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IMPROVEMENT OF A DETERIORATED RESIDENTIAL NEIGHBOURHOOD: A Case Study Of A Renewal Scheme Of Ikorde In Enugu Metropolis.

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Abstract

The deterioration in nature of the environment and the social, economic and physical conditions in slum settlements require public attention towards improving the areas so as to avoid unhealthy conditions and other socio-physical problems which are common to slums in Nigeria. This paper proposes a renewal scheme that is expected to transform the deteriorated Ikorde neighborhood of Enugu urban in Enugu state of Nigeria. The paper examined the three basic renewal strategies namely; comprehensive redevelopment, rehabilitation, and conservation and after evaluation of the social impacts, comprehensive redevelopment strategy was chosen as a solution to the deteriorated study area. Also the phasing of the implementation strategy of the scheme done to reduce the anticipated negative effects on the populace was also addressed in this paper. The paper concludes that if the renewal scheme is properly implemented, it would not only help to decongest the already over populated city of Enugu but will uplift the socio-economic status of the people as well as make the neighborhood environment more habitable.

KEYWORDS: Decay, Implementation, Renewal, Transformation.

1.0 INTRODUCTION

A community, be it rural or urban, is an ecological unit; it grows and in the process, parts become obsolete due to old age, misuse or lack of care and without regenerative actions, such parts decay and fall into dis-use (Onibokun, 1985). This fact is evident in our cities and towns. As new estates and neighborhoods emerge, the older ones exhibit evidence of decay which is referred to as "slum". This slum development can be seen as a direct consequence of the declining housing stock, both qualitatively and quantitatively. The solution to the Nigerian housing and residential environment problems therefore involves more than the construction of new housing units or new estates or new neighborhoods. It requires the renewal of some of the existing deteriorating areas. Blight and slum feature prominently in an urban environment where there are signs of decline in the physical fitness of dwelling units. It is therefore used to describe the process by which the quality of physical developments deteriorates below acceptable living standards. Such weathering in quality of properties could apply to single structures as well as clusters of buildings. In each situation, deterioration may reach a stage where buildings are considered unfit for human habitation.

The concept of urban renewal could be traced back to Europe during the industrial revolution when a lot of people migrated from the rural areas to urban areas to seek for employment. This trend of rural-urban migration resulted to the high rate of urbanization today in most countries and Nigeria in particular. The actual problem of Nigerian urban growth and development is not strictly its urbanization rate which the World Bank has described as "astonishing". Rather the general concern has always been expressed about its consequences which includes lack of adequate infrastructures and which consequently create bottlenecks for economic expansion, a situation where government can not cope with the growing demand for basic urban services. Such consequences have been known to have manifested as urban slums, deficient and ineffective urban infrastructure. According to World Bank et al (1995), "the physical condition of Nigerian urban infrastructure - water supply, urban roads, electricity, drainage, waste disposal is generally poor....."

Other consequences include; worsening traffic conditions, housing shortages, urban poverty and urban violence. Urbanization has increasingly posed a great danger to the general physical condition of the environment which degenerates to slums with its attendant consequences. Apart from these, slums generate adverse effects that reduce the economic value of neighboring land uses. With all these problems associated with

urban slums, the goals and objectives of a planned and healthy environment have therefore been negated. Agbola, (1986) noted that most of the areas calling for renewal actions in Nigeria are not only the core of Nigerian traditional cities but also the fringes of most urban areas which are the new slums.

The study area Ikrake in the fringes of Idaw River layout, Enugu south L.G.A. of Enugu state was chosen because it is characterized by deteriorated, dilapidated and obsolete features. Apart from the poor quality of physical housing, it is also evident that a very large proportion of these houses lack the basic amenities needed for private use and convenience. As at the time of survey, undeveloped acres of land were also noticed in the study area. These undeveloped lands can be used for meaningful purposes like developments contrary to slum characteristics. E.g. the construction of resettlement for those to be affected as a result of the renewal strategy to be adopted for the area.

It is in view of this that this paper also attempts to bridge the gap between spatial exhaustion and availability of slums, as it tends to direct both public and government attentions towards protecting against further development of slum features in the vacant land while carrying out the renewal strategy to be adopted. This paper focuses on assessing the physical condition of the study area, determining the quantity and quality of housing in Ikrake, assessing the availability and conditions of infrastructures in the area and suggesting ways of improving the socio-economic life of the inhabitants of the study area.

