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PLACE IN PRACTICE

An appraisal of urban renewal in Nigeria

Urban renewal
scheme

A case study of the Nigerian Army Shopping Arena, Oshodi-Lagos

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Abstract

Purpose – The purpose of this paper is to appraise the sustainability of the Nigerian Army Shopping Arena urban renewal project in Oshodi-Lagos, Nigeria.

Design/methodology/approach – Case study research design was adopted for the study and both quantitative and qualitative data collection methods were used. Data were collected from randomly selected 94 business operators in the shopping complex using structured questionnaires, while oral interviews were conducted with two purposively selected members of the project management team. Data were also collected through non-participant observation and analysed by using both descriptive statistics and content analysis.

Findings – The project was executed using the build-operate-transfer (BOT) arrangement, and users were generally satisfied with facilities provided, except for the provision of utilities. Access to public facilities, creation of job opportunities, community involvement and sense of ownership, as well as the provision of facilities for pedestrian and vehicle users were considered as contributing optimally, while adherence to the principle of green design and construction was rated as contributing minimally to the sustainability of the project.

Practical implications – The adoption of BOT can facilitate access to funds for urban renewal projects in the developing countries. Creation of job opportunities, ensuring users' satisfaction, community involvement and compatibility with environment can promote the sustainability of urban renewal projects in the developing countries.

Originality/value – The study extends our understanding of funding mechanisms, users' satisfaction with, and the sustainability of urban renewal projects from the Nigerian perspective.

Keywords Urban areas, Nigeria, Developing countries, Shopping centres, Sustainable development, Urban renewal, Sustainability, User satisfaction, Build-operate-transfer, Lagos

Paper type Research paper

1. Introduction

Urban renewal or regeneration has emerged as one of the effective means of combating the challenges of urban decay, infrastructure and housing shortage as well as for reviving declining social and economic status of urban areas across the globe. Most particularly in the developing countries, where physical deterioration, infrastructure obsolescence (World Bank, 2006; UN-HABITAT, 2010), poor housing conditions

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(Rondinelli, 1990; UN-HABITAT, 2006) and disaster vulnerability (Ibem, 2011a) pose serious threats to public health and sustainable urban development (United Nations Population Fund, 2007); urban renewal has been suggested as a tool for slowing down the rate at which these challenges are escalating in these countries (Dimuna and Omatsone, 2010; Gbadegesin and Aluko, 2010). For instance, in Lagos, Nigeria, where many of the challenges confronting cities in the “Global South” have led to stark deterioration in quality of life (Gandy, 2006); Fadare and Oduwaye (2009) made a case for comprehensive rebranding of this city through urban regeneration.

Interestingly, several studies (Sule, 1990; Agbola and Jinadu, 1997; George, 2006; Fadairo and Taiwo, 2009; Olawepo, 2010) have shown that past and present governments in Lagos have applied different urban renewal strategies ranging from slum clearance and redevelopment, road and city beautification to the rehabilitation of other physical infrastructure. Olawepo (2010) specifically noted that current efforts in rehabilitating transportation infrastructure in Lagos are based on public-private partnerships (PPPs) and these have resulted in the construction of bus rapid transit system and other related facilities. It is however noted that most previous studies have focused on the identification of the different types of urban renewal projects in Lagos with little or no attention given to the evaluation of their sustainability. Although the term sustainability is a highly contentious term in the literature as Marcuse (1998) pointed out; in this study, it is used to describe the possibility of maintaining, replicating, continuing and institutionalizing the long term social, economic, physical and environmental benefits of social intervention programmes (Savaya *et al.*, 2008; Ibem and Azuh, 2011). By putting this definition in context, sustainability can be conceived of as a measure of the extent to which urban renewal projects and other initiatives are capable of addressing current social, economic and environmental concerns without compromising the ability of future generations to meet their needs (World Commission on Environment and Development, 1987).

