# Assessment of the Implementation of the Doxiadis Master Plan (1975-2000) and FolaKonsult Master Plan (2008-2025) in the Central Area of Jos Town, Nigeria.

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## Abstract:

This paper assesses the plan and policies that have guided development and other processes of change in the central area of Jos town in Nigeria. The study assesses the implementation of the Doxiadis Jos-Bukuru Master Plan of 1975 and the FolaKonsult Greater Jos Master Plan (2008-2025)which were prepared to guide development of the central area of Jos by the then state governments. Regeneration policies in Jos central area had mainly been through the provisions of these two master plans, which had remained largely unimplemented. Though, the process of physical change is desirable, the result shows that, the recent growth is not based on sustainable planning strategies, and the central area has not been able to cope with the provisions of these master plans. Thus, bringing about uncoordinated efforts within the central area of this rapidly growing regional urban area in the country.

Key Words: Jos, Central Area, Master Plans, Urban Regeneration Policies, Partnerships.

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## I. INTRODUCTION

In 2016, an estimated 54.5 per cent of the world's population lived in urban settlements. By 2030, urban areas are projected to house 60 per cent of people globally. Understanding the key trends in urbanization that are likely to unfold over the coming years is crucial to the implementation of the 2030 Agenda for Sustainable Development<sup>1</sup>. The trend has its consequences on urban areas, due to the fact that no adequate provisions are put in place to accommodate the pressures created by such growth.

Such growth pressure is evident in the central area of Jos, which is the heart of a fast growing and expanding urban area. According to Karimu<sup>2</sup>, in Nigeria, the conception of a 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 varies with each town vis-a-vis its historical background. The central area plays important role in the growth and development of the urban area. It fundamentally performs the function of providing various services/facilities to the inhabitants of the urban area of Jos such as political (administrative offices), social (such as event centres, cinemas, libraries, theatre) and economic (such as banks, shops, markets) and residential space for housing<sup>3</sup>.

In Nigeria, a number of known master plans which such as; the Enugu Master Plan, Structure Plan and satellite towns for Onitsha amongst others, were born out of the need for urban renewal<sup>4</sup>. Similarly, attempts to resolve the problems that besiege central areas in its urban areas led the Federal Government of Nigeria to embark on The Federal Government Assisted Urban Renewal and Slum Upgrading Programme in 1988 as a policy aimed at improving the central areas and neighbourhoods of the poor and the disadvantaged through the provision and upgrading of basic facilities<sup>5</sup>. Such a policy has not been adopted for the central area of Jos, and the central area of the town has been growing and changing in the last 30 years in uncoordinated manner. In Jos, the Jos-Bukuru Master Plan of 1975 which was prepared to guide development by the state government had proposed the decentralization of some central functions to locations that would be nearer to the population they serve and the creation of a new central area to be located south of the existing one between Plateau Hospital and the State Secretariat. This has not been fully implemented, only the state secretariat was built. Thus, little results were achieved and over the years no known attempt of embarking on a renewal programme for the existing central area of Jos is in such a state of chaos.

Planning authorities and policy makers in Jos have not been able to evolve any practicable, comprehensive planning policies 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.

Wapwera noted that the master plans for major urban areas (Greater Jos Master Plan, Riyom Urban Master Plan and Angware Urban Master Plan) were either not reviewed or were not implemented at all<sup>4</sup>. Urban planners in the city relied on the master plans to coordinate development but there is no will to implement their provisions by the state government. The involvement of the local community in the plan formulation process and subsequent implementation effort has been very minimal. The urban renewal strategy which is more physical in nature has also proved to be ineffective in addressing central area problems in most cities in Nigeria, hence, the need for a better understanding of the nature of central area problems and change as a basis for effective policy and sustainable approach in its planning and management.

This new approach through urban regeneration has been and is one of the most important strategies addressing central area problems. Recognition that successful regeneration should also incorporate social and environmental policies has resulted in a shift from urban renewal and revitalization to a more comprehensive urban regeneration approach. Couch summarizes 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<sup>6</sup>.

