

UPLanD

Journal of Urban Planning, Landscape & Environmental Design



Research & experimentation
Ricerca e sperimentazione

ASSESSMENT OF URBAN REGENERATION ACTIVITIES IN THE CENTRAL AREA OF JOS TOWN, NIGERIA

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HIGHLIGHTS

- The Central area of Jos had witnessed profound changes in the last 20 years, physically, economically and culturally.
- Jos Main Market was gutted by fire in February 2002 and this had propelled expansion of the 'CBD;' into adjunct streets, which currently occupies about 184 hectares of land.
- Urban regeneration activities, which are primarily private-sector-led have concentrated on either partial building renovations or comprehensive reconstruction to accommodate commercial uses, to the detriment of a 'holistic' social, economic and cultural regeneration.
- There is need for a holistic approach to urban regeneration through public-private partnership to achieve wider goals of physical renewal, economic vitality and cultural renaissance of the capital city.

ABSTRACT

This paper examines land use changes and urban regeneration activities in the central area of Jos, Nigeria; the processes and forces driving those changes. The central area has been expanding into adjacent streets over the past nearly two decades due to increased pressure for commercial and retail space resulting from the fire incident that burnt the Jos Main Market in February 2002 and increase in the urban population. The research employed positivist and interpretivist approaches, where qualitative and quantitative methods were used to collect data. Land use changes were analyzed from satellite images and maps while questionnaires were administered to property owners and shoppers. The study area covers an area of about 183.37 hectares. Regeneration activities have increased during the period under study with private-sector-led activities accounting for 668 of a total of 797 properties (about 84%) and covering an area of 59 hectares (about 41% of the land area). Though the processes of change are unstoppable, even desirable; these have created a number of problems such as inner city congestion due inadequate parking space, illegal motor parks and the proliferation of commercial activities unto the adjacent streets and pedestrian walkways; inadequate utilities/services; poor waste collection and management practices and a degraded urban environment. Urban regeneration was proceeding in a piecemeal and uncoordinated manner without overall planning vision towards achieving clear socio-economic and environmental objectives and bereft of community values of enhancing public safety and security.

ARTICLE HISTORY

Received: April 18, 2018
 Reviewed: June 10, 2018
 Accepted: June 23, 2018
 On line: September 15, 2018

KEYWORDS

Jos Central Area
 Urban regeneration
 Private sector-Led
 No-policy framework
 Private-public partnership

1. INTRODUCTION

The rapid growth rate of the global urban population is one of the most striking features in the demographic shift taking place in the world today. By 1950, only 30 percent of the world was urbanized. In 1980, the figure had risen to 39 percent and by 2001, 47.5 percent of the world's population lived in urban areas. The level of urbanization will rise to 56.7 percent within the next two decades with almost the entire urban growth taking place in developing countries (UNDP, 1999). Numerically, this represents an increase of 1.5 billion people between 2000 and 2025. Today, the fastest urbanizing region in the world is Africa, with an urban population that is expanding at double the rate of the world as a whole (UNDP, 1999).

The high rate of urbanization in both developed and developing countries has created a range of physical, demographic and economic challenges in many cities over the recent years (Friesecke, 2007). Over the last decade it has become hard to ignore the almost continual process of development and building that has characterized the inner areas of many cities and towns. Cities are never finished objects; land uses change, plots are redeveloped, the urban area itself expands and occasionally shrinks. The pressure of growth is more evident in the city centres which are the heart of these urban areas. According to Karimu (1984), in Nigeria, the conception of central area is in relation to functional centrality not necessarily geographical centrality. It refers to the core of the city which has greatest concentration of activities such as civic, economic, socio-cultural, religious as well as recreational. The importance of each of these categories will vary with each town vis-a-vis its historical background. These city centres play important role in the growth and development of the urban areas. They fundamentally perform the function of providing various services/facilities to the inhabitants of the urban areas such as political, administrative (such as offices), social (such as cinemas, libraries, theatre etc.) and economic (such as banks, shops, markets) and residential space for housing.

Since the central areas form the core of the urban areas, they have come to be identified with some problems caused by the pressure of population growth. These problems manifest themselves in various dimensions such as physical, environmental, social, economic, and health. The phenomenal rise in size of our cities have over the years

resulted in pressure on basic infrastructure such as water, electricity; poor waste management system and increased air pollution, resulting in the increasing emergence of what is often referred to as 'the urban/city centre-inner city-down town decay' (Abumere, 1987, Dankani, 2016).

In Jos, planning authorities and policy makers have not been able to evolve any practicable, comprehensive planning policy with respect to these complex central area and environmental problems often hampered by their lack of grasp of the social, economic, physiological and psychological implications of these problems. Furthermore, there are no clearly stated strategies and policy directions to encourage private sector and community participation in solving the emerging and entrenching urban problems in the central area of Jos.