2.0 STUDY AREA.

Ikrake is located in the periphery of Idaw river layout in Enugu. It is bounded on the north by Agbani road, on the west by the Udi hill and on the south-east by the Nigerian Police Mobile barracks. The original owners are the Ikrake community which consists of 3 kindred from Amogukugwu Amechi town in Enugu south L.G.A of Enugu state though the inhabitants are both the indigenes and non-indigenes. The population of the area was incorporated in the Idaw River layout population by 1991 census as shown in Table 1.

Table 1. 1991 Population Census

Area	Male	Female	Total	1996 Projection
Idaw River Layout	6,220	7,420	13,640	15,745

Source: National Population Commission Enugu

Efforts were made to estimate the study area's population by using the total number of household and house occupancy ratio. At the time of survey in 2005, the estimated population of Ikrake was approximately 3,250.

Table 2. 2005 Estimated Population Density of Ikrake

Ward	Dwelling Unit	Avg No. of H/H per D. Unit	No.of H/H per ward	Avg no. of pers/H/H	No.of pers/ward
A	50	4	200	7	1,400
B	39	4	156	7	1,092
C	27	4	108	7	756
Total	116		464		3,248

Source: Author's Field Survey, 2005

The assumption is that the structure of the population from the sample generally reflects the total population of Ikrake.

2.1 POPULATION PROJECTION OF IKRAKE

In a renewal scheme of this nature, it is pertinent to make forecast for future development tendencies. This is done by making future projections using statistical/mathematical models. As already estimated, the 2005 population of Ikrake is

3,250 and using the growth rate of 2.9%, the 2005 population projection of Ikorre to year 2025 (20 years) is 5,753.

3.0 THEORETICAL FRAMEWORK

3.1 Urban Renewal

Urban renewal conceptually implies bringing back a deteriorated urban area to the status of the original intentions of a safe, aesthetic and functionally efficient urban area. The term "Urban Renewal" was coined by an American Housing economist, Miles Coleen in his attempt to adopt an integrated approach to curb the threats of urban living, especially that of eliminating slums. Urban renewal was developed as an integrated approach to combat the deterioration of the urban environment at a time (1960's) when there was a growing impression in many countries that a limited approach to obsolescence and deterioration was inadequate and in the long run, would not solve the problem. A lot of scholars defined urban renewal differently but conceptually they imply the transformation of a deteriorated area for good urban living.

3.2 Urban Renewal Strategies

These are programmes set up to carry out the renewal in an orderly manner that will avoid untold hardship on the inhabitants of the affected area. Urban renewal strategies also involve adopting an urban scheme that will preserve and conserve existing natural and man-made features of the renewal area.

There are 3 techniques used to package urban renewal strategies. Two are major techniques viz redevelopment, which incorporates slum clearance, and rehabilitation or renovation. The 3rd technique, conservation is very common in Europe. It is a common place for people to give different terminologies to these techniques like incomplete redevelopment which leads to controversies. However, the basic meaning of the techniques ultimately remains the same. A combination of their application, which depends on the model of urban decay constitute the renewal strategy.

3.2.1 Redevelopment Strategy

Redevelopment can be applied to a single structure (blight) or to a cluster of structures (slum) where obsolescence or decay is absolute, which is where the structure or layout is in a serious deteriorated condition. It is pertinent to note here that blight begets slum. Slum clearance should not be done if the minimum housing needs are not met. An example is the resettlement scheme embarked on in the 1960's in New Bussa, Niger State as a result of the Dam construction. The socio-cultural and eco-political characteristics and needs of the displaced people were not considered before embarking on the scheme. Consequent to this, the resettled people had to revert to their former slum kind of life and culture indicating the failure of the intentions of the scheme.

3.2.2 Rehabilitation Strategy

Rehabilitation is the process of neighborhood revitalization through the removal of the worst houses, the repairing and construction of streets, and the addition of parks and other public utilities. It is applied in areas where buildings, though generally structurally sound, are partially deteriorated, in which some loss of original functions are being felt, or where conditions might lead to these.

3.2.3 Conservation Strategy

Conservation is closely associated with rehabilitation because both are concerned with the preservation and maintenance of valuable elements in the old environment. Conservation is predominantly concerned with preserving items with historic, cultural, aesthetic and architectural value. It prevents deterioration by, among other things, requiring maintenance of buildings, preventing overcrowding, enforcing density limitations and zoning regulations.

