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"CITIES WE HAVE VS. CITIES WE NEED"

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Short Outlines

Papers

1. Transforming human settlements
2. Planning activism and social justice
3. Envisaging planning theory and practice for the next decades
4. Urban planning and policy making in times of uncertainty, fragility and insecurity
5. Intelligent cities for people
6. Planning for an interlinked and integrated rural-urban development

Authors are responsible for the content of the short outlines and the full papers that are listed in the order of their presentations in each track.



Session 1: Rural transformations, fringe, sprawl

Madina JUNUSSOVA, University of Central Asia, Almaty, Kazakhstan

Planning economic development of city and region: strategic assumptions of the state versus local capacities

The paper aims to present immediate outcomes from the research on planning roles of the local governments in Kazakhstan. The national government pushes urbanisation by assigning new roles to certain cities. The local governments struggle to promote economic development under the pressure of growing urban-rural disparities.

Siwaporn KLINMALAI, Thammasat University, Pathumthani, Thailand

The adaptation of former gated communities in urban sprawl of Bangkok metropolitan area, Thailand

A gated community development has been developed in the Bangkok Metropolitan Area for 50 years. The physical elements have been adapted and transformed according to the residents and socio-economic situation. The categories of adaptation will reveal the relevant factors of changes.

Xiaoxiao DENG, Shanghai Tongji Urban planning & Design institute, Shanghai, China; Xiao ZHANG, Jiangsu Institution of Urban Planning and Design, Nanjing, China

Spatial evolution of rural settlements in urban fringe of Shanghai metropolitan area

The rural settlements in the Shanghai urban fringe transformed considerably in the past 30 years under the influence of urbanization, presenting characteristics such as heterogenization, gathering, communitization, etc. A comprehensive structure was established to explain it from five aspects, including driving force, interacting path, supporting facility, promotion mechanism and regulatory mechanism.

Ernst DREWES, Mariske VAN ASWEGEN, North-West University, Potchefstroom, South Africa

Rural resilience: transforming mining towns and settlements

The focus of this research is on transforming traditional mining villages as well as surrounding urban settlements into a more resilient urban conurbation. The study area focuses on a rural region in South Africa that has been transformed the past twelve years.

Prince Ike ONYEMENAM, Oluwabukola A. AYANGBILE, Ayobami POPOOLA, Bamiji M. ADELEYE, University of Ibadan, Ibadan, Nigeria

Towards transforming human settlements in urban fringes of delta state, Nigeria

Spatial exclusion is a negative occurrence, universally. It implies a socio-spatial segregation of Urban-Fringe dwellers, given its major hindrance to both functional urban development and the inclusive vision of cities we need. The need towards transforming these fringe areas in Urban-Delta forms the underpinning rationale for this paper.

Ahmed SANGARE, Totem Architects, Abidjan, Ivory Coast

Deprived human settlements in Abidjan: from theory to action

The UIA-CIMES and MOST-UNESCO "Base Plan" method was designed as a light planning tool for intermediate cities that allows them to trigger immediate actions for the improvement of their daily living conditions. This paper describes the implementation of the method in Adjouffou, an illegal settlement south-east of Abidjan.

Session 2: Morphology, rehabilitation

Payap PAKDEELAO, Thammasat University, Pathumthani, Thailand; Korawan RUNGSAWANG, Silpakorn University, Bangkok, Thailand

Four decades of vertical living: a comprehensive analysis of the architectural development of the vertical housing projects by the national housing authority in Bangkok and the greater metropolitan area between 1973 and 2013

A multifaceted architectural and urban analysis of the vertical housing projects created by Thailand's National Housing Authority in the Greater Bangkok Metropolitan Area between 1973 and 2013 examines the projects' design evolutions, the factors that contributed to such changes and the relationships between the inhabitants and their residences.

