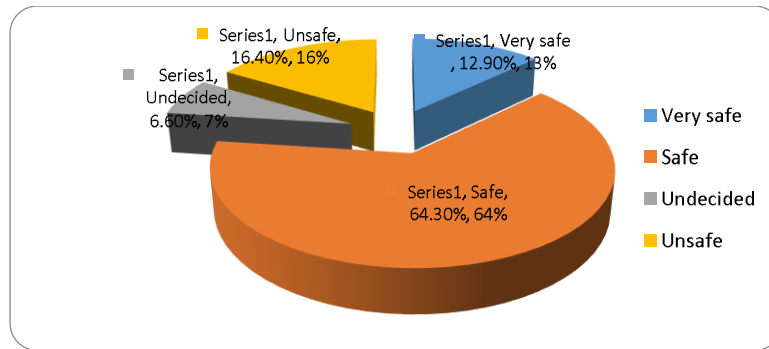
Figure 2: Feeling of Safety Walking around Neighbourhood at Night

Examining the nature of criminal offences in the study area presents that the bulk of criminal offences are non-heinous offences. Criminal occurrence in the neighbourhood is varied which was further categorized into crime against persons, property crime and crime against public order. Property crime and crime against persons have the highest recorded cases constituting 52% and 42.4% respectively. Crime offences such as theft, assault and cheating topped the chart with percentages of 44%, 18% and 11% respectively.

Demographic Attributes of Offenders
Ascertaining the predominant age and gender of the offenders, the respondents response revealed a close correlation with the data obtained from the divisional Police outlet, according to the respondents report 48.1% which represented persons below the age of 20 years were indicated to be perpetrators of criminal offences in the study area, followed by persons between 21-25 years with a percentage of 46.9% as criminal offenders in the study area, this information was obtained from the data analysed from the questionnaires administered (see figure 4.12) while the data collected from the Police divisional station recorded a crime frequency of 55 out of the total 91 crime cases collected and collated

as crime cases perpetrated by persons of ages 18-25 years.

Crime Hotspots
Identification of crime hotspots of the study area, as earlier defined crime hotspot is a region with clustered criminal occurrences. The data obtained from the Police outpost at Maitumbi divisional station better explains regions with clustered crime experiences, figure 4.16 better buttresses this point. Regions such as Angwan Roca, FM, Gbedayi and Dana area record an estimated higher rate of criminal offences.

