New Urbanism and the Challenges of the Onitsha Urban Sprawl: The Case of Onitsha Sky City

Obu Chuka, Obiadi Bons N., Onuorah I. M., Mbah P. U., Okafor C. C., Kikanme E. I., Aniako C. U.

Department of Architecture, Faculty of Environmental Sciences
Nnamdi Azikiwe University, Awka, Anambra State, Nigeria
bonsobi@yahoo.com

ABSTRACT

The urbanization of Onitsha metropolitan area already created the dislocation of Onitsha Master Plan implementation. Subsequent to this, is the lack of adequate urban infrastructure, inappropriate implementation of the Master Plan, facilities and amenities for the Onitsha exploding population. These, accompanied by rapid urbanization resulted in spontaneous growth of slums, and ghetto settlements in the city centre and surrounding territories. Various current movements in urban design seek to create sustainable urban environments with long-lasting structures, buildings and a great liveability for its inhabitants. Onitsha communities would need to walk and live in the same community and the most clearly defined form of walkable urbanism is known as the Charter of New Urbanism. It is an approach for successfully reducing environmental impacts by altering the built environment to create and preserve smart cities that support sustainable transport. The Onitsha Master Plan was elaborated to put in place, a sustainable urban spatial environment for all groups or classes of activities to be carried out in the metropolitan area. The city was planned to be built in phases and by different developers. The Master Plan actually provided for low-income settlements (housing) areas, to be built by individuals and to be occupied by the public; the poor urban sector servants did not appear to be properly provided for. The government should invest in appropriate planning and execution of the Onitsha urban development laws, to invigorate hope, encourage and restore confidence in the people. The settlements have for years, suffered and in poor conditions and lacked housing and socioeconomic needs. The current Onitsha settlement patterns (formal and informal) are not speaking in terms of integration and there is, inexistence, adverse economic inequality and injustice within the Onitsha mainland area and the need for the formal, informal settlements and the residents and the urban actors to be talking, to link the informal and formal settlements together and tie them into the mainland infrastructure.

KEYWORDS: *Sky City, Development Laws, Housing, Architecture, Government, Implementation*

INTRODUCTION

High-rise residential buildings are multi-story buildings that house large numbers of people in apartments or condominiums. These are buildings taller than six stories and providing multiple dwelling units on each floor (Bosselmann, 2001). It is an urban form of housing that has gained popularity in many cities around the world due to its ability to accommodate a large number of people on a small amount of land (Jones 1972). Depending on the region, country or continent,

tall buildings are classified as High-rise buildings and in some areas and especially, in oceanic countries, they are regarded and called, Vertical buildings or housing. Vertical housing is traced back to the early 20th century, with the emergence of high-rise buildings in major cities around the world. The concept of building tall structures was first popularized in New York City, where the demand for more living and office space led to the construction of the first skyscrapers. Housing is a fundamental human right and an essential component of sustainable development. It is a crucial factor that influences people's wellbeing and quality of life (Willis, 1949).

The earliest known example of ahigh-rise building is the Monadnock Building in Chicago, which was completed in 1893. Designed by architects Burnham and Root, the 16-story building was one of the tallest structures in the city at the time. Other notable examples of early vertical housing include the Flatiron Building in New York City, completed in 1902, and the Woolworth Building, also in New York City, completed in 1913 (Willis, 1949).

Throughout the 20th century, the popularity of high rise housing continued to grow, with many cities around the world adopting the high-rise building as a solution to urban housing challenges. In the United States, the post-World War II boom led to a rapid increase in the construction of high-rise apartment buildings in urban centres. In Europe, the construction of vertical housing was also driven by a need for more affordable housing in densely populated cities.

One of the most significant developments in the history of vertical housing was the emergence of modernist architecture in the mid-20th century. Architects such as Le Corbusier, Ludwig Mies van der Rohe, and Walter Gropius championed the use of high-rise buildings as a solution to urban housing challenges. They believed that vertical housing complexes could provide a more efficient use of space, increase urban density, and create a more harmonious relationship between people and their environment (Taylor, Crowther & (2010)

In Asia, especially, East Asia countries; Japan, China, Singapore and Korea with high land prices, almost their entire population live in High-rise buildings. The residential buildings are generally known as, vertical cities in the sky or vertical communities. After the Korean War, the South Korean government built many residential towers to accommodate her increasing population and the practice continued, and has been transformed into tower blocks accommodating shopping malls, convenient facilities, housing and parking systems(Tower Block, 2013).