Bamiji ADELEYE, Mohammed NDANA, Federal University of Technology Minna, Niger, Nigeria; Oluwabukola AYANGBILE; Ayobami POPOOLA, University of Ibadan, Ibadan, Nigeria

Urban transformation: a changing phase of Minna central area

Urban centres in the world are undergoing various facets of changes; these changes are also evident in developing countries. This phenomenon is not different with the central area of Minna, Nigeria. This calls for the SDGs approach that emphasized participation and inclusive planning in the management of Minna central area.

Urban Transformation: A changing phase of Minna central area

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Synopsis

Urban centres in the world are undergoing various facets of changes; these changes are also evident in developing countries. This phenomenon is not different with the central area of Minna, Nigeria. This call for the SDGs approach that emphasized participation and inclusive planning in the management of Minna central area.

Introduction

Cities in different part of the world are experiencing different forms of changes. These changes often manifest itself in term of population growth, urban gentrification, conversion of vegetal cover in other land uses and improvement of infrastructures. The transformation witness by urban centres in the world is an indication that urban centres are the focal point of economic, political and artistic activities (Spates and Macronis, 1987). Spates and Macronis (1987) were of the opinion that urban centres are the catalyst for civilizations and this proves the assertion of the UN Habitat (2008b) that state that, over half of the world's population currently lives in urban areas. This assertion is not farfetched because urban centres worldwide exerts an increasing attraction on people (Gbadegesin and Aluko, 2010).

That is to say, the changes experienced by major urban centres, especially the developing countries in the world can be attributed to rapid urbanization and population growth (UN Habitat, 2009). It is believed that between 2007 and 2025 the annual rate of change of the urban population in developing countries is expected to be 2.27 percent as against 0.49 percent of the developed countries (World Bank, 2002). More so, the rapid urbanization experienced in the developing countries will be characterized by poor urban management and the inability of the government to provide urban infrastructure (UN Habitat, 2009).

This phenomena of urban transformation of towns and cities in the world are often challenging to urban planners, particularly in the developing countries, where less planning is being carried out (Egunjobi, Jelili and Adeyeye, 2007). It is considered that the governance and the management of the urban centres in developing countries are most discouraging, because the pace of the rapid urbanization and population growth normally go beyond the control of the planners, beyond management capacities and beyond available resources (Agbola and Olurin 1998 as cited by Olujimi, 2009).

The relics of planned modernist urban cores are often displayed in urban centres of developing countries, and these urban centres are frequently surrounded by vast areas of informal settlements, the commercial hub and residential enclaves (UN Habitat, 2009). This

belief is also visible in the Core of Minna, Niger state. The informal settlements surrounding the city centre and the commercial activities located in the city centre of Minna frequently breeds challenges such as traffic congestion, on street trading, overcrowding, and indiscriminate waste disposal.

In an effort to address the problems posed by urban transformation in Minna, the Niger State Government took a decisive step in 2008 to ameliorate these problems through implementation of urban policies. New roads were constructed, other roads were rehabilitated, demolishes were done and land uses were relocated. An example was the relocation of the Minna central market from the Mobil area to the western by-pass of the state. Against this background, this paper will assess the changes that have occurred in the core area of Minna between 2008 and 2016 with its implications on human settlement.

Aim and Objectives of the Study

To achieve this assessment, the following objectives were considered:

- i. To examine the socio-economic characteristic of the residents of Minna Core;
- ii. To give a spatial analysis of Minna Core between 2008 and 2016;
- iii. Examine the factors responsible for Urban transformation in Minna Core; and
- iv. To ascertain the implication of urban transformation in Minna Core.

Study Area

Minna Core is located between latitude 9°35' 00.69"N and Longitude 6° 31'00.69"E (figure 1.). The Minna core area comprises of six neighbourhoods that is, Makera, Sabon-Gari, Nassarawa, Minna Central, Angwan Daji and Limawa. Minna Core is encapsulated by the Bosso Local Government area of Niger State (figure 1).