Figure 6 below shows the facilities distribution as well as the crime cluster for Maitumbi neighbourhood Minna - Niger State. The intensity of the colour reveals the magnitude of criminal offence, the deep red colouration reveals high cluster high crime rate while the lighter coloured red located especially at the eastern part of Maitumbi represents low cluster high crime and lastly the remaining portion is not significantly clustered with as well low crime cases. Regions that fall under high cluster and high crime are Angwan Roca, Angwan Kadara, Sabon Angwa and Gbedayi while FM and Dana area are low clustered with high crime case.
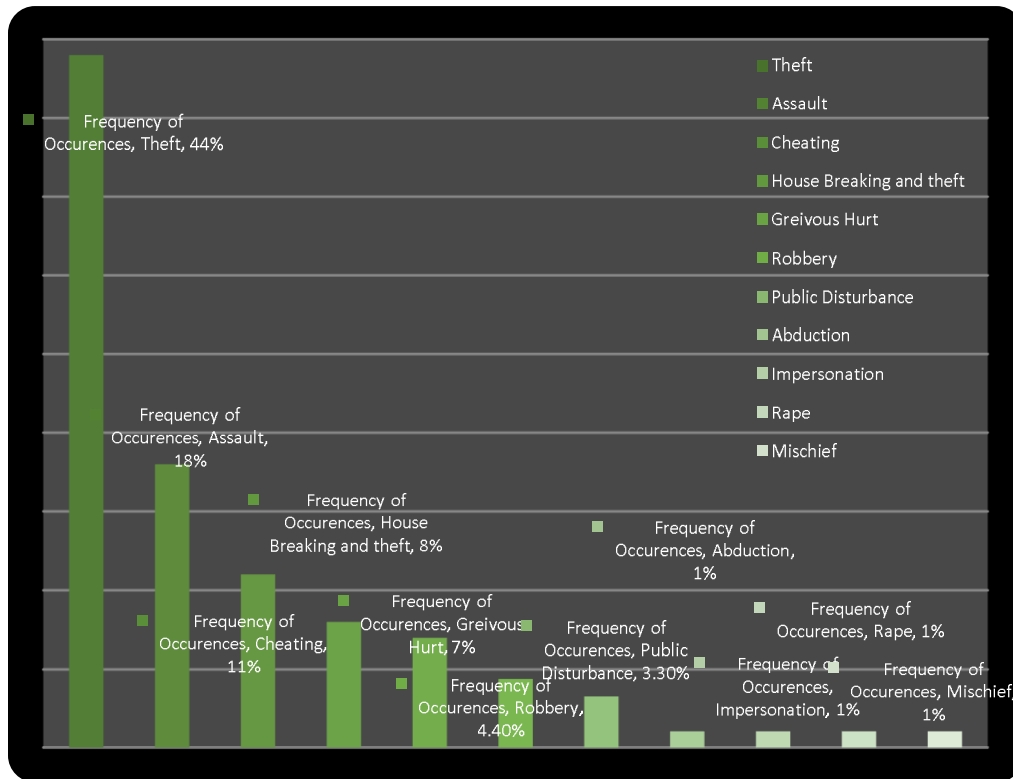
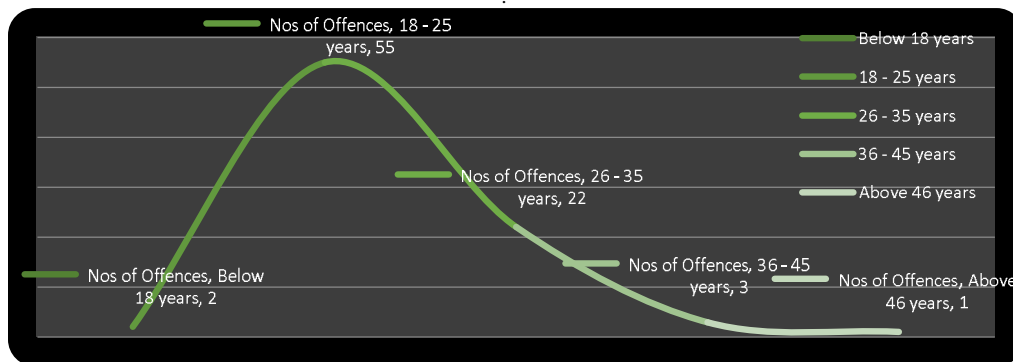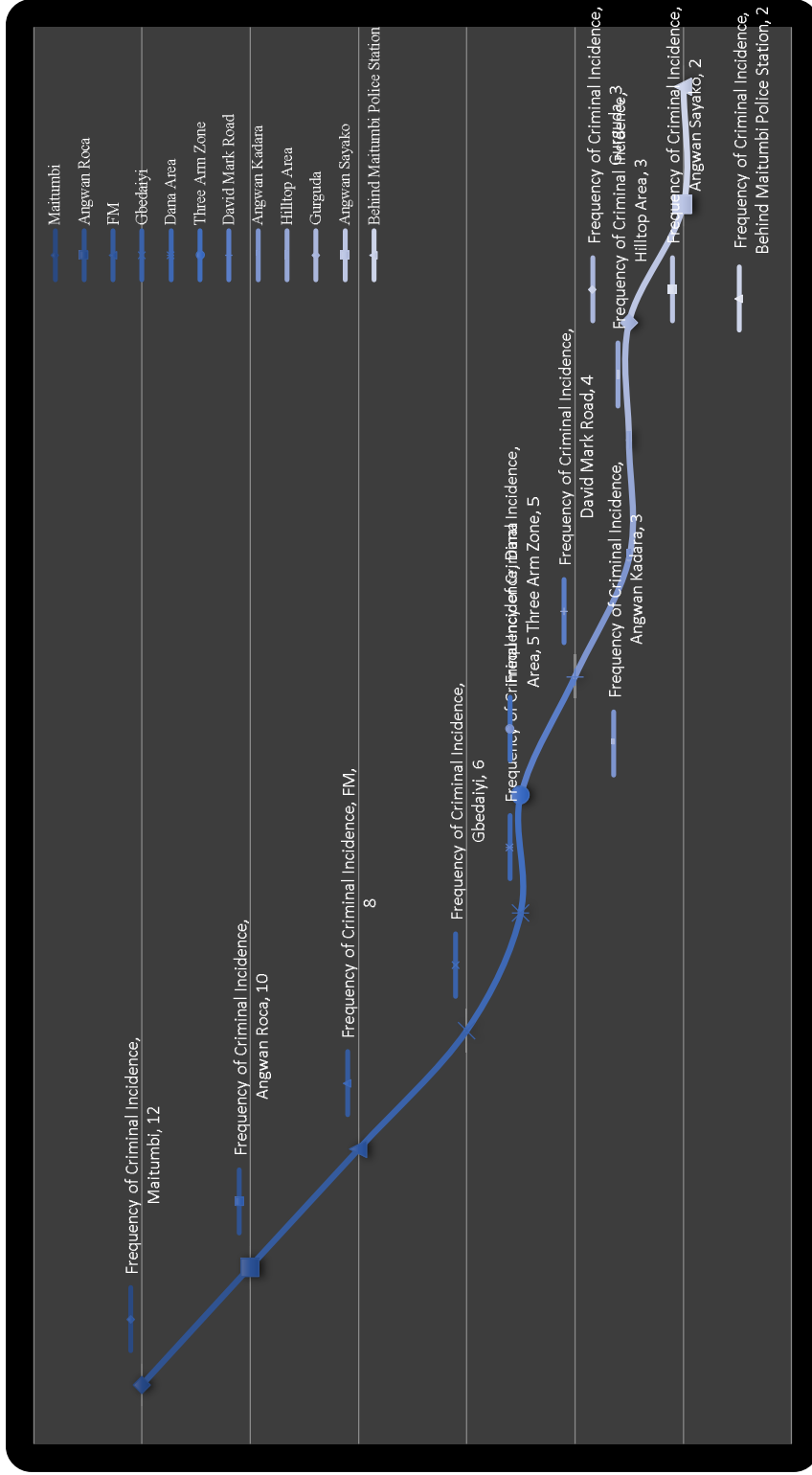Figure 3: Typology of crime and frequency of offence

