

Mr. J. J. J. J.  
A. J. J.

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# THE IMPACT OF BUILDING SUCCESSION AND USE CONVERSION ON HOUSING STOCK IN THE CORE AREAS OF MINNA, NIGER STATE.

By Tpl. Dr. A. M. Jinaidu MNITP, RTP.  
Department of Urban and Regional Planning,  
Federal University of Technology,  
Minna, Niger State.

## Abstract

*The increasing economic activities of man have subjected lands in the inner city to locational competition, which generates land use dynamics. The emerging trend therefore, is the gradual commercialization of the city center leading to the concentration of the low-income group on smaller proportion of land. This paper examines the process of building succession and change of use in the central part of Minna town and the implications it has for the housing of the low-income residents. It uses Minna township map to identify and survey buildings in the outlining business districts of the core areas. Among others, the study found out that a significant proportion of the residential houses were converted to commercial uses without planning permission. The increasing reduction of residential accommodation in the core areas has thus resulted in overcrowding in small spaces due to room partitioning. Shortages of accommodation have caused relocation of some residents to poor tenements in the suburban areas of Kpakungu, Dutsenkura Gwari, Maitunbi Tudun Fulani and Maikunkele. Among others, the study recommended property renovation, neighborhood upgrade and land use relocation as measures to preserve the existing city center accommodation for the benefit of the poor majority.*

## 1.0 Introduction

Housing is a basic human need, third after food and clothing. It is a valued commodity that provides shelter, security, access to basic infrastructure and social identity for mankind. Availability of decent and affordable accommodation is therefore central to human existence as it provides the framework for the pursuit of the socio-cultural and economic activities of man.

Cities as centres of agglomeration provide the spatial context for the provision of the housing needs of the people. It is therefore not surprising that residential buildings of varying types form the major elements of the city landscape. A significant proportion of these buildings is found in the central city which is the area of initial development and growth and which also forms the hub of socio-economic activities.

The city center is an important area in any human settlement. In most towns and cities of the developing world, the core areas are characterized by aging buildings, which provide accommodation for the majority. Real life experience and empirical findings of many studies reveal that the core areas of cities in Africa, Asia and Latin America provide cheap accommodation for the majority of the low-income group. According to Habitat (1996), studies of city centre in Latin America reveal that tens of thousands of households lived in cheap tenements and hotels in Buenos, Aires, Montevideo, Lima, Mexico city, Bogota and many

other large cities, these and other studies confirm that the main sources of housing for the low-income groups are within the traditional city centre.

Despite the importance of the city centre as major areas of low-income accommodation, the sustenance of the existing housing stock is currently under threat in many cities of the development world. As it were, the increasing economic function of cities and the emergence and resilience of the informal sector economic activities have subjected the space in the central areas to intensive locational competition. The emerging trend therefore, is the gradual commercialization of the city centre leading to the concentration of the low-income group on smaller proportion of land. As more and more commercial uses take over the land in the city centre, the accommodation of the low-income residents is threatened and they run the risk of being completely displaced.

This paper examines the phenomenon of building succession and building use conversion in the central part of Minna town and the implications it has for the housing of the low-income residents. The objectives are to ascertain the level of building use conversion, structural modifications and replacement that had taken place and how these have affected the existing housing stock.

## **2.0 Literature Survey and Conceptual Background.**

Physical development is a permanent and recurring feature of human settlements. The concept of development, within the context of the Nigerian Town and Country Planning Ordinance of 1946 is varied and wide. The meaning of development is used to cover all improvements to land including building operations and change of use (Ola, 1977) Building operations, according to the Law, include rebuilding operations, structural alterations and additions to an existing building. On the other hand, change of use involves the use of land or building for a purpose that is different from that for which approval was given and the purpose for which the land or building was last used. In this case, the conversion of residential buildings to commercial use - including external advertisement constitutes change of use, a phenomenon that Abodunrin (1986) referred to as non-conformity use of a conforming building.

