DEPARTMENT OF URBAN AND REGIONAL DEVELOPMENT
FEDERAL MINISTRY OF LANDS, HOUSING AND URBAN DEVELOPMENT

SLUM IDENTIFICATION AND NEEDS ASSESSMENT STUDIES OF SELECTED SETTLEMENTS IN NIGERIA – ABA, KADUNA AND OSHOGBO

CASE STUDY OF OSHOGBO, OSUN STATE, NIGERIA

FINAL REPORT

POLAD TECHNOLOGIES LIMITED

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Polad Technologies Ltd.
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ACRONYMS

C of O	Certificate of Occupancy
DURD	Department of Urban and Regional Development
ETM	Enhanced Thematic Mapper
FGD	Focus Group Discussion
FGN	Federal Government of Nigeria
FHA	Federal Housing Authority
FMLHUD	Federal Ministry of Lands, Housing and Urban Development
FMBN	Federal Mortgage Bank of Nigeria
GIS	Geographical Information System
GPS	Global Positioning System
GRA	Government Reserved Area
HR	High Resolution
KII	Key Informant Interview
LAT	Latitude
LAUTECH	Ladoke Akintola University of Technology
LGA	Local Government Area
LONG	Longitude
LULC	Land Use Land Cover
MDG	Millennium Development Goals
NBS	National Bureau of Statistics
TM	Thematic Mapper
TPL	Town Planner
UN-Habitat	United Nations Human Settlements Programme
VHR	Very High Resolution

EXECUTIVE SUMMARY

Project Background

This project on slum identification and needs assessment study of Oshogbo is part of the effort by the Department of Urban and Regional Development (DURD) of the Federal Ministry of Lands, Housing and Urban Development (FMLHUD) to begin the study of Nigerian cities with the view to collecting, collating, analysing and synthesizing data on slums and blighted areas and to propose inclusive renewal strategies and prioritize implementation action plans and programmes. Two other cities involved in this initial effort of DURD are Aba and Kaduna

The Specific Terms of Reference as Stated by the DURD are:

- Identification and delineation of the slum areas
- Provision of site photographs of the slum areas
- Preparation of an overview of the physical characteristics including housing conditions, drainages, roads, schools, health centres, abattoirs, sewage, solid and liquid waste collection and disposal points, places of worship, markets, civic centres and playgrounds, etc
- Assessment and analysis of basic infrastructures and services required by the inhabitants to uplift their living conditions
- Preparation of strategic proposal using phased development method for improving slum conditions
- Provision of evaluation and monitoring strategies for successful implementation of projects

Methodology

The study utilized both the remote sensing and social surveys approaches to data collection and analysis. The activities carried out include desk review and literature search; collation of physical and social criteria for slum identification; collation, processing and analysis of maps and satellite imageries; delineation of candidate slum clusters and preliminary slum area maps; field work planning and field reconnaissance; field social surveys including questionnaire administration and FDG and KII; GPS and photographic campaign; data analysis and integration; in house stakeholders validation workshop, and drafting of the reports.

The physical indicators of slum used were inferred from the spectral, qualitative and locational information of high resolution satellite image data were grouped into object, settlement and environment levels. The object level which comprises of building characteristics include roof material, footprint, shape, orientation, type, access network characteristics, regular/irregular structure, type and width of roads, and other elements of image interpretation including texture, object size and shape, and shadow. The settlement level characteristics consists of development characteristics of the settlement defining the overall shape and density including compactness and complexity, haphazard, high density building pattern, unplanned

development, public infrastructure and services lag behind development, proximity to public services (health, education, open space, public transport). The environment level refers to the general characteristics of the environment including the location of slums with respect to socio-economic status and hazard-prone areas, poor management of solid waste, location of the settlement/ proximity to natural and technological hazards, and degree of greenness.

The social dimensions of the slum conditions were evaluated based on social survey data collected on the field. The social factors of slums generated from household surveys carried out across the slum clusters include household information, housing conditions, and environmental conditions which captures information on sustainable access to safe water, access to improved sanitation, access to durable structure/housing, overcrowding, access to tenure, access to social services. In addition a needs assessment was conducted and what the communities are willing to offer in partnership with other stakeholders to improve their living conditions were documented.

Summary of Findings

The followings are the summary of the findings for Oshogbo

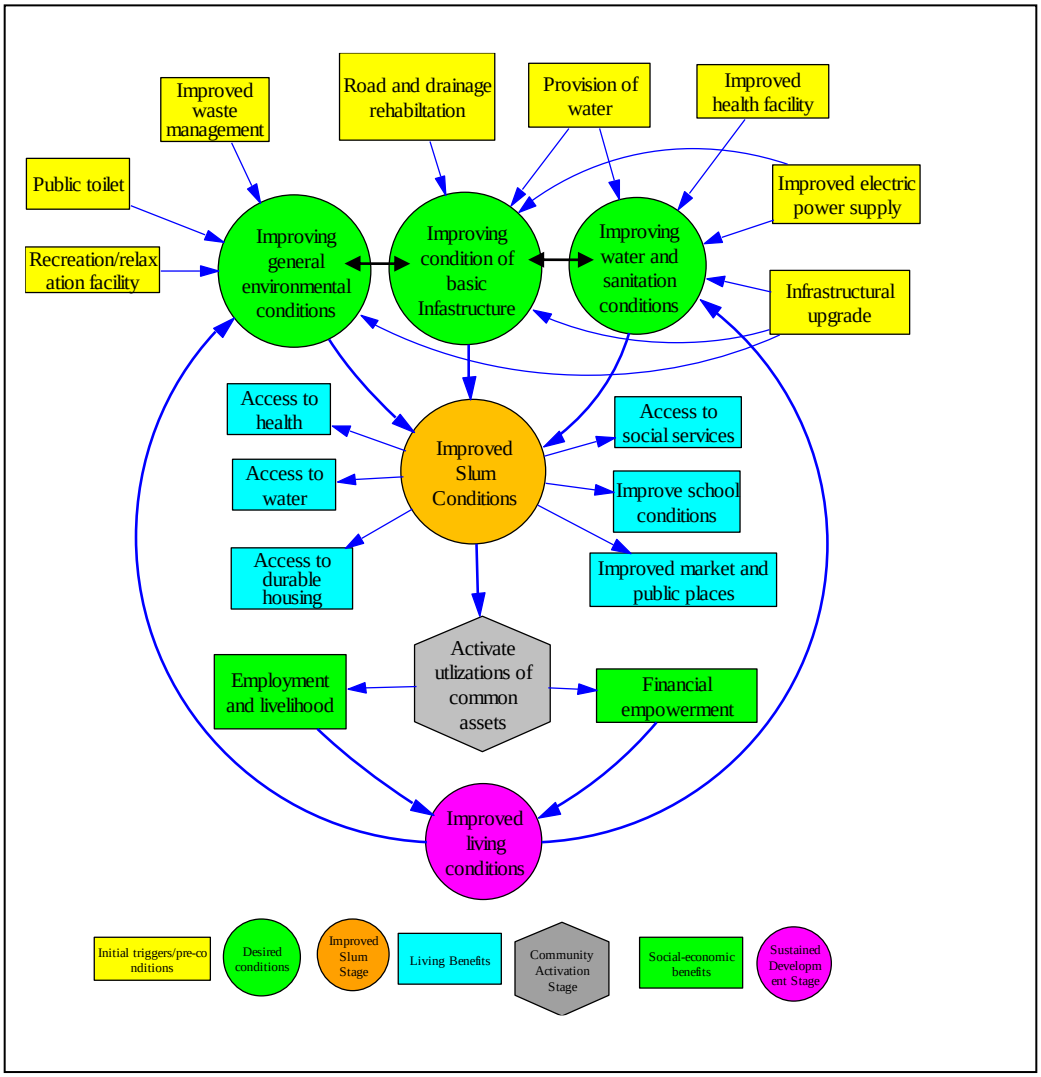
- The town of Oshogbo has been expanding at a rate of about 21% per annum which is tremendous
- Four slum clusters – Isale Osun/Oja Oba/Oluode/Odi Olowo axis, Oke bale, Ilesha Road after River Oshun and old Ede Road beside the GRA were identified and delineated from satellite imageries.
- The identified slum covers an area of **about 5.64km2 or 564.36ha and a perimeter of about 19.4km**. This area represents **about 3.7%** of the present built up area of Oshogbo.
- The largest Cluster- Isale Osun/Oja Oba/Oluode/Odi Olowo axis - approximates the old Oshogbo town or traditional city core and covers **about 4.28km^2 or 427.84ha** (about 76% of the entire slum area) and a perimeter of about **10km**.
- The slums represent a matured stage of slum brought about by combination of gradual degradation of formal housing and social filtering processes and variety of informal housing development processes
- Two clusters of ***degrading zone that cover about 2.48km^2 (248ha)*** were also identified between Ikirun Road, Testing ground and Olorunda LGA Secretariat/Oshogbo city hall; and around MDS, Alekuwodo and Adejumo streets before the Technical College on old Ede road.
- Trading or business dominates the major occupation or source of livelihood
- Strong social network exist, 75% belongs to a group or association
- 60% of buildings are constructed of concrete materials
- Among the environmental indicators, number of people living in a building, solid waste disposal, pedestrian access to building and traffic congestion were rated good. Eight indicators including planning, squatting, building appearance, road conditions, access to building and drainage were rated poor.

- For public infrastructure, refuse collection and public primary and secondary schools were rated as present and working. Electricity, public water supply and public health centre were rated as present but in bad conditions. Recreation/relaxation facility, public toilet facility, post office, civic centre, children's playground, roadside walk, police station, street lights and abattoir were adjudged to be absent.
- On common issues, communication, access to food and being able to perform cultural and religious rituals were rated good. Housing/shelter, fuel for cooking, sanitation/toilet facility, children school and access to water were considered poor.
- Combination of pipe borne water and well was considered the major source of drinking water.
- Majority (57.7%) of households do not always feel they have enough water for daily use
- Pit latrine remains the major type of toilet facility available
- 85% of households dispose their waste through government waste collectors
- Water, electricity and employment opportunities are the three most important needs required in the slum community.
- Access to water is the primordial need
- The top three expectations from the government are: provision of infrastructure, access to employment or sources of livelihood and improvement in electric power supply.
- Advocacy or enlightening other community members to support government efforts , volunteer personal labour, mobilizing other community members to contribute, paid professional service, and personal financial contribution are what the communities are willing to offer in partnership with other stakeholders to improve their living conditions

Redevelopment Strategy

The identified slum neighbourhoods in Oshogbo face three key urban challenges. The need to invest in: (A) upgrading the slums with the insertion of physical and social infrastructure; (B) regeneration of the slum neighbourhoods to bring infrastructure and buildings that have suffered neglect and whose original functions have been lost; and (C) local economic development and empowerment by activating the local assets to create jobs and improve livelihood, financial independence and living conditions.

The figure below shows how these challenges can be addressed to turn around the situation in the slums.



Recommendations

The suggested recommendations are divided into the short term (immediate to 3years), medium term 3-6 years), and long term (6-9 years) time-line. The implementing agencies include the FG, State Government and its relevant agencies, Local Government, Community, FMLHUD and Private Investors that should have the implementation responsibility.

Some of the recommendations on the short term include preparation of blue print on strategic plan for slum upgrading and livelihood improvement, quick and immediate deployment of motorised or truck-provided drinking water to ameliorate the water problem, provision of public toilet facilities, rehabilitation of inner streets, clearance of drainage channels, rehabilitation of abattoirs etc.

The medium term recommendations include investment in design and provision of municipal infrastructure including water, public recreation and relaxation areas and children's playground, street light and waste management, and the need to develop a digital GIS-based database for managing the settlements, tracking progress made in slum upgrading and human living conditions improvement plans.

Recommendations for the long term include rehabilitation and improvement of housing stock, removal of make shift structures constructed of non-durable materials and leveraging on existing economic and social assets and networks to institute cleavages to improve local economic outputs.

CHAPTER ONE

PROJECT SCOPE

1. 1 INTRODUCTION

As with many cities in developing countries, urban development in Nigeria is happening too rapidly, and at a large scale for the current system to cope. This often results in urban degradation and deficiency in infrastructure and related basic services including power supply, water, drainage and sanitation, solid waste disposal, roads and public transport). The main challenge is not to slow down urbanization but to cope with it and the challenges it brings. The main challenges that rapid urbanization brings are centered on how to provide adequate shelter, employment, and basic urban services such as water and sanitation, and how to effectively respond to the rising crime, urban poverty and environmental degradation.

The UN-Habitat described slums as the physical manifestation of urban poverty and intra-city inequality. Slums occur partly because the prosperity of cities is not well distributed. About 10% of the world population now live in slums which are neighbourhoods that typically lack or denied access to basic services. Slums can also result from the failure of public policy. Slums are typically characterised by physical blight, insecure tenure, diseases, and insecurity which resulted from absence of basic neighbourhood services such as potable water, sanitation, vehicular access, and adequate housing. They can be identified on the basis of the performance of a community against some basic attributes such as access to land, potable water, sanitation and generally good living conditions. They are also characterised by dense and overcrowding conditions, where human rights are flagrantly denied.

Urban slums and blighted areas pose specific and peculiar physical and environmental health planning challenges. They have population density that is in most cases beyond the carrying capacity of both the environment and infrastructure. Resource depletion is a natural result of a system that is fast growing beyond its carrying capacity. Blighted areas are in themselves evidence of development beyond the limit of acceptable change. Hence environmental deterioration, waste management problem and inadequacy and breakdown of infrastructure and facilities are the hall mark of blighted areas. Epidemics of poor environment-induced and related diseases including chorea, dysentery, malaria, etc are common occurrences. Waste generation is high and waste collection and disposal is poor. Due to poor planning and the lack or poor management of drains, flooding is also a common challenge. People live in very unsanitary conditions which pose serious challenges to the public health. Unfortunately, there are many of these blighted areas in Nigerian cities, and they form the abode of over 50% of cities' population.

Location characteristics including socio-demographic and environmental exposure offer a valuable source of data for urban slum research. Spatial heterogeneity can develop for a variety of reasons including differences in geography, history and

ethnicity, social exclusion in access to markets, employment, social services and infrastructure, and other aspects of public policy. Providing information on the spatial heterogeneity of urban slums can greatly assist in trying to identifying the proximate and underlying causes of slum conditions and understanding the distribution of access to the assets that are necessary to alleviate poverty and improve the performance of human well-being. When spatial information is not available, the ability to make informed intervention decisions and to monitor development activities that are vital functions of governance would be basically difficult.

It is expected that urban development must meet current and anticipated human needs, whilst making use of land, infrastructure and other natural and human resources in the most efficient, cost effective and sustainable way. Urban development plan often focuses on regeneration in terms of physical transformation of disadvantaged places without explicitly considering the poorest. The reality is that urban conditions become much worse when public policy and programmes no longer secure and protect the set of needed opportunities for sustainable development at the local level. Globally, urban regeneration policy is now moving towards inclusive governance, tackling poverty and deprivation in the context of disadvantaged places. This inclusive and sustainable urban development approach as enshrined in the doctrine of good urban governance aims to enable women and men to access the benefits of urban citizenship. Good urban governance, based on the principle of urban citizenship, as articulated by the UN-Habitat affirms that no man, woman or child can be denied access to the necessities of urban life, including adequate shelter, security of tenure, safe water, sanitation, a clean environment, health, education and nutrition, employment and public safety and mobility. Through good urban governance, citizens are provided with the platform which will allow them to use their talents to the full to improve their social and economic conditions. Indeed, inclusive and sustainable urban development framework involves urban situation analysis, sustainable urban development planning, sustainable action planning, and implementation and management of projects. The rights of citizens are also protected through access to information, consultations and consensus building and inclusion in decision-making, risk sharing, partnership and community-driven development projects. These ensure that projects and programmes are relevant to community's needs and aspirations. Ultimately, while steps can be taken to improve policy and the regulatory framework and strengthen the capacity for administering it, the only way that a plan has any chance of working is if it has buy-in from all those with a stake in it. Public and community participation is essential particularly at the action planning stage. This will ensure that the stakeholders 'own' the plan, and take their own steps to ensure that it is followed.

