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# Physical Master-planning as Panacea to Physical Planning Challenges in Nigeria Cities: Case Study of Abuja, Nigeria Capital City

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#### Abstract

The need for a master plan to guide development in urban areas cannot be emphasized. There is however criticisms against this master planning as a development strategy. This paper x-rays the relevance of master plan using Abuja- Nigeria Capital City- master plan as a reference study area. Attempts were made to investigate the urban challenges in Abuja as well as problems confronting master plan implementation. It was recommended that master planning should be encouraged as a strategy to guiding development settlement development

Keywords: Master plan, Settlement, Urban

#### 1. Introduction

The need to prepare master plans to guide the growth, development and investments in urban settlements is no longer a contestable issue among government, policy and decision makers. This is based on the realization that urban settlements i.e. the built environment, are reflection of the society's social, cultural, economic, technological achievement and aspiration. City development however involves huge resource investment by both the public and private sectors. Government spend huge sum of money annually in the construction and maintenance of roads, drainages, water, electricity, waste management, schools, markets etc, while individual households and firms make daily investment on housing, transportation, industries, and commercial ventures.

All these investments and decisions can not be left unguided; otherwise the objectives of making these decisions and investments may be defeated. Master plans that stipulates where, who, how and when urban land is to be used to create conducive and functional environment where all elements of the city are harmonized for the enjoyment of the citizens has to be prepared. Indeed, it is argued that master plans are the necessary conditions for successful economic and social growth as the former rationalizes the use of the later.

A Master Plan is a comprehensive long range physical development plan intended to guide growth and development of a community, city or region. It includes analysis, drawings, plans, reports, recommendations, land use zones, proposals, amongst others for the community's population, economy, housing, transportation, facilities, recreational activities, institutional, industrial, and agricultural activities. Master plan has been defined by eminent schools of taught depicting various knowledge and ideas of master planning as a planning tool. According to Ogbazi, (1992), master plan is a document prepared to guide or provides an orderly development of a city or region. The concept emphasizes on the need for a guide or point of referral to avoid chaotic juxtaposing of structures and development.

Essagha,(1997) defined master plan in Nigerian context as an official long term document by the appropriate federal, state or local authority as may be desirable clearly stating the direction of future physical development plan of a place. He described the master plan as a public document made up of maps, drawings, sketches and explanatory written reports. The maps/plans could be to direct the physical development of the area or region.

The master plan should be able to guide and direct the physical development up to next 20 to 30 years in the planned area or city. He affirmed that a good master plan should have the following characteristics:

- 1. Long term plan of between 20 to 30 years.
- 2. Emphasis on all physical development in the area within the plan period.
- 3. Comprehensive in nature treating all the major areas and sectors of development plan.
- 4. Democratic in nature stimulated usually through public debate and contribution
- 5. Open to necessary amendment if the need arises. Not a concluded permanent set up. That is to say that a

good master plan should be flexible enough to accommodate appropriate changes while rigid enough to defend the core values contained in the master plan.

Kent (1984), went further to enshrine the political dimension of master planning by defining it as a general plan or instrument through which the city council considers, debates, and finally agrees on a coherent and unified set of long range policies for the physical development of a community. Kent stated that due to political inclinations most of the general long range policies being paraded in developing countries as master plans have always been failing woefully at the implementation stage.

### 2 Concept and Philosophy of Master Plan.

Town and Regional Planning may be as old as humanity but it was the emergence of chaotic and polluted cities of Western Europe's Industrial Revolution that prompted radical and dynamic concepts of master plan and urban management. The first of these concepts was termed "modernist planning" which emerged in the later part of the 19<sup>th</sup> century and was influenced by technical and ideological considerations. The state or the ruling class were more concerned with the ideological: using master plans to maintain their property values and excluding "less desirable" low – income residents, ethnic minorities and traders from their areas. In the 20<sup>th</sup> century the concept of city master plan gained more international attention in the management of chaotic, degraded and polluted cities. Master plan emerged as the key aspect of modernist planning and detailed the city layout from its built form to its ideal end state. Master planning still survives all over the world, albeit with some variation.

Among the greatest masters of this planning form was the Frenchman, Le Corbusier. His ideas in the 1920s and 1930s established the ideal of the 'modernist city': the ideal was neat, ordered and highly controlled. Slums, narrow streets and mixed use areas were to be demolished. In the United States, Frank Lloyd Wrights of this differed. His solution to the rapid industrialization in New York City was for low density, dispersed cities with each family on its own small plot. In the 20<sup>th</sup> century in England, Ebenezer Howard developed the Garden City, which represented an attempt during the Industrial Revolution to recreate village life by bringing "green back" into the towns made up of winding roads and separate cottage residences, and through controlling the size and growth of the town.

In Sub-Saharan Africa, diffusion master plan ideas occurred mainly through British, German, French and Portuguese colonial influence. Imported master planning models were not applied equally to all sectors of the urban population. For example, towns were zoned into low density residential areas for Europeans, medium density residential areas for African civil servants and high density residential areas for the indigenous population.