Development, in whatever form it may occur, is a common and dynamic feature in the central areas of towns and cities. The theoretical postulates of the classical land use models and the economic rent theories provide the framework for understanding the dynamics of land use at the city centre. The classical models of urban land use propounded by Burgess (1925) and Homer Hoyt (1939) recognized the city centre as a high value area, an optimum location for human activities that has the advantage of great accessibility. Likewise, the economic rent theories posit that lands in the inner city are of high economic value, and that prices and rent diminish outwards from the city centre. For instance, the rent theory propounded by Alonso (1964) demonstrated that, intra-urban location of economic activities results from a bidding process for land regulated by the urban land market. The basic idea is that each parcel of land has a unique locational attribute and it shares physical relationships with many other parcels. For every combination of space relationships, the market attaches a value, which determines the bid for that site. Based on land value, the land market allocates each piece for different land uses according to the bid rent - the amount individuals are willing to pay for any location. The bidding process thus allocates each piece of land to the highest bidder at a given location.

Wicks (1982), in his study of the structure of land value in Topeka, established that the value of the Central Business District (CBD) towers above other locations. The observable pattern of land value in any given city is however dynamic and it changes over time. Homer Hoyt (1939) demonstrated empirically that as the patterns of values change in time, use patterns also change. Thus, there is a strong correlation between land values and use pattern/intensity of use.

The changes in the pattern of urban land use find basic explanations in the concept of urban ecology. This concept follows the explanations in biological sciences and it is used to describe the physical change processes in cities. In social context, the concept of urban ecology describes the evolution and development of urban communities in time and space through a process called aggregation. According to Ericksen (1954), the sub process of aggregation includes concentration and dispersion of services and population, population segregation, dominance and invasion of areas by groups leading to succession of one group by another.

Among all the sub processes, that of invasion and succession is of particular relevance to the study of land use conversion and change. In practical terms, economic forces feature prominently in the explanation of ecological process in cities. According to Helga Leitner and Eric Sheppard (1989) the production of built structures, its timing and location reflect the investment decisions made by different actors such as developers, landowners and brokers. These actors, in the supply of new or converted buildings, are influenced by the expectations and speculations about future revenues that are likely to accrue from the investment.

Alterations and adaptations to buildings arise as a result of the need to put properties to more economical use. As we know, the city centre in most developing countries is characterized by ageing residential stock. The economic value of the existing outmoded stock becomes depressed over time. As the value fell, less is invested in maintenance. This makes the buildings cheaper for developers to purchase and provide the justification for building replacement. Thus, the extent of space demand for economic activities and a decrease in the value of the existing buildings influence the rate of building conversion, disposal, demolition and rebuilding in any economy.

### 3.0 Research Scope and Methods

The research is focused on the core area of Minna, Niger State. The area considered is bounded by Airport, Kuta, Sabongari, U.K Bello, Abudu, Yoruba and Hospital roads and it covers an approximate area of 285995.38 m<sup>2</sup> (0.3 Km<sup>2</sup>). Along these and many other roads, 717 buildings located at both sides of streets were surveyed.

The secondary data used for the study were derived from Minna township maps (sheets 22 and 23) prepared from Aerial photographs by Dar Al-Handasah Consultants in April 1974. The maps provided the base line information and they were used to identify the buildings in the outlining business districts of the core areas. A field survey was conducted to determine the number of residential houses and/or living rooms converted to commercial and other uses as well as those completely replaced by process of succession. Simple data collection structures were used to record information on building types, the initial and current use of buildings, room partitioning, room to shop conversions, occupancy ratios, building additions and evidence of population displacement and building replacement. The data collected were analyzed using descriptive and non-parametric statistics as well as graphical charts.

## 4.0 Research Findings

### 4.1 Housing Characteristics

Studies on the nature and character of the housing stock in the central areas of cities in developing countries confirm that they are usually characterized by old, overcrowded houses with high occupancy ratios and inadequate facilities. (Olu Sule, 1986 and Habitat, 1996). The situation in Minna central area is not, in any way, different. The area consists of four major types of buildings - compound buildings, storey buildings, detached and semi-detached bungalows (figure 1). Among these, 480 (66.9%) of the 717 buildings surveyed are compound buildings. The structures are generally old with the ages of 66.7 percent of the buildings ranging from 41 - 100 years and above. The buildings are generally congested due to development pressures that lead to in-filling of spaces between buildings and road set-backs. Research findings revealed that 273 (38.1%) of the buildings surveyed had structural additions in form of living rooms and shop attachments to the main buildings (table 1). The general quality of the housing environment is poor due to aging structures, high density of development and poor sanitation.