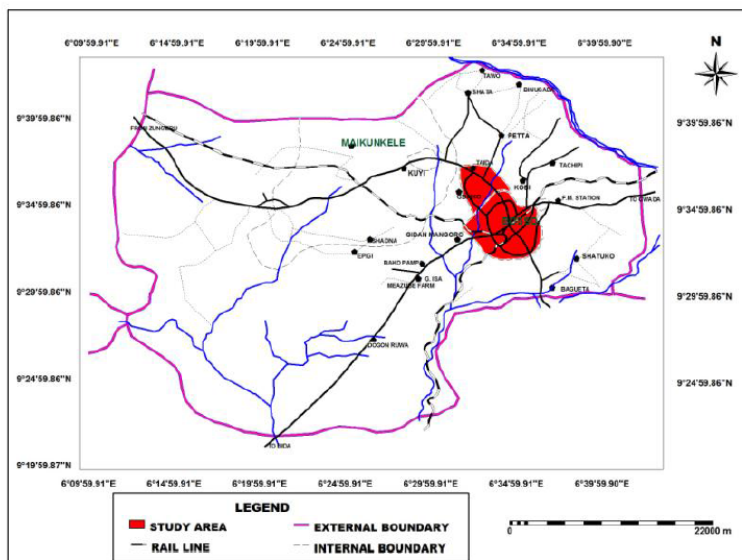


Figure 1: Minna highlighted in Bosso Local Government Area.

Source: Department of Urban and Regional Planning, FUTMinna

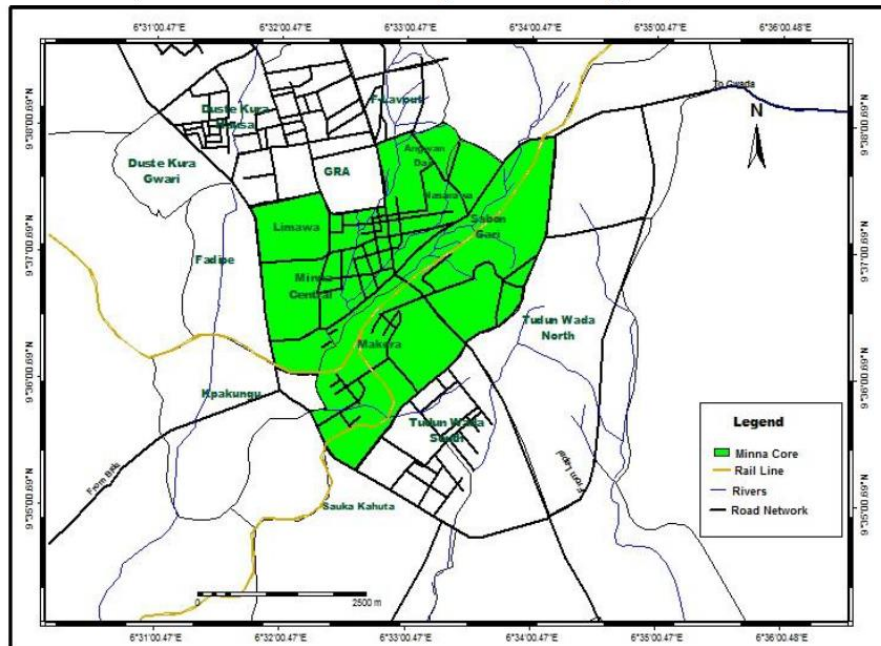


Figure 2: Street Guide Map of Minna with emphasis on Minna Core.

Source: Department of Urban and Regional Planning, FUTMinna

Methodology

Research Design

The cross-sectional design and the longitudinal research design were employed for this research. The cross-sectional design involves the administration of questionnaires and the longitudinal design for the interpretation of the Landsat images and the quick bird Images.