Tokyo's Sky City
Discovery Channel, February 15, 2013 "Some Japanese architects want to change our approach to urban crowding. They think we can live in the sky, and they hope to build a vertical city twice the height of today's tallest skyscraper that would house, employ and entertain hundreds of thousands of people."

Umeda Sky Building
To control the urban sprawl and create housing for the Japan urban dwellers, Japanese architects and planners introduced Sky buildings. Among their sky buildings is the Umeda Sky Building which is the twelfth-tallest building in Osaka, Japan, and one of the city's most recognizable landmarks. It consists of two 40-story towers that connect at their two uppermost

stories, with bridges and an escalator crossing the wide atrium-like space in the center (Umeda Sky Building, 2013). Umeda Sky Building was conceived in 1988 and was planned and designed to have four interconnected towers, but was cut down to two towers because of practical considerations and it is located in Umeda district of Kita-ku. The building is a live and work housing complex, offices, commercial, residential, recreational facilities and many more. Among its most notable features are, underground market that recreates Osaka atmosphere in the early 20th century along with an urban garden with walking trails and water features. It is 173 meters (568 ft) and was completed in 1993.

Sky City or Sky City One, China

According to Paritzky (2011), population growth in China is one of the most serious problems that the Beijing administration needs to tackle. How does the government plan to solve what could be the biggest problem for China's future? China has had population explosion problem that resulted in its 1978 implementation of a one child policy law that officially restricted the number of children married urban couples are allowed to have. This law was established to solve China's population problems leading to pressure in their social, economic, and environmental problems. According to Paritzky (2011), the law has prevented 400 million births from 1979 to 2011 and less pressure on worldwide food supplies and less population in major Chinese cities.

The growth of China's massive population has slowed in recent years, but migration to urban areas has increased, with almost half of China's 1.3 billion people living in or near cities. A booming economy, government housing initiatives, infrastructure programs, and private real estate speculation have all driven construction to record levels. New apartment, office, and government buildings regularly rise up over older neighborhoods, and thousands have relocated to modern housing complexes. The blend of old and new Chinese architecture is ever-present in cities and villages, as older buildings are torn down and newer ones built at ever faster rates (Taylor, 2012).

In China, it is the Sky City or Sky City One, proposed to be the world tallest building, and to be built in the city of Changsha, Hunan, South-central, China. If built as planned, it will have 220 floors and 838 meters (2, 749 ft) high. The building will accommodate 1000 hotel guests, a hospital, 5 schools and offices. 83% of the building will be used for residential, housing about 17, 000 people. A mixed use, with luxury apartments, low income housing, and space for businesses and retail. According to Alter (2013), this building puts 4,450 households on two acres and it is actually designed with energy conservation in mind. By going huge they are getting tremendous manufacturing efficiencies; by going vertical they get the kind of repetition that makes it affordable. By going half a mile high and 220 stories they are going to get noticed. It is a vision of sustainability that people in a crowded world are going to have to get used to (Alter, 2013).

Literature reviews indicated that, almost all the advanced countries adopted High-rise building approach, which became possible with the invention of elevators (lift) and abundance of building materials. It is a widely accepted fact that the towers and skyscrapers are advantageous in housing accommodation, in urban areas with high population density and decreases the cost of municipal infrastructure. Plates 1 to 5 are the high-rise buildings used in other parts of the word in solving their urban population housing problems. They accommodate more people per unit of area of land when compared with single family buildings and low rise apartments. In Asia, especially, East Asia countries; Japan, China, Singapore and Korea with high land prices,

almost their entire population live in High-rise buildings. After the Korean War, the South Korean government built many residential towers to accommodate her increasing population and the practice continued, and has been transformed into tower blocks accommodating shopping malls, convenient facilities, housing and parking systems (Tower Block, 2013).