Figure 1: Housing Types In Central Minna

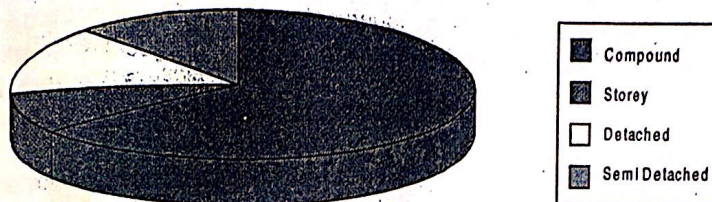


Table 1: Relevant Aspects of Change of use and Structural Modifications

Descriptions	Frequency	% of total buildings
Room to shop conversion	340	47.7
Room\shop use	258	36.0
Frontage trading	365	50.9
Room partitioning	178	24.8
Building additions	273	38.1
Building replacement	97	13.5

Source: Fieldwork, August 2004

### 4.2 Land-use Dynamics: Building Use Conversion and Replacement

The research results on the dynamics of land use in the area revealed consistent change over the years. There had been some changes in the initial purpose and use of buildings. Table 2 shows that 615 (85.8%) of the 717 buildings surveyed were initially used, purely, for residential purposes, 52 (7.3%) were for commercial while 43 (6.0%) were used for both residential and commercial purposes (mixed uses). However, the current situation reveals a decline in the number of pure residential buildings from 615 (85.8%) to 151 (21.1%). As at the time of the study, the number of commercial buildings increased to 98 (13.7%) while those for both residential and commercial uses increased to 468 (64.4%). Chi square analysis was performed to determine the level of significance of the changes observed. The result

yielded a positive value of 453.407 at 1 degree of freedom and 0.000 level of significance. This result is highly significant and it shows that there had been a tremendous change in the pattern of land use in the area.

**Table 2: The Initial and Current Use of Buildings in Minna Central Area**

Type of Use	Initial Use		Current Use	
	Frequency	Percentage	Frequency	Percentage
Residential	615	85.8	151	21.1
Commercial	52	7.3	98	13.7
Residential Commercial	43	6.0	468	64.4
Public	7	0.9	6	0.8
Total	717	100.0	717	100.0

Source: Fieldwork, August 2004

Changes in the use of properties in the area occurred in form of room to shop conversion of spaces and complete building replacement. The survey revealed that room to shop conversion took place in 340 (47.4%) of the buildings (Table 1). The number of rooms converted in each of the buildings ranged from one to five in 84.8 percent of the buildings and from six to ten in 14.0 percent of the buildings. Most conversions took place along Ogbomosho, Abudu, Kuta and Sabon Gari roads.

The phenomenon of building replacement occurred in form of the demolition of residential buildings and replacement with commercial land uses. Research findings revealed that 97 (13.50%) of the buildings surveyed had been completely replaced (Table 1). This type of replacement is common along Bosso road where residential buildings have been replaced by commercial uses such as banks, insurance, services and shopping complexes. Other evidences of change from residential to commercial use of buildings also occurred in form of frontage trading in 365 (50.9%) of buildings surveyed along Kuta, Sabon Gari, Bosso, Abudu and Ogbomosho roads. The trading along Abudu, Ogbomosho and part of Sabon Gari roads had reduced the vehicular right-of-way and this hinders traffic flow in the area.

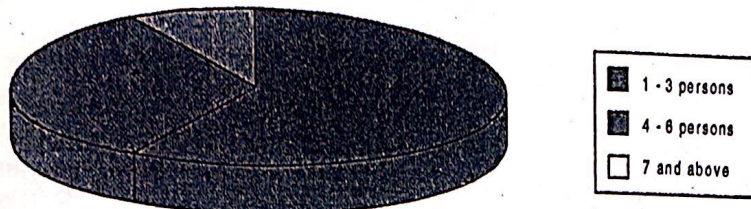
#### **4.3 Impacts of Land-Use Change on Residential Accommodation**

The trend in land-use dynamics in the study area reveals the gradual taking over of residential properties by commercial land use. This trend has severe implications for the survival of the existing housing stock. One major area of negative impact is the reduction in the number of room accommodation in the area. For instance, the room to shop conversion has reduced the number of living rooms available for the residents. Also, survey findings further revealed that room partitioning due to accommodation shortages had occurred in 178 (24.8%) of the buildings and the number of rooms partitioned in each building ranged from one to five in 95.4% of the buildings.