The Federal Ministry of Lands Housing and Urban Development (FMLHUD), in collaboration with the Federal Mortgage Bank of Nigeria (FMBN) and the Federal Housing Authority (FHA) convened a national slum summit on Monday 21st and Tuesday 22nd October, 2013 in Abuja. The theme of the summit was *'developing a national housing strategy for mass housing delivery and slum upgrading'*. The aim of the summit was to establish a strategic platform that would guarantee sustainable mass housing delivery and slum upgrading in Nigeria. The summit is a positive

response to the declaration made at the conference on 'global efforts at making slums history' in 2012 at Rabat, Morocco. The summit was anticipated to produce integrated approach and innovative strategies for sustainable housing delivery and slum upgrading.

The current effort by the Department of Urban and Regional Development (DURD) of the Ministry of Lands, Housing and Urban Development (FMLHUD) to begin the study of Nigerian cities with the view to collecting, collating, analysing and synthesising data on slums and blighted areas and to propose inclusive renewal strategies and prioritise implementation action plans and programmes is a welcome development. This will provide data on the extent of urban slums in Nigerian cities and assist in mobilizing stakeholders to participate in the quest to achieving sustainable cities where land, infrastructure, and other natural and human resources are used in the most efficient, cost effective and sustainable way. It is also in consonance with the task of the FMLHUD to develop a National Programme of Action and Strategic Plan to address slums in Nigeria.

1.2 TERMS OF REFERENCE

The aim of the study is to collect, collate, analyse required data and subsequently propose alternative renewal strategies with prioritised implementation programmes of actions for the slum areas.

The specific terms of reference as stated by the DURD are:

a. Identification and delineation of the slum areas
b. Provision of site photographs of the slum areas
c. Preparation of an overview of the physical characteristics including housing conditions, drainages, roads, schools, health centres, abattoirs, sewage, solid and liquid waste collection and disposal points, places of worship, markets, civic centres and playgrounds, etc.
d. Assessment and analysis of basic infrastructures and services required by the inhabitants to uplift their living conditions
e. Preparation of strategic proposal using phased development method for improving slum conditions
f. Provision of evaluation and monitoring strategies for successful implementation of projects

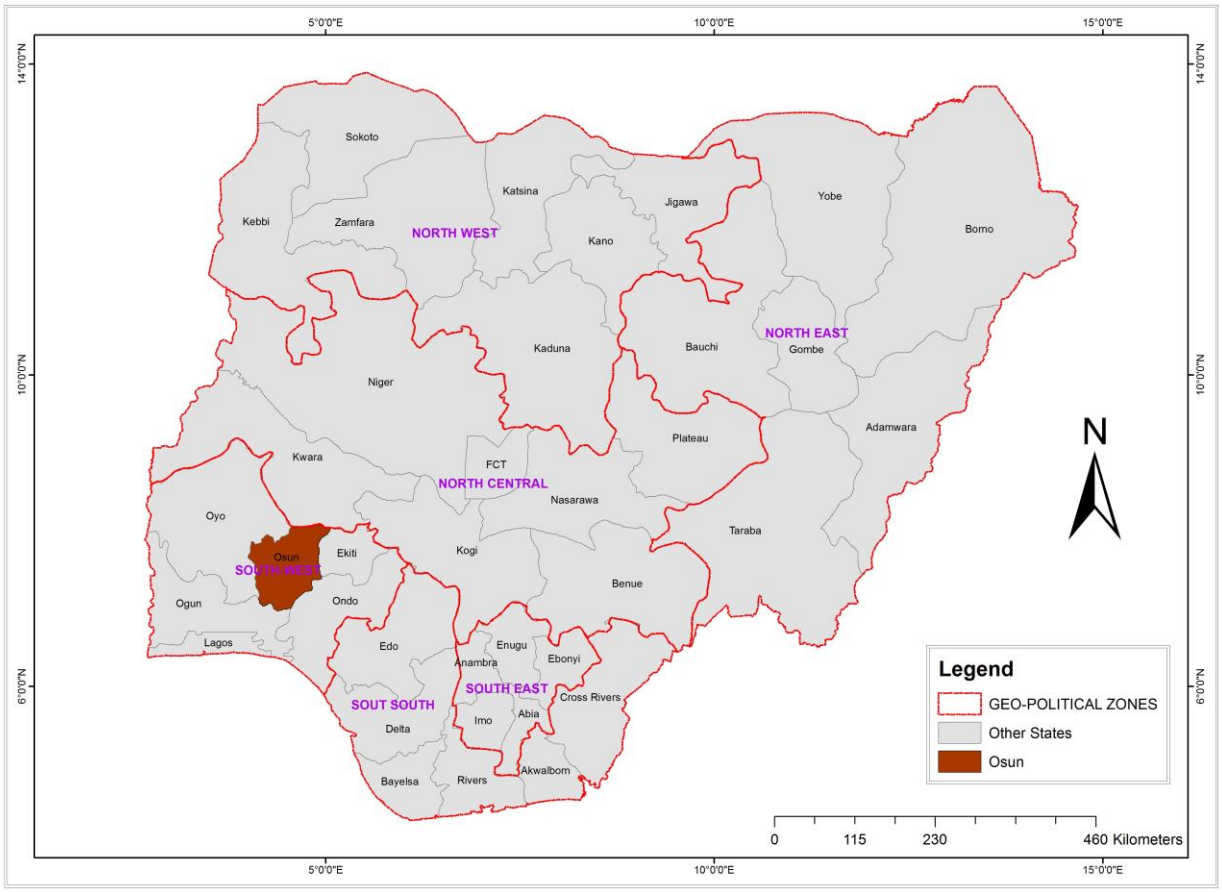


Figure 1.1: Nigeria showing the state where the study city is located

1.3. IDENTIFIED SCOPE OF WORK

Based on the terms of reference listed above, the identified scope of work includes the following:

i. Desk review and literature search and collation of preliminary information – national and international criteria for slum definition and delimitation, existing city reports and city/local development plans, etc.
ii. Collation of existing spatial data on Oshogbo – including base maps and plans
iii. Field reconnaissance and identification of candidate slum areas and neighbourhoods
iv. Sourcing of archived imageries imagery for the identification of the slum neighbourhoods
v. Delineation of slum neighbourhoods and extraction of spatial information (building footprints, roads, drainage, facilities, etc) from imageries

vi. Field Survey – GPS and Photographic campaign to capture point facilities such as schools, medical facilities, places of worship, waste disposal points, markets, civil centres, abattoir, etc. This also includes inventory and documentation of status and conditions of all facilities available. All photographs will be geocoded for import into GIS database for each slum areas/neighbourhoods.

vii. Social Survey – questionnaire administration, focus group discussion (FGD) and key informant interviews (KII) to solicit information on physical conditions and personal experiences, communal lives, aspiration and priorities. It will also elicit information on what individuals and communities require to uplift their living standards.

viii. Information synthesises, integration and analysis

ix. Expert interactive session for Visioning, scenario building and preparation of phased, inclusive and strategic urban renewal strategies to improve slum conditions with evaluation and monitoring strategies for successful implementation of projects.

CHAPTER TWO
PROJECT METHODOLOGY

2.1 RESEARCH FRAMEWORK

Figure 2.1 shows the overall framework of the study based on the terms of reference and identified scope of work.

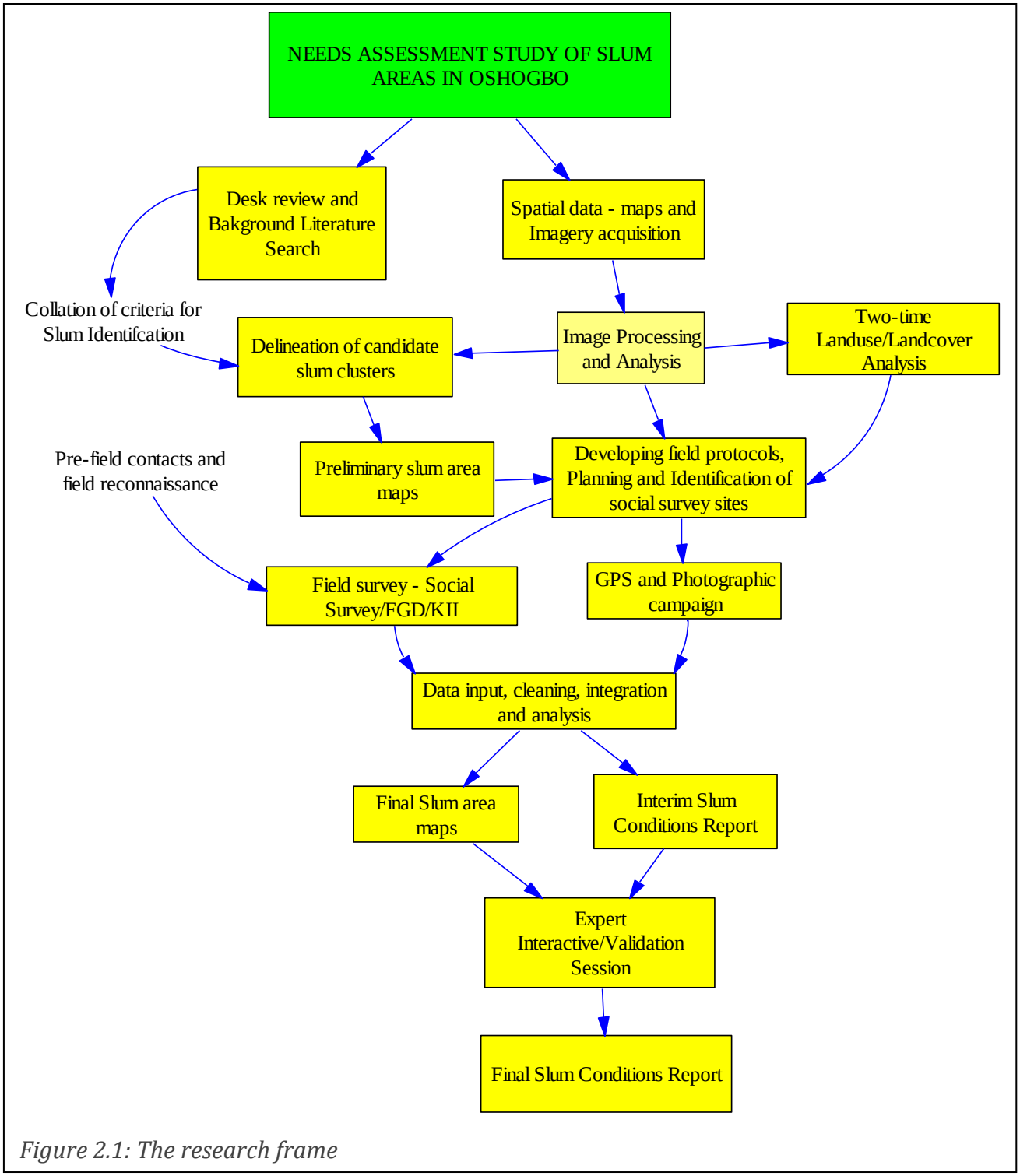


Figure 2.1: The research frame

The methodology for accomplishing the task is divided into the followings:

- Desk review and Literature search of Oshogbo
- Collation and acquisition of spatial data on the Oshogbo
- Collation of physical and social criteria for slum identification in Oshogbo
- Delineation of candidate slum areas from imageries/preliminary slum area maps for fieldwork
- Time series analysis of the city expansion
- Fieldwork planning(including preliminary field contacts and reconnaissance)
- Actual fieldwork – social surveys and GPS/photographic campaign
- Data analysis and integration
- In-house stakeholders workshop for slum development strategy
- Reporting

As shown in Figure 2.1, the key components of the study include: desk review and literature search on Oshogbo and to generate indicators for slum conditions identification; acquisition of spatial data - very high and medium resolution satellite imageries for time-series change analyses and candidate slum areas delineation; field surveys consisting of social surveys and GPS and photographic campaign in the slum areas, and in-house slum redevelopment strategy workshop to collate opinions on possible strategies for upgrading the human living conditions in the identified slum areas as well as possible monitoring and evaluation strategies.

2.2 DESK REVIEW AND LITERATURE

Several documents were collated with the view to establishing the study background for Oshogbo. They include the followings:

- The 2013 Structure Plans for urban settlements in the State of Osun: Oshogbo structure Plan Area prepared by Femi Olomola, Bola Ayeni, Samuel Oni and Olushade Taiwo for UN-Habitat.
- State of Osun Urban Renewal Projects: Oshogbo Urban Renewal Aspects
- Proceedings of housing & slum summit held by FMLHUD on 21st-22nd October, 2013
- The UN-Habitat Kenya Slum Upgrading Programme Strategy Document, 2008.

In addition, technical documents and academic articles were reviewed with the view to gather information on the spatial and socio-economic criteria for slum identification.

2.3 SPATIAL DATA

The following spatial data were accessed for this project:

- Landsat TM and ETM satellite image scenes for Oshogbo for periods ranging from 1980s to 2014. These image scenes were processed and analysed to generate two-time period maps/image maps for the city with the view to estimating the changes in spatial extents of Oshogbo between the two time periods. This was also used to calculate the spatial growth rate for each of the city.

- Very high resolution Quick bird imageries (62cm) – These were used for delineating the slum areas using the physical/spatial indicators retrieved from literature search.

- Existing base maps and data – Road data and place names were retrieved from existing base maps and other digital spatial data sources.

2.4 COLLATION OF SOCIAL AND SPATIAL CRITERIA FOR SLUM IDENTIFICATION AND DELINEATION IN OSHOGBO

According to Sliuzas et al (2008), slum development is a process that can take several different forms.

- Slums can develop through the gradual degradation of formal housing and social filtering processes (examples of this are often found in the developed cities but they are also found in the form of degraded social or low income housing projects in developing countries).
- Slums can also develop through a variety of informal housing development processes (e.g. incremental and structured, incremental and unstructured, sudden and structured, sudden and unstructured). Each form has its own distinctive characteristics.

2.4.1 SOCIAL INDICATORS OF SLUM CONDITIONS

Majority of human populations in the world lives in cities. This unprecedented growth in human populations and settlements has created the type of urbanization characterized by increased affluence and poverty. There is a growing inequality among urban dwellers where the rich are found in sections of the city served with basic social services and infrastructures while the poor are confined to poorly served areas characterized by squalid conditions (Elias, 1999). Demographically, the rich who enjoys the largest share of city resources are fewer in number compared to the population of the poor. This picture describes urbanization in the least development countries where rapid urban populations is growing faster than available resources. Consequently, majority of the urban dwellers do not have access to basic life-support systems. The UN-Habitat (2003) describes slum areas as "those communities characterized by: insecure residential status, poor structural quality of housing, overcrowding and inadequate access to safe water, sanitation and other infrastructure".

Preliminary literature reviews revealed that five (5) main social indicators of slum conditions (also referred to as the indices of deprivation) were identified by the UN-Habitat expert group on slum identification and mapping. These are:

- Sustainable access to safe water
- Access to improved sanitation
- Access to durable structure/housing
- Overcrowding
- Access to tenure

- And to these we have added access to social services which is the one of the most basic evidence of slum condition in cities of the developing countries in general and Nigerian cities in particular.

The identified metrics and the data sources from which they were generated for Oshogbo are shown in Table 2.1.

Table 2.1: Social indicators of slum conditions, likely metrics and data sources

Sn	Indicators	Likely metrics /measurement	Data sources
1	Sustainable access to safe water	Where major source of water for drinking and other uses is not piped water, public tap, borehole or pump, protected well, protected spring or rainwater E.g. shallow well, pond, stream Use and amount spent on vendor-provided waters, bottled water, and tanker trucks. (water should take less than 10% of household income) Minimum water use per day Maximum water access per day Time spent on water collection Amount paid per litre	Fieldwork
2	Access to improved sanitation	Lack of access to water system toilet or improved latrine E.g. – use of pit, open defecation, etc.	Fieldwork
3	Access to durable structure/housing	Lack of access to durable housing material (e.g. where housing roof, wall, floor is made of non-durable materials) Building in hazardous areas such as floodplain, close to canals, waste dumps, etc.	Fieldwork
4	Overcrowding	Living in more than 3 people per room Density of people per km2	Fieldwork
5	Access to tenure	Approved building plans Certificate of occupancy	Fieldwork
6	Access to social services	Social services – health, education, police, etc. per population	Fieldwork

While efforts were made to access census and demographic and health surveys data, they did not contain these metrics at neighbourhood or enumeration areas and household levels which are the spatial scale desirable for high resolution mapping and analysis of slum conditions. All the social metrics for slum condition analysis were, therefore, generated from social surveys and field observations.