2. LITERATURE REVIEW

2.1 *Concept of urban regeneration*

Urban regeneration has long been a key theme in planning of the city. Six interlinked themes are identified as constituting the practice of urban regeneration: physical conditions and the social-political response; housing and health; social welfare and economic progress; urban containment; changing role and nature of urban policy; and sustainable development (Boateng & Moobela, 2008; Gbadegesin et al, 2011). Regeneration is concerned with improving the economic, social and environmental vitality of the city. It describes a wide range of activities, bringing new vitality and viability to previously run down areas, refurbishing buildings, infrastructure and the built environment, and redeveloping buildings that have reached the end of their useful life.

Urban regeneration is one of the most important strategies used to address inner city decline and deprivation especially in the western world. Urban problems in the last forty years have been addressed through economic and planning policies geared towards physical and economic revitalization of local areas. Recognition that successful regeneration should incorporate social and environmental policies has resulted in a shift from urban renewal and revitalization to a comprehensive urban regeneration approach. Couch (1990) has summarized this transition as follows: *Urban regeneration moves beyond the aims, aspirations,*

and achievements of urban renewal, which is seen as a process of essentially physical change, urban development (or redevelopment), with its general mission and less well-defined purpose, and urban revitalization (or rehabilitation) which whilst suggests the need for action, fails to specify a precise method of approach (p2).

According to Boateng & Moobela (2008), there are a few discernible features from this definition that are worth noting especially as they relate to the broader perspective of planning as a decision-making process. The first relates to what urban regeneration is - that it is an interventionist activity. This intervention can either be state-led or it can be a matter of public-private consensus. The second relates to what urban regeneration is not - that it is not simply the aspirations and achievements of urban renewal, which is essentially physical change. Urban regeneration is not urban development or redevelopment as this is less well defined in purpose. Furthermore, urban regeneration is not urban revitalization (or rehabilitation) as this fails to specify a precise method of approach.

Another useful way of operationalising urban regeneration is to relate it to other similar concepts, such as gentrification and redevelopment. While gentrification transforms neighbourhoods by bringing in newcomers to the area, the eventual displacement of the host communities makes it rather a pseudo social justice issue. It can be argued that urban redevelopment achieves almost the same kind of results as urban gentrification as the faith in private enterprise may not cater for those in low income brackets. A balance between these two has been a key aim of urban regeneration (Boateng & Moobela, 2008).

Therefore, urban regeneration is a complex combination of social, economic, planning, construction and management activities. These elements of urban regeneration are brought together to improve the social sustainability, economic stability and the infrastructure of a geographical location and so help the sustainability of the entire urban area (Tsenkova, 2002).

2.2 *The evolution of urban regeneration*

The term 'urban regeneration' evolved after the Second World War in Europe and Britain, mainly due to post-war decline of industries. Since then,

government policies have focused on urban regeneration to achieve a better society. Over the last 50 years, urban regeneration policy in the UK has had various foci. The nature of regeneration policy has changed direction several times (Roberts, 2000). These changes have been implemented to suppress the extent of urban problems and resulted in the development of different urban regeneration programmes.

During the 1950s and 1960s, the pre-dominant approach of comprehensive redemption had been driven by the determinist assumption that poverty could be built out and that changing the physical landscape would inevitably result in social and economic benefits. It was believed that new physical developments would improve both social and economic conditions of inhabitants of a neighbourhood. It was mainly characterized by master plan-based reconstruction (Lee & Rhee, 2010). The overspill towns of Liverpool and Manchester - Runcorn, Skelmersdale and Warrington - started to be developed at this period (McDonald, Malys & Maliene, 2009).

Later, from the middle of the 1960s to the late 1970s, public welfare was promoted through suburban and peripheral growth-oriented revitalization due to the state of poverty and deprivation in inner city areas. This policy provided temporary compensation to the victims of economic and social change.

From the 1970s it was realised that many urban problems were caused by structural economic changes. Therefore, economic development was required to assist in the area's restoration, leading to the development of in-situ renewal and neighbourhood schemes (Lee & Rhee, 2010).

In the 1980s, regeneration policy became closely associated with neo-liberalism, amplifying that urban problems derived from the 'dead hand' of bureaucratic local government, stifling entrepreneurial initiative and enterprise. The focus shifted to unblocking of the supply-side obstacles to land and property development.

Between early and middle of 1990s, local area-based partnerships were created and provided with compensation from public funds. This policy recognized that for successful implementation, regeneration projects needed to harness the strengths, resources, energy and initiative of local communities and a bottom-up approach intended to build social capital and encourage community self-help. The late 1990s approach concentrated on the development of strategies, joined-up ac-

tion improving governance and the institutional arrangements for urban regeneration (Couch, Fraser, & Percy, 2003). This is similar to the America approach with strong local entrepreneurial initiatives supported by the federal government with loans, grants or partnerships. (See, Urban renewal partnership in America and Britain, <http://www.psi.org.uk/publications/archiveofdfs/housing/JV4/pdf>).