We argue in this study that since urban renewal seeks to bring lasting improvement in the economic, physical, social and environmental conditions of an area that has been subject to change as Roberts and Sykes (2000) observed; examination of the sustainability of urban renewal projects is important for better understanding of the different ways we can maximise and sustain the long-term benefits of urban renewal in Nigeria. Therefore, the study appraised the sustainability of urban renewal in Lagos Metropolis using the Nigerian Army Shopping Arena, Oshodi renewal project as a case study. The specific objectives were to review the trends in urban renewal in Lagos; examine the funding mechanism adopted and users’ satisfaction with, as well as the sustainability of this urban renewal project. The study is expected to contribute to the growing literature on urban renewal from the Nigerian perspective. It also hopes to inform urban development and management policies and practice in the developing countries.

2. Review of related literature

2.1 Trends in urban renewal in Lagos

Lagos is a coastal city in Southwest Nigeria that has grown from a small fishing and farming Island in the fifteenth century AD to one of the fastest growing megacities in the world today. Although a former administrative capital, Lagos is currently the commercial nerve centre and industrial base of Nigeria and the West African sub-region

(Ibem, 2011a). The contested 2006 National Population census in Nigeria indicates that the population of Lagos is just above 10 million. However, estimates suggest that over 18 million people currently reside in Lagos and that by 2015 this figure will increase to around 24.4 million, and by then Lagos will be the third largest city in the world (George, 2006). Going by this demographic dynamics and the antecedent of Lagos and other Nigerian cities in the provision of infrastructure such as water and power supply, transportation, shopping, drainage and waste management facilities as well as housing (Fadairo and Taiwo, 2009; Ibem, 2011b) it is obvious that there is enormous pressure on the existing housing and infrastructure in this city. The implication of this is that massive construction of new housing units and infrastructural facilities as well as rehabilitation of existing ones through urban renewal are needed to curb current state of decay of physical environment and proliferation of slums and shanties in Lagos.

Efforts aimed at addressing the challenges associated with urban decay through urban renewal have been underway in Lagos since 1928 when the now defunct Lagos Executive Development Board (LEDB) carried out the first slum clearance exercise to check the spread of the bubonic plague in the city (Sule, 1990; George, 2006). This was followed by a comprehensive slum redevelopment programme covering areas, including Azikiwe Street, Broad Street and Palm Church Street carried out again by the LEDB in 1951. Olawepo (2010) noted that the goal of that scheme was to give a facelift to the aforementioned areas in Lagos Island. Four years later, another renewal scheme involving slum clearance, resettlement and redevelopment was carried out in central Lagos also by the LEDB. George (2006) reported that the 1955 scheme was aimed at creating a befitting Federal Capital for Nigeria in preparation for her independence in October 1960. She further revealed that despite efforts to resettle some 200,000 displaced persons, that renewal scheme exposed the problem of social cost and public resentment associated with slum clearance in Nigeria.

Between 1962 and 1988 most of the urban renewal schemes in Lagos involved slum clearance, settlement upgrading, construction of flyovers and overhead bridges. One of such schemes was the rehabilitation of Olaleye-Iponri slum area, which involved Lagos State Government and the United Nations Centre for Human Settlements (Olawepo, 2010). With the promulgation of the Nigerian Urban and Regional Planning Decree 1992, and subsequent establishment of the Lagos Urban Renewal Board, the Maroko slum area renewal project took off in July 1990. Regrettably, Sule (1990) identified that scheme as one of the most controversial and widely publicised urban renewal exercise in the history of Nigeria. This is because Agbola and Jinadu (1997) revealed that of over 300,000 people and 41,776 landlords reported to have been displaced from their homes and property; only about 2,933 of them were considered for resettlement.

At the onset of current civilian rule in 1999, the NEPAD cities Programme-a joint initiative of the UN-HABITAT and African Union through the New Partnership for Africa's Development (NEPAD) Secretariat was initiated in Lagos. The African Ministerial Conference on Housing and Urban Development (2005) noted that this project aims at facilitating urban upgrading, low-cost housing and investment in basic services. Fadairo and Taiwo (2009) also observed that other renewal projects in the city in recent times involved the construction and rehabilitation, of markets/commercial centres, hospitals, schools, abattoirs, new towns, housing schemes and street lighting projects. Besides, a recent survey (Olawepo, 2010) also indicated that urban renewal in

Lagos has taken a new direction with the adoption of PPPs in the construction and rehabilitation of transport infrastructure.