Access to tenure (criteria #5) is a strong indicator of legal rights to property. However, this may be very difficult to operationalise in Nigeria where less than 5% of all lands/properties are legally registered. But it is important in terms of access and entitlement to compensation in cases where a private dwelling has to give way for overriding public good especially in the process of improving slum conditions. Question on the resident status (land lord or tenant) was included in the questionnaire with a follow-up question on the type of legal document for legal right to the property.

2.4.2 Physical Indicators of Slum Conditions

Satellite imageries remain the best means of identifying slum neighbourhoods at the city level. Satellite images are complemented and strengthened by results derived

from micro level survey. Very High Resolution (VHR) images are useful for assessing and providing objective evidence on the physical conditions of slum areas. They are also useful to assessing the stage of slum development - ***infancy, consolidation, maturity*** and to identify how slum characteristics may change according to the development stage of the slum. Preliminary or candidate slum area maps generated from satellite imageries are indispensable tool for social vulnerability assessment of slums on the field.

According to Kohli et al (2012) and Sliuzas et al (2008), the physical indicators which are inferable from spectral, qualitative and locational information useful for identification of candidate slum areas on satellite imageries can be grouped into *object, settlement and environment levels*.

Object Level comprises of building characteristics observable via VHR Images such as:

- roof material,
- footprint,
- shape,
- orientation,
- type,
- height,
- access network characteristics such as connected/not connected with surroundings
- regular/irregular structure
- type and width of roads.
- condition of drainage,
- durability of housing/material for roofing (corrugated tin, plastic sheeting/tarps, cloth/grass);
- other elements of image interpretation including texture, lacunarity (measure of the distribution of empty spaces within an image), object size and shape, and shadow

Settlement level consists of development characteristics of the settlement defining the overall shape and density including:

- Very compact and complex settlement patterns
- *Extensive, high density, multi-storey unplanned development.*
- *Public infrastructure and services lag behind development*
- haphazard, high density building pattern
- Proximity to public services (health, education, open space, public transport).

The Environment level refers to the general characteristics of the environment including:

- the location of slums with respect to socio-economic status and hazard-prone areas
- Poor management of solid waste, air pollution
- Location of the settlement/proximity to natural and technological hazards - (in or near a steep slope, in or near a flood plain, in or near a (toxic) waste area, in or near an industrial area, etc.)

- We also add to this class the degree of greenness – presence or absence of trees that provide ecosystem services

The hybrid image analysis technique (combining elements of digital and visual analysis) was employed for the interpretation and delineation of slum areas from the VHR imageries. The elements of image interpretation were employed in the visual analysis of the imageries. (See Fig 2.2)

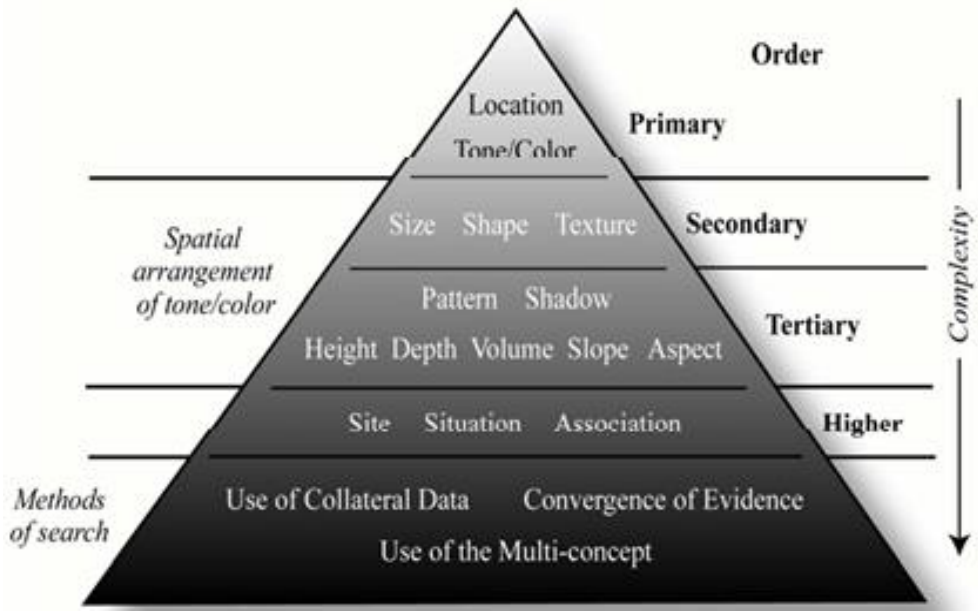


Fig 2.2: Elements Employed in Analysis of HR Image (Source: Jensen 2007)

Using the principle of convergence of evidence, all the three levels – object, settlement and environment – were integrated. Table 2.2 shows the spatial metric most relevant for delineating slum areas in Oshogbo.

Table 2.2: Metric Relevant for Slum Delineation in Oshogbo

Spatial Metrics	Oshogbo
Settlement Level	
· roof material,	√
· footprint,	√
· shape,	√
· orientation,	
· type,	√
· height,	
· access network characteristics such as connected/not connected with surroundings	√
· regular/irregular structure	√
· type and width of roads.	√
· condition of drainage,	

· durability of housing/material for roofing (corrugated tin, plastic sheeting/tarps, cloth/grass);	√
· other elements of image interpretation including texture, lacunarity (measure of the distribution of empty spaces within an image), object size and shape, and shadow	√
Object Level	
· Very compact and complex settlement patterns	√
· Extensive, high density, multi-storey unplanned development.	
· Public infrastructure and services lag behind development	
· Redensification and Public infrastructure breakdown	
· haphazard, high density building pattern	√
· Proximity to public services (health, education, open space, public transport).	√
Environment Level	
· the location of slums with respect to socio-economic status and hazard-prone areas	√
· Poor management of solid waste, air pollution	
· Location of the settlement/ proximity to natural and technological hazards - (in or near a steep slope, in or near a flood plain, in or near a (toxic) waste area, in or near an industrial area, etc.)	√
· Degree of greenness – presence or absence of trees that provide ecosystem services	√

2.5 FIELDWORK

The fieldwork consists of pre-field contacts and visits, social surveys (questionnaire administration and Focus Group Discussions (FGD)/Key Informant Interviews (KII)) and GPS and Photographic Campaign. The field protocol is as shown on Figure 2.3

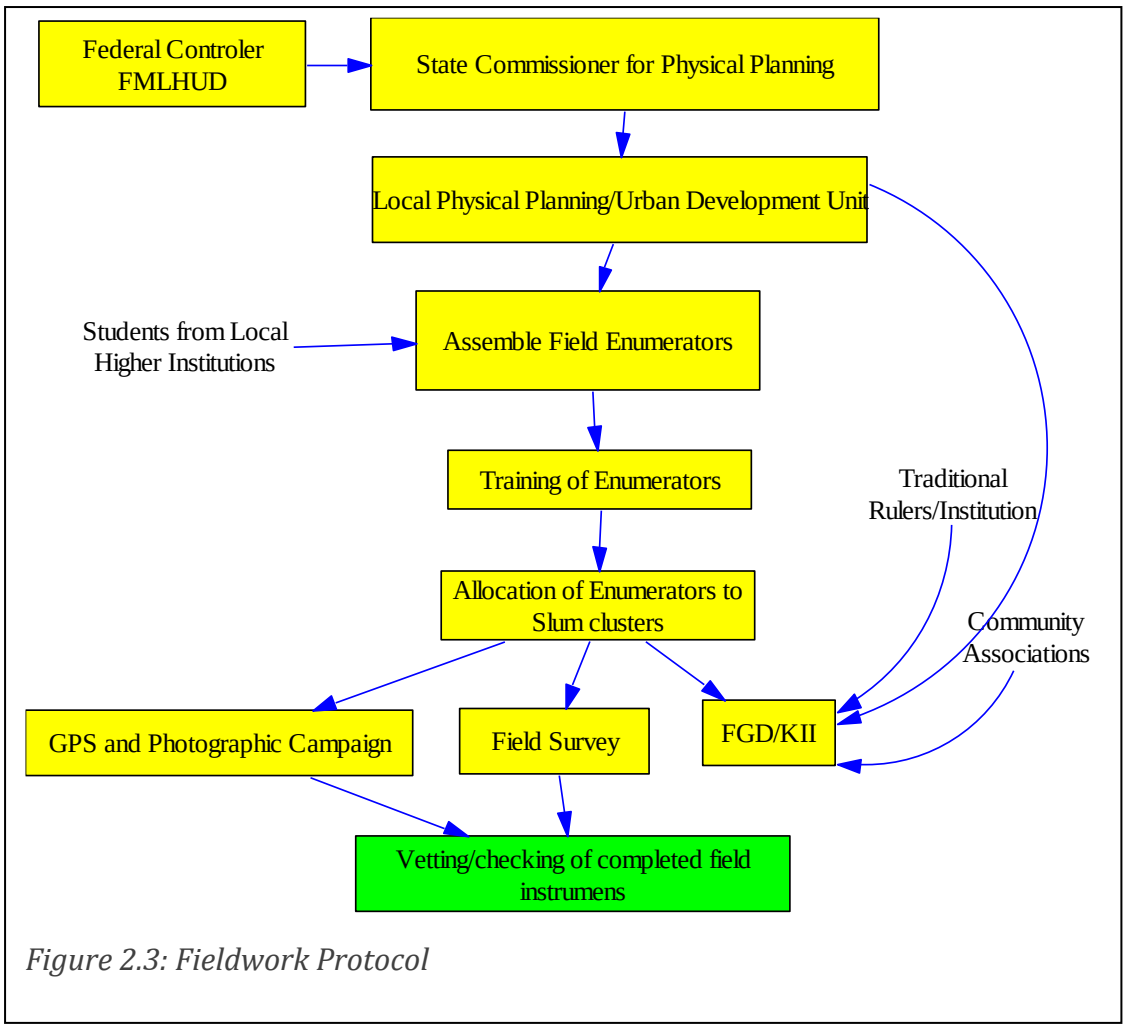


Figure 2.3: Fieldwork Protocol

2.5.1 Preliminary Field Visits and Contacts

The pre-field visit to Oshogbo took place between 2nd and 3rd April 2014. The target was to meet key stakeholders including the Federal Controller, Federal Ministry of Lands, Housing and Urban Development and the Commissioner in charge of the Ministry of Lands, Housing and Urban Development in Osun State.

Having arrived Oshogbo after the business hour on Wednesday (2/4/2014), our team met with the Federal Controller, Tpl. Dunmoye on Thursday (3/4/2014). After a brief introduction and exchange of pleasantries, we began to discuss the project and the expectations from his office with respect to facilitating our meeting with key stakeholders in the Osun State Government, especially, the State Ministry of Lands, Housing and Urban Development.

The Federal Controller contacted the Director, Town Planning in the Osun State Ministry of Lands, Housing and Urban Development who provided useful information about the itinerary of the Honourable Commissioner. At about 11.30am, our team was at the State Secretariat and held a brief meeting with the Honourable Commissioner in company of the Federal Controller and the Commissioner's top officials. The Commissioner was excited about the study. According to him, this study will serve two immediate purposes: (i) to provide a basis for comparison with similar studies already conducted by his State Ministry (ii) to update the data collected in the earlier studies by his Ministry. He pledged the support of his Ministry. He also introduced one of his aides (Mr. Kazeem) who was a key player in the studies conducted on slums by the State.

2.5.2 Fieldwork Protocol

The actual fieldwork in Oshogbo took place from Mid-April to Mid-May, 2014.The protocol for the actual fieldwork is shown on Figure 2.3. The Federal Controller (FMLHUD) served as our primary contact and facilitator. The Controller helped our team to link the State Ministry in charge of Urban Development. The State Ministry gave us a briefing on and profile of the city. It also facilitated the recruitment of local enumerators. The enumerators came mainly from the local higher institutions and the State Ministry in charge of Housing and Lands. With this arrangement, the POLAD team was able to recruit enumerators that are not only conversant with the local city and community environments, but also conversant with issues about slum conditions in those neighbourhoods.

Training of enumerator was conducted to get them familiarised with the survey instrument. In addition, a pilot survey was conducted with them before they proceeded to the field for the full survey. Each enumerator was allocated to a slum neighbourhood as the case may be. 10 enumerators were employed for the questionnaire survey in Oshogbo - the deployment of enumerators to the areas was based on the initial slum area maps generated from satellite imageries. An enumerator was expected to administer about 30 questionnaires in his/her allocated neighbourhood within a week. The enumerators were expected to administer 10 sets of questionnaire per day. At the end of each day, the consultant checked the returned questionnaire for quality assurance.

In addition to the field enumerators, 1 field assistant was specially trained to handle the GPS/Photographic campaign for three days. The focus group discussion (FGD) and key informant interviews (KII) were handled by the POLAD team and assisted by staff from the State Ministry in Charge of Urban Development. The targets engaged in the FGD and KII include community and traditional rulers/leaders, opinion leaders, neighbourhood groups and community based organizations, and officials of the State Ministry in Charge of Urban Development.

2.5.3 Field Equipment

2.5.3.1 Field Survey – Social Survey and FGD:

The questionnaire was the instrument used for the social survey. The household head was the target of the survey. The questionnaire was designed to capture all the social indicators of slum conditions including water, sanitation, housing, overcrowding, access to tenure and access to social services (see questionnaire in Appendix 1). The questionnaire consists of 35 questions and about 116 variables. It captures issues such as location (LGA, Town, Locality and Streets) where the survey was conducted. It also contains aspects dealing with household information including income and means of livelihood, among others. There is also a section on housing conditions and residential status of household head as well as environmental conditions where respondents were asked to check from a catalogue of indicators (facilities) and indicate the ones that are present in their locality and their present conditions. It also captures aspects relating to water, and access to water, toilet facilities, waste management, etc. The final aspect deals with needs assessment.

Plate 2.1: Polad Officer at Field Planning Session with Field Officers in Oshogbo

Plate 2.2: Interacting with enumerators at Oshogbo

2.5.3.2 GPS and Photographic Campaign

A state-of-the-art **Canon PowerShot SX280 HS GPS camera with in-built GPS** capability was used for the GPS and photographic campaign. In this case we were able to achieve photographic and coordinate collection with single equipment. Prior to proceeding to the field, 4 types of forms were designed to record information about the name and state/status of the facilities that are available, as well as documenting the general environmental conditions of the slum communities (see appendices).

Form A: captures the general facilities and environment including the locality where they are, as well as their status and ownership or provider.

Form B: is for schools and health facilities. It captures the name, provider, status and general conditions of the facility

Form C: specifically for some selected schools/education facilities. It captures in-depth information about the schools, including estimated population, number of teachers, number of classrooms, condition of buildings, water, electricity, toilets, etc.

Form D: is for in-depth information on health facilities, including, estimated number of patients, number of doctors and nurses, number of beds, etc. (See Appendices II and V)

2.5.3.3 FGD/KII

An interview guide was designed to elicit information from stakeholders about the general conditions of the slum areas. In particular, aspects relating to slum conditions including water, sanitation, housing, overcrowding, access to tenure and access to social services were discussed with the stakeholders. They were also requested to volunteer opinions on how the community as a group can be involved in slum upgrading and improvement of lives in these areas.

2.5.4 Field Sampling

The stratified sampling technique was used to select the candidate respondents. First the LGAs that share the city were considered. Second, the localities/neighbourhoods where the slum areas are concentrated were considered. Lastly the streets were collated and questionnaires randomly administered in selected streets. Due to the lack of population and household data at a scale lower than the LGA, the sampling efforts were concentrated at ensuring adequate representations consisting of all the identified slum types and stages.