The beginning of the 21st century has brought new holistic and integrated policy epitomized by Urban Task Force's contention that an urban renaissance should be founded on the principles of design excellence, economic strength, environmental responsibility, good governance and social well-being. It has provided an explicit place-making dimension. Throughout the history of urban regeneration, leadership has shifted from local to national, but participation opportunities has been expanded to more stakeholders and the policies have become more integrated and comprehensive.

3. THE STUDY AREA

Jos, the capital of Plateau State is situated approximately on latitude 9.6 degrees North and Latitude 8.5 degrees East. The city lies close to the geographical center of Nigeria (see Figure 1). Jos metropolitan area is made up of two main local government areas, Jos North and Jos South. However, with recent expansion of the city it has extended into Bassa and Jos East Local Government Areas. During British colonial rule (1900 to 1960) it was an important centre for tin mining. With an altitude of 4,062 feet (1,217 m) above sea level, it enjoys a more temperate climate than much of the rest of Nigeria (average monthly temperatures range from 70° to 77°F or 21° to 25°C). The weather has played an important role in attracting population into the city, coupled with its unique terrain and topography.

Jos was established in 1915, as a tin transportation camp but started earlier as a mining camp at Naraguta (Bingel, 1978). Its early history was closely linked to the prosperity of the mining industry, which led to the continuous growth of the city (Mangvwat, 2001; Dung-Gwom, 2001). In recent times, the town has continued to grow in spite of decline in mining activities due to its administrative role as the capital of the defunct

Benue-Plateau State and later Plateau state. It receives an influx of immigrants from within the state and from other parts of the country who flock into the city for the purpose of employment, education and commerce. The recent growth is not based on any sustainable planning strategies as the city has failed to cope with the pressures of growth and the demand for land and sites for various purposes. Growth in urban population and economic changes has put increasing pressure on the city centre. The Doxiadis Master Plan of 1975 had proposed a new city centre but this had not been achieved. Only the State Secretariat (State Government Offices) and the Federal Secretariat had been built. The recent FolaKonsult New Greater Jos Master Plan (2008-2025) has suffered the same fate. The plan had unfairly concentrated on growth and expansion strategies outside the city and paid very little attention to the management of existing urban area and the city centre.

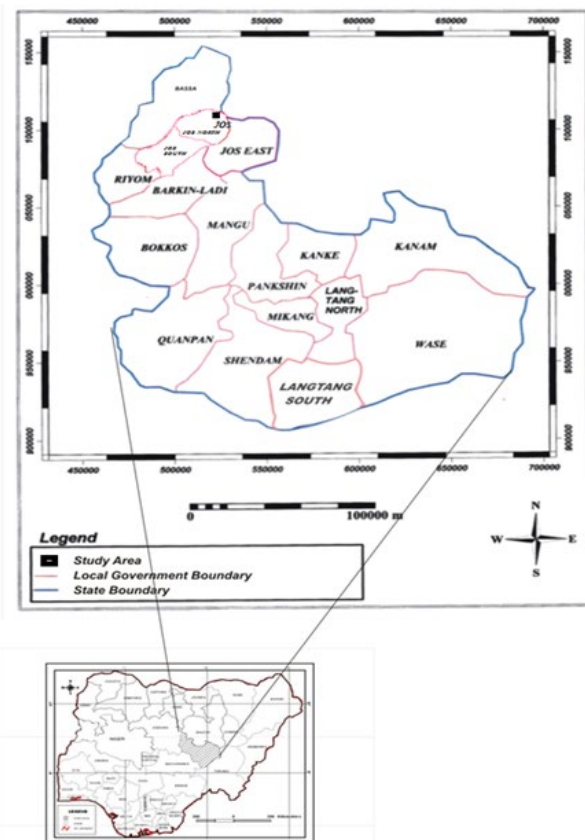


Figure 1: Map of Nigeria Showing Plateau State and the Study Area Region of Jos (2011).
Source: *Regional Spatial Plan for the Commuter*.

4. METHODOLOGY

Benbasat, Goldstein, & Mead (1987) have observed that there is no single research methodology that is intrinsically better than any other methodology. Many authors call for a combination of research methods in order to improve the quality of research (Kaplan & Duchon, 1988). Equally, some institutions have tended to adopt a certain 'house style' methodology (Galliers, 1991). Benbasat, 1984 has advised that given the richness and complexity of the real world, a methodology that is best suited to the problem under consideration, as well as the objectives of the researcher, should be chosen. In this research, what may be characterised as methodological monism has been avoided, that is, the insistence on using a single research method but rather a combination of positivist and interpretivist techniques. Both the qualitative and quantitative approaches were adopted given the nature of the research which involved descriptive surveys, reviews, case studies and administration of a questionnaire.