Sources of Data

The primary and the secondary sources of data were used for this study. The primary source of data used for this study involves the use of questionnaire administration, ground truthing, taking of photographs, and detail survey. For the secondary source of data, literatures relevant to the study were reviewed and also satellite images were acquired. All the satellite images were obtained from the National Centre for Remote Sensing and GIS, Jos, Plateau State.

Sampling Techniques and Sample size

The purposive sampling techniques was used for this study. Here the questionnaires to be administered were selected based on the judgement of the researcher. Using the Macorr sampling calculator with the confidence level of 95% and an interval of 7 a sample size of 196 was deduced for the study.

Post Processing

Two sets of satellite images were used for this study, that is, the Landsat images with 30metres resolutions and the quick bird image with 0.65cm resolution. The Landsat images used were, the enhance thematic mapper plus (ETM⁺) for 2008 and 2016 likewise the quick bird Image of 2008 and 2016 were also used. On the two sets of satellite images (both Landsat and Quick bird) the area of interest was clipped out using Arcgis 10.2 Software. Band 4,3,2 were used to form the “false colour composite” for the 2008 and 2016 landsat images. In this band combination Cyan Colour appears as Built-up area, Dark Red appears as vegetation while water bodies are shown in blue colour. Sample set (built-up area) was created on the “false colour composite” of the Landsat images of 2008 and 2016. These images were subjected to supervised maximum likelihood classification on Arcgis 10.2 software and the land area for the sample set created (Built-up area) was ascertained.

“Shape files” of features (Commercial areas, roads, Public land uses) were created on the quick bird images of 2008 and 2016. These features were digitized on the images and the land areas of the features were determined in order to carry out a spatial analysis.

Discussion of Result

Socio-Economic Characteristic of the residents of Minna Core

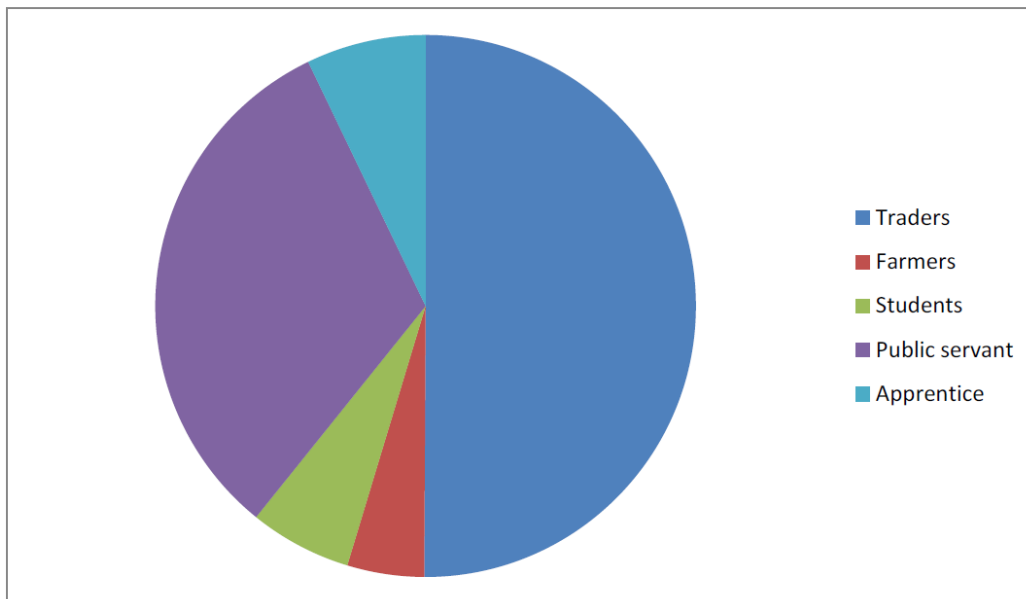


Figure 3: Socio Economic characteristics of the Core

Source: Authors, 2016

Figure 3 illustrates data relating to the Socio Economic characteristics of the respondents. The figure shows that 32% of the respondents are Public Servant in the Core of Minna. The

number of government establishments is responsible for this. The highest numbers of the respondents are Traders with 50%. The presence of Shops, Stalls in the Core of Minna can be attributed to this and this affirms the claim of Orintunsin (2009) that the core of Minna is the "heart" of Commercial activities. Apprentice and students constitute 7.14% and 6.10% of the respondents, respectively, while 4.59% of the respondents are farmers.