The sampling design at Oshogbo followed series of meetings and consultations with the Department of Town Planning in Osun State Ministry of Lands and Survey facilitated by the office of the Comptroller of Works, Federal Ministry of Land, Housing and Urban Development. The sampled communities were identified for the household survey based on the 1km radius of the town centre covering both the Osogbo and Olorunda LGAs. Identified slum neighbourhoods were identified and delineated following known neighbourhoods including Isale osun, Isale aro, Lawole, Atelewo, Ifelodun, Surulere, Isale agbara, and Owode/Igbona among others. By using the proportional principle of sampling technique for household selection 10 households were randomly selected for longer streets (over 1 km) while five households were randomly chosen for those less than 1km long. The recruitment of field assistants was facilitated by the Osun State Ministry of Lands and Survey and coordinated by Tpl. (Mrs.) Ibiyemi and Mr. Kazeem Tijani. The field assistants have participated in similar studies organized by the State of Osun Ministry of Lands and Survey on the Urban Renewal Programme and UN-Habitat subject plans. To ensure quality assurance each enumerator was expected to interview a maximum number 10 households per day. At the end of each day, the field assistants returned the completed questionnaire for collation and verifications by the consultants.

Summary

In total 300 questionnaires were administered in Oshogbo. Table 2.3 shows the locality where questionnaires were administered.

Table 2.3: Number of Questionnaires Administered per Locality in Oshogbo

Locality	Frequency	Percentage
Isale osun	68	22.7
Isale aro	8	2.7
Lawole	5	1.7
Atelewo	27	9.0
Ifelodun	4	1.3
College road	4	1.3
Surulere	3	1.0
Isale - agbara	10	3.3
Owode/igbona area	3	1.0
Kolawole area	3	1.0

Bishop area	6	2.0
Ajegunle	9	3.0
Balogun	12	4.0
Oke - popo	14	4.7
Aiyetoro area	5	1.7
Igbona - owode area	10	3.3
Balogun agoro area	15	5.0
Olakiti	3	1.0
Isale – agbara	10	3.3
No location information	91	30.3
Total	300	100.0

2.6 EXPERT INTERACTIVE SESSION

The objective of the expert interactive session was to validate the fieldwork and to offer further expert opinions and suggestions on the proposed slum upgrading strategy and recommendations. The expert interactive session took place on Tuesday 28th July 2014 after the initial comments on the draft report have been received from the FMLHUD. The experts were drawn from both the academic and industry. They include practicing Urban Planners and Planners from the University, Expert Geographers with considerable experience in Human Settlement Analysis, Remote Sensing, and Geographic Information System (GIS). They also include experienced Estate Surveyor and Valuers, and Lawyers with expertise in land management and policy. Two representatives from the FMLHUD also attended the session. The experts also acted as reviewers. They were given copies of the draft report to review in advance and their observations, comments and suggestions were discussed and collated during the session with the view to improving the report. During the session each aspect of the report were thoroughly considered and consensus reached on the strategies and recommendations for improving human living conditions in the slum areas. The full report of the expert interactive session including the names and domiciliation of the attendees is shown in appendix IV.

2.7 CHALLENGES AND CONSTRAINTS

The challenges and constraints encountered in the course of this project can be divided into two major groups.

- The first are those that relates to sourcing and acquisition of spatial and attribute data pertaining to the slum areas.
- The second are those experienced in the conduct of the fieldwork.

Spatial data

Ideally, this kind of study should have been done using the lowest official units of spatial and /or population reporting zones e.g. census enumeration areas, census supervisory areas, or electoral wards boundaries. Government records, administrative registers and spatial data or maps showing the delimitation of these were not available. This makes it difficult to know either the population or the actual extent of a

slum neighborhood. Good street network data (showing all the streets and their names in a town) is also important for delineating the coverage of particular areas or neighborhoods. The street data available for Oshogbo is incomplete in attribute. The unavailability of these spatial data makes the delineation of actual slum neighborhoods very difficult. Hence, the slums identified in Oshogbo were delineated as continuous polygons while the place or neighborhood names are then placed as points to identify them. The implication is that it becomes difficult to calculate the area of each separate inner city slum neighborhood.

On the Field

One of the major constraints encountered on the field is apathy. Some households are unwilling to respond to the questionnaire because of the feeling that the government has never implemented recommendations from any study. In essence they feel it is sheer waste to devote any good time to supporting or volunteer information for any study. This suggests disenchantment with government disposition towards slum dwellers in not being able to provide urban basic services to support improvement in their living conditions. In few cases, there were demands for money as incentive to participating in the survey.

There was also the lack of cooperation from facility managers such as schools and health facility heads. In most cases, they did not agree to complete the forms on attributes of facility, citing orders from above and the need for us to obtain permission from the school board or the health board before they can accede to our request. This barrier exemplifies the divergence between data availability versus its accessibility.

CHAPTER THREE

GEOGRAPHY AND PHYSICAL CHARACTERISTICS OF SLUMS IN OSHOGBO

3.1 GEOGRAPHY

3.1.1 Location

Oshogbo, the capital of Osun State in Southwest Nigeria is roughly defined by Latitudes 7°40′ to 7°52′ North and Longitude 4°30′ to 4°38′East (Fig 3.1). It is about 88km by road northeast of Ibadan, 100km by road south of Ilorin, and 115 km by road northwest of Akure. The city has witnessed a rapid spatial growth since its becoming the capital city of Osun State in 1991 with the main city and its adjoining settlements now over 100km^2 in extent. It is the headquarters of Oshogbo and Olorunda LGAs.

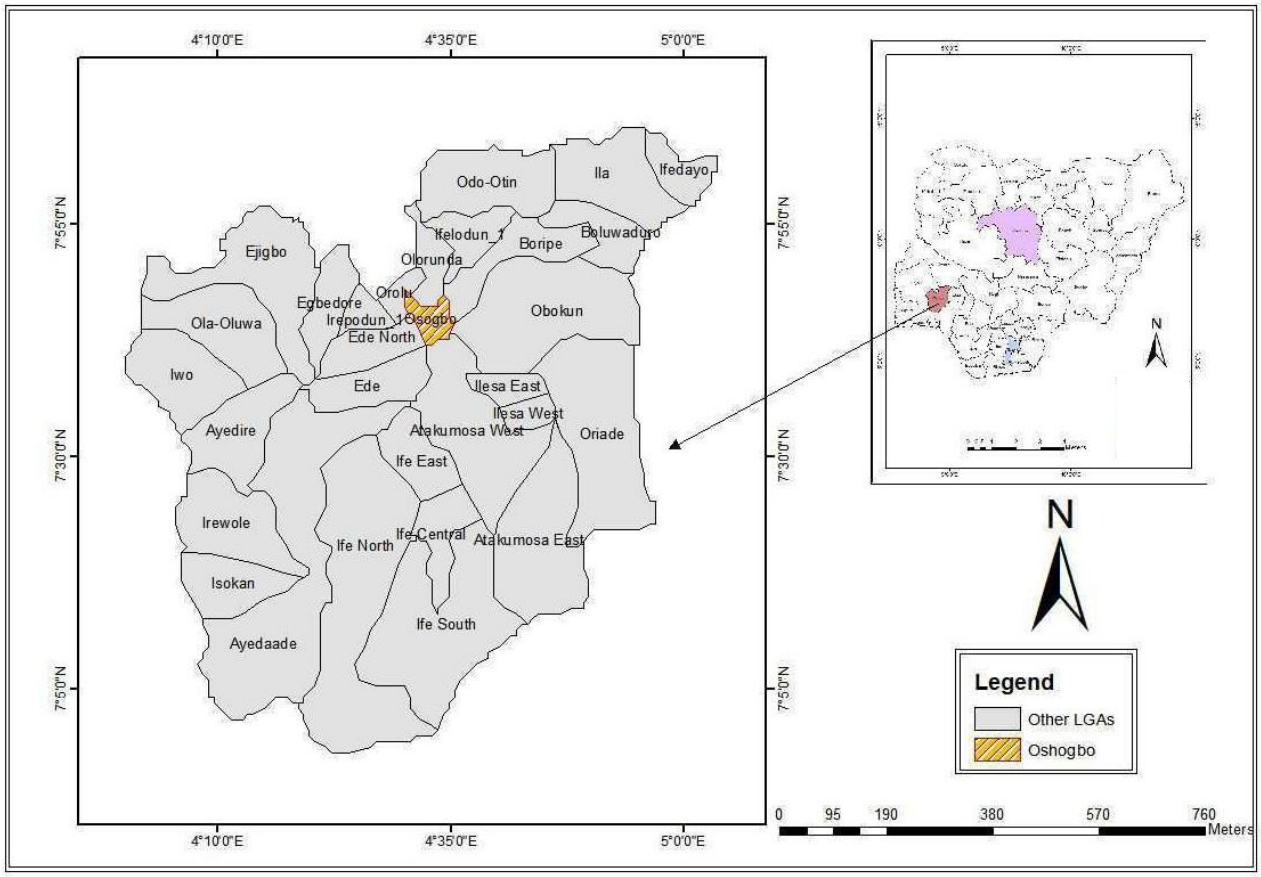


Figure 3.1: Osun State Showing Oshogbo

3.1.2 Historical Background

History suggests that Oso - Igbo, the goddess of the River, was believed to be the Queen and original founder of Oshogbo. The earliest settlement in Oshogbo seems to have been in the Oshogbo Grove which has palaces and a market. When the population expanded, the community moved out of the Grove and created a new town, which reflected spatially the arrangements within the Grove. In the 1840s Oshogbo became a refugee town for people fleeing the Fulani Jihad, as it moved south from what is now northern Nigeria. The Yorubas retreated further south into the forests and Oshogbo, right at the northern edge of the forest, became an important centre for northern Yoruba land. The Fulani attacks on Oshogbo were repelled and, as a result, Oshogbo became a symbol of pride for all the Yorubas. During the first half of the 20th century, the town of Oshogbo expanded considerably.

3.1.3 Physical Characteristic

3.1.3.1 Climate and Vegetation

The climate of Oshogbo is the tropical hinterland type with mean annual temperature and rainfall of about 28°C and over 1600 mm respectively (Oluwagbenga *et al*, 2009). The two main climatic seasons are: a dry season which starts from November to early March and a wet season between late March and early November with mean annual rainfall of 1000 - 1250 mm. The area, falls within the lowland tropical rain forest vegetation most of which had since given way to secondary forest and derived savannah due to fuel wood production, quarrying and traditional farming practices as well as other developmental projects like road constructions.

Specifically, the expected climax vegetation in Oshogbo is the evergreen high forest composed of many varieties of hardwood timber, such as a *Procera spp., Terminalia Superba, Lophir, Khaya Ivorensis, Melicia excelsa and Antiaris africana*. This natural vegetation is hardly present now but relics are observable especially in area where forest reserves are established by government. It can therefore be stated that Oshogbo is covered by secondary growth forest. Over most part of the area, the natural vegetation has been very much degraded as a result of human activities, the chief of which is bush fallow farming system. Others are fuel wood production and road construction. An important aspect of the vegetation of the area is the tree crop plantation.

The major tree crops include cocoa, kola, oil palms, cashew and citrus, among others. As a result of the degradation of the natural forest, exotic trees have been introduced as forest plantations. The exotics introduced include Tectona grandis (teak) and Gmelina arborea, Teminalia superba, a nativespecies also cultivated. All these cultivated trees now replace the natural vegetation of the forest reserves.

3.1.3.2 Soil and Geology

Geologically, Oshogbo lies largely within the Pre-Cambrian Basement Complex of South-western Nigeria, and belongs to the Pan African mobile belt east of West African Craton. The major rock groups in the study area are migmatite complex and meta-sediments (consisting of schist, quartzite and amphibolite in places). The

dominant basement rocks in Oshogbo area are schist and migmatite, associated with quartzite ridges forming the characteristic undulating terrain. Surface materials are characterized by relatively deeply weathered soil profile or regolith in the low lying areas, due to the relatively humid climatic conditions. Greater proportions of the soils are ferruginous tropical red soils (laterites) associated with Basement Complex terrains. Regionally, soil degradation and soil erosion are generally minimal due to compactness of the surface material, however, debris wash along the slopes of the hills are common.

3.1.3.3 Drainage and Topography

The drainage pattern of Oshogbo is moderately dense and dendritic, dominated by Osun River and its tributaries, which are largely controlled by the structural trends within the Basement Complex terrain. The land surface is generally undulating and descends from an altitude of over 450m in Ijesa area to 150m and below in the southern parts of the state. Two main relief regions may be identified; the first is the inselberg landscape which is part of the Yoruba highlands, while the second is the coastal plain. The region of inselberg landscape covers more than half of the state. The northern part is characterized by numerous domed hills and occasional flat topped ridges, the more prominent hills in this region, are found at Ilesa, Igbajo, Okemesi, Elu and Oba. The relief is rugged with undulating areas and granitic out - crops in several places. The area is well drained and the fertility of the soil makes farming a prominent economic activity in the area. The Osun River is perennial and its volume fluctuates with seasons. The drainage system is strongly influenced by the slope inclination and the drainage pattern is dendritic.

3.1.4 Human Characteristics

3.1.4.1 Population

The population of Oshogbo town was estimated at about 122,728 in 1952, 152,424 in1963, 189,733 in 1991 and 287,156 in 2006.The phenomenal growth in the population overtime is related to the introduction of industrialization and administration as Osogbo became a growth centre that pulled population from its neighbouring settlements through its centripetal forces of railway station, steel rolling mill, machine tool industries and commercial activities. Osogbo became the administrative capital city of Osun State at creation in 1991 further fuelling urban growth.

3.1.4.2 Social Infrastructure

a. Electricity

Oshogbo is the major base of the National Grid and power supply to the town is provided by the 533kv line radiating from the national control centre. However, Oshogbo, like other urban areas in Nigeria experiences epileptic supply of electricity. The Old Township's electrical power came from 132/33kv substation in Oshogbo. This was further stepped down to 33/11kv sub - stations located within the area. The local distribution from the sub - station is by over - ground cables to 11/0.415kv cabins radially from feeder pillars.

b. Water Supply

The water requirement of the people of Oshogbo is being met from three major sources. These include pipe - borne water, boreholes and hand dug wells. Pipe - borne water is supplied from the new expanded Ede - Oshogbo water scheme located in Erinle River in Ede. These schemes were of 10mld and 9mld design capacities and 40.66mld and 3.06mld production levels respectively. The Osun State Government has recently increased the production capacity of this Dam to additional million litres of water per day.

According to the 2013 structure plans for urban settlements in the State of Osun: Oshogbo structure plan, access to affordable water, sanitation services, electricity, solid waste management, public toilet, civic centre, public parking areas, educational institutions and health centres, cemeteries, fire service, recreation and sport facilities are challenges to the city of Oshogbo etc. The State presently generates 30 liters of water per head/daily. Despite this, in Oshogbo water supply is irregular because the water pumps are powered by Power Holding Company of Nigeria. New areas in Oshogbo are not adequately connected to the pipeline network and therefore the areas experience shortage of water supply. In addition to the schemes, local governments also provide boreholes and deep well to supplement the state government effort. For instance, Oshogbo Local Government Area is serviced by 18 boreholes, 26 public wells and other numerous private wells found in individual compounds.

c. Waste Management

The environmental health units of the two local government areas of Oshogbo are in charge of waste collection and disposal. Collection of waste is done by open dump clearance and pickup system. Human effluence disposal facilities include the pit latrines and the septic tanks. The pit latrines are mostly used in the core areas, soak away pits in the newer areas in the villages' vacant land and strain banks or nearby bush are used. The problem of waste disposal in Oshogbo encompasses inadequate public pit latrines in the core areas, irregular and/ not functioning of refuse vans and inadequate central dumping grounds.

d. Education and Health

There are about a total of 30 Secondary / Post-elementary Schools in Oshogbo. There is also a Government Technical College, a school of Nursing and Midwifery, and a Teaching Hospital of the Ladoke Akintola University. There are 81 health institutions of different categories that service the entire Osogbo urban including teaching hospital, state hospital, Primary Health Care centers, maternity centers, clinic/hospitals, as well as dispensaries and also private health institutions.