The initial challenge was demarcating the study area as in the past 20 years, and particularly since the Jos Main Market (JMM) that was burnt in 2002, the central area of Jos has expanded rather uneasily into the adjoining residential streets and neighbourhoods. Murthy and Vance (1954.) have suggested the use of the Central Business Intensity Index (CBII) and or the Central Business Height Index (CBHI) in delineating the Central Business District (CBD). Whereas, the CBD is quite distinctive and therefore easily mapped and analyzed in western cities, this is not the case in the cities of the developing countries where mixed and informal land uses intermingled. The authors therefore undertook a physical reconnaissance of the central area of Jos for the purpose of delineating the central area. The guiding principle was the predominance of commercial activities (Murphy and Vance 1954; Pissourios, 2014). A detailed land use coding was therefore developed for the study based on the work of Massachusetts Department of Revenue, Division of Local Services (2002). The study area was delineated as bounded by Mango Street to the north, Challenge and Constitution Hill Road to the south, in the east by Bauchi Road and Murtala Mohammed/Gangare Roads; and to the west by Dodo Street, West of Mines and Kura Road. The area covers a total of 183.37 hectares. High resolution Quick Bird satellite images of 2005 and 2010 provided the baseline data for a 100% (797) prop-

erties that were surveyed and analyzed to measure the physical regeneration of properties that had occurred in the area within the period, 2005 to 2014 using the roof properties of the buildings and physical field survey.

A questionnaire was employed to obtain information from property owners/shop owners, and developers to determine the driving motivation for regeneration, level of investments, compliance with any planning requirements (if any) and another one for users of the central area to assess their perception of regeneration activities that had occurred.

Desktop research was undertaken to source relevant secondary data on urban regeneration. The term 'urban renewal' or 'urban upgrading' are still more popular in Nigeria. These tend to be narrower in scope and focus more on the physical aspects of regeneration to the detriment of the social, economic and cultural aspects of urban regeneration (Agbola, 1987; Dimuna & Omatsone, 2010). Both qualitative and quantitative (statistical) techniques were employed in analyzing the data.

5. RESULTS AND DISCUSSION

5.1 *The Central Area Regeneration 2005-2014*

The properties that had undergone regeneration over the period under study are those that had major physical changes like renovations, repairs, additional floors and new constructions. The data reveal that by 2005, 96 properties had been regenerated out of a total of 797. This represents a little above one tenth of the total number of properties regenerated and covered an area of 27.39 hectares (about 20% of the study area). A significant increase in regeneration of properties was experienced between 2006 and 2010 with a sum total of 167 properties regenerated. This represents about 20% of the total properties and covered 47.67 hectares (one third) of the land area. It is clear from the data that this increase in regeneration has been sustained from 2011-2014 with a total of 102 properties regenerated within a period of 3 years. This represents more than one tenth of properties in the central area, covering 11.39 hectares which is less than one tenth of the land area. Over the years most properties in the central area had become obsolete and structurally weak

(most were above 70 years old). They were originally residential properties but had been renovated or refurbished to accommodate commercial and other modern uses, such as banks, offices, etc. The financial cost of regenerating these properties could not be determined because the funding is mostly privately sourced and the property owners were reluctant to disclose the amounts involved. Similarly, most of the physical regeneration activ-

ities were done without approval of the planning authority (Jos Metropolitan Development Board-JMDB) except the ones that involved major structural changes, such as El-Buba Outreach Ministries International, Mr. Biggs Restaurant, Southern Fried Chicken and S. C. Okonkwo Shopping Complex. Table 1 and Figure 2 show the regeneration activities that had been carried out within the period under study (2005-2014).

Table 1: Properties regenerated between 2005-2014.

Year	No. of Properties	Percentage (%)	Area (Ha)	Percentage (%)
2005	96	12.05	27.39	18.90
2010	167	20.95	47.67	32.89
2014	102	12.80	11.39	7.86
None	432	54.20	58.48	40.35
Total	797	100.00	144.93	100.00

5.2 Nature of physical regeneration

The nature of physical regeneration taking place in the central area has been categorized into two, first is comprehensive regeneration which involved building or construction of new structures. This involves major changes to the building including demolition, reconstruction and change of use from the previous one. The second type which partial regeneration refers to renovations of existing structures/buildings. Table 2 and Figure 3 show information on comprehensive regeneration, with a total of 150 properties that had undergone complete regeneration, constituting 18.82% of the whole properties in the central area and covering 42.19 hectares (29.11%). Partial regeneration affected a total of 215 properties (26.98%), covering an area of 44.26 hectares (30.54% of the land area). Put together, about 60% of all properties in the city centre had witnessed some form of physical regeneration between 2005 and 2014.