From the foregoing, it is evident that urban renewal in Lagos started in the colonial era as an attempt by government to eliminate unhygienic living and working environment and improve the quality of life of residents. We can also see that although urban renewal has evolved from government solely sponsored to PPP programme in line with global trend; one aspect which has attracted public resentment in the last few decades is the failure of operators of previous schemes to relocate persons displaced from their homes in the course of implementing urban renewal projects. This development has been attributed to inadequate funding and non-availability of suitable land to provide alternative accommodation and services to affected persons (UN-HABITAT, 2006). It is also noted that previous studies have given little attention to examining user satisfaction with, and sustainability of urban renewal projects in Lagos. Therefore, the current study was an attempt to fill this gap in literature.

2.2 Urban renewal and the concept of sustainability

In the developing world, urban decay has become an issue of concern to governments, development agencies and the general public as it presently constitutes an obstacle to sustainable urban development. Huang (2008) noted that the best approach to achieving sustainable urban development and retarding the rate of urban decay is adequate care for existing cities. Consequently, urban renewal has been described as a tool for retarding or ending urban obsolescence, preventing urban decay, clearing blighted areas and upgrading deteriorated buildings, physical environment and infrastructure (Weaver, 1970; Okeke, 2004; George, 2006). Moreover, urban renewal has also been considered as a strategy for eliminating undesirable individuals and creating additional job opportunities (Zielenbach and Levin, 2000), achieving sustainable provision of utilities (Ashley *et al.*, 2004; Van der Brugge and de Graaf, 2010), improving the quality of living environment (McCarthy, 2009; Kara, 2011), creating new and efficient economic activities (McDonald *et al.*, 2009), building sustainable communities and improving socio-economic integration in urban areas (Fadare and Oduwaye, 2009; Dimuna and Omatsone, 2010). This means that urban renewal schemes generally seek to eliminate undesirable physical, environmental, social and economic elements that negate sustainable urban growth and development. Therefore, the different urban renewal strategies should be seen as veritable planning tools for improving and sustaining the viability of urban neighbourhoods, and thus promoting all around sustainable development.

Okeke (2004) and Gbadegesin and Aluko (2010) identified the different urban renewal strategies to include rehabilitation, conservation and redevelopment. However, as is true for other urban development initiatives, the success of each of these strategies in urban renewal depends largely on the adequacy of funding arrangement for the scheme (George, 2006; UN-HABITAT, 2006). In many developing countries, the increasing need to reduce government budgetary constraints and improve the performance of public sector in service delivery has heightened the search for alternative to the traditional funding arrangement for urban development projects. Consequently, emphasis is currently on drawing from private finance through PPP arrangements (Jamali, 2004). This explains why there is increasing number of infrastructure- and housing-led urban renewal schemes implemented using the PPP finance option in the developing countries (Olawepo, 2010; Kara, 2011; Ibem, 2011b). Although, there are different models of PPPs, it is observed that the build-operate

and transfer (BOT) model of PPP has become popular in the rehabilitation and redevelopment of urban neighbourhoods and provision of infrastructural facilities in recent times. Cheung and Chan (2009) and Mouraviev and Kakabadse (2012) observed that BOT model allows the government to transfer technical and financial risks to the project concessionaire (private organization), who is responsible for the construction, financing, operation and maintenance of a facility over the period of the concession before finally transferring it at certain or no cost to the government. Although, Chu (1999) was of the view that BOT projects are relatively more complex to set up and usually take longer time to develop due to long documentation and negotiation period; Askar and Gab-Allah (2002) argued that when compared to the traditional procurement system the BOT approach can offer a number of advantages. These include among others:

- the use of private sector financing to provide new sources of capital and thus reducing public borrowing and improving the host government's credit rating;
- the use of private sector initiative and know-how to reduce project construction costs and schedules and to improve operating efficiency;
- the control of construction, operating and maintenance costs by the private sector;
- optimal use of scarce resources; and
- establishment by a private sector benchmark to measure the efficiency of similar public sector projects and thereby offer opportunities for the enhancement of public management of infrastructure facilities.