Spatial Analysis of Minna Core between 2008 and 2016

The trend of growth between 2008 and 2016 (table 1) is calculated by subtracting the area of the Land use for the year 2008 from 2016 that is, B-A. The annual frequency of change (D) is determined by dividing the magnitude of change of the Land use by the number of years between the periods, that is, 8 years for 2008 - 2016. The percentage of change (E) is calculated by dividing the magnitude of change C of the Land use (Built-Up Area) by the figure of the base year that is, 2008 then multiplying the result by 100.

Year	Built-up Area (km ²)	Magnitude of change (C) (km ²)	Annual Frequency of change (C/8)	Percentage of change (C/A)
(A) 2008	8.06			
(B) 2016	14.02	5.96	0.745	73.9

Table 1: Trend of growth between 2008 and 2016
Source: Authors, 2016.

Table 1 shows that between the year 2008 and 2016 the change in the core of Minna was progressive. The analysis reveals a magnitude of change of 5.96 km² in the core area of Minna. This implies that additional 5.96 km² of green areas were converted into built-up areas in the core of Minna between 2008 and 2016. The analysis also reveals that, annually 0.745km² of green areas are converted into built-up areas with a percentage of change of 73.9%. The change experienced in the core of Minna can be attributed to population increase and rapid urbanization. The spatial extent of the Core area of Minna is shown in figure 4

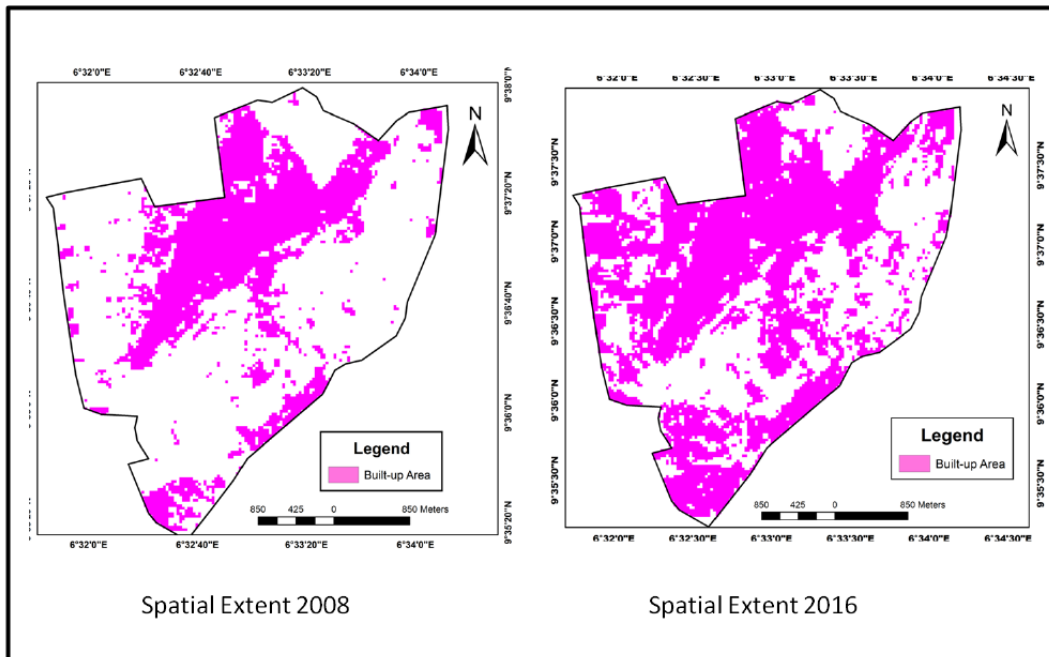


Figure 4: Spatial Extent of Minna Core in 2008 and 2016
 Source: Authors, 2016.