There are three major dimensions of accommodation shortages that portrayed the impact of use conversion and building replacement in the area. First, is the phenomenon of 'shop/room use' in which shops that were used for commercial purposes in the daytime are also used as sleeping rooms at night. Cases of shop/room use were recorded in 258 (36.0%) of the buildings surveyed along Lagos Street, Ibo, Kuta, Ogbomosho and Sabon Gari roads. The second dimension is expressed through overcrowding in buildings due to high occupancy

ratios. The housing indicator studies conducted by Habitat (1996) puts the average persons per room in High, middle and low-income countries at less than 1, 1.69 and 2.47 respectively. Within this context, an average occupancy ratio of 1-3 persons per room could be considered as adequate for the Nigerian cities. However, cases of 4-6 persons per room and 7 persons and above were recorded in 252 (41.3%) of the buildings surveyed in Minna central area (figure 2). This indicates overcrowding in buildings and this, as observed by Baba and jinadu (2000), has implications for the health and well-being of the people.

Figure 2: Average Room Occupancy Ratio



The third dimension is population displacement and emigration from the city centre. Although emigration from the centre is not new as reported by Johnson (1966) in his study of population decline in the central borough of London from 1861 - 1961, the situation in Minna and many other cities of the development world is peculiar. While improvement in transportation (Mass Transit System) largely accounted for the emigration in London, the low income dwellers of central Minna, most especially the new households, largely migrate due to space inadequacy and shortage of accommodation. Unlike the situation in the developed countries, emigration from the centre not also borne out by improved economic status of residents or the desire for wider space of the periphery in exchange for higher commuting cost. For the low-income residents, the movement is involuntary. Research findings show that the migrants relocated to the peripheral areas of Maitunbi, Kpakungu, Dutsen kuran gwari, Saukakahuta Tudun Fulani and Maikunkele. They were not only built substandard houses and lived in slums, but also incurred heavy transport cost in commuting to the centre.

Another important impact of residential building demolition and replacement is the gradual destruction of the city's cultural heritage. As some of the buildings that reflect the people's culture and past experiences are pulled down and replaced, the city stands the chance of losing its traditional artifacts in the future.

## 5.0 Conclusion and Recommendations

This research revealed the trend in land-use changes in the central areas of Minna town. Amongst others, building use conversion, room to shop conversion, room partitioning, shop/room use, frontage trading and building replacement are found to be the products as well as part of the process of gradual commercialization of the city centre. The process of commercial land-use invasion in the areas could be slow and imperceptible when viewed in the short run. However, the impacts, in terms of the reduction in the housing stock that accommodate the majority of the low-income dwellers, could have considerable planning implications in the long run. Another issue of concern is that all the conversions, structural additions and changes of use observed in the area were done without planning permission. This situation thus increased the level of disorderliness and has lowered the quality of housing in the area.

There is the need for planning intervention in the central area of Minna to restore orderliness and preserve the existing housing stock in the area. This becomes imperative in an era



when the UNCHS (2001) observed that the housing delivery system in developing countries needs to cope with an annual demand of 18 million housing units.

Experience and research findings have shown that obsolescence and poor residential qualities depress economic value of buildings and subject them to conversions and replacement. Preserving the low-income accommodation in the study area will therefore require enormous property renovation and neighborhood upgrading exercises. The renovation and upgrading measures should be complemented with strict enforcement of planning approval for building conversion and change of use. The approval should attract economic fees to serve as disincentive to commercial users.

Perhaps, one major reason for increasing commercial land-use invasion of residential properties is location of four major markets in the central area - Minna Central, Gwadabe, Gwari and Mrs. Oduwoye markets. There is therefore the need to relocate, at least two of these markets outside the central area to reduce the pressure of commercial land use on residential properties. This relocation of functions could be complemented with the creation of more corner shops in other neighborhoods outside the central area. In this case, layout preparation should be used as a tool for decentralizing commercial functions in the city centre.

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