All these are clear indications that the BOT model of PPP is a credible alternative to the conventional funding arrangement for urban renewal as it reduces the financial burden on government in infrastructure provision; ensures the sustainability of the initial and life cycle costs of projects; encourages smooth operation and regular maintenance of a facility over the period of the concession; and guarantees quality assurance through optimal use of scarce resources. This goes to suggest that the merits of BOT are enormous and can be a sustainable funding option for urban renewal schemes.

Talking about sustainability, Lee and Chan (2010) observed that there is also a global trend towards the adoption of sustainability concept in urban renewal projects; noting that the objective of urban renewal projects across the globe is to achieve economic, social and environmental sustainability. This corroborates the submission by Choguill (2007) that economic viability, social acceptability, technical visibility and environmental compatibility are the key features of sustainable initiatives. In the light of the above, Ibem and Azuh (2011) concluded that the adoption of the concept of sustainability of programmes is to ensure that specific social, economic and environmental needs of the present generation are met without compromising the potential of the posterity to meet their needs. The implication of this is that the sustainability of urban renewal projects can be evaluated in terms of their suitability and viability in addressing related social, economic and environmental concerns in the society.

From the review of literature we found that most frameworks for evaluating sustainability of built environment projects are environmentally biased. It is against this background that authors (Turcotte and Geiser, 2010; Ibem and Azuh, 2011) have suggested the adoption of all-embracing sustainability assessment frameworks in evaluating the sustainability of physical development projects. Lee and Chan (2010) suggested that:

- access to public facilities;
- green design;
- provision for establishment of different businesses;
- community involvement;
- compatibility with neighbourhood;
- convenient, efficient and safe environment for pedestrian and public transport users;
- creation of job opportunities;
- provision of open spaces; and
- meeting needs of the disabled, children and the elderly are the key sustainability assessment criteria for urban renewal projects.

However, in this study, we adopted the above listed criteria, in addition to the funding option and users' perception of satisfaction in appraising the sustainability of the selected urban renewal project. The adoption of these criteria was based on our conviction that they encompass the key objectives of urban renewal projects as identified in the literature and are critical to their sustainability; suggesting that these criteria are relevant in helping us achieve the goal of the current research. Similarly, user satisfaction was also used in this study because it is one of the approaches for assessing social acceptability attributes of sustainable initiatives; the performance (success or failure) of built environment projects (Kian *et al.*, 2001; Karna *et al.*, 2009) and serves as a feedback to project managers and designers for improved quality of projects and associated services (Mohit and Nazyddah, 2011). In this regard, users' satisfaction measurement is viewed as one of the ways of assessing the sustainability urban renewal schemes.

3. Research method

A case study research design was adopted for this study, and both qualitative and quantitative data collection methods were used. The collection of qualitative data was through oral interviews and non-participant observation, while quantitative data were collected using structured questionnaire. The field work was carried out in phases by the researchers and one Research Assistant between October, 2009 and April, 2011 in the study area. The first phase involved data collection on the funding and management of the project. This was done through oral interviews; and key informants were two purposely selected senior members of the project management team. The interviews which were on one-on-one basis were conducted based on questions drawn from prepared interview guide. The interviewees were asked questions related to key stakeholders in the renewal project and their respective roles and cost of the project. The interviews were recorded manually.