In order to meet the challenges posed by rapid urbanization and population increase in the core of Minna, the government decided to bring some innovation via her policies and these policies brought about transformation at the core of Minna. In 2009, the Minna central market was relocated to the site earmarked for the proposed stadium because the central market of 800 stalls and shops of different sizes was believed to be grossly inadequate by the State government (Orintunsin, 2009).

Orintunsin (2009) was of the view that, the Illegal structures in the market have tripled the legal ones, more so, every available space within the Minna central market were converted to stalls, and this made the market spilling over to Mobil Roundabout which is assumed to be the heart of Minna city. It is believed that the Minna Central market was fast becoming another Oshodi (Lagos) Market in Minna, where Motorists and customers in the market have to compete and struggle for the little available space with pepper and grocery sellers because of the on street trading found around the market area (Orintunsin, 2009).

S/No	Land use	Area (Metres Square)
1	Roads	412894
2	General Hospital	41983
3	Minna Central Market (Old Market)	58821
4	Katerigwuri Market	21531
5	Mobil Garage	3750
6	Proposed Stadium	390207

Table 2: Land use Analysis of Minna Core Area in 2008

Source: Author, 2016.

Table 2 shows the land use analysis of Minna Core Area in 2008. The analysis reveals that roads in the core area of Minna were 412894 M² of the total land area in 2008. The General hospital covers a total land area of 41983 M² while the Minna Central market and the Katerigwuri market have a land area of 58821 M² and 21531 M² respectively in 2008. A total of 3750 M² was recorded in Mobil garage in 2008. The analysis (table 2) further reveals that 390207 M² was allotted for the proposed stadium (in the Minna Core) as stated by the Minna Master plan (see figure 5).

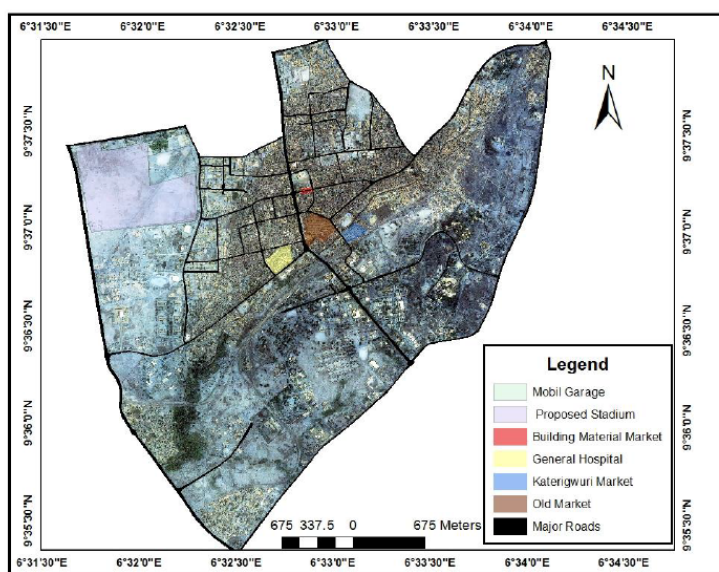


Figure 5: Spatial Analysis of Minna core in 2008

Source: Authors, 2016.

S/No	Landuse	Area (Metres Square)
1	Roads	475029
2	General Hospital	41983
3	Extension of General Hospital	22498
4	Katerigwuri Market	21531
5	Mobil Garage	3750
6	New Market (Kure Market)	390207
7	Residential Buildings converted to commercial land uses	48718
8	Relocated building material Market	6572

Table 3 Land use Analysis of Minna Core Area in 2016

Source: Author, 2016.