### 3. Review and Critique of Abuja Master Plan.

### History:

The Abuja Master Plan for the physical development for the New Capital City (NCC) and Territory (FCT) was made in the 1980s, with projections having the year 2000 as the design year. At the inception when the capital city was chosen by Akinola Aguda Panel to be the seat of Federal Government of Nigeria away from Lagos as a result of intractable land use problems and also serving dual purpose of the seat of Federal and Lagos Government. To give effect to the choice, in June 1997, the Federal Capital Development Authority of Nigeria commissioned International Planning Associates (IPA) to produce a Master Plan for the new capital city and its regional grid.

### Concept of Abuja Master Plan.

The Abuja Master Plan Approved in 1979 provides the general framework to guide orderly development of the city. The concept is based on the principle of a functional city with a crescent-shaped structure, occupying a prominent position in the north east quadrant of the Federal Capital Territory which is emphasized by an axial focus on the highest point of Aso Hill. The plan coordinates land use, transportation, infrastructure, housing, light industry, commercial, recreational, Agricultural and other uses in a manner that recognizes their interrelationship and spatial requirements. The Master Plan has four (4) phases with incremental planning model as foundation for implementation. The Master Plan adopted incremental model of staged growth planned to occur in stages so that construction of one sector is completed before the next is begun to reduce the impact of noise, dust, and disruption accompanying a continuous long term construction programme. The intention of the Abuja Master Plan is to provide maximum flexibility to accommodate a broad range of socio-economic groups and cultural affinities.

### 4 Urban Challenges and Responses.

### **TRANSPORTATION:**

A major reason for the decision to relocate Nigeria's capital city from Lagos to Abuja was the intractable transport problems which constricted the city. The Abuja Master Plan was aimed to provide the spatial framework, to amongst others, avoid the incidence of the Lagos transport problems. The transportation network and road hierarchy for Abuja was envisaged to meet intra-city movement needs essential to an urban centre, and which at the same time provide interaction with the hinterland of the Federal Capital. The road hierarchy system was designed to include the expressway flanking the city and sector road system which provide easy access to the various districts of the city.

However, less than five years after the Federal Capital finally moved to Abuja city, it was obvious that high accessibility to public transportation was no longer guaranteed, as there had been delays in the development of mass transit points. As a response to the prevailing transportation problems in the city and satellite towns, the Federal Capital Territory Administration (FCTA) has embarked on a number of measures, which include:

- (i) The launching of the Abuja Green Cab Programme under the Greater License Scheme.
- (ii) The ban on commercial motorcycle (Okada) operations in the city.
- (iii) Proposed development of Abuja Metro line.

(iv) The engagement of licensed transport company operators in four categories of public transport services in Federal Capital Territory, and

- (v) The launching of Abuja Urban Mass Transit Company (AUMTCO).
- ✓ HOUSING:

Housing problems became so glaring at the early stages of the movement of Federal Capital from Lagos to Abuja. The population explosion far outstripped the figures that were planned for, with adverse effects on services, housing delivery and infrastructure. Largely because of the uncontrolled migration to the city, the influx was much higher than planned resources resulting in development programmes being slowed down. The actions of Federal Capital Territory Administration (FCTA), the Federal Ministry of Lands, Housing and Urban Development, and Federal Housing Authority (FHA) have resulted in the implementation of various housing programmes within the city and in the surrounding satellite towns. To further ameliorate the problem of housing shortages in Abuja, the Government has solicited private sector participation in the development of various categories of houses and housing estates in the city to provide cheap and affordable houses for the inhabitants. Another strategy of encouraging house ownership is the sale of Federal Government houses to civil servant occupants.

### ✓ POWER SUPPLY:

Electric supply to the capital city is mainly from the national grid connection supply sources. The system comprises transmission, substation and distribution for which Power Holding Company of Nigeria (PHCN) is to handle 330/132kv facilities while Federal Capital Development Authority (FCDA) handles 33/11kv facilities for the various districts of the city. The bulk of the power comes from Shiroro hydroelectric generation plant in Niger State. Moreover, electric power supply in Abuja is still grossly inadequate as the incessant power failure still persists.

# ✓ WATER SUPPLY AND HEALTH CARE:

The Federal Capital Territory water scheme was based on a system of tanks located at the north-eastern perimeter highlands to facilitate distribution flow by gravity through feeder and distribution mains. The treatment plant is located at Lower Usuma Dam. Presently, the water scheme has not been able to supply enough water to adequately serve the entire territory. About 60% have access to clean water (pipe-borne water and boreholes). Residents in satellite towns and squatter settlements use alternative sources (wells, streams, boreholes, and water vendors). The on-going water scheme of the Federal Ministry of Water Resources, which is to serve the city from Gurara, is expected to increase potable water supply to the territory.

Residents have access to good health services.

### ✓ SECURITY AND SAFETY:

Abuja is no more a safe city as crime rates and bomb blasts have been tasking security operatives to rise to the challenges. Modern techniques such as regular vehicle patrols, security check points, public enlightenment and use of effective up - to - date communication gadgets are employed in crime detection and prevention.