Plate 1. Numerious High-rise apartments in Navi Mumbai, India
Source: Internet (May 4, 2023)

B
Plate 2. Waterloo, Sydney, Australia Housing commission towers
Source: Internet (April 25, 2023)

Plate 3. South Korea Tower block apartment (typical)
Source: Internet (April 25, 2023)

Plate 4. Umeda Sky Building in Osaka
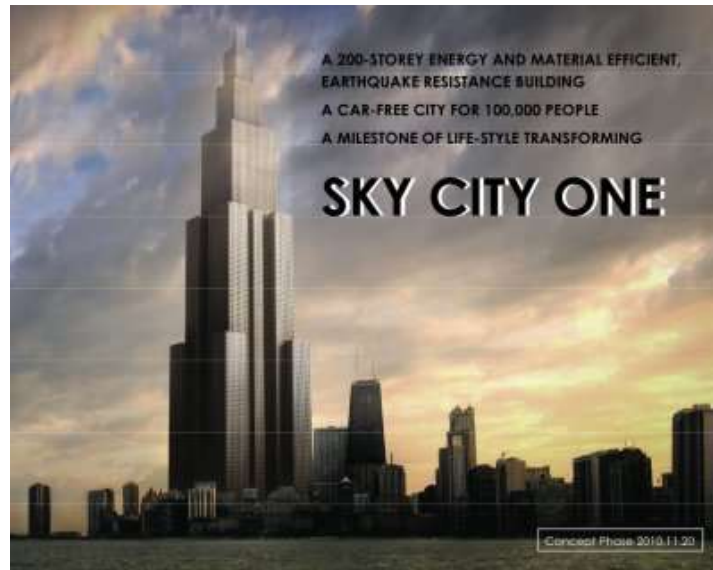Source: Internet (April 25, 2023)

Plate 5. Sky City or Sky City One, China
Source: Internet (May 4, 2023)

Literature reviews indicated that the most enduring quality of the city is its form. The initial impact it has upon the stranger arises from the appearance of its form. The city is something to be seen and delight-in (Amole, 1997). Lynch (1985), indicated that, like a piece of architecture, the city is a construction in space, but one of vast scales, a thing perceived only in the course of long spans of time. Lynch, further indicated that, although clarity or legibility is by no means the only important property of a beautiful city, it is of special importance when considering environments at the urban scale of size, time, and complexity. To understand this, we must consider not just the city as a thing in itself, but the city being perceived by its inhabitants (Lynch, 1985). Having been clearly stated, this research explored adopting urban design principles that would address the above mentioned attributes.

According to Curran (1983), within the urban context, the expressive qualities of buildings extend beyond individual structures. Here one must consider not only the form of a building relative to other buildings, but also the role it plays in defining public spaces. Like built forms, the spatial forms of public spaces also convey essential information. The forms of buildings, determined by their shapes and sizes, can be highly expressive and a vital source of information in our understanding and use of the city. Built and spatial forms provide the basic context for the urban experience.

MODERN URBAN PLANNING

Planning and architecture went through a paradigm shift at the turn of the 20th century. The industrialized cities of the 19th century had grown at a tremendous rate, with the pace and style of building largely dictated by private business concerns. The evils of urban life for the working poor were becoming increasingly evident as a matter for public concern. The laissez-faire style of government management of the economy, in fashion for most of the Victorian era, was starting to give way to a New Liberalism that championed intervention on the part of the poor and disadvantaged. Around 1900, theorists began developing urban planning models to mitigate the consequences of the industrial age, by providing citizens, especially factory workers, with healthier environments (Hall and Tewdwr-Jones, 2010).

The first major urban planning theorist was Sir Ebenezer Howard, who initiated the garden city movement in 1898. This was inspired by earlier planned communities built by industrial philanthropists in the countryside, such as Cadburys' Bournville, Lever'sPort Sunlight and George Pullman's eponymous Pullman in Chicago. All these settlements decentralized the working environment from the center of the cities, and provided a healthy living space for the factory workers. Howard generalized this achievement into a planned movement for the country as a whole. He was also influenced by the work of economist Alfred Marshall who argued in 1884 that industry needed a supply of labour that could in theory be supplied anywhere, and that companies have an incentive to improve workers living standards as the company bears much of the cost inflicted by the unhealthy urban conditions in the big cities (Hall and Tewdwr-Jones, 2010).