As a result of the increase in population and Urbanization more changes were experienced in Minna Core. Table 3 shows a significant change in the areas of the land uses. In 2016 the land area for roads increased from 412894 M² to 475029 M². Roads that were under rehabilitation constitutes 4956 M², Rehabilitated roads cover 100500 M², while the newly constructed roads and the existing roads covered 15654 M² and 353919 M² respectively. The sum total of all these roads is 475029 M². In the rehabilitation of the roads the soft landscape that allows for easy percolation of water during precipitation were replaced with hard landscape (interlocking tiles) in an attempt to beautify the Core of Minna (see plate 1 and plate 2). Roads rehabilitated were the Sabon-Gari Road, Keterin Gwari Road, 123 quarters Road, Old Airport Road while Kuta road was still under construction as at the time of the study. The only road constructed at the core of Minna during this study is the Kure Market road.



Plate 2: Road before Rehabilitation (2008)

Source: Authors, 2016.



Plate 3: Rehabilitated Road with interlocks (2016)

Source: Authors, 2016.

The new market (Kure Market) covers a total land area of 390207 M² as against the 58821 M² of the old central Market. Though the new Market (Kure Market) has over 2000 stalls and shops of different categories, banking halls, Police and fire service posts, restaurants, a clinic, Parks, administrative block, market union office, wider space for expansion, for vehicular park for traders to offload their wares as against the 800 stalls and shops of the old market (Orintunsin, 2009). One would expect that all the problems highlighted in the old market would be solved by the Kure market, but reverse is the case, as on street trading; on street parking and lack of regard for traffic laws by motorist visiting the market are gradually marring the effort of the Niger State government in achieving a sustainable planning. The

study also revealed between 2008 and 2016 the building material market was relocated from the Minna core to a new site (Mandela Area) while old market area is still left unoccupied.

The Niger State General Hospital located in the core of Minna also received a facelift; the area for the General Hospital was expanded so as to meet the need of the growing population. The land area for the General Hospital increased from 41983 M² (in 2008) to 64481M² in 2016. The analysis further (figure 6) reveals that a total land area of 48718 M² converted from Residential land uses to commercial land uses while a total of 22498 M² land area were converted for the General Hospital expansion.

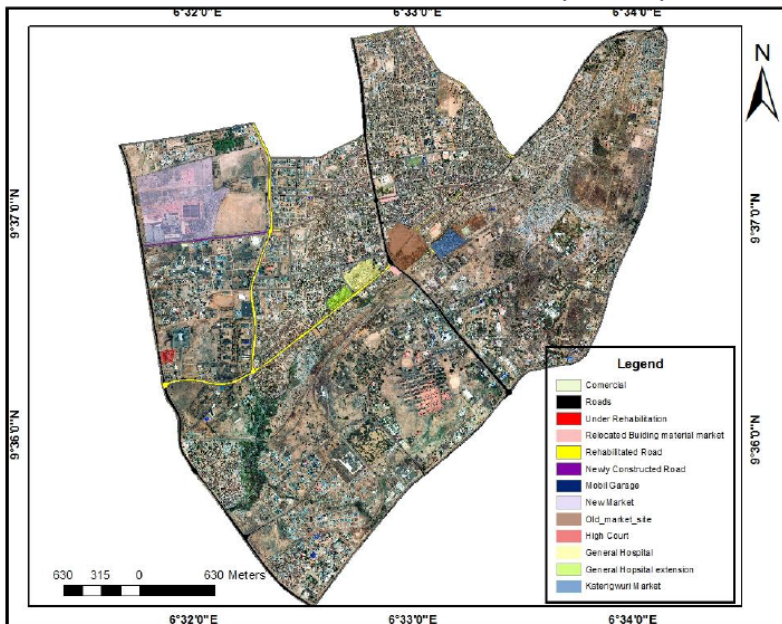


Figure 6: Spatial Analysis of Minna core in 2016

Source: Authors, 2016.