# ✓ **RESETTLEMENT**:

One of the challenges of the development of Federal Capital City is the resettlement policy of the government. The initial resettlement policy for FCT as envisaged was to move out all the original inhabitants of the area and resettle them outside the territory. This was in line with the principle that all Nigerians have equal access to land and other benefits without any person or group of persons being able to insist on ancestral or primordial rights.

However, due to the facts that the population of the FCT was grossly underestimated, Government realized the prohibitively high cost of wholesale resettlement and compensation. The decision was taken to resettle and compensate only the villages in the areas actually required for the development of the city. This change in policy has created certain problems leading to the emergence of pockets of slum settlements such as Karmo, Idu, Gwagwa etc. within the city.

# CRITICISM OF ABUJA CAPITAL CITY MASTER PLAN:

However, in spite of the numerous achievements which have been made in the physical development of Abuja since its implementation began in 1980, there have been significant distortions and unwholesome deviations which inhibit the full realization of the provisions of the master plan. These distortions and deviations are being corrected through the on – going demolition of illegal structures and settlements; and the restoration of the green belts, open spaces, parks and gardens, and sewage channels. The defects and limitations of Incremental Planning model used in Abuja Master Plan include the following:-

• The incremental Planning model is not a comprehensive planning strategy.

• It favours democratic political system where the term of offices is short and eligibility is by election. Thus, if the tenure of particular office is 4 years, any one seeking election will also be interested in short term city planning model in which the gestation period will be short term. The reason is that such model will promote short term project which will enhance his or her chances of being re – elected. This city planning model presents a true picture of most developing countries.

- Incremental model is myopic, reactional, and conservative.
- It can not handle adequately city planning issues that require a complete break from the past.
- It is a dis –jointed, dis –centralized and fragmented planning strategy.
- Since town planning is defined as a future oriented process, it has been argued that incremental planning model used in Abuja Master Plan is a negation to the planning process.

Other limitations in Abuja Master Plan approach include the following:-

• Abuja master plan placed more emphasis on economic planning rather than physical planning. There was lack of cooperation and coordination between the efforts of economic and physical planners. The inevitable conflicts between physical and economic planners reduce the effectiveness of the plan. Both, working at cross purposes, led to deficiencies in goal attainment and inefficiency in cost effectiveness. For instance, in Aminu Kano Crescent at Wuse II, most of the residential apartments have been converted to commercial centres.

- Self interest in relaxing standards, controls, and regulations in housing construction there by resulting in the on going collapsing of buildings in Jabi, Gwarinpa and other districts of Abuja, and
- Bureaucratic bottlenecks in land acquisition in Abuja.

### PROBLEMS FACING MASTER PLAN IMPLEMENTATION

The preparation of master plan for a city does not ensure implementation of the proposals as conceived by the plan. In most developing countries, master plan is fast loosing its usefulness as tool for controlling development as many master plans have been prepared without implementation. An efficient master plan must have comprehensive implementation framework based on judicious allocation of financial and institutional resources in a coordinated manner to ensure successful implementation. After completion of all the elements of the plan, special attention is needed to focus on implementation tools. These tools include legal protection of the plan, capital improvement programme, zoning regulations, land sub-division regulations, building regulations amongst others.

Based on the above submission, some of the critical challenges facing master plan implementation in Nigeria

#### include:-

• Lack of finance to fund the implementation of long range plans, against the general practice of annual budgeting and planning in Nigeria

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- Outrageous cost of implementation
- Political reasons/lack of political will for implementation
- Weak legal basis for plan implementation
- Weak institutional set up to coordinate planning and lack of coordination among government departments
- Bad plans which lack merit for implementation
- Lack of proper dissemination of information about master plans, a situation whereby the average citizen does not understand the meaning of master plan, not to talk of understanding the implications of its contents
- Lack of adequate consideration of the informal sector as active stakeholders in plan implementation
- Lack of formal public participation in the planning process, and
- Domination of master plan committees by bureaucrats. Most master plan committees have few technical experts with few town planners participating in studies and plan preparation process.

### CONCLUSION

Growing criticism of master plan has emerged from the same part of the world in which it originated (Western Europe and the United States) and some countries have made concerted efforts to develop alternative approaches. In other words, new tools other than just master plan have been identified for managing urban problems in the near future as master plan is fast loosing its own usefulness as a dynamic tool for controlling urban development.

However, over the past two decades, several international development agencies have attempted to resolve the problems of master planning in developing and transitional countries by introducing special programmes and processes into local government system. The aim of these programmes has been to attempt to make local authorities more responsive to other stakeholders, and to attend to particular urban issues which are considered important. In recent years, some of these "sector action plans" have focused on poverty, gender, crime and safety, health, heritage and the environment, among others.

Some of the most important of these sectoral programmes include:-

- Safer City Programme
- Localizing Agenda 21 Programme
- Sustainable Cities Programme
- The Disaster Management Programme
- The Healthy City Programme
- Global Campaign on Urban Governance
- Global Campaign on Secure Tenure
- City Development Strategy
- The Compact City Approach, and
- New Urbanism

Most of the new and innovative approaches to master planning mentioned above are moving in the direction of normative principles for urban planning.

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