Howard's ideas, although utopian, were also highly practical and were adopted around the world in the ensuing decades. His garden cities were intended to be planned, self-contained communities surrounded by parks, containing proportionate and separate areas of residences, industry, and agriculture. Inspired by the Utopian novel Looking Backward and Henry George's work Progress and Poverty, Howard published his book Garden Cities of To-morrow in 1898, commonly regarded as the most important book in the history of urban planning (Howard, 1898). His idealized garden city would house 32,000 people on a site of 6,000 acres (2,428 ha), planned on a concentric pattern with open spaces, public parks and six radial boulevards, 120 ft (37 m) wide, extending from the center. The garden city would be self-sufficient and when it reached full population, another garden city would be developed nearby. Howard envisaged a cluster of several garden cities as satellites of a central city of 50,000 people, linked by road and rail (Goodall, 1987).

In North America, the Garden City movement was also popular, and evolved into the "Neighbourhood Unit" form of development. In the early 1900s, as cars were introduced to city streets for the first time, residents became increasingly concerned with the number of pedestrians being injured by car traffic. The response, seen first in Radburn, New Jersey, was the Neighbourhood Unit-style development, which oriented houses toward a common public path instead of the street. The neighbourhood is distinctively organized around a school, with the intention of providing children a safe way to walk to school (Christensen, 1986 and Schaffer, 1982).

MODERNISM: CONTEMPORARY PERIOD

In the 1920s, the ideas of modernism began to surface in urban planning. The influential modernist architect Le Corbusier presented his scheme for a "Contemporary City" for three million inhabitants (Ville Contemporaine) in 1922. The center piece of this plan was the group of sixty-story cruciform skyscrapers, steel-framed office buildings encased in huge curtain walls of glass (plate 6).

Plate 6. Partizánske in Slovakia – an example of a typical planned industrial city founded in 1938 together with a shoemaking factory in which practically all adult inhabitants of the city were employed.
Source: Internet (May 4, 2023)

These skyscrapers were set within large, rectangular, park-like green spaces. At the centre was a huge transportation hub that on different levels included depots for buses and trains, as well as highway intersections, and at the top, an airport. Le Corbusier had the fanciful notion that commercial airliners would land between the huge skyscrapers. He segregated pedestrian circulation paths from the roadways and glorified the automobile as a means of transportation. As one moved out from the central skyscrapers, smaller low-story, zig-zag apartment blocks (set far back from the street amid green space) housed the inhabitants. Le Corbusier hoped that politically minded industrialists in France would lead the way with their efficient Taylorist and Fordist strategies adopted from American industrial models to re-organize society (Norma. 1969, p.7).

In 1925, he exhibited his "Plan Voisin", in which he proposed to bulldoze most of central Paris north of the Seine and replace it with his sixty-story cruciform towers from the Contemporary City, placed within an orthogonal street grid and park-like green space. In the 1930s, Le Corbusier expanded and reformulated his ideas on urbanism, eventually publishing them in La Ville radieuse (The Radiant City) in 1935. Perhaps the most significant difference between the Contemporary City and the Radiant City is that the latter abandoned the class-based stratification of the former; housing was now assigned according to family size, not economic position (Fishman, 1982, p 231).

THE ARCHITECTURE OF OBJECTS AND DECLINE OF THE PUBLIC DOMAIN

Modernism also came with the decline in the quality of the architecture of public spaces as was the case in the eras past. As indicated by Curran (1983 p5), directly related to the reduction of architectural structures to the status of objects, the most dominant characteristic of the modern tradition has been the deterioration and virtual disappearance of the public domain. No longer sustaining a range of activities traditionally associated with urban life, the public domain has been reduced to the exclusively use of the automobile, and the city, as a collection and system of spaces having multiple social as well as functional roles, was lost. This has paralleled the

decline of public participation in government, industry, community affairs, etc., which represent the other vital dimension of the public domain. Accordingly, the city-making process has been fragmented into separate and specialized professions, including city and regional land-use planning, road and highway engineering, landscape architecture, architecture, etc. As in factory-line production, each is concerned with a single aspect of the process, while the effects of their input within the community has been lost to abstraction (Curran, 1983 p5).