# II. MATERIAL AND METHODS

Given the nature of the study, which is an assessment of urban regeneration policies in the central area of Jos, reviews were used for this study. The method used was based on the review of pre-existing policies that existed to guide development in the central area of Jos. Some secondary sources, government documents concerning the development of Jos which included the Doxiadis Greater Jos Area Final Master Plan (1975-2000) and the FolaKonsult Greater Jos Master Plan (2008-2025)<sup>7,8</sup>, were reviewed for an overview of the provisions of these policies, especially as they related to the central area and their level of implementation. The initial challenge was the demarcation of the study area as in the past 20 years, and particularly since the Jos Main Market (JMM) was burnt in 2002, the central area of Jos had expanded rather uneasily into the adjoining residential streets and neighbourhoods (Musa & Dung-Gwom 2018a). 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 intermingle together rather seamlessly<sup>3</sup>. 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<sup>9</sup>. The landscape in and around the central area and its adjoining streets were recorded using a digital camera to show the extent of the problem. Statistical techniques were employed in analyzing the data. Beyond visual observation, the statistical technique gave accurate measure in quantitative terms.



Figure 1: The Central Area

Source: Musa & Dung-Gwom<sup>10</sup>.

# **III. RESULT AND DISCUSSION**

## **Urban Regeneration Policies in Jos**

The policies that shaped and guided the development of the central area of Jos are found in two main documents, the Doxiadis Greater Jos Area, Final Master Plan (1975-2000) and the FolaKonsult Greater Jos Master Plan (2008-2025)<sup>7,8</sup>.

## Doxiadis Greater Jos Area, Final Master Plan (1975-2000)

In the 1975 Greater Jos Area Final Master Plan, it was rightly observed that most central functions were concentrated within the then central business district and from there extended to the light industrial areas south of it, with heavy and mixed concentration of uses which were fairly indiscriminate and not particularly conducive to the promotion of a properly functioning urban environment.

It was noted that one of the causes of the congestion and mixture of uses in the CBD of Jos was that commercial and civic services for its growing population had not been extended and distributed to the then new residential sectors. The CBD, which could, up to a certain stage, serve the surrounding old part of the city, had been overburdened with services for new communities lying far away from it. A rational distribution of these to new local centres and markets, expansion of the CBD in consecutive stages and in a contiguous way to achieve a more even distribution of services was the guiding principle of the Greater Jos Area Final Master Plan (Doxiadis, 1975). In line with the above, the master plan's proposal for the central area was in two-fold, the existing centre and creation of a new centre.

#### The central and administrative area

According to the provision of the Doxiadis Master Plan of 1975, the then existing central area, which was located around Terminus area was to be upgraded into the main civic and commercial centre of the urban complex comprising:

- 1) civic and commercial functions with services of a higher order.
- 2) residential accommodation in apartment blocks either in separate buildings or on the upper floors of buildings also containing other uses.

It was argued that the provision of residential accommodation together with the civic and commercial uses in the central area was desirable in order to guarantee movement and safety in the area even during the night.

The general estimate indicated that about 50% or more of the total floor area in the central and administrative area would be taken up by civic and commercial functions such as shops, offices, art galleries, libraries, central religious buildings, restaurants, hotels, outpatient clinics etc. The remaining 50% or less of the total floor area would be occupied by residences. The plan therefore proposed the following distribution for civic and commercial functions:

- 1) commercial and business group 50%
- 2) religious and socio-cultural facilities 20%
- 3) administration 20%
- 4) transportation and communication facilities<u>10%</u>

#### 100%

The proposal divided the central area into twenty sub-sectors of central area functions based on the road networks proposed in the plan, within which secondary collector-distributor roads would form rings serving the various plots with parking areas along these internal ring roads at appropriate places. The pedestrian streets were to constitute a separate system, lying mainly within that of the vehicular roads (ring roads) with which they would be interlocked. It was also proposed that the railroad line would be removed from the central area of Jos and a transportation terminal created south of the industrial area adjacent to the central functions so that road and railroad transportation could be interchanged at Zarmaganda.