5.3 Property ownership

Field survey revealed a significant number of properties were privately owned. This is presented in Table 3 and Figure 4. There is the dominance of privately owned properties in the central area, which however, occupies proportionally less land area than public and corporate properties which occupy 59.04 hectares or 40.74% of the total land area. Public property in the form of offices,

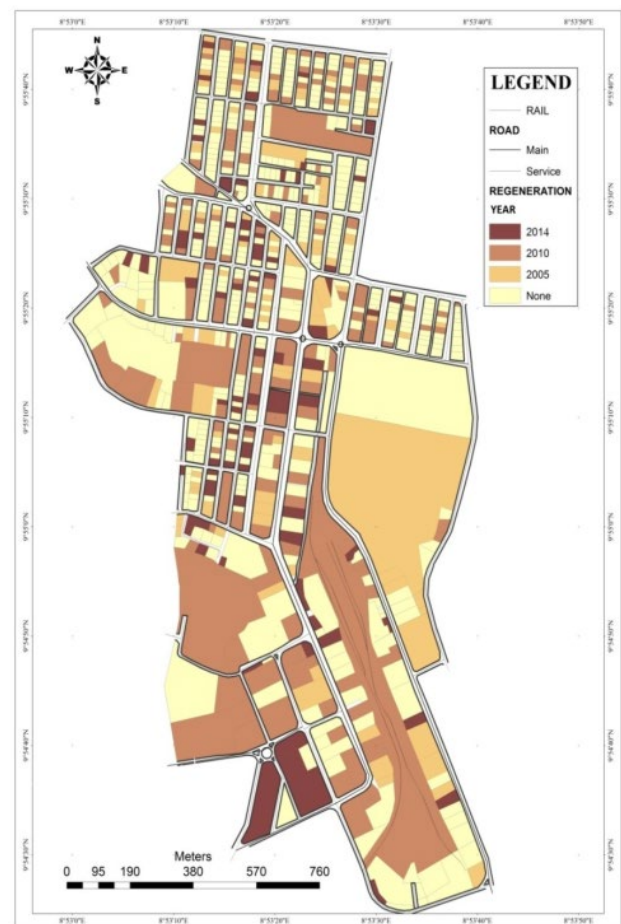


Figure 2: Properties Physically Regenerated in the Central Area of Jos (2005-2014). *Source: Authors*

Table 2: Nature of Regeneration.

Nature of Regeneration	No. of Properties	Percentage (%)	Area (Ha)	Percentage (%)
Comprehensive	150	18.82	42.19	29.11
Partial	215	26.98	44.26	30.54
None	432	54.20	58.48	40.35
Total	797	100.00	144.93	100.00

Table 3: Property Ownership.

Category of Ownership	No. of Properties	Percentage (%)	Area(Ha)	Percentage (%)
Corporate	84	10.54	29.35	20.25
Government	45	5.65	56.54	39.01
Private	668	83.81	59.04	40.74
Total	797	100.00	183.37	100.00

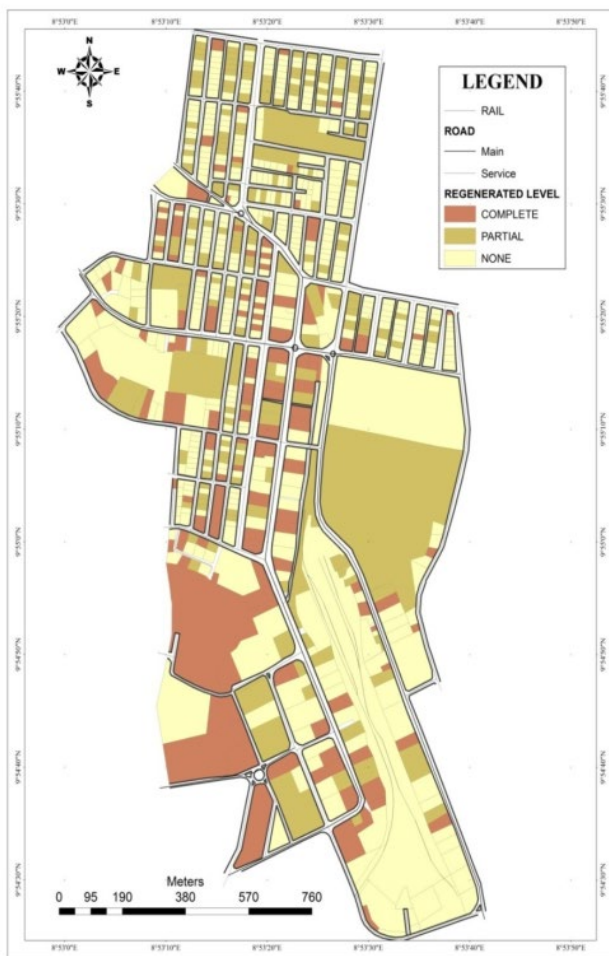


Figure 3: Nature of Physical Regeneration in the Central Area of Jos (2005-2014). *Source: Authors*