3.1.4.3 Spatial Pattern of Land Uses

Generally, Oshogbo exhibits an intricate pattern of land-uses as there are no zoning arrangements. The city grew organically without any planning at its inception, development were haphazardly carried out especially in the core areas due to lack of physical land use planning. Like many other old Yoruba towns and cities, Oshogbo is an agglomeration of different massive neighborhoods that are discernible today. Ever

since, the town is said to have witnessed four major phases of development which are the pre-1904, 1904 - 1950, 1951 - 1970 and 1971 up to date. By the end of 1991, Oshogbo metropolis was estimated to have expanded over an area of 18 square kilometers. The new residential areas include Alekuwodo, Government Reservation Area Oke - Oniti, Agowande, Gbongan road, Dada Estate, West bye - pass, Ibadan road, and Mesa road.

In other words, there are considerable variations in the city's physical pattern and growth with the Oba's palace and the traditional market (Oja Oba) as the central focus (Ojo, 1966) surrounded by residential districts which form the core of the city. The residential districts area comprises of buildings and developments dated back to the pre-colonial period. Building types here comprise of the traditional compound, extended family dwellings, some of which have now been modified into contemporary house types. The area is interconnected by network of roads, albeit most of them in bad condition. Most of the buildings and infrastructure in the interior part of Oshogbo are already very old and in need of rehabilitation.

Next to the core area is the intermediate zone (between the core and the new area/periphery). This zone is made up of buildings and developments which existed from between 1935 and 1960. Then the town had expanded to cover an area of about 580 hectares of land. Most of the dwellings here are of the contemporary types. This zone is followed by the periphery and the newly developed area. The houses here are of better quality than those of other zones. It consists of modern building development interspersed by few traditional and contemporary house types. Considering the 1991 estimated population figures for Oshogbo; the core area has about 1,882 houses, the intermediate area has 1,729 houses while the periphery has about 1,971 houses.

The development in Oshogbo is however best noticed as one moves from the interior towards the outskirts while most of the business districts are interwoven with residential districts (Egunjobi, 1995). Despite the provision and availability of some basic infrastructures like water, electricity, telecommunication and road networks in Oshogbo, the level and condition of these facilities are still very inadequate and deplorable considering the rate of urbanization and population growth witnessed in the town in recent times.

The busiest and most commercial parts of the town are Ayetoro area, Ajegunle area and the area along and around the Station road. The commercial activities, which are enhanced by the provision of infrastructural facilities, include trading in building materials, vehicles, cloths, plastic wares and metal wares etc.

3.2 SPATIAL EXPANSION OF OSHOGBO

The spatial growth of Oshogbo has been tremendous especially since its designation as the capital city of Osun State.

Table 3.1: Landcover Statistics of Oshogbo, 1986-2014

SN	Land-use Classes	Area_1986 (km2)	Area_2014 (km2)	Change (km2)	Rate (km2)	Rate (percent)	Annual rate (%)
1	Cultivation	89.34	16.24	-73.1	-2.6	-81.8	-2.9
2	Urban	22.42	153.73	131.3	4.7	585.7	20.9
3	Wetland	40.23	57.96	17.7	0.6	44.1	1.6
4	Vegetation/Fallow	158.02	79.02	-79.0	-2.8	-50.0	-1.8
5	Water Body		3.06	3.1	0.1		

As indicated in Table 3.1, the town of ***Oshogbo increased from 22.4km² in 1986 to 153.7km² representing an increase of 131km² or 585.7% in 28 years. This means the town has been growing at a rate of about 21% per annum which is tremendous***. This is reflected in the decline in the other land-cover categories which are being increasingly converted into urban lands. This also means great challenge for infrastructural development and urban planning.

Figures 3.2 and 3.3 show the spatial pattern of the growth of the town from 1986 to 2014.

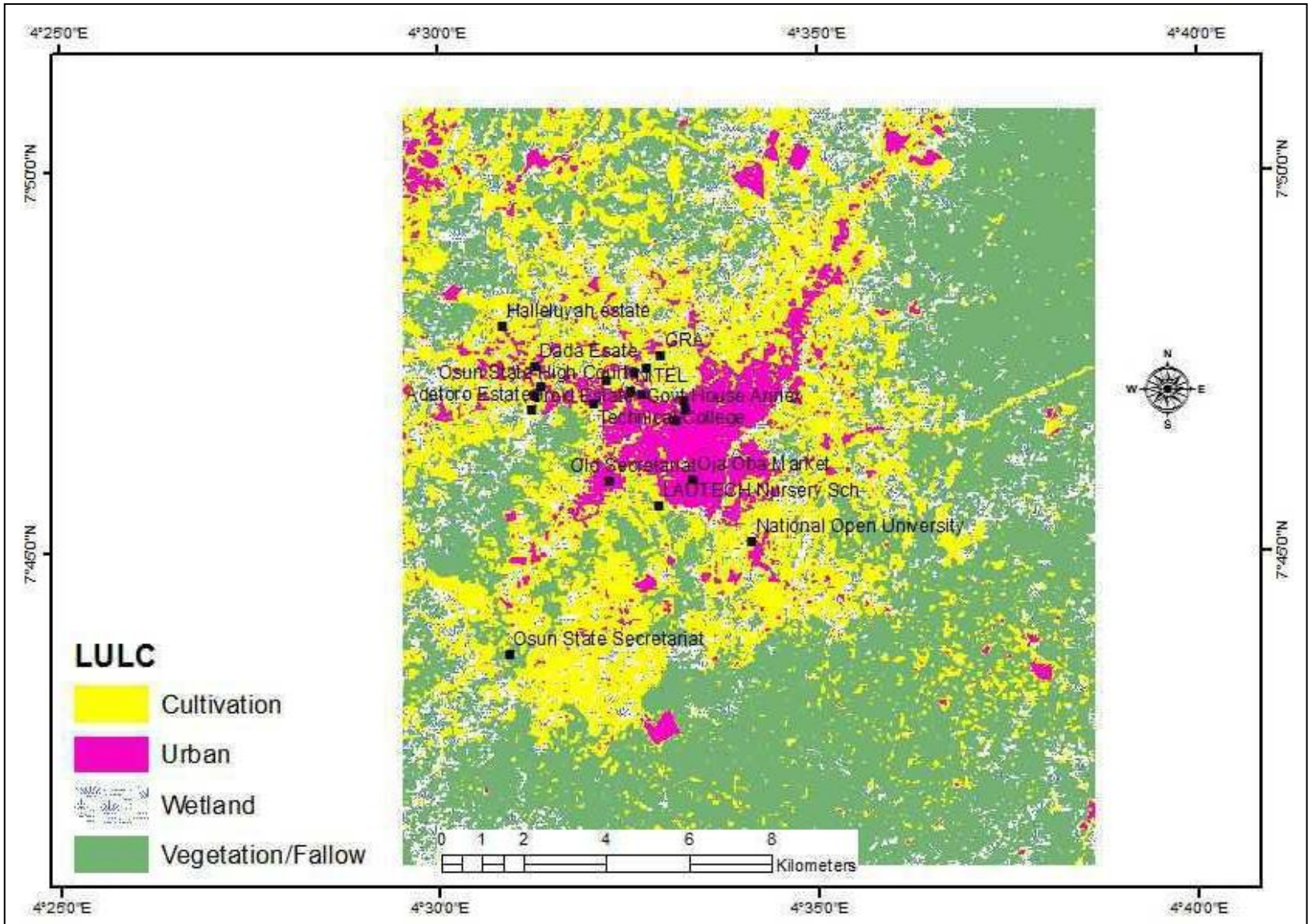


Figure 3.2: Spatial Extent of Oshogbo In 1986

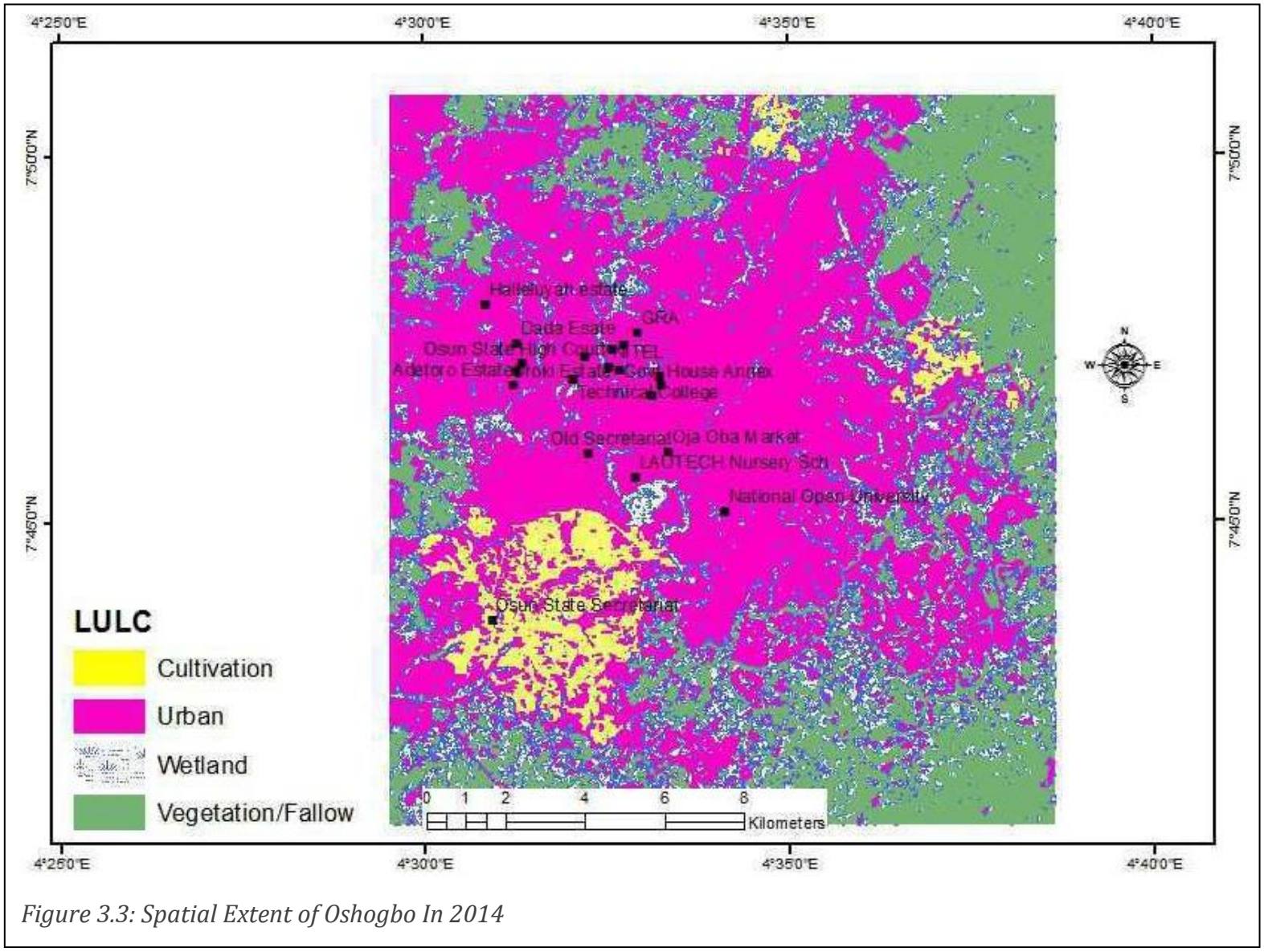


Figure 3.3: Spatial Extent of Oshogbo In 2014

From a small compact settlement in1986 the city has grown significantly between 1986 and 2014 radiating in all directions by swallowing other land-uses including cultivated lands, vegetation and fallow lands.

3.3 SLUM DELINEATION

3.3.1 Slum Area Delineation

Four (4) slum clusters were identified and delineated from HR satellite imageries in Oshogbo. These are the Isale Osun/Oja Oba/Oluode/Odi Olowo slum complex, the Oke bale area, Ilesha Road after the Oshun River and an area along the old Ede Road beside the GRA. The total area covered by these slum is about **5.64km^2 or 564.36ha and a perimeter of about 19.4km**. This area represents **about 3.7%** of the present built up area of Oshogbo.

The largest area which covers* about 4.28km^2 or 427.84ha** (about 76% of the entire slum area) and a perimeter of about **10km is the** Isale Osun/Oja Oba/Oluode/Odi Olowo slum complex. This zone approximates ***the old Oshogbo town or original traditional city core with the Oba's palace as the nerve centre. This slum represents a matured stage of slum development brought about by combination of gradual degradation of formal (old) housing and social filtering processes and variety of informal housing development processes. This compact and continuous area harbours the Oba's Palace and the traditional market (Oja Oba). It is demarcated by the major road arteries of Isale Osun, Odi Olowo, Oluguna, Sabo, and Ikirun Roads. It covers the entire neighbourhoods around Isale Aro, Station Road, Catholic Mission Street, Ita Olokan Street, Arunmole Ifelodu Street, Ibokun Road and Owode Street. This area is generally less than one kilometre to the Government House annex at Okefia. The LAUTECH Teaching Hospital is located right at the edge of this area. The famous Osun Grove, the cultural and tourism heartbeat of Oshogbo town and Osun State is located less than 100 meters away from this area. ***The slum area is generally compact and continuous***.

In addition, 2 clusters zones of degrading area – areas that could best be described to be at the infant stage of slum development – were also identified between Ikirun Road, Testing ground and Olorunda LGA Secretariat/Oshogbo city hall; and around MDS, Alekuwodo and Adejumo streets before the Technical College on old Ede road. The degrading areas c***over about 2.48km^2 (248ha). Table 3.2 shows the statistics for slum areas delineated in Oshogbo***

Table 3.2: Slum clusters delineated in Oshogbo

SN	Neighborhood Name	Class	Area (in square kilometer)	Area (in hectares)	Perimeter (km)
1	Isale Osun/Oja Oba/Oluode/Odi Olowo slum complex	Slum area	**4.28km^2**	**427.84**	**10km**
2	Okebale	Slum area	0.907297	90.7	4.3
3	Ilesha Road after River Osun	Slum area	0.258830	25.8	2.8
4	Old Ede Road beside the GRA/old Govt House	Slum area	0.199045	19.9	2.2

Figure 3.4 shows the identified slum neighbourhoods in spatial context, Figures 3.5 and 3.6 shows the identified clusters.

The identified slum areas contain about 17,397 building footprints while the degrading areas contain additional 5000 building footprints. Peculiar road problems including narrow width and lack of bus stops are found in these core areas. The location of the Osun Grove in this area and the large number of dated buildings, however, presents an opportunity for developing this slum area into a zone of **cultural tourism**.