#### The creation of a new centre

The Doxiadis Master Plan proposed a new centre for Jos-Bukuru complex to be located between the State Secretariat and Plateau Hospital, seeing it as necessary in view of the rapid expansion of the city in order to serve the new developing areas and alleviate the disproportionate pressure on the existing central business district. The area proposed for its construction in the first five years planning period measures 21ha and lies south of the administrative area. The project was to cost N1.3 million.

#### Financing the project

The major source of finance proposed for implementing the master plan was the federal government. It was expected that out of a total amount of N735 million proposed to be spent for the five years development programme (1975/76-1979/80) for 20 major urban centres in Nigeria, Jos accounted for about 2% of the total which was approximately N14.7 million. This amount was to be used for investment in the sectors of housing, roads, health, water supply, sewerage and drainage, electricity, telephone and refuse collection.

It was estimated that the private sector would construct 880 dwelling units during the first 5 years of the plan (1975-1980) both for private uses and in the form of housing undertaken by companies to house their personnel at a total cost of N5.6 million. With such an investment the private sector was to cover 7.2% of the housing need within the first 5 years of the plan.

## Legal measures

Three principal measures were taken to ensure the proper implementation of the master plan:

- 1) the legal adoption of the master plan by the then Government of Benue Plateau State and by the Local Authorities through decree.
- 2) the legal promulgation of zoning, and bulk and height regulations that would govern the future growth of the urban complex through preparation of local plans and detailed layout plans.
- 3) the legal adoption of economic measures that would enable the authorities to properly implement the plan and programme for Jos-Bukuru.

#### FolaKonsult Greater Jos Master Plan (2008-2025)

The master plan has as its guiding principle the integration of the existing community organizational land use structure within the built-up areas. The plan area has been divided into ten sectors based on such identified criteria as potentials for growth, existing community homogeneity, physical configuration and spatial locations. The existing central area is in sector three. The plan is to re-organize the development in the sectors, and to eliminate the current organic development prevalent within the planning area.

The major determinants of the city form are; the natural elements (topography) and man-made physical structures (buildings, roads and services) along with historic existing built-up settlement have combined to determine the adoption of the multi-nuclei concept for Greater Jos, and with the existing central area being the main centre of Jos. According to the master plan, the main centre is to connect with others through commerce and the provision of services, retaining its leadership role while the other settlements would be of lower order in the distribution of goods and services (See, Jos Master Plan).

It was also observed in the master plan that the town centre as currently existing in Jos is amorphous in nature and dispersed into residential areas in a chaotic manner. The new plan would attempt to delimit the extent of the central area to give it a focus and pride of place in terms of proposed scale of development and usage. The master plan offers broad land use proposals for the central area as follows:

- 1) construction of modular market for easy accessibility and prevention of quick spread of fire. The old central market was burnt in 1975 and the rebuilt Jos Main Market also burnt in February 2002.
- 2) provision of a modern multi-storey parking besides the Main Market.
- 3) provision of access routes around the market for ease of loading and off-loading goods.
- 4) expansion of the terminus (railway) building, installation of vandal proof accessories and fittings, improve security by ensuring presence of policemen in the station as well as provision of healthy and ambient environment.
- 5) encouragement of private developers to erect complexes.
- 6) provision of new and improvement of existing drainage system, pedestrian walkways and cycle paths.
- 7) installation of street lighting facilities.
- 8) provision of and increase green landscaped areas.
- 9) establishment of a waste management scheme to clean up and maintain the environment.
- 10) provision of rest rooms, bus stops and street furniture.

## Financing of the Master Plan

It was proposed that the implementation of the master plan would be the joint responsibility of the Federal, State, Local Governments and the Private Sector. However, the PPP (Public Private Participation) model was suggested as a viable sustainable option for the funding provision and execution of infrastructure and services within the master plan area.

#### Assessment of the Implementation of the Central Area Plan and Policies

This section assesses the level of implementation of the proposals and policies that relates to the central area regeneration. The assessment of the Doxiadis Master Plan is presented in Table 1 and in Figure 1, while that of FolaKonsult is presented in Table 2 and in Figure 2.