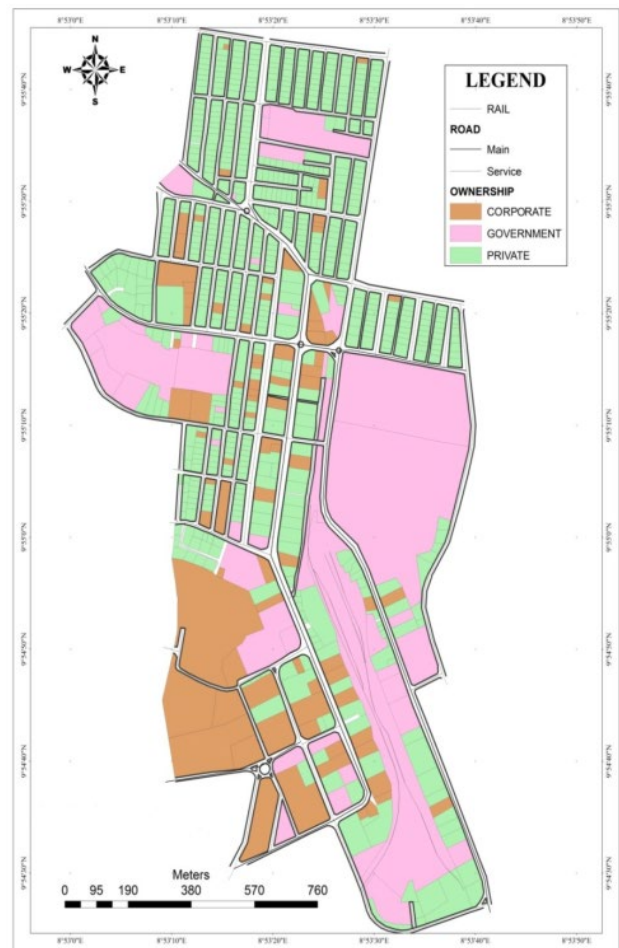


Figure 4: Property Ownership in the Central Area of Jos (2014). *Source: Authors*

Table 4: Regeneration Based on Property Ownership.

Category of Ownership	No. of Properties	Percentage (%)	Area (Ha)	Percentage (%)
Corporate	72	19.73	25.79	29.83
Government	24	6.57	35.84	41.46
Private	269	73.70	24.82	28.71
Total	365	100.00	86.45	100.00

schools, health facilities, the Cultural Centre/Open Air Theatre, the Jos Modern Market belongs either the federal, state and local governments. The Federal Government properties include the Nigerian Railway Corporation rail station and offices, staff quarters and tracks; the Jos Museum and the General Post Office. However, most lands belonging to Nigerian Railway Corporation have been leased to private developers who have built shopping complexes and stalls along Murtala Mohammed Road and Ahmadu Bello Way. The state government properties included the old General Hospital, Jos Main Market, JMDB shopping complex (Abuja shopping complex), Works Yard, Motor Parks, Primary Schools and Offices. The local government properties include shopping malls and offices.

Planning procedures and permissions are normally not followed in the development and management of government owned properties/land. This was the case with the lands belonging to the Nigerian Railway Corporation (NRC). Under the colonial planning regulations, public developments were normally approved 'in-house' and excluded from planning/development control.

Table 4 presents regeneration activities based on property ownership. The private sector plays a predominant role in the central area regeneration with over 70% of the properties regenerated. Of the major regeneration activities that have occurred between 2005 to 2014; 269 were being implemented by private developers/property owners covering 24.82 hectares (28.71%), while only 72 properties belonged to corporate organizations (organized private sector), covering an area of 25.79 hectares (29.83%). Only 24 properties were being regenerated by the government covering 35.84 hectares (40.46%).

5.4 Environmental conditions in the Central Area

The burnt Jos Main Market had been the hub of commercial activities in Jos metropolis for so

many years. Very dense commercial and office uses radiated from this core along the major streets of Murtala Mohammed Way, Bauchi Road, Ahmadu Bello Way and Tafawa Balewa Road. The land use situation around the burnt market and the adjoining streets was very chaotic with commercial activities invading unto streets, road shoulders and unto the public realm.

The rapid expansion of the city centre and improper transport planning had produced significant traffic congestion in the central area. Vehicles parked on the street, reducing them to single lanes. The development of shopping malls, banks, offices and other commercial activities have worsen the parking situation. Rail land and sliding (Nigerian Railway Corporation had not been functional for many years) had been overrun by shops and stalls on rail tracks. Similarly, the pedestrian walkways along the major streets has been taken over by road side/mobile petty street traders. Figure 5 shows the chaotic traffic situation along Ahmadu Bello Street on a normal weekend.

Basic services and utilities, such as water and power are grossly inadequate in the city centre and unevenly distributed. Poor waste management was also a very glaring problem. Rapid population growth in the city has exerted immense pressure on solid waste management systems. Solid waste is generated in all parts of the central area with refuse dumped in an unsatisfactory and haphazard manner on the road meridian and into the drainage channels.