4.0 RESEARCH METHODOLOGY

Two types of data were basically used for this research viz: primary and secondary data. The former is derived in-situ while the latter is reference materials

contained in reputable publications. A survey of the area involving oral interview, questionnaire and reconnaissance methods was carried out to ascertain the physical condition of the area and the socio-economic life of the inhabitants. It revealed the existence of 3 wards which were used as the strata for the stratified sampling method used in gathering information through questionnaires. The questionnaire was designed to get information on socio-economic characteristics of the inhabitants, housing stock both qualitatively and quantitatively, building characteristics and facilities, attitudinal issues of the inhabitants, adequacy and availability of infrastructures, etc.

5.0 DATA PRESENTATION AND DISCUSSION OF RESULT

From the data collected, the structure of the population shows that 62% of the respondents are females while 32% are males. Table 3 shows that 56% of the inhabitants are income earners of not more than N4000. Also from the data, 72.4% are directly or indirectly single while surprisingly, 0.8% are 1st degree holders. The implication of these is that greater numbers of the inhabitants are relatively poor.

Table 3. UNEMPLOYMENT - INCOME CLASS

UNEMPLOYED	PUBLIC WORKER	PUBLIC WORKER	SSELF EMPLOYED	STUDENT	UNEMPLOYED	Total
INCOME CLASS						
LESS THAN 1000	32	-	4	-	-	36
1001-2000	4	18	59	-	-	79
2001-3000	-	3	37	-	-	40
3001-4000	-	2	3	-	-	5
4001+	-	-	-	-	-	-
Total	36	21	100	-	-	140

Source: Author's Field Survey, 2005

For occupancy ratio, about half (50.4%) of the sample population live in 2 room apartment. See Table 4 below.

Table 4. Relationship of family size and number of rooms occupied

No. of rms 0000-1000	1	2	3	4	5+	Total
Family size						
1 - 5	86	41	18	6	-	132
6 - 10	14	85	11	4	3	117
11 - 15	-	-	-	-	-	-
16 - 20	-	-	-	-	-	-
21 +	-	-	-	-	-	-
Total	82	126	29	10	3	250

Source: Author's Field Survey, 2005

Most of the inhabitants that are indigenes of Enugu state represent 74.8%. Of the 116 buildings sampled 83 i.e. 71.6% are between 16-20 years old. (Plate 1)

Table 5. Age of Dwelling unit

Age Group	No. of Dwelling Unit	% of the total Dwelling Units
1 - 5	-	0
6 - 10	2	1.7
11 - 15	7	6.0
16 - 20	83	71.6
21 +	24	20.7
Total	116	100.0

Source: Author's Field Survey, 2005



Plate 1. Odogbolie structure

64.7% of the buildings have between 6-10 rooms. For the access roads, about 92.2% of the motorable roads are untarred and are in a deplorable condition. (Plate 2)



Plate 2: Untarred road



Plate 3: Make shift structure.

Greater percentage of the houses sampled was built with substandard and makeshift materials (Plate 3) leaving about 2.6% that were built with sandcrete blocks. For personal conveniences, 59.3% defecate in the bush, 2.4% uses modern WC while 38.3% uses either bucket or pit latrine. Also, many have their bathrooms completely detached away from the dwelling places and with substandard materials. (Plate 4)



Plate 4: Bathroom away from dwelling unit



Plate 5: Bad roof condition

On attitudinal issue, most respondents dislike the area on the following grounds: physical condition, low income earners zone, lack of basic facilities (power supply, water supply, drainage) etc. on the other hand, 3.7% prefer staying back even if their income increases because of the following reasons: serenity of the area, farming opportunities; existing harmonious communal life and fraternity there; unattractive to robbers; rural nature of the area.

In conclusion, the field survey revealed that about 96% of the buildings has deteriorated badly or are obsolete (Plates 1). In some parts, buildings of bad roof and wall conditions and shanties erupt in a most confused manner with no defined pattern, (Plate 5).

6.0 CRITERIA ASSESSMENT FOR RENEWAL STRATEGY

The result of the analysis will help to adopt or propose the best idea that will help to transform the deteriorated study area. In the theoretical frame work, the major renewal strategies were highlighted. It is now pertinent to consider and evaluate them for the proposed area. Any of these major urban renewal strategies: redevelopment, rehabilitation, and conservation can be chosen to transform the slum into a habitable status though the choice of any of them depends on the outcome of their evaluation. In the choice of the alternative strategy, some factors are considered which includes:



FIG 1: Existing Situation Map of Iddiko

The existing physical condition of the area. The existing situation basically considered were data on housing, nature of the existing roads, and the availability of community facilities in the area. See Fig 1.