Figure 1 reveals the none implementation of the provisions of the Doxiadis Master plan. Only 25% of the policies/projects were partially implemented. 75% of the provisions remained unimplemented after a period of 47 years since the plan was prepared and adopted by the state government. Planning and construction of residential dwellings and height regulations, though still relevant to planning policies have been rendered ineffective due to the recent trends of development in the central area like the constant decline in residential areas and the emergence of storey buildings without proper coordination within the area.

The FolaKonsult Master Plan came in to effect from 2008 but 12 years after its preparation and submission to the state government, only 7.69% of the plan had been implemented and 7.69% partially implemented, while 84.62% of the provisions are unimplemented (Figure 2). These provisions were to be implemented by the three tiers of government, the Federal, State and Local Government Councils. Only the

Plateau Environmental Protection and Sanitation Agency (PEPSA) was established to manage solid waste collection and disposal in the metropolis. The Jang's administration (2007-2015) strengthened PEPSA by improving its technical capabilities. With PEPSA, waste collection and disposal though improved remains a huge problem. Most gutters and drainage channels are filled with garbage and refuse. Some waste collection and disposal vehicles were purchased and dino bins procured and located throughout the township.

#### Table 1.Assessment of Doxiadis (1975-2000) Master Plan Policies as they Relates to Regeneration of the Central Area

S/No	Provision	Degree of Implementation		
		Fully	Partial	None
1	Upgrading of existing central area as the pivotal civic centre with services of a higher order.		√	
2	Upgrading of existing central area into main commercial centre with services of higher order.		$\checkmark$	
3	Upgrading of existing central area into state administrative area.			$\checkmark$
4	Provision of residential accommodation in apartment blocks either in separate buildings or on the upper floors also containing other uses.			~
5	Relocation of railway line from the central area to a new railway terminal at Zarmaganda.			~
6	Creation of transportation terminal south of the industrial area.			$\checkmark$
7	Adoption of the master plan by the state and local governments.			$\checkmark$
8	Promulgation of zoning, bulk and height regulations.			$\checkmark$

Source: See Musa<sup>11</sup>.



Source: Musa<sup>11</sup>.

# Table 2.Assessment of FolaKonsult (2008-2025) Master Plan Policies as it Relates to Regeneration of the

S/No	Policy Framework		Degree of Implementation		
		Fully	Partial	None	
1	Delimiting the extent of the central area.			~	
2	Construction of modular market.			✓	
3	Provision of multi-storey parking beside the market.			✓	
4	Provision of access routes around the market.			✓	
5	Expansion of terminus (railway) building.			✓	
6	Installation of vandal proof accessories and fittings.			~	
7	Encouragement of private developers to erect commercial complexes.		$\checkmark$		
8	Improve existing storm water drainage system and provide new ones.			~	
9	Provision of pedestrian walkways and cycle paths.			✓	
10	Installation of street lighting facilities.			✓	
11	Provision of green landscaped areas.			~	
12	Establishment of a waste management scheme to clean up the environment (PEPSA).	$\checkmark$			
13	Provision of rest rooms, bus stops and street furniture.			✓	

Source: Musa<sup>11</sup>.

Many property owners still use wheel barrow boys to evacuate their waste. All the other policies remained unimplemented especially the one that has to do with government encouraging private developers and expansion of the railway building. In spite of the proposal to revive the railway, the rail tracks have been taken over by weeds, shops and stalls. The lively and busy Nigerian Railway Corporation had become moribund since the 1980's (see Plate 1). Though the Federal Government has in the recent past made concerted efforts to revive the Nigerian Railway through concession of its operation to the Indian Government and assistance by the Chinese Government, only the Lagos-Ibadan and Abuja-Kaduna lines are operating more recently. It can therefore be argued that the regeneration and changes taking place in the central area of Jos are not driven by any government policies and plans but rather by private decisions and market forces.