URBAN CRISIS
By the late 1960s and early 1970s, many planners felt that modernism's clean lines and lack of human scale sapped vitality from the community, blaming them for high crime rates and social problems (Morris et al. 1997). Modernist planning fell into decline in the 1970s when the construction of cheap, uniform tower blocks ended in most countries, such as Britain and France. Since then many have been demolished and replaced by other housing types. Rather than attempting to eliminate all disorder, planning now concentrates on individualism and diversity in society and the economy; this is the post-modernist era (Morris et al. 1997).

NEW URBANISM
Various current movements in urban design seek to create sustainable urban environments with long-lasting structures, buildings and a great livability for its inhabitants. The most clearly defined form of walkable urbanism is known as the Charter of New Urbanism. It is an approach for successfully reducing environmental impacts by altering the built environment to create and preserve smart cities that support sustainable transport. Residents in compact urban neighborhoods drive fewer miles and have significantly lower environmental impacts across a range of measures compared with those living in sprawling suburbs (Ewing, 2009).

In recent years, the trend toward High-rise building has continued to evolve, with architects and urban planners exploring new ways to design sustainable, livable high-rise buildings, In China the history of high-rise buildings can be traced back to the early 1950s, when the country began implementing socialist urbanization policies. The focus of these policies was to create a large number of affordable housing units for workers and low-income earners. Initially, the government constructed low-rise housing units to meet the demand for affordable housing. However, with the increasing urbanization and population growth, the government began to explore the development of high-rise housing to maximize land use and meet the growing demand for housing.

One of the earliest examples of vertical housing in China was the Daning International Community in Shanghai. Built in 1994, the community comprised three 50-story residential towers, making it the tallest residential building in China at the time (Lu, 1994). The success of the Daning International Community paved the way for the development of more high-rise residential buildings in China.

In recent years, the Chinese government has been promoting the development of high-rise residential buildings as a solution to the shortage of affordable housing in major cities. The government has implemented various policies to encourage the construction of high-rise residential buildings, such as providing subsidies to developers and easing land use restrictions.

One of the most significant developments in the history of vertical housing in China is the construction of the 632-meter tall Shanghai Tower. Completed in 2015, the Shanghai Tower is currently the second-tallest building in the world and the tallest building in China. The tower

comprises offices, hotels, and residential units, making it a prime example of mixed-use development (CTBUH, 2015).

In Africa housing development has been dominated by low-rise housing and informal settlements, with high-rise residential buildings being a relatively recent development. One of the earliest examples of vertical housing in Africa can be found in Egypt. The iconic Al-Ahram building in Cairo was completed in 1960 and is considered one of the first high-rise buildings in Africa (Braun, 2010). The building served as the headquarters of the Al-Ahram newspaper and was designed by the famous Egyptian architect, Ramses Wissa Wassef. In the 1970s, Nigeria began to experience a rapid increase in urbanization, which led to a growing demand for housing. To meet this demand, the Nigerian government embarked on a program to build high-rise residential buildings in major cities. One of the most significant developments of this program was the construction of the Cocoa House in Ibadan, which was completed in 1965 and became the tallest building in West Africa at the time (Oguntoyinbo, 2016).

In recent years, African countries have begun to embrace high-rise residential buildings as a solution to the shortage of sustanble housing. In South Africa, for example, the government has implemented policies to promote the development of high-density residential buildings in major cities (Lamond, 2015). The construction of the 52-story Leonardo Tower in Johannesburg in 2019 is a prime example of this trend (Evans, 2019). One of the challenges facing the development of vertical housing in Africa is the high cost of construction. High-rise buildings require significant investment in materials and infrastructure, which can make them unaffordable for low-income earners. Additionally, there are concerns about the safety of high-rise buildings in Africa, particularly in areas with high seismic activity.