Lack of effective solid waste management had resulted in blocked drainages, and general environmental degradation with serious implications for the spread of communicable diseases as traders and shoppers were exposed to high health risks arising from exposure to heaps of solid waste that had not been collected for many days and polluted drainages. Coupled with the problems of solid waste management was that of air and noise pollution due to increased car ownership and traffic.



Figure 5: Traffic, parking condition, and roadside trading along Ahmadu Bello Way in the Central Area of Jos. *Source: Authors, 2013.*

5.5 Factors driving urban regeneration in the Central Area of Jos

Forces driving central area regeneration in Jos are unique to the locality. This is in contrast to the British experience which is reported by Tsenkova (2002) to be predominantly national in nature. According to Tsenkova (2002), urban regeneration in Britain was as a result of major shifts in the British economy that were beyond the control of specific localities. These sectoral changes were driven by a combination of factors; rapid decline of mining, manufacturing activity and employment of semi-skilled workers, contrasted by growth in the tech-

nology, financial and business services; which resulted in rapid economic and social differentiation. Some of the major factors responsible for the changes in the central area of Jos were:

1. Obsolete housing structures

In the central area, residential buildings were being renovated to accommodate commercial uses. These buildings were designed to meet residential needs about 70 years ago but which do not meet up with current demands within the central area, especially the need to maximize profit by private sector developers by converting such properties into commercial uses. New uses, such as sale of building materials require large storage and dis-

play space. Other commercial uses in the central area are ICT related, banking, restaurants, pharmaceuticals, etc.

2. Increased trade and commerce

Undoubtedly one of the propelling factors in the regeneration process of the central area had been huge investment in the trade and commerce. This is mainly as a result of the need by investors to take advantage of the growth in the physical and economic sectors of the city which would yield substantial profits to property owners, developers and entrepreneurs. However, one of the sectors where growth was expected such as tourism, was characterized by low investment and falling patronage due the communal crises that had engulfed the city since 2001.

3. Need for office space and shops

The growing national and local economy had stimulated the demand for banks, offices and shops leading to increase in the price of real estate in the city. Rental values have been on the increase, ranging from N20,000.00 (\$65) per square metre at the fringes of the central area to about N140,000.00 (\$450) per square metre at the most central locations. Many investors were coming from different parts of the state and the country, taking advantage of the central area as the most attractive location for investments in banking premises, insurance offices, mobile phones retail outlets, etc. With major investments in commercial activities, the residential sector was the first to suffer. Unable to cope in the new competitive environment, the residents have been pushed out to the urban periphery and to other less central parts of the city.

4. Burning of Jos Main Market

The Jos Main Market which was a major regional centre of commercial activities for so many years was razed down in a fire disaster in February 2002. This triggered a series of processes that have continued to propel changes in the central area. These include efforts by the displaced traders to find alternative locations within the central area and the proliferation of businesses along the major streets, leading to the expansion of the central area along such corridors. The conversion of uses from residential to commercial uses along Rwang Pam Street, Church Street, Langtang Street, Shendam Street, and Bauchi Road is primarily due to this factor.

5. Growth of the city

The city of Jos has been experiencing phenomenal growth both in terms of population and land area over the last 50 years. Initially this was a result of

being made the capital of defunct Benue-Plateau State in 1967 and later on the capital of Plateau State in 1976. This growth in the urban area also continued to extend the boundaries of the central area to meet up with ever increasing demand for space to accommodate central area activities. The population of Jos has grown from 510,300 in 1991 to an estimated 1,300,000 in 2014 (National Population Commission). The clement weather of the city has continued to attract permanent residents in spite of the communal crises that were witnessed in the recent past.

6. Jos crises

The ethno-religious crises that affected the city of Jos in 2001, 2004, 2008 and 2010 have played a significant role in shaping the central area. The crises affected businesses around the burnt Jos Main Market, Bauchi Road, Dilimi Street and Gangare Road. It also affected some churches for example, ECWA Good News Church along Ahmadu Bello Way. Similarly, the bombings around the Jos Main Market, COCIN Headquarters and Mr. Biggs restaurant have led to internal adjustments and re-adjustments of businesses in the central area. The effect had been two fold; with some activities and residents relocating either within or outside the central area, and secondly, new businesses coming into the central area as it had been relatively one of the safest part of the city during the crises. Due to the huge property and business investments in the central area, it was better protected during crises by security agents. There has been relative peace in Jos in the last five years and businesses that relocated have started returning.