The second phase of data collection involved non-participant observation and users' survey. Data on the shopping complex and facilities provided in it were derived using observation schedule and photographic materials during the several visits made to the complex by the researchers. For the users' survey, the principal data gathering instrument used was structured questionnaire. The questionnaire had two sections: "Section-A" comprised basic information on the profiles of respondents (e.g. sex, age, education, length of stay, type of shop occupied, and tenure option), while "Section-B"

dwelt on users' satisfaction with the different facilities and services in the shopping complex. In Section-B, respondents were specifically asked to rate their level of satisfaction with key aspects of the shopping complex (Table II) based on three-point Likert scale ranging from "1" for not satisfied, "2" for neutral to "3" for satisfied. Although, 3,000 lock-up and open shops were provided in the shopping complex, 450 shops representing about 15 percent of the total number of shop spaces had been put to use for different business activities at the time of the survey. Consequently, the random sampling technique was used in selecting 150 business operators representing about 33 percent of the total shop/office spaces put to use were selected for the administration of questionnaires. A total of 94 questionnaires representing about 63 percent of the total questionnaires distributed were retrieved.

Data were subjected to two basic types of analyses. The first was descriptive statistics, which generated the proportion and percentages of respondents' profiles and mean satisfaction scores (MSS) on each of the items investigated. The second type of analysis was content analysis, and this was used in analyzing data derived from the observation schedule and oral interviews. In appraising the sustainability of this project, we developed an evaluation matrix comprising nine principal sustainability criteria, the corresponding indicators and scoring system as derived from the review of literature. The scoring system was based on a scale of 1-3 as suggested by Lee and Chan (2010), where 1 represents the "minimum" level of contribution, 2 represents "moderate" level of contribution, while 3 represents "optimum" level of contribution of each criterion to sustainability of the project.

4. The case study findings

4.1 Description of the project

The Nigerian Army Shopping Arena is located within the Ikeja Military Cantonment with access routes from the Oshodi-Agege Expressway (Figure 1). This shopping complex was constructed on the site where the Nigerian Army Mammy market was located. That market was characterized by dilapidation, filthiness and lack of basic services as well as decline in economic activities. Consequently, the Nigerian Army initiated the demolition and redevelopment of the market into an ultra modern shopping facility in 2009. This project is part of the ongoing renewal of greater Lagos project, and was executed under the Nigerian Army Welfare Scheme through a PPP arrangement between the Nigerian Army and the private developer-Messrs Woobs Resources Limited. From the oral interviews it was revealed that the project was based on the memorandum of understanding (MOU) between the two partners, and that the Nigerian Army provided land for the project, while Woobs Resources Limited funded the design and construction of the shopping complex at the cost of about ₦ 4 billion (US\$25 million). Woobs Resources Limited, who also provided the project management framework for the project is expected to operate and maintain the complex for 24 years before transferring it to the Nigerian Army. This makes the project a typical example of BOT urban renewal project in Nigeria. Among the facilities provided in the shopping complex include an abattoir, administrative buildings, banking facilities, car parks for 1,016 cars, a fire station, 216 public toilets and 72 showers, seven number restaurants and covered loading bays for 32 lorries. Others are warehouses, a bio-sewage treatment facility, 3,000 lock-up and open shops, water treatment plant, and security posts (Figure 1).



Figure 1.
Site layout
of the complex

The construction work on the site was completed in October 2009 and the complex was officially opened for business in June 2010. It was also revealed from the interviews that the reason for providing different sizes and types of shop spaces was to resettle those displaced from the demolished Mammy market in the new complex; and thus avoiding the problem of non-settlement of those displaced from the demolished market. Therefore, one significant contribution of this project to promoting economic activities in this part of Lagos is the provision of shop/office spaces for all categories of businesses in a serene environment. In addition to contributing to improving the aesthetic and economic value of the surrounding neighbourhood, the project has also contributed to eliminating traffic congestion and street trading along the Oshodi-Agege Expressway.

4.2 Sustainability of the project

Assessment of the sustainability of this renewal project was based on users' perception of satisfaction with the facilities and other sustainability criteria identified in the literature. For the users' satisfaction, Table I shows the personal profiles of respondents in the users' survey. From the result, it is evident that the majority (80 percent) of respondents were female business operators and that 62 percent of the business operators sampled were in rented shop/office spaces. It was found that 45 percent of the respondents were between 18 years and 30 years of age and 44 percent of them had formal education beyond secondary school. This result suggests that the majority of shop/office spaces in the shopping complex are occupied on rental basis and business activities in the complex are operated mostly by young and educated women. This partly shows the extent to which women are involved in commercial activities in this part of Lagos.