As cities become more crowded and land becomes scarcer, high-rise buildings may become an increasingly popular solution to urban housing challenges (Oldfield 2013). Hence the Need for High-Rise Buildings in Onitsha. Onitsha is one of the most densely populated cities in Nigeria. it lies at a major east–west crossing point of the Niger River and occupies the northernmost point of the river regularly navigable by large vessels. These factors have historically made Onitsha a major center for trade between the coastal regions and the north, as well as between eastern and western Nigeria. Onitsha possesses one of the very few road bridge crossings of the mile-wide Niger River and with the almost completed second bridge near it (Anayo, 2010).

As of 2016, Onitsha had an estimated city proper population of 2,080,000 people. As of early 2022, Onitsha has a rising estimated population at 3,553,000 and the population is projected to grow to over 5 million by 2030. (National Bureau of Statistics, 2022). Over the years, the city has experienced huge influx of people, causing shortage of housing, especially sustainable housing. This has led to a lot of residents seeking accommodation in neighboring states like Asaba Delta State, leading to increase in the number of people commuting daily for work and other activities (Nwachukwu 2009). There are several reasons; residents in Onitsha have resorted to moving to neighboring cities in search of housing. One of the major reasons is the high cost of housing in the city, the lack of adequate urban planning and infrastructure. Onitsha, like many other cities in Nigeria, lacks proper urban planning and infrastructure, leading to the development of slum settlements and overcrowding in certain areas. The city's infrastructure, such as roads, water supply, and electricity, has not kept pace with the growing population, resulting in poor living conditions for residents (Anayo, 2010). Sustainable vertical housing

has the potential to address the city's housing crisis while also contributing to environmental sustainability of the city.

As seen from the background, the urbanization of Onitsha urban area already created the dislocation of Onitsha Master Plan implementation. Subsequent to this, is the lack of adequate urban infrastructure, inappropriate implementation of the Master Plan, facilities and amenities for the Onitsha exploding population. These, accompanied by rapid urbanization resulted in spontaneous growth of slums, shanty towns and ghetto settlements in the city centre and surrounding territory. These informal settlements are partly of the original indigenes and partly settlers, who were cut up by urbanization process. The situation is heightened by demolition exercises especially, during the Governor Soludo's administration of the Anambra State and steady influx of migrants which cumulatively have resulted in greater population having no housing and sustainable residential environment, and the formal areas (Government Reserved Area [GRA]) being invaded by the informal urban dwellers.

The inadequate development of the city, coupled with the distortion in the Master Plan implementation gave rise to:-
(a)   Spontaneous emergence of informal settlements especially, within the Central areas of the city. A situation which predominates up till date.
(b)   Urban spatial distortions
(c)   Unplanned and undeveloped City Center periphery, an attempt to remain within reach to place of work by the urban people.

As the surging population was now seen to be housed (settle or squat) in areas not meant for them. It was then that the Anambra State started demolition of houses of the settlers, who now, moved to the planned, but undeveloped areas within the Onitsha city central area periphery. They have done these as they derived their livelihood from jobs offered within the Onitsha Main market, Ochanja, Head Bridge area; be it public or private jobs. This is as noted by Uji and Okonkwo (2007), that the urban poor are people, "frustrated by the inadequacies and failure of the conventional approaches to provide urban shelter and services to a significantly large enough proportion of the poor in the urban areas of the developing nations, these ever-increasing class of urban populations have to resort to squatting on public or private land, either by invading and forcefully occupying or leasing such land (illegally sub-divided) on which they hurriedly construct (through self-help) their shelter from any available materials using any readily affordable and available technology."