Figure 4: Age group of offenders and frequency of offence

Legend:
- Maitumbi
- Angwan Roca
- FM
- Gbedaiyi
- Dana Area
- Three Arm Zone
- David Mark Road
- Angwan Kadara
- Hilltop Area
- Gurguda
- Angwan Sayako
- Behind Maitumbi Police Station

Frequency of Criminal Incidence, Maitumbi, 12

Frequency of Criminal Incidence, Angwan Roca, 10

Frequency of Criminal Incidence, FM, 8

Frequency of Criminal Incidence, Gbedaiyi, 6

Frequency of Criminal Incidence, Dana Area, 5

Frequency of Criminal Incidence, Three Arm Zone, 5

Frequency of Criminal Incidence, David Mark Road, 4

Frequency of Criminal Incidence, Angwan Kadara, 3

Frequency of Criminal Incidence, Hilltop Area, 3

Frequency of Criminal Incidence, Gurguda, 3

Frequency of Criminal Incidence, Angwan Sayako, 2

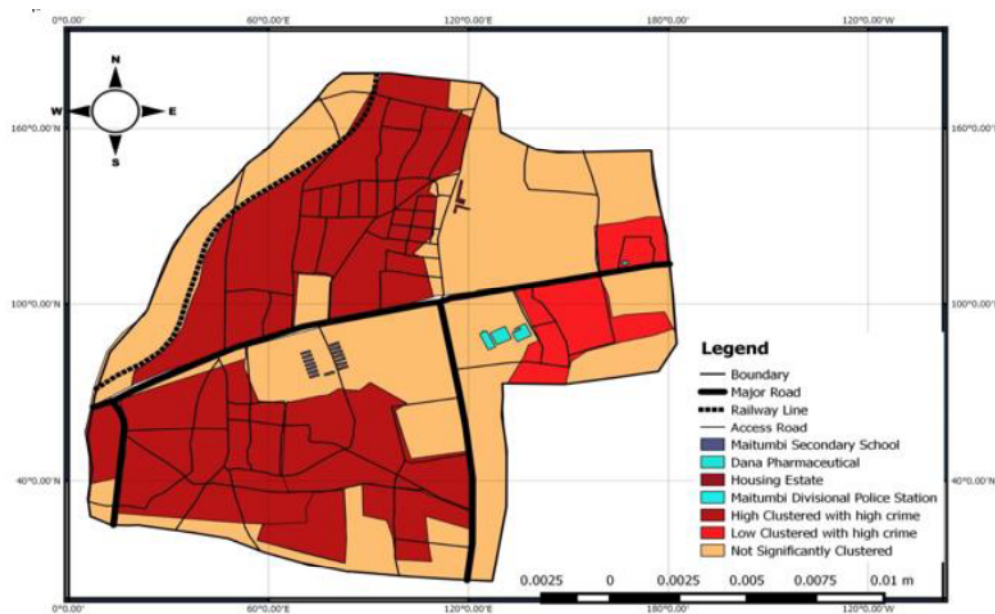Frequency of Criminal Incidence, Behind Maitumbi Police Station, 2

Figure 6: Maitumbi Crime Cluster and Facilities distribution

Recommendation and Conclusion

The compilation of assessment of the dimension (nature) and preponderance (impact) of urban crime in Maitumbi ward of Bosso local government area of Niger State, Nigeria underwent processes, which was critically analysed to ascertain and establish research findings.

Crime and criminality cases from the findings of the research, trace its root to two basic sources which are unemployment and poverty. These crime cases are a serious threat to urban security and safety. Maitumbi neighbourhood is not different from every other urban center taking being tagged a high crime zone under Minna township according to Jinadu et.al (2012). Although, the studies outline criminal occurrences, cases such as robbery, rape, kidnapping, manslaughter are rather on the low side. This therefore establishes the absence of heinous crime incidences only minor criminal offences are perpetuated.

Achieving safety and security for city dwellers a key goal of urban planning, the following considerations must be carefully considered in the context of this report. The outcome of this research has as its response to the findings need for implementation of measures to curb criminal activities in the study area and to enhance safety and security among residents of the urban centres generally and Maitumbi specifically.

i. There is need for provision of skill acquisition and scholarship programmes for unemployed and/or unskilled persons and scholarship programmes respectively for youths who are interested in furthering their education but are constrained by inadequate funds.

ii. There should be adequate equipping of the security personnel for effectiveness in execution of duties, deployment of officers from CID unit in patrolling the crime hotspots such as Angwan Roca, Gbedayi and FM this is a necessity in apprehending criminals and ameliorating the incessant occurrence of crime.

iii. State government intervention in economic empowerment and slum upgrade or urban renewal, will be of immense benefit to the residents which will on the long run curb

joblessness/unemployment thus offsetting the effect of the absence of jobs and a well-structured neighbourhood. The effect of which is crime and criminality cases.

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