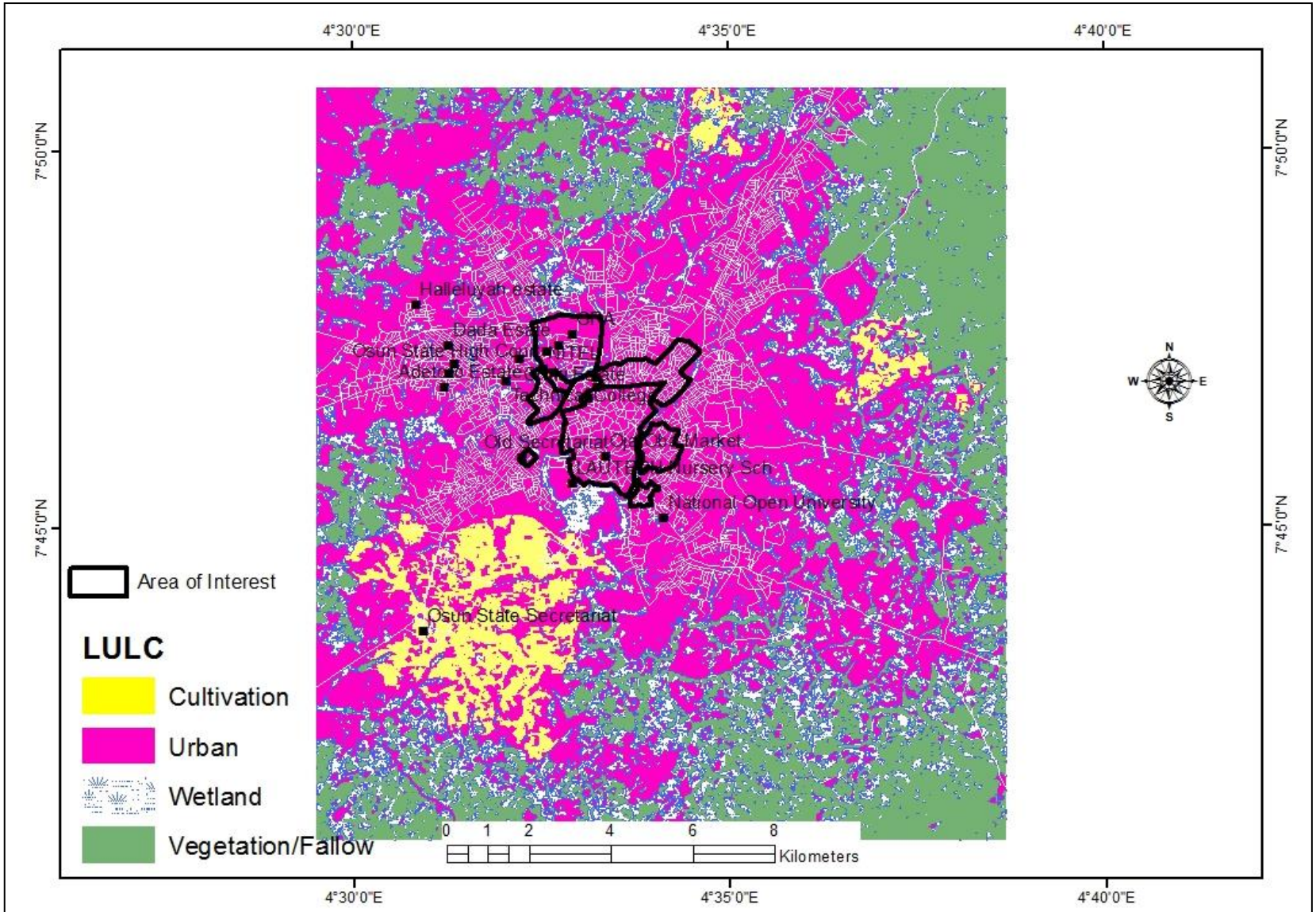


Figure 3.4: Spatial Context of the Slum in Oshogbo

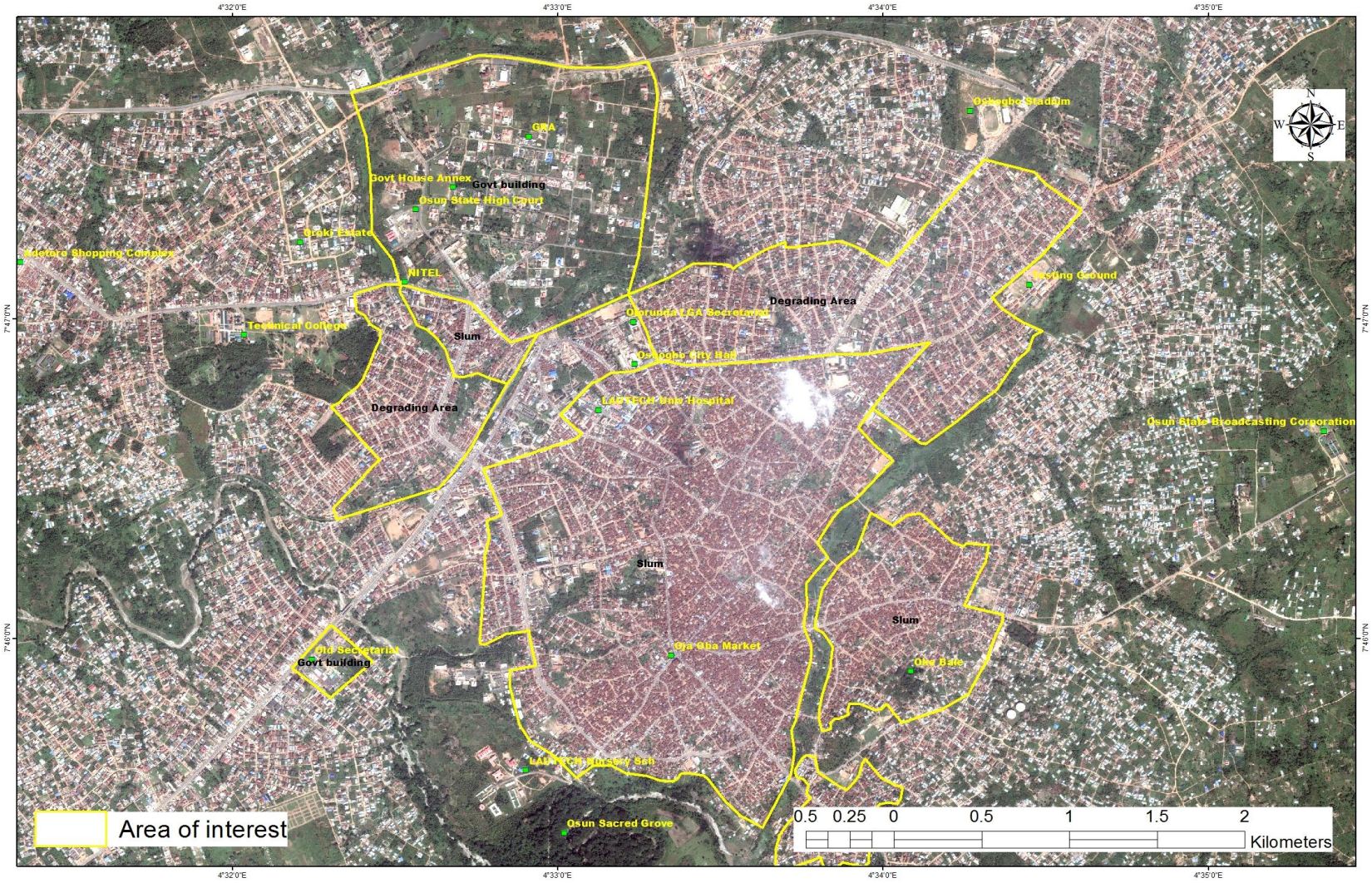


Figure 3.5: High Resolution Image Showing the Identified Slum Area

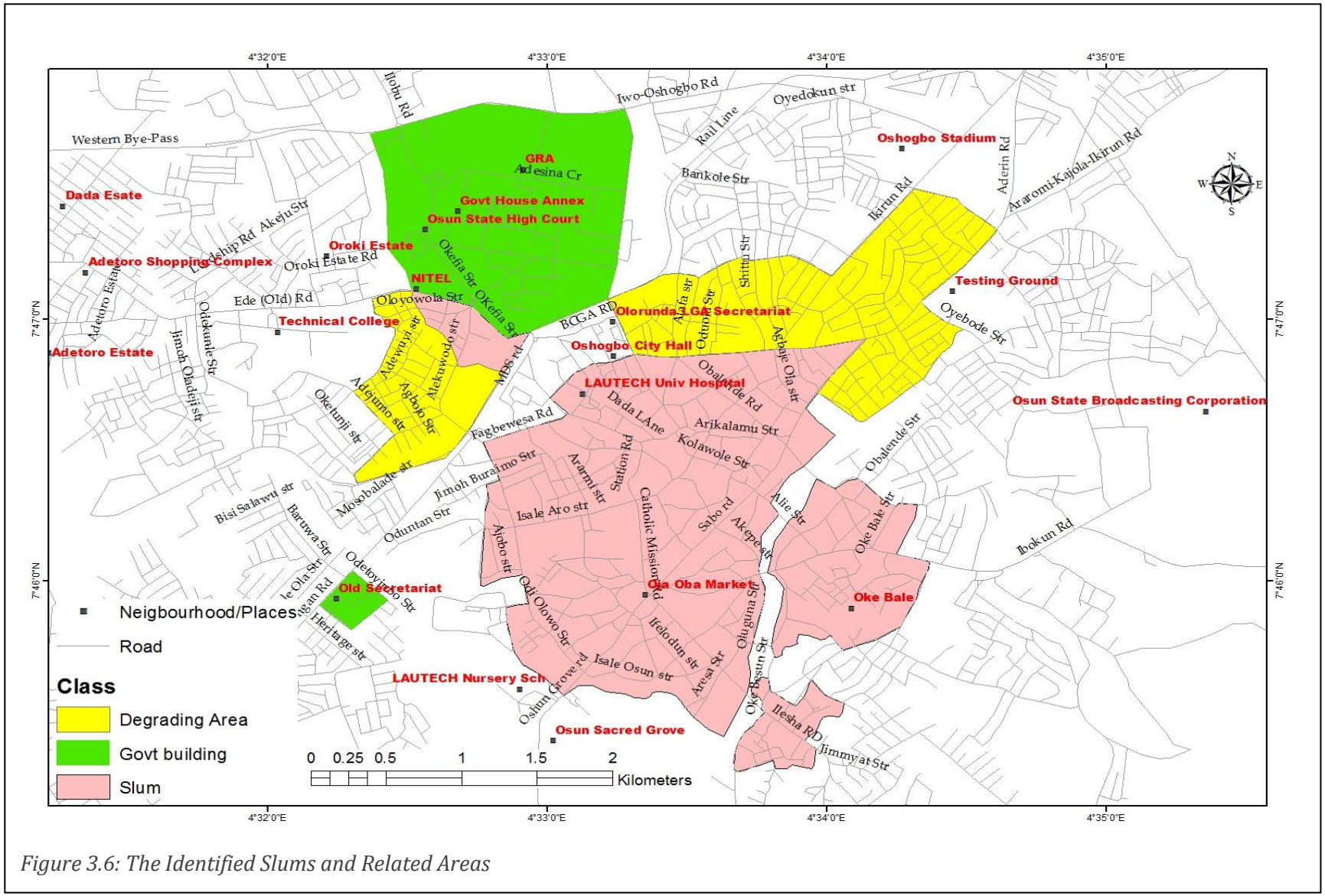


Figure 3.6: The Identified Slums and Related Areas

3.4 PHYSICAL CHARACTERISTICS OF SLUMS IN OSHOGBO

3.4.1 Physical Infrastructure and Road Conditions

The slum area identified in Oshogbo is a totally unplanned traditional city core. A number of buildings constructed of poor and non-durable materials found in the area. A number of buildings are also located in unsafe and hazardous locations including close to gullies, river floodplain and around refuse dumps (Plate 3.1). The houses are generally closely packed with very poor motorable access to buildings. Evidence of large household size which suggest overcrowding also abound.

Plate 3.1 a and b: Building structure and location

Several dwelling units within the slum neighbourhoods of Oshogbo do not have motorable access. The poor road conditions in some of the inner streets further limit accessibility and socio-economic activities (Plate 3.2).

Plate 3.2: Road Conditions in Some of the Area

3.4.2 Water and Sanitation

The field experience and visual analysis confirm that urban water is in short supply in the slum area. Most public taps are dry and many households rely on other water sources including boreholes, wells and water from vendors (See Plate 3.3 (a) and (b)). The quality of some of these water sources could be doubtful with the risk of life threatening infections.

Plate 3.3a: Community Water Sources

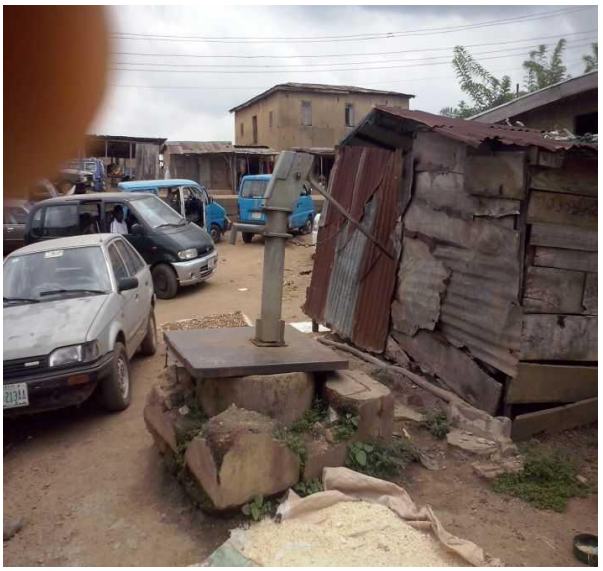


Plate 3.3b: Community Water Sources

The efforts of the Osun State government in waste collection and management is very commendable - the streets are relatively clean. Osun State Waste Management Agency (O' Clean) has good Dino waste bins in strategic places for the slum inhabitants to dispose off their waste (Plate 3.4). However, in few places, waste are still dropped in drains and open spaces

Plate 3.4: O Clean Dino Bin

3.4.3 Sch

The condition of the primary schools is relatively good. A number of newly renovated primary schools were seen around the slum area (Plate 3.5), but much still need to be

done to bring all the schools to good standard in terms of physical infrastructure. Although, much strides have been recorded in the areas of education and health services in Osun State, the slum areas still have a number of overcrowded classes, collapsed structures (buildings, roofs and fences), absence or inadequate toilet facilities and lack of water supply in schools, markets and motor parks.

Plate 3.5: A rehabilitated primary school

Other infrastructure including public relaxation area, children playground, public toilets, abattoir, etc. are virtually absent. The analysis of the physical characteristics of the slum area in Oshogbo shows that much need to be done to improve the basic infrastructure and services for a growing city. The residents appeared to be caught up in the web of new wave of urbanism without any prospects of better life. Opportunities need to be created through interventions and basic assets required for sustainable transformation needs to be harnessed to improve their living conditions.

CHAPTER FOUR

SOCIO-ECONOMIC CHARACTERISTICS OF SLUMS IN OSHOGBO*

4.1 INTRODUCTION

The social dimensions of the slum conditions in Oshogbo are evaluated based on data on the social factors of slums generated from household surveys carried out across the slum clusters. This is discussed here under the following headings:

- Household information
- Housing conditions
- Environmental conditions which captures information on
  - Sustainable access to safe water
  - Access to improved sanitation
  - Access to durable structure/housing
  - Overcrowding
  - Access to tenure
  - Access to social services
- Needs assessment of the communities

Figure 4.1 shows the neighbourhoods where the social survey took place. It should be noted again that the delineated slum area is a compact zone in the middle of the city of Oshogbo. Although the different neighbourhoods where the survey was conducted exist as areas and place names, there were no existing data to aid in accurate delineation of the neighbourhood boundaries.