Cost implications. The development of the alternative urban renewal strategy will depend immensely on the cost involved in using the said strategy. Hence, any strategy chosen should take into account the cost involvement.

Social benefits. Any strategy chosen should possess such qualities capable of alleviating the sufferings of the inhabitants and raise their standard of living. Therefore in developing any strategy for the area, it is important to weigh the social benefits inherent in the alternative strategy. The social benefits will therefore influence the preferred strategy since it will be a long term benefit.

6.1 Evaluation of Strategies for Adoption

Having established the various alternative strategies, their merits/demerits and gains/losses will be compared based on the social benefits. Evaluation is intended to assist the decision maker in making rational choice of the alternative strategy. The evaluation is in respect to the study area conditions.

6.1.1 Alternative A: Comprehensive redevelopment

This includes rehabilitation, spot clearance, and conservation. It involves clearance of the whole area in installments leaving out or upgrading the few preserved features. About 96% of the dwellings in Ilorin are in real obsolescent condition and the best option for them is clearance. Basically this strategy is usually adopted where the existing buildings are of little or no value, upgrading will be too expensive, and nothing of value to be preserved. Installment clearance is suggested so that its adverse effect will be drastically reduced.

Merits - Upgrading the inhabitants to the status of house owners; Removal of that social stigma of "never do well" and perpetual urban poor through re-housing programmes; the positive changes that the inhabitants experience will be to the satisfaction of everybody.

Demerits - Displacement of families is done quite unsatisfactorily; Merging together incompatible elements in the new area; Complete disruption of economic activities; Social insecurity as to the uncertainty of tenure; Usual problems of adaptations to the new area; Expensive to undertake.

6.1.2 Alternative B: Rehabilitation

According to Onibokun (1980), it is a process of environmental improvement at both micro and macro levels utilizing in an effective way all the domestic resources and all the possible strategies initially deployed. On the micro level, rehabilitation is basically on individual housing units where defective structural components of buildings are repaired. On the macro level, the neighborhood is revitalized by the renewal of obsolescent houses, construction of new roads, etc.

Merits - Cost is reduced; Socio-economic ties of the inhabitants are unaffected; Social security is maintained.

Demerits - In the short run, degradation sets in since the totality of the area is not considered; it does culture the people towards the environment.

6.1.3 Alternative C: Conservation

This strategy is concerned with the preservation and maintenance of features of value in an area where renewal is being carried out. In this light, the features to be conserved in Ilorin are few structurally fair houses and some roads (Map 1). Apart from these, every other development there is worth demolishing.

Merits - Cost effective; Preservation of some features; Preserved features can be tourist attractions and destinations; Culture is not lost totally.

Demerits - The preserved or conserved features, if not upgraded might reduce the aesthetical quality of the environment; maintenance cost of such features may be too high.

Blemishes - the preserved or conserved features, if not upgraded might reduce the aesthetic quality of the environment; maintenance cost of such features may be too high.

Conclusively, from the social evaluation of these alternative strategies and the extent of their effects, it seems that alternative A (*comprehensive redevelopment incorporating rehabilitation and conservation*) is favored. This is so because of the long term social benefits it has over the others with respect to the study area. Hence, alternative A is chosen.

7.0 REDEVELOPMENT PLAN PROPOSAL

This is a general draft plan of the proposed renewal of the area. Housing, circulation pattern, public utilities and services, educational and health facilities and the socio-economic activities of the inhabitants among others were considered in transforming the area.

In Fig 2, most the sum features relating planning principles were given consideration in the proposed design. Predominantly incompatible uses will be distinctly reduced on implementation of the proposal. Self-backs, sheet/circulatory systems, open spaces and other elements of good residential layout were all considered. Moreover, most facilities were centralized.

Also, the three basic residential densities were given proportionate allocation with the high density having greater percentage of allocation. Some roads and buildings are incorporated in the design by way of retaining and improving on them. In summary, planning standards of a neighborhood layout are referred to in the proposed layout design.