This work looked into the problems and challenges of population on the architecture of the urban areas that resulted in housing inadequacy, slums and urban housing settlements especially in Onitsha. The dynamics of the world economy has changed and greatly impacting the socio-economic conditions of every society. Today, the world economy is in a period of rapid and dramatic change, and the question of just how we will connect to this new world is the single most important issue of our life. We are living in a time of contradiction. A time of role reversals, a time in which old expectations are violated so frequently that new expectations cannot form. Many of these contradictions center around connections to the world (Kanter, 1995). The world is now connected and affecting the old operational mechanisms of most establishments. It is a new world and with changes. The changes are affecting the building industry and especially, the practice of architecture, with daily increase in the population of the urban areas, urbanization and housing inadequacy.

AIM OF STUDY

Primarily, this work aims to point to the fact that, the urban actors in Onitsha, could take advantage of the Vertical City concept as practiced in most advanced countries in decongesting the Onitsha metropolitan area, at the same time, sustainably, solving Onitsha's urbanization problems.

RESEARCH METHODOLOGY

Different authors are reacting to the changes of the Onitsha urbanization problems and differently. Based on that, the writers, adopted qualitative research method that embraced information from secondary data sources including, literature reviews from journals, previous works and books. The disciplinary area of focus are the population of the Onitsha urban area and their architecture, or better said, architecture and housing inadequacy in the metropolitan area especially, focusing on Onitsha, Anambra State, Nigeria mainland area. As a result, the writers evaluated the opinions of the experts in the field and used that in supporting their argument that, the population of Onitsha, Nigeria is affecting the architecture and housing supply of the area consequently, proposed the adoption of High-rise building approach for Onitsha, Nigeria's urban housing settlements.

FINDINGS

In the field, the researchers found formal (well surveyed settlements) and informal housing [urban settlers (slums)] characterized by Quick-Fix (make-shift) homes, mostly built with recycled wood, zinc and aluminum products and from construction sites. The settlements have homes in total disrepair; the areas littered with waste and unkempt (even at the middle of formal housing areas). The majority of the settlements have narrow and overflowing dirty gutters that zigzagged around the make-shift homes. They lacked infrastructure, but could be linked up with the surrounding mainland infrastructure. Interview with the residents revealed that they lived there because of nearness to places of work, both formal and informal. The areas however, have no strong economic production base of any sort and many of the residents have been living there for many years and would prefer to continue living there.

- The Onitsha Master Plan was elaborated to put in place, a sustainable urban spatial environment for all groups or classes of activities to be carried out in the Metropolitan area.
- The city was planned to be built by in phases and by different developers. The Master Plan actually provided for low-income settlements (housing) areas, to be built by individuals and to be occupied by the public; the private sector servants did not appear to be properly provided for.
- The crises in both the north and southwest Nigeria have resulted in more demands for housing in the east and particularly, Onitsha. This resulted in adverse scarcity of housing and progressive urbanization, affecting housing=g delivery on the greater Onitsha metropolitan area.

RECOMMENDATIONS

This research strongly recommends for the Anambra State government to review and change her typical ways of implementing government policies. The governments in Nigeria have in the past, developed housing programmes for the urban poor without urban architecture or urban design attributes, contributions of the inhabitants and consideration of their interests and those

are, part of the problems with the Nigerian housing delivery programmes and needed to be changed.

It recommends adopting urban design principles, dealing with the density of the Onitsha people's housing settlements, the aesthetics, urban amenities, well defined means of circulation, functional parks, how the people and their settlements function and decongestion of the areas by building high rise, 6 to 20 story apartments with facilities for factories and industries within the buildings. The buildings would embrace facilities for factories and industries (commerce) on the lower floors, where the residents would be gainfully engaged in economic activities while they live on the upper floors.

It recommends for the government to invest in the appropriate planning and execution of the Onitsha urban development laws, to invigorate hope, encourage and restore confidence in the people of Onitsha. The settlements have for years, suffered and in poor conditions and lacked housing and socioeconomic needs. The present state of the rich community's comfort and competition are, as a result of the free access they have to lands and resources. Denied access to lands and resources are persistent problems to the urban people's areas and have continually derailed their growth and development.