**See Appendix III for the summary of the outcomes from, the slums in the three cities – Aba, Kaduna and Oshogbo*

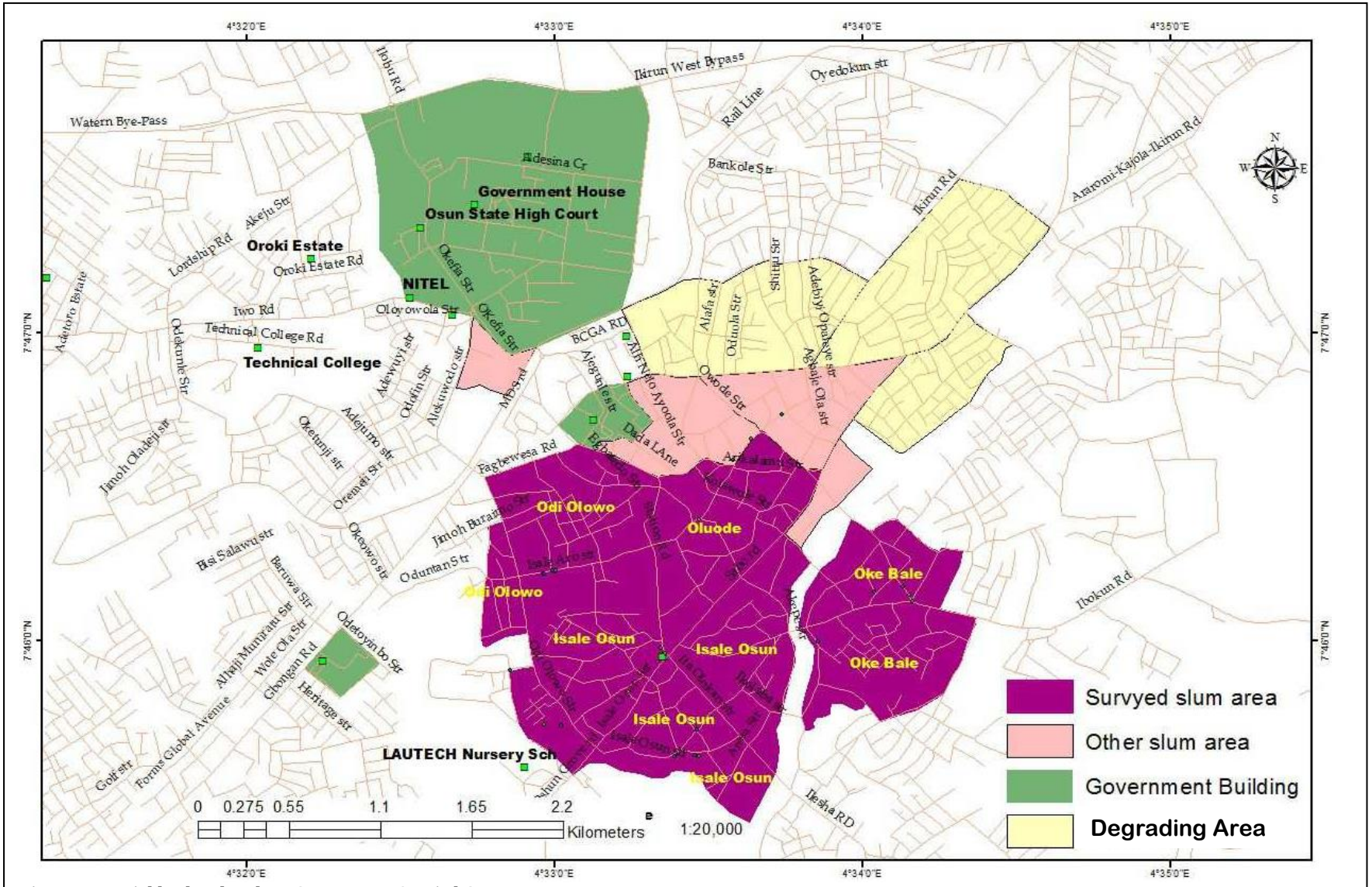


Figure 4.1: Neighborhoods Where Survey Was Carried Out

4.2 HOUSEHOLD INFORMATION

A. Age composition

The age composition of household heads that participated in the survey is shown on Table 4.1. This is dominated by the age groups 41-55years at (36%), 56-70years at (26%) and 26-40 years at (22%).

Table 4.1: Age Composition of the Household Heads

Age	Number of household heads	Percentage
16 - 25 years	19	6.3
26 - 40 years	66	22.0
41 - 55 years	107	35.7
56 - 70 years	78	26.0
Above 70 years	30	10.0
Total	300	100

Similarly, the gender is in favour of male (60%) against female (40%). The gender of household heads in Osun State given by the NBS Social Statistics data, 2013 is in favour of male at 69 % against female at 31 %.

B. Occupation

Figure 4.2 shows the occupation of the surveyed household heads. The trading/business category dominated with 49%. This is also consistent with their volunteered idea on the major occupation in the area shown on Table 4.2.

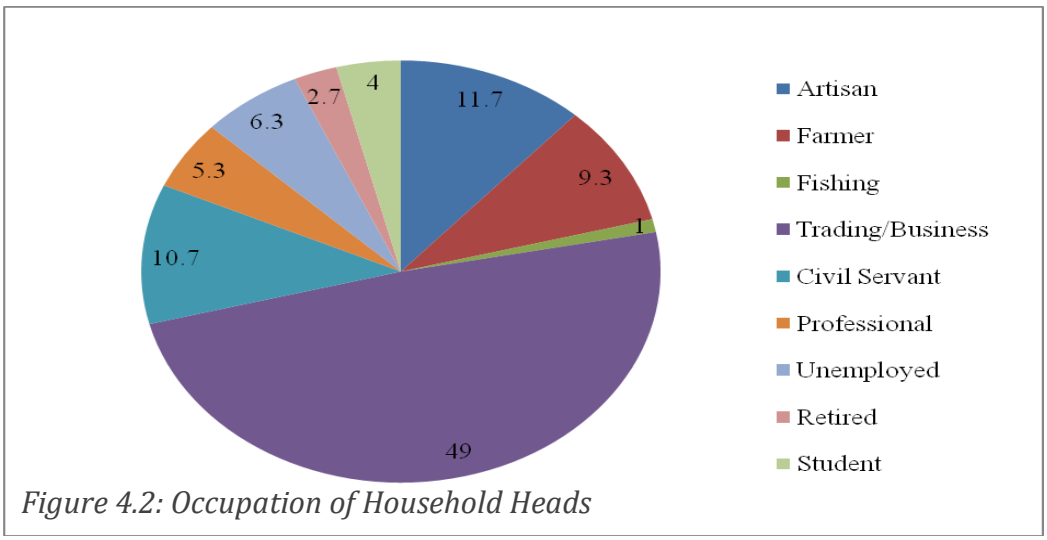


Figure 4.2: Occupation of Household Heads

Table 4.2: Major Occupation in the Study Area

Occupation	Number of household heads	Percentage
Farming	5	1.7
Trading/business	253	84.3
Civil servant	1	.3
Artisan	23	7.7
No information	18	6.0

Total	300	100.0

C. Income

With regards to income level, this is dominated by the monthly income group with N10,001-N25,000 (36%) and N25,001-N50,000 (32.3%) as shown on Figure 4.3.

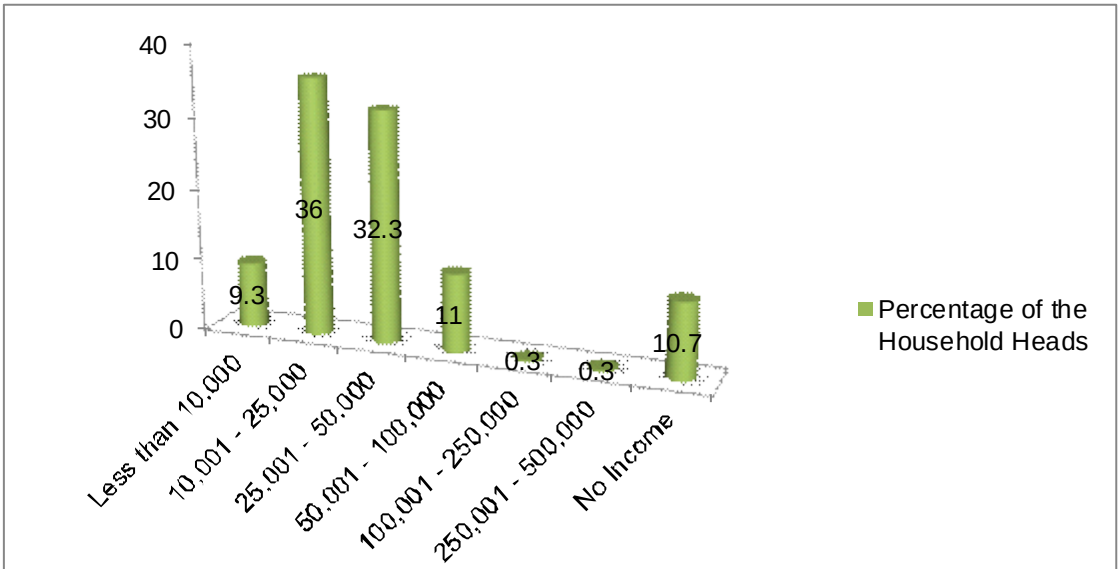


Figure 4.3: Monthly Income of Respondents

D. Size of household

Figure 4.4 shows the household size. A great majority of the households have higher number of persons per household than the state average of 3.9 (NBS, 2012). While35% has 4-6persons per household, 21% has 7-9 and 37.3% has above 10 persons per household. This gives a pointer to overcrowding which is one of the elements of slum conditions.

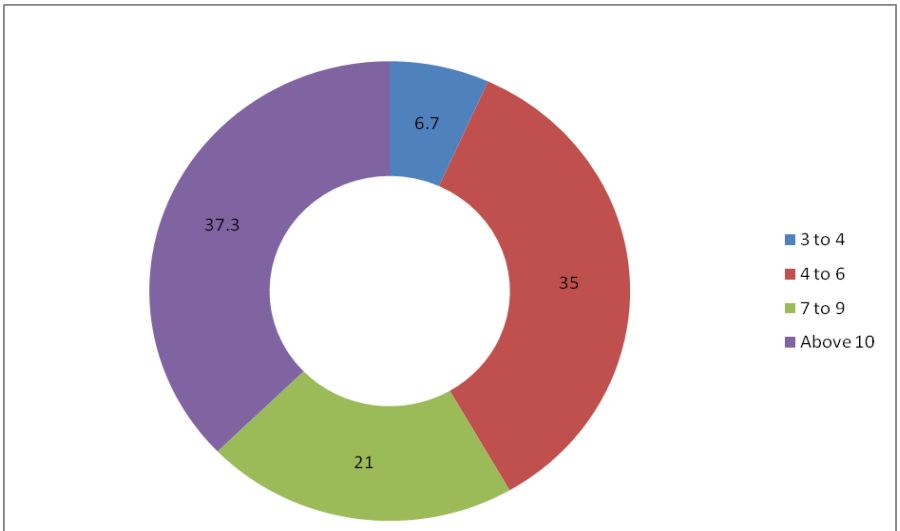


Figure 4.4: Pattern of Household Size

E. Proportion of Vulnerable Populations

The proportion of dependent population or vulnerable populations (i.e. the children and elderly) is shown in Tables 4.3 and 4.4. Although there was no response from over half of the sampled population on number of children under 5, the highest from those who responded was between 1 and 2 children.

Table 4.3: Number of Children Less Than 5 Years per Households

Less than 5 years	Number of households	Percentage
1	36	12
2	43	14.3
3	20	6.7
4	12	4.0
5	9	3.0
6	4	1.3
8	1	3
No response	175	58.3
Total	300	100

Table 4.4: Number of Elderly (Above 65 Years) Per Household

Elderly (above 65years)	Number of households	Percentage
One	10	3.3
Two	11	3.7
Three	2	.7
Four	3	1.0
Eight	1	.3
No response	273	91.0
Total	300	100.0

F. Association of household members

Table 4.5 shows the types of associations to which household members are associated. This is dominated by religious association (36.7%) and landlord association (19.7%). These associations are important social assets and networks and presented a veritable platform to galvanising the community for action projects.

Table 4.5: Association of Household Members

Association	Number of households	Percentage
Professional guild or association	23	7.7
Religious institutions	110	36.7
Landlord association	59	19.7
Vigilante association	5	1.7
Community development association	17	5.7
Town association	5	1.7
Elders forum	4	1.3
Cooperative society	2	.7
No association	75	25.0
Total	300	100.0

4.3 HOUSING CONDITIONS

A. Age of buildings

Age of buildings is presented in Table 4.6. As expected, there is a preponderance of old buildings over 20 years old with about 54%. The literature suggests a number of historic and dated buildings the slum areas of Oshogbo especially around the Oba's palace and Oja-Oba market close to the Osun grove. These, together with the ambience of the Grove, represent some of the social and cultural assets of the slum areas that can become the platform for improving the lives of the people in this slum area.

Table 4.6: Age of Buildings

Year	Frequency	Percentage
Less than 5years	12	4.0
5-10 years	43	14.3
11 - 20 years	29	9.7
21 - 40 years	86	28.7
More than 40years	75	25.0
I don't know	55	18.4
Total	300	100

B. Building construction material

Concrete is the dominant material used for constructing the buildings while a very substantial proportion (38%) are constructed with mud materials (Table 4.7). Wood and zinc are also used. These are indicators of poverty levels and portray lack of access to durable structure/housing.

Table 4.7: Types of Materials Used For Construction

Material	Frequency	Percentage
Wood	1	.3
Concrete	181	60.3
Zinc	3	1.0
Mud	115	38.3
Total	300	100

C. Length of stay and Reasons for staying in the slum area

While 16.3% of respondents claimed to have been born in the slum area, 22% have stayed for 6-10 years, 17% for 11-20 years and another 22.7% have stayed for over 20 years in the delineated areas. The level of commitment of the household heads is evident from this analysis but not much can be deduced in the aspect of immigrant population as noted above.

With regards to the reason for staying in the area, the top five reasons in order of tally are: close to my work (25.6%), because my family and friends live in the community (17.3%), it is my hometown (15.7%), it is safe and peaceful (14%) and it is comfortable living in the community (6%) (see Table 4.8)

Table 4.8: Reasons for Choice of Community of Residence

Reasons	Frequency	Percentage
Financial constraint	17	5.7
Because my family and friends live here	52	17.3
Its comfortable living here	18	6.0
It is safe and peaceful	42	14.0
It cheaper living here	9	3.0
It is my home town	47	15.7
It was not like this before	1	.3
Close to my work	76	25.3
Where I can afford to build my house	9	3.0
I inherited the property	7	2.3
No reason	22	7.3
Total	300	100.0

D. Status of household heads

Table 4.9 shows the residential status of household heads and 45.3% are landlords while 51.7% are tenants.

Table 4.9: Residential Status of Household Heads

Residential status	Frequency	Percentage
Landlord	136	45.3
Tenant	155	51.7
Squatting	9	3.0
Total	300	100

Among the landlords, 74% (representing 101 of 136) says they have access to tenure through legal document to their property. Of these, 28% have certificate of occupancy (C of O), 6% have land certificate, 19% have survey plan and 48% have traditional freehold right to their property.

Access to tenure is a strong indicator of possessory rights to property. It is also a strong indicator of slum conditions, because most slum dwellers do not often have access to tenure of lands. However, it is very difficult to operationalize in Nigeria because less than 5% of all lands are legally registered.

4.4 ENVIRONMENTAL CONDITIONS OF SLUM COMMUNITIES IN OSHOGBO

4.4.1 Perception of Environmental Condition

The analysis of the perception of the environmental condition of the slum community by the respondents based on selected indicators is shown in Table 4.10 and Figure 4.5. The analysis reveals that eight (8) of the selected indicators were rated poor by majority of the respondents while four (4) indicators – number of people living in a building, solid waste disposal, pedestrian access to building and traffic congestion, were rated good by majority of the household heads.