5.6 Discussion

Increase in regeneration activities can be seen in the number of buildings that have undergone physical changes, from 12.05% of total properties in the central area covering 27.39 hectares of the total area of the central area in 2005 to 45.80% of the total properties in the central area covering 86.45 hectares in 2014 (See, Table 1). A unique trend was identified for the various land uses within the central area; with commercial land use dominating in terms of land area coverage from 61.10 hectares (34.42%) in 2005 to 70.01 hectares (38.18%) in 2014. A similar trend could be seen for other land uses with the exception of residential land uses which witnessed a steady decline in terms of area coverage from 18.83 hec-

tares (10.27%) in 2005 to 15.42 hectares (8.41%) in 2014.

There is a strong competition for space between the different land uses within central area, with commercial uses gradually increasing in both number and area coverage while residential land uses had been pushed out to the periphery and other adjoining areas. Spatio-temporal changes in land uses presents an insight into central area dynamics and the challenges of planning and urban management.

Table 4 had shown that the regeneration processes were mostly private sector led, with the sector regenerating 93.43% of the total properties regenerated in the central area covering 50.61 hectares (58.54% of land area). This contrasts sharply with the public sector that regenerated a mere 6.57% of the total properties, covering 35.84 hectares (41.46% of land area). This is in contrast with the British experience where the British government played a significant role in initiating the regeneration activities by providing funds that served as catalyst to stimulate private sector investment (Beswick & Tsenkova, 2002). The key characteristics are long-term commitment with a partnership approach to deliver real change, community involvement and ownership as well as action based on evidence of 'what works and what doesn't' (Friesecke, 2007).

Regeneration efforts in the central area of Jos have been on the increase in recent years. Though, the process of physical change is desirable, the results show that it is plagued with a number of problems like congestion and inadequate parking space, inadequate utilities, poor waste management and environmental conditions. The propelling forces driving regeneration in the central area of Jos had been the increased rate in commercial activities, return of businesses displaced during the crises. While general decline and deterioration are key forces in urban regeneration in Britain and South Africa (Tsenkova, 2002; Ngwabi, 2009); this is also true in Jos, especially of built environment and obsolete infrastructure.

Planning and management of the regeneration processes had not been encouraging over the last 20 years. There had been no policy framework to guide the regeneration processes and activities by either the government or the planning authority (JMDB). If anything, the state government and Jos North Local Government Council work at cross purposes. While the local government is driven by the desire to maximize revenues into its coffers,

the state government wants to project the central area as befitting the status of a state capital. Social and cultural aspects of regeneration in terms of provision of recreational facilities and good public open spaces to make the central area truly the cultural/tourism hub of the city had been lacking.

6. RECOMMENDATIONS

1. The government, and particularly, the state and local government (Jos North) need to play a catalyst role in providing strong leadership by ensuring that positive synergies, strategies and programs of the various stakeholders are coordinated for effective and sustainable central area regeneration.
2. Public investment is pivotal for change; and this should be provided through upgrading of the decaying infrastructure and services. For example, busy roads like Rwang Pam Street, Langtang Street, Tafawa Balewa Street etc should be tarred with asphalt with adequate road side parking space. Public motor parks should be provided instead of them mushrooming along busy streets, which interfere with the free flow of traffic. This will ease the congestion experienced in the central area.
3. The State Government should acquire land at suitable locations to provide well organized refuse collection points that are off the busy streets. The waste should be evacuated more frequently.
4. Commercial land uses like building material sales along Church Street, Rwang Pam Street, Langtang Street, Tafawa Balewa Street etc. that require large space and contribute significantly to congestion in the area should be relocated to Building Material Market along Bukuru Road or to other new locations based on the Fola Consult Plan. In fact, there is the need to re-organize the whole land uses in the city centre, to reduce congestion, waste generation, squalor and environmental degradation.
5. Recognizing the uniqueness of Jos city, the central area should be full of local character/content and able to promote the local economy. In line with this, the Jos Main Market should be reconstructed by the State Government and the large parking space within its vicinity put into use. Additional multilevel parking spaces should be provided through public-private

sector investments.

6. The Partnership Model should become the *fait accompli* for central area regeneration with powerful potential for accelerating the process of positive change. A comprehensive Central Area Regeneration Policy Framework should be prepared and implemented.

7. CONCLUSION

Regeneration activities have been on the increase in the central area of Jos during the period under review. Though, the processes of change are desirable, the result show that they have led to a number of problems, which include traffic congestion, inadequate parking space, inadequate infrastructure, poor waste management, poor environmental conditions, gentrification and apparent chaos

in the central area.

There is a strong competition for limited space and sites between the different land uses within central area, given its dynamic nature; with commercial uses increasing in both number and area coverage, while residential land uses have been pushed to the adjoining streets or to the urban periphery.

The result of this study show that regeneration activities were mostly private sector led, with public sector regeneration lacking behind. Lack of an overall spatial strategy and policy framework will result into more chaos and multiple challenges in the future. A spatio-temporal analysis of land use changes and analysis of the decisions and attitudes of both property owners and shoppers, which this study has attempted to do, has the prospects of unearthing the dynamic changes occurring, the existing challenges and the need for a holistic approach to central area regeneration and management.

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