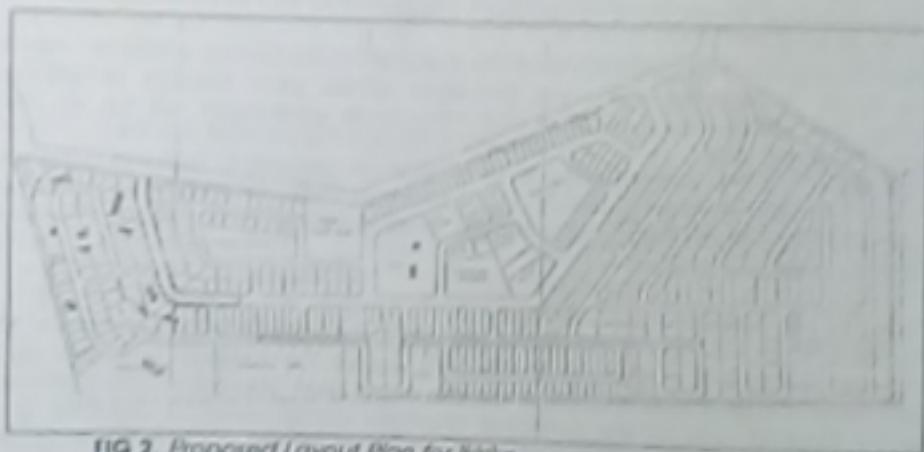


FIG 2. Proposed Layout Plan for Bokka

8.0 IMPLICATION OF THE PROPOSED RENEWAL SCHEME

The implications of this scheme includes inter alia: untold hardships on the inhabitants, loss of properties and social ties, compulsory acquisition of land etc. However, some of the implications will be taken care of by providing alternative place for displaced people.

9.0 IMPLEMENTATION OF THE PROPOSED PLAN

As a result of the implications, the implementation of the renewal strategy will be phased to reduce the costs and the degree of the inconveniences that might be inflicted on the inhabitants if the project is carried out wholesomely. The implementation programmes are divided into 4 phases of 3 year period each as thus:

PHASE I (2008-2010) Evaluation of the private property values, payment of compensations where necessary, arrangements for temporal resettlement of the affected people, opening up of new roads and demolition of encroaching structures, upgrading of

provide loans and sites and services. Also to be done is the construction of public services and facilities.

PHASE III (2014-2015) Resettlement of the rest displaced people and demolitions as in Phase II. Recalling of the 1st set of the displaced to the completed structures, construction of service industries and commercial areas.

PHASE IV (2017-2019) Recalling of the second set of the displaced as in Phase III, supply of equipment, staff to the facilities and services, setting up of an administrative body to take care of the neighborhood and modalities for acquiring vacant plots.

10 CONCLUSION

After studying the entire physical conditions of the study area and analysis of findings done, it is hoped that after the implementation of this renewal programme, it will to preserve the environment and improve the socio-economic conditions of the people. It will also help to decongest the overpopulated city of Enugu.

11. RECOMMENDATION

- Urban renewal is a delicate issue and must be attacked with great caution.
- Attempt to resettle people had toppled some governments.
- It should be done when housing shortage had eased or when it is coupled with vast rehousing programme.
- Adequate compensation for moving and other expenses as well as for losses of goodwill should be provided as part of the renewal costs.
- It should be undertaken only after its benefits (long term) to the community as a whole justify the impositions it enforces and it should be launched only after it has received wide public acceptance.

References

- Onodugha, C. B. (1998). Renewal Scheme for Enugu Urban. Case study of Ikorre in Enugu South LGA, of Enugu State. An unpublished B.Tech (UIR) dissertation, dept. of Urban and Regional Planning, FUT Minna
- Onibokun, P & Agbola, T. (1986). Urban Housing Problems, Implications for the Land Use Decrees and Building Plan Approval Process in Onibokun, P. (ed) Urban Housing in Nigeria. Physical Planning dept. NISER Ibadan.
- Okeke, D. C (2002). Environmental and Urban Renewal Strategies. Theoretical and Analytical Framework. Institute for development studies UNEC Enugu.
- Rothenberg, J. (1967). Economic Evaluation of Urban Renewal. Brooklyn Institution.
- World Bank et al (1995) in Ogundele O. F. (1996) Settlement Upgrading A challenge to the Planners and Managers of Nigerian Cities in the 21st century. An unpublished paper presented at the 27th annual conference of NTP in Edo State 1996.