Table II shows the result on users' satisfaction with the facilities in the shopping complex. The MSS shows that users were most satisfied with parking facilities, followed by safety and security of lives and property, construction material used and

	Frequency ($n = 94$)	Percentage
<i>Sex</i>		
Male	19	20.2
Female	75	79.8
<i>Age in years</i>		
18-30	42	44.7
31-45	31	33.0
46-59	20	21.4
60 +	1	0.9
<i>Highest level of education</i>		
Primary school	18	19.2
Secondary	35	37.2
Tertiary	41	43.6
<i>Length of stay in months</i>		
Less than 6	5	5.3
Between 6 and 12	25	26.6
Between 12 and 18	64	68.1
<i>Tenure status</i>		
Owner occupiers	36	38.3
Renters	58	61.7

Table I.
Respondents' personal
profile

Table II.
Users' satisfaction
with ARENA shopping
complex

Attributes of the shopping complex	Mean satisfaction score (MSS)
Parking facility	3.34
Safety and security of lives and property	3.12
Construction material	3.05
Public conveniences	3.01
Quality of construction work	2.94
Shop spaces	2.89
Site layout of the complex	2.84
Quality of finishing	2.71
Cleanliness of the complex	2.51
Warehouse facilities	2.45
Solid waste management	2.34
Maintenance of facilities in the complex	2.19
Power and water supply	1.67

public conveniences provided in the complex, respectively. This result may not be unconnected with the number of parking spaces provided in the complex (Figure 1 and Plate 3), and the use of burnt bricks in the construction of the shops and office spaces (Plate 1). This is probably because bricks are not very common building materials in Lagos, and thus, people tend to appreciate buildings constructed with burnt bricks. For satisfaction with safety and security, the location of this shopping complex within the Ikeja Military Cantonment and the provision of regularly manned security posts could have influenced users' feeling of adequate security within the facility. On the contrary, the users appear to be least satisfied with power and water supply in the complex. This was to be expected going by the observation that the shopping complex was yet to be connected to the National Power Supply Grid and the available power generating sets may not have been providing adequate electricity to the shops/offices and water treatment plant in the complex. In view of the fact that urban renewal has been associated with the achievement of sustainable provision of utilities as pointed out by Ashley *et al.* (2004), this particularly result goes to suggest that this project has not



Plate 1.
Lock-up shops in the
shopping complex

achieved sustainable provision of utilities to users of this facility. However, the overall result (Table II) shows that users of the shopping complex were satisfied with the facilities; suggesting that the renewal project has succeeded in meeting user's expectations and is socially acceptable to them. One possible explanation for this result is that facilities were provided for all categories of businesses, including petty trading (Plate 2), and the fact that displaced persons from the demolished Mammy market were provided alternative shop spaces in the new shopping complex.

Table III is an illustration of the evaluation matrix comprising nine sustainability criteria, their respective indicators and scores on the sustainability scale. Although, it is very difficult to have every indicator to conform to all of the identified criteria; in this study we only attempted to consider those indicators that adhered to these criteria as much as possible. Examination of the scores on the contributions of each of the criterion to sustainability of the project as shown in Table III reveals that five criteria including access to public facilities, job creation, community involvement and sense of ownership, the adoption of the BOT model of PPP in the construction of the project as well as the provision of facilities for pedestrian and vehicle users', with score "3" were considered as contributing optimally to the sustainability of the project. Notably, the use of the BOT financing option was rated very high on the sustainability scale because unlike the traditional funding approaches which delivered facilities with very little consideration on maintenance and life cycle costs, the BOT model of PPP approach has addressed this problem in this project. As a result, this is considered as contributing immensely to enhancing the economic sustainability of this project. Whereas compatibility of the project with surrounding neighbourhood, and the provision of facilities for the disabled, children and elderly with score "2" were rated as contributing moderately; adherence to the principle of green design and construction as well as the provision of open spaces which scored "1" were evaluated as contributing minimally to the sustainability of this renewal project. It is important to state here that the low contribution of adherence to the principle of green design and construction is based on two key observations. The first was that besides the open shops, all other shop/office spaces in the complex depend on electricity derived from fossil fuel; and this is not environmentally-friendly source of energy. The second was that there were inadequate open spaces and green areas in the complex (Figure 1), and thus there is high proportion of built-up areas and paved surfaces in the complex (Plates 1, 2 and 4). These features are no doubt very inconsistent with the principle of green design and construction, and