Factors Responsible for Urban transformation in Minna Core

Population increase

Using the growth rate of 3.42% as stipulated by the National population commission (2006). The 1991 population figures were projected for 2008 and 2016 using the exponential formula for population projection. The projected population obtained for 2008 and 2016 were 111,159 and 136,010 respectively. Table 4 shows a progressive increase in the population of the core Minna with a percentage of increase of 22.36. The implication of this is that as the population increases more land areas will be converted to built-up area. Thus, this will increase the area of built-up area between the study periods.

Year	Population	Percentage of increase
2008	111159	
2016	136010	22.36

Table 4: Population change between 2008 and 2016

Source: Authors, 2016.

On the factors that influences the urban transformation in the Minna core. The study reveals that 39.80% of the respondents were of the view that government policies were responsible for the transformation that has occurred over the years in the core of Minna. The respondents that had the option that government policies were responsible for the current urban transformation in Minna Core are more in number, this is an indication that the recent trend of changes in the core of Minna by government is well noticed by the general public. Despite these changes in the Core of Minna, 2.55% of the respondents do not have any idea of what must have influenced the changes. Some of the respondents (17.35%) believed that Low rental value of properties in the Core area must have influenced the changes. Land uses changes were attributed to the current urban transformation in the Core of Minna by 9.18% of the respondents.

Implications of Urban Transformation in the Core of Minna

The study reveals that urban transformation has had different implications in the Core of Minna within the period under study (2008 to 2016). The implications discovered during the course of the study ranges from high cost of stalls and shops in the new Market (Kure Market), psychological trauma on residents relocated, Remoteness of facilities and lost of livelihood. Majority of the respondents (36.73%) believed that urban transformation in Minna has had negative effects on them because they now have to "travel" within Minna in order to enjoy some facilities that were formally located centrally due to the remoteness of the new facilities, example of this facilities are the relocated Minna central market and the building material market. High cost of shops and stalls in the new market was perceived to be a major effect of urban transformation by 32.14% of the respondents, because of their inability to pay for the shops or stalls. 8.40% of the respondents are of the opinion that, relocation of residents from the core area has Psychological (trauma) effect on the people. A number of the respondents (4.40%) believed that inadequate and untimely compensation is often experienced by those relocated and this have made the general public to lose trust in the transformation agenda of the State Government. Others (18.33%) believed that the harassment by law enforcement agencies on those involved in on-street trading have made many lost their livelihoods.

Conclusion

Urban transformation is not peculiar to developing countries alone but, the manner in which planning and management is carried out is the issue. This is because less priority is often given to planning in this part of the world. To achieve sustainable planning in a region were

rapid urbanization is experienced, it is of great significant to note that urban transformation will be visible in such region. The study Urban Transformation a changing phase in Minna, Niger State, Nigeria, has effectively addressed the Implications of urban transformation, factors that influences urban transformation and the trend of Urban transformation in Minna between 2008 and 2016.

Recommendations

Base on the findings the following recommendations were made for the study:

- I. Adequate and timely compensation should be paid to those relocated in order to guide against the issue of psychological trauma or even death of the residents.
- II. Law enforcement agencies in the state should be fully equipped so as to curb the activities of traffic offenders especially those that take their turn on the median divide on the road.
- III. Planning and management of Minna Core should be done through the inclusive planning approach which is a bottom-top approach. This will help to integrate everyone's view in planning process.
- IV. On-street trading should be stopped by the government so as to ensure free flow of traffic around major facilities. This can be achieved when cheaper shops and stalls are provided in the central market.
- V. Planning education should also be encouraged in the state in order to meet the need gap of planning profession.
- VI. SDGs approached that allows community participation in planning should also be encouraged.

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