**Figure 2:** Degree of Implementation of Fola Konsult Master Plan (2008-2025) *Source: Musa*<sup>11</sup>.

Assessment of the Implementation of the Doxiadis MasterPlan (1975-2000) and FolaKonsult.



**Plate 1:** Shops and Stalls Constructed on Rail Tracks in the Jos Central Area. *Source: Site Visit, June 2019.* 

Oyesiku, Agbola, Alabi,<sup>12,13,14</sup>have accurately observed that the current institutional framework of urban and regional planning in Nigeria and indeed Jos Metropolis, have failed to adequately address the urban problems associated with urbanization and physical characteristics. This is exacerbated by the social, economic, environmental and their political constraints to effective urban planning in the metropolis.WapweraandEgbu have strongly recommended an effective urban planning system to address urban sprawl and its characteristics in the metropolis<sup>15</sup>.

From the assessment of urban regeneration process in the central area, there is very little government involvement in the process of change taking place. Government policies and programs have had very little or no bearing on the actual regeneration going on, especially in the construction of shops on the railway track around the terminus area which is in variance with the proposal for the expansion of the railway station (see Plate 1) byFolaKonsult (2008-2025) Master Plan.

Recognizing the uniqueness of each city, urban regeneration is to be seen as a process that, combined with sustainable development principles, should aim at contributing to an economically vibrant and thriving area, a socially diverse and inclusive place that promotes an urban environment that is full of local character and able to promote the local economy.

# **IV. RECOMMENDATIONS**

Based on the review and assessment of the Doxiadis Master Plans (1975-2000) and FolaKonsult Master Plan (2008-2025) policies and plans for the central area of Jos, the following recommendations are made:

- Public private partnership should be the modus operandi of the central area regeneration with powerful potential for accelerating the process of change. These include a comprehensive and multi-agency approach, which is the opposite of the one-agency solutions to the central area problems as proposed by the Doxiadis and FolaKonsult Master Plans. An enabling law should be enacted and administrative/policy framework established to steer planning and coordination the central area.
- 2) The communities within the central area like the residents and other organized groups should be key stakeholders in the formulation and implementation of the plan/policy. The public private partnership model is about empowerment, active participation of the various tiers of government, the private businesses and the people in a collaborative manner. There is the need to protect members of the central area community, and allow them space to contribute to their future and the future of the central area to evolve as mix-use, multi-use and multi-functional city centre.
- 3) A new administrative framework with a central coordinating agency is required to coordinate the public private partnership for the central area.
- 4) The public sector through their MDAs should provide strong leadership by ensuring that positive synergies that arise from different strategies and programs are harnessed. Public investment is a catalyst for change; and this should be provided through upgrading of the

decaying infrastructures and provision of new ones, for example, busy roads like Ahmadu Bello Way, Rwang Pam Street, Langtang Street, Tafawa Balewa Street etc. These should be expanded with adequate road side parking for commercial vehicles to pick and drop passengers without interference with traffic. This will ease the congestion experienced in the central area.

# **V. CONCLUSION**

Urban regeneration policies in Jos had mainly been through the provisions of two master plans, the Doxiadis Master Plan of 1975 and FolaKonsult Master Plan of 2008. There have been no intervening local plans and policies to give these master plans specific details; i.e. no detailed infrastructural or financial plans/policies to attract investment and provide incentives to private developers.

The findings on the assessment of the implementation of the policy provisions of the Doxiadis Master Plan of 1975 and FolaKonsults Master Plan of 2008 as these relates to the central area of Jos indicates the non-implementation of the provisions of the Doxiadis Master Plan as the proposed new city centre was not implemented, while only about 15% of the FolaKonsults Master Plan was implemented since 2008. The planning and management of regeneration activities therefore lack the desired coordination.

In addition, the two master plans were characterized by lack of flexibility effective urban regeneration strategies and very poor policy formulation and implementation<sup>16</sup>. The rigid nature of these master plans, falling economic fortunes of the state and municipal governments, urban violence and mistrust had seriously affected the effective implementation of their provisions for the central area plans and policies over the years.

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