Plate 2.
Open shops for
food items

S. no.	Economic sustainability criteria	Indicators	Scores
1	Access to public facilities	Provided public facilities such as abattoir, banking facilities, parking spaces, restaurants, fire station and conveniences	3
2	Green design and construction	Provision of open shops that depends on day lighting. The use of bricks in the construction of lock-up shops reduces the use of cement in the construction work	1
3	Provision for establishment of different businesses (job creation)	Different sizes of shops and office spaces provided for all categories of businesses, including petty trading	3
4	Community involvement and sense of ownership	Nigerian Army Welfare Association was involved	3
5	Compatibility with neighbourhood	Facilities and buildings constructed blends well with existing environment within the neighbourhood	2
6	Convenient, efficient and safe environment for pedestrians and public transport users	Rapid Bus transit terminal, pedestrian walkways and bridges as well car parks provided	3
7	Access to open spaces	Availability of open spaces and landscaped green areas	1
8	Provisions for meeting the needs of the disabled persons, children and elderly	Most shops are on bungalow type buildings that are accessible by the disabled, children and elderly	2
9	Adoption of the BOT funding option	Adequate provision of funds for the initial construction, operation and maintenance costs of the facility during the period of concession	3

Table III.
Evaluation matrix for the sustainability assessment

are globally known as not contributing much to promoting environmental sustainability of built environment projects.

In all, going by the key objectives of urban renewal schemes as found in the literature, which include clearing blighted areas and upgrading deteriorated buildings, physical environment and infrastructure; creation of additional jobs, promoting different kinds of economic activities and improving the quality physical environment; findings of this study suggest that this project has achieved these objectives. In addition to these, evidence from the study also shows that users' satisfaction, access to public facilities, provision of job opportunities, community involvement and provision for the needs of pedestrians and vehicle users as well as the adoption of the BOT funding option are key attributes of this urban renewal project that are contributing most to addressing the economic, social and environmental concerns that were instrumental to initiating the project. Therefore, the above listed attributes are considered as having greater influence towards achieving the goal of this urban renewal project as well as enhancing the sustainability of its long-term benefits.



Plate 3.
Parking space in the
shopping complex



Plate 4.
Sewage treatment plant in
the shopping complex

5. Conclusion

This study appraised the sustainability of the Nigerian Army Shopping Arena, Oshodi-Lagos, based on users' perception and experts' evaluation. Findings show that the renewal project which was executed using the BOT option of the PPP agreement resulted in the provision of satisfactory facilities to the users. Although, the principle of green design and construction was minimally adhered to in the design and construction of the facility; the needs of displaced persons were addressed, and different categories of users were provided with access to public facilities and shop/office spaces for different kinds of businesses. Therefore, the project was generally considered to be socially acceptable to the public and sustainable to a reasonable extent.

Findings of this study have a number of implications that are noteworthy. The first is that the BOT model of PPP has great potential in addressing funding challenges associated with life cycle cost and maintenance of urban renewal projects in Lagos Metropolis.

Therefore, this approach to financing urban renewal projects should be part of urban development policy framework and embraced by cities in the developing countries.

The second implication is that the sustainability of urban renewal projects in the developing countries can be enhanced through the following measures:

- Giving adequate attention to the principle of green design and construction.
- The provision of facilities for all categories of users and income groups in line with urban population mix and user preferences.
- Paying adequate attention to the provision of public facilities, creation of job opportunities and users' friendly environment as well as promoting community involvement and sense of ownership.

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