CONCLUSION

The current Onitsha settlement patterns (formal and informal) are not speaking in terms of integration and there is, inexistence, adverse economic inequality and injustice within the Onitsha mainland area and the need for the formal, informal settlements and the residents and the urban actors to be talking, to link the informal and formal settlements together and tie them into the mainland infrastructure. The poor implementation of the Onitsha Master Plan, led to dismal miscommunication problems and economic divide within the Onitsha City. The city lacked integrity, inclusion of all and shared prosperity. It is a model commercial city that lacked inclusive economic growth incentives and from the research findings, not sustainable.

REFERENCES

Alter Lloyd, (2013) One Building, One City: World's tallest prefab, Sky City, is breaking ground in June. Retrieved from: http://www.treehugger.com/modular-design/one-building-one-city-worlds-tallest-prefab-breaking-ground-june.html

Amole Bayo, 1997. The Architecture and City Building: New Roles? The City as Home: Who are the Builders? The Nigerian Institute of Architects, Oyo State Chapter.

Paritzky Lior, Laowaiblog (2011). China has the largest market share of clean energy investment, 12 Population in Trouble.SpirE-Journal-Q3-2012_Are-you-invested-in-China#U2019s-sunrise-industries.pdf (spireresearch.com)

Christensen Carol Ann (1986), The American garden city and the new towns movement.

CTBUH (2015). The Complex Path to Simple Elegance: The Story of 432 Park Avenue. 2437-the-complex-path-to-simple-elegance-the-story-of-432-park-avenue.pdf (ctbuh.org)

Curran Raymond J. (1983). Archtecture and the Urban Experience. Van Nostrand Reinhold Company. New York. P51

Ewing, R "Growing Cooler - the Evidence on Urban Development and Climate Change". Retrieved on: 2009-03-16.

Fishman Robert (1982). Urban Utopias in the Twentieth Century: Ebenezer Howard, Frank

Lloyd Wright, and Le Corbusier (Cambridge, MA: MIT Press). p 231.

Goodall, B (1987), Dictionary of Human Geography, London: Penguin.

Hall, Peter and Mark Tewdwr-Jones (2010). Urban and Regional Planning. Routledge.

Howard, E. (1898): Garden Cities of Tomorrow.

Kanter Moss Rosabeth (1995) World Class, Thriving Locally in the Global Economy. Simon
and Schuster, Rokyfella Center, 1230 Avenue of the Americas, New York, NY 10020.
19-25

Lynch, Kevin (1985). The Image of a City. The M. I. T. Press: Massachusetts Institute
of Technology Cambridge, Massachusetts, and London, England. p. 1, 3, 105.

Morris Smith et al (1997). British Town Planning and Urban Design, ISBN 0-582-23496-4,
Longman, Singapore.

Morris 1972, pp. 39-41, 51-60; Kolb 1984, pp. 169-238; Benevolo, Leonardo (1993).
Die Geschichte der Stadt. Frankfurt am Main/New York. pp. 256-267.

Norma Evenson (1969). Le Corbusier: The Machine and the Grand Design. George Braziller,
Pub: New York, (p.7). pp. 115-120

Oldfield PF (2012) Tall buildings and sustainability. University of Nottingham Press,
England, pp 32–35

Paritzky Lior, Laowaiblog (2011). China has the largest market share of clean energy
investment, 12 Population in Trouble.SpirE-Journal-Q3-2012_Are-you-invested-in-
China#U2019s-sunrise-industries.pdf (spireresearch.com)

Schaffer Daniel (1982). Garden Cities for America: The Radburn Experience (Temple
University Press)

Taylor Alan (2012) In Focus; Chinese Architecture, Old and New

Tower Block (2013) Retrieved from: http://en.wikipedia.org/wiki/Tower_block

Building (2013) Retrieved from:
http://en.wikipedia.org/wiki/Umeda_Sky_Building

Uji Zanzan Akaka and Okonkwo Madubueze Moses (2007) Housing the Urban Poor,
User Involvement in the Production Process, EDPCA Publications, Enugu, Nigeria.:11-
17,

Umeda Sky Building (2013) Retrieved from:
http://en.wikipedia.org/wiki/Umeda_Sky_Building

Willis Carol (1949). Skyscraper Museum. Form Follows Finance: Skyscrapers and Skylines
in New York and Chicago (1-October 1996), Paperback.