Table 4.10: Perception of Environmental Condition of the Community by Percent Responses

Indicator	Good (%)	Poor (%)	Bad (%)	Worse (%)	Worst (%)
Planning of the area	29.7	46.7	16.0	3.0	4.7
Squatting	12.3	50.7	26.7	1.7	8.7
Building appearance	19.0	46.0	24.3	3.7	7.0
Number of people living in a building	44.3	25.3	21.3	3.7	5.4
Road condition	24.0	38.0	25.7	6.7	5.6
Solid waste disposal	37.3	22.3	25.7	8.7	6.0
Sewage/effluent discharge	23.0	36.3	23.0	6.0	11.7
Motorable access to the buildings	19.0	46.0	24.3	3.7	7.0
Pedestrian access to the buildings	39.3	30.3	22.0	2.0	6.4
Traffic congestion	37.7	27.7	18.7	6.7	9.4
Noise pollution	29.3	30.0	22.0	11.0	7.7
Drainage/gutter/ water channel	22.0	31.7	24.3	7.0	14.0

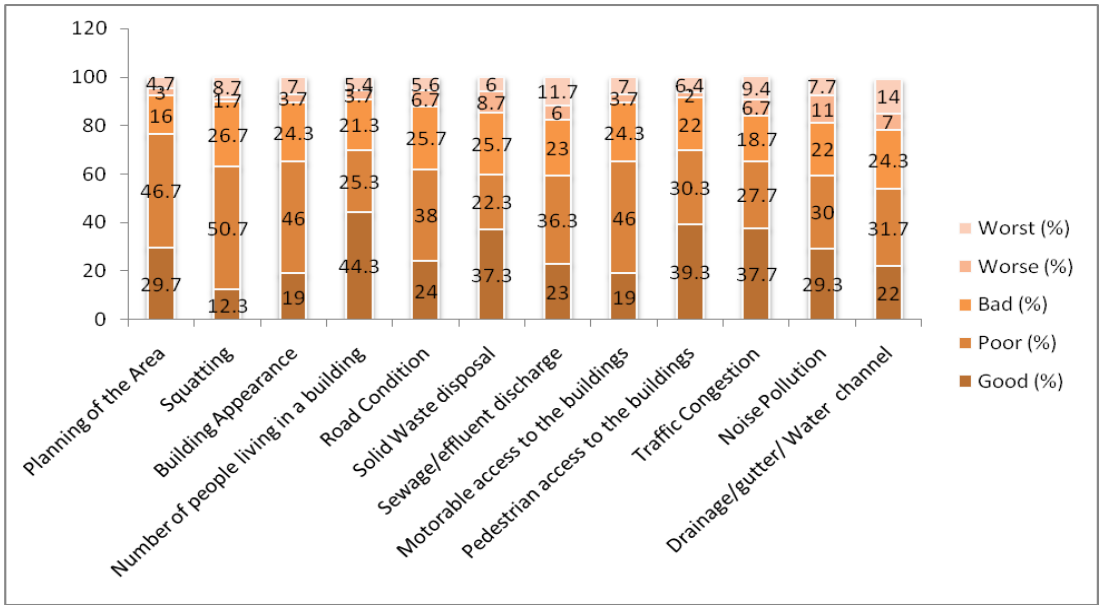


Figure 4.5: Perception of Environmental Condition of the Community By Household Heads

Plate 4.1: Housing and major road in Oshogbo Slum

Plate 4.2: Water Project but Dry Tap

The perception of selected locations or neighbourhoods across the Oshogbo slum also aligns with the general pattern as shown on Table 4.11. The table was computed based on the highest responses on each indicator across the neighbourhoods. Most of

the indicators were rated between poor and bad across the selected locations. Generally, the Isale Osun neighbourhood appeared to have fared better in road conditions, waste disposal, pedestrian access to buildings, and traffic congestion. Drainage/gutter maintenance remains a sore point across the neighbourhoods.

Table 4.11: Perception of Environmental Condition in selected locations across the slum area

Indicator	Isale Osun N=68	Atelewo N=27	Okepopo N=14
Planning of the area	Poor	Poor	Poor
Squatting	Poor	Good	Bad
Building appearance	Poor	Bad	Bad
Number of people living in a building	Good	Good	Good
Road condition	Poor	Bad	Poor
Solid waste disposal	Good	Bad	Bad
Sewage/effluent discharge	Good	Bad	Bad
Motorable access to the buildings	Poor	Bad	Poor
Pedestrian access to the buildings	Good	Bad	Poor
Traffic congestion	Good	Bad	Poor
Noise pollution	Good	Bad	Poor
Drainage/gutter/ water channel	Poor	Bad	Worst

Rating Scale	Good	Poor	Bad	Worse	Worst

4.4.2 Perception of the Condition of Basic Infrastructure in the Community

The analysis of the perception of the condition of basic infrastructures by respondents is presented in Table 4.12 and Figure 4.6. The top three rated good and working basic infrastructures in the community include: religious centres (mosque, 88%) and church, 82%), private primary school (68%) and refuse collection (59.7%). Public primary and secondary schools were also rated good. Similarly, electricity (57.7%) is the top rated present but bad infrastructure followed by public water supply (42%) and public health centre. The top seven basic infrastructures rated not available in the community include recreation/relaxation (84.3%), tertiary institution (82%), public toilet facility (76.7%), post office (76.3%), civic centre (74%), children's playground (71.7%), and roadside walk (70%).

Table 4.12: Perception of the Condition of Basic Infrastructure by Respondents

Indicators	Present & good/working		Present but bad		Not available	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Public water supply	40	13.3	126	42.0	134	44.6
Electricity supply	119	39.7	173	57.7	8	2.7
Recreation/relaxation facilities	18	6.0	29	9.7	253	84.3
Children's playground	49	16.3	36	12.0	215	71.7

Road side walks	50	16.7	40	13.3	210	70.0
Public toilet facility	20	6.7	50	16.7	230	76.7
Trees on the street	57	19.0	38	12.7	205	68.3
Street lights	36	12.0	79	26.3	185	61.7
Refuse collection point	179	59.7	65	21.7	56	18.7
Public primary schools	138	46.0	99	33.0	63	21.0
Public secondary schools	130	43.3	89	29.7	81	27.0
Private primary schools	204	68.0	44	14.7	52	17.3
Private secondary schools	130	43.3	89	29.7	81	27.0
Tertiary institution	16	5.3	38	12.6	246	82.0
Market	119	39.7	121	40.3	60	20.0
Civic centre	30	10.0	46	15.3	224	74.6
Church	247	82.3	28	9.3	25	8.3
Mosque	264	88.0	25	8.3	11	3.7
Public health centre	66	22.0	121	40.3	113	37.7
Private clinic	139	46.3	57	19.0	104	34.7
Petrol/ gas station	86	28.7	41	13.6	173	57.7
Financial institution	58	19.3	44	14.7	198	66.0
Post office	22	7.3	49	16.3	229	76.3
Police post/ station	51	17.0	78	26.0	171	57.0
Abattoir	62	20.7	85	28.3	153	51.0

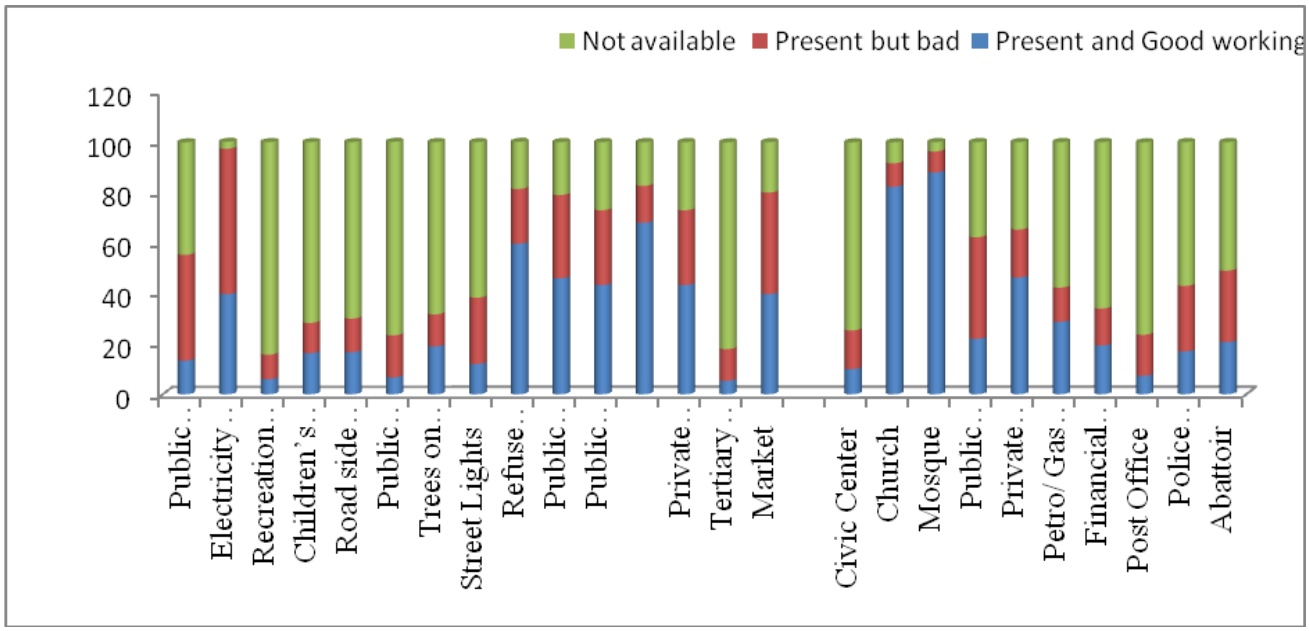


Figure 4.6: Perception of condition of basic infrastructures by house heads

Table 4.13 shows the perceptions on the conditions of basic infrastructure by respondents at selected neighbourhoods based on the highest percentage responses from the respondents. In all the locations, basic living facilities including recreation/relaxation facilities, children playground, road sidewalks, public toilet, trees on the streets, and street lights were rated as not being available. However, refuse collection and public primary and secondary schools were all rated as present and in good condition.

Table 4.13: Perception of the condition of basic infrastructure across selected neighbourhoods

Indicators	Isale osun N=68	Atelewo N=27	Okepopo N=14
Public water supply	Absent	Bad	Absent
Electricity supply	Good	Bad	Bad
Recreation/relaxation facilities	Absent	Absent	Absent
Children's playground	Absent	Absent	Absent
Road side walks	Absent	Absent	Absent
Public toilet facility	Absent	Absent	Absent
Trees on the street	Absent	Absent	Good
Street lights	Absent	Absent	Bad
Refuse collection point	Good	Good	Good
Public primary schools	Good	Good	Good
Public secondary schools	Good	Good	Good
Private primary schools	Good	Good	Good
Private secondary schools	Absent	Good	Bad
Tertiary institution	Absent	Absent	Absent
Market	Good	Bad	Good
Civic centre	Absent	Absent	Absent
Church	Good	Good	Good
Mosque	Good	Good	Good
Public health centre	Good	Bad	Good
Private clinic	Absent	Good	Good
Petrol/ gas station	Absent	Good	Absent
Financial institution	Absent	Bad	Absent
Post office	Absent	Bad	Absent
Police post/ station	Absent	Bad	Good
Abattoir	Absent	Bad	Good

Rating scale	Good =present and good	Bad=present and bad	Absent= not available

4.4.3 Rating of Common Issues

Table 4.14 and Figure 4.7 present responses on rating of some common issues in the community. Only communication (52%), food (47.3%) and being able to perform cultural and religious rituals (44.3%) are rated good. The issues rated as poor in decreasing order are housing/shelter (47.7%), fuel for cooking (44%), sanitation/toilet facility (43.7%), children school (43.3%) and water 43.3%).

Table 4.14: Rating of Community Issues

Indicator	Good (%)	Poor (%)	Bad (%)	Severe (%)	Critical (%)
Water	6.0	43.3	16.7	29.7	29.7
Sanitation/ toilet facilities	8.3	43.7	20.7	16.3	11.0
Food	47.3	37.3	12.0	2.0	1.4
Employment/livelihood	2.3	30.7	21.3	18.0	27.7
Housing/ shelter	21.3	47.7	14.7	12.7	3.7
Fuel for cooking	25.3	44.0	24.0	5.6	1.0
Health care	15.3	33.7	31.0	11.7	8.4
Being able to perform cultural &religious rituals	44.3	26.0	6.7	18.3	4.7
Security	34.7	27.0	13.3	10.7	14.3
Children school	27.7	43.3	18.7	8.7	1.7
Transportation	38.0	32.7	21.0	6.3	2.0
Communication	52.0	21.7	15.0	10.7	.7

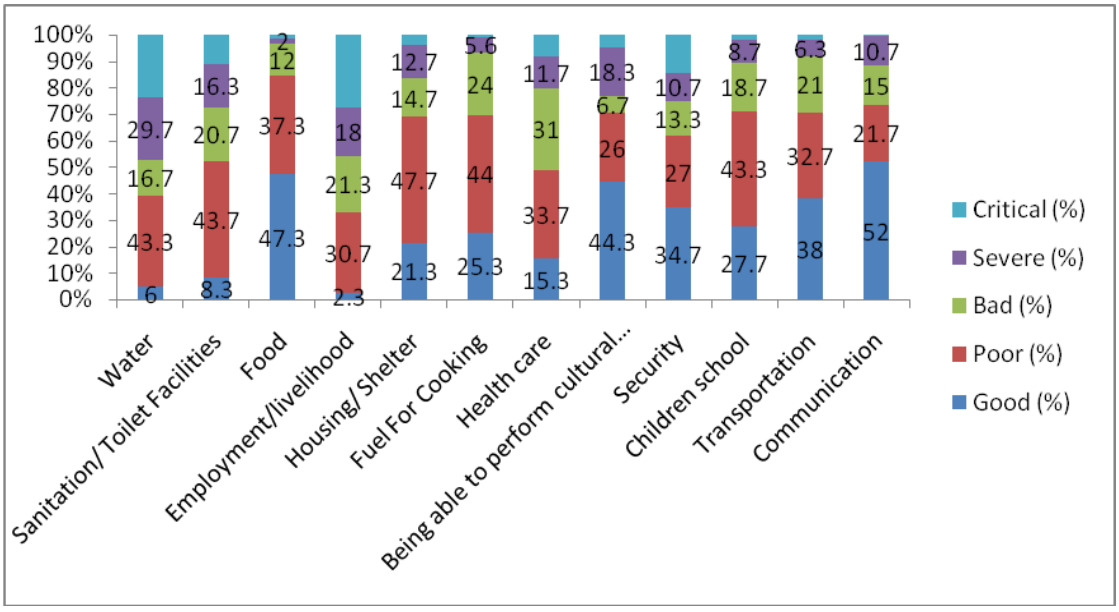


Figure 4.7: Rating of Community Issues

Table 4.15 shows the rating of the same common issues across selected locations. Again, water is rated as critical in Atelewo and Okepopo. Sanitation and toilet facilities rated critical and severe across the locations.

Table 4.15: Rating of Community Issues Across Selected Neighbourhoods

Indicator	Isale osun N=68	Atelewo N=27	Okepopo N=14
Water	Poor	Critical	Critical
Sanitation/ toilet facilities	Severe	Critical	Severe
Food	Good	Bad	Poor
Employment/livelihood	Bad	Poor	Bad
Housing/ shelter	Poor	Poor	Poor
Fuel for cooking	Poor	Poor	Good
Health care	Poor	Bad	Good
Being able to perform cultural &religious rituals	Good	Good	Good
Security	Good	Critical	Poor
Children school	Poor	Poor	Good
Transportation	Good	Poor	Good
Communication	Good	Poor	Good

Rating Scale	Good	Poor	Bad	Severe	Critical

4.4.4 ACCESS TO SUSTAINABLE WATER AND SANITATION

4.4.4.1 Sustainable access to safe water

Lack of sustainable access to safe water is one of the pillars of slum conditions. This is reflected not only in lack of access to good and protected source of water for drinking and other uses from piped water, public tap, borehole or pump, protected well, protected spring or rainwater, but also in the time, effort and cost required to access good source of water. For example, in terms of cost, access to water should take less than 10% of household income and use of bottled water, tanker truck and vendor provided water are not considered a safe and sustainable water access.

Plate 4.3: Palace of the Ataoja of Oshogbo – The Traditional and Cultural Epicentre of the Area

Plate 4.4: Government's New Model Primary Schools

Table 4.16 and Figure 4.8 present the sources of water available to the household in the slum areas of Oshogbo. The common sources in order are pipe borne water/well (21.7%), public tap (13.3%), and borehole (11.3%), protected well, rain water and sachet water (9.7%).

Table 4.16: Sources of Household Drinking Water

Source of drinking water	Number of households	Percentage
Pipe borne water	21	7.0
Public tap	40	13.3
Borehole/ sachet water	34	11.3
Protected dug well	8	2.7
Unprotected dug well	13	4.3
Shallow well	13	4.3
Rain water collection	7	2.3
Tanker truck	6	2.0
Cart - pushers	8	2.7
Surface water source - river, stream, pond	2	.7
Bottled water	2	.7
Pipe/well	65	21.7
Borehole &well	24	8.0
Unprotected well & sachet water	14	4.7
Protected well, rain &sachet water	29	9.7
Public tap, rain & sachet water	14	4.7
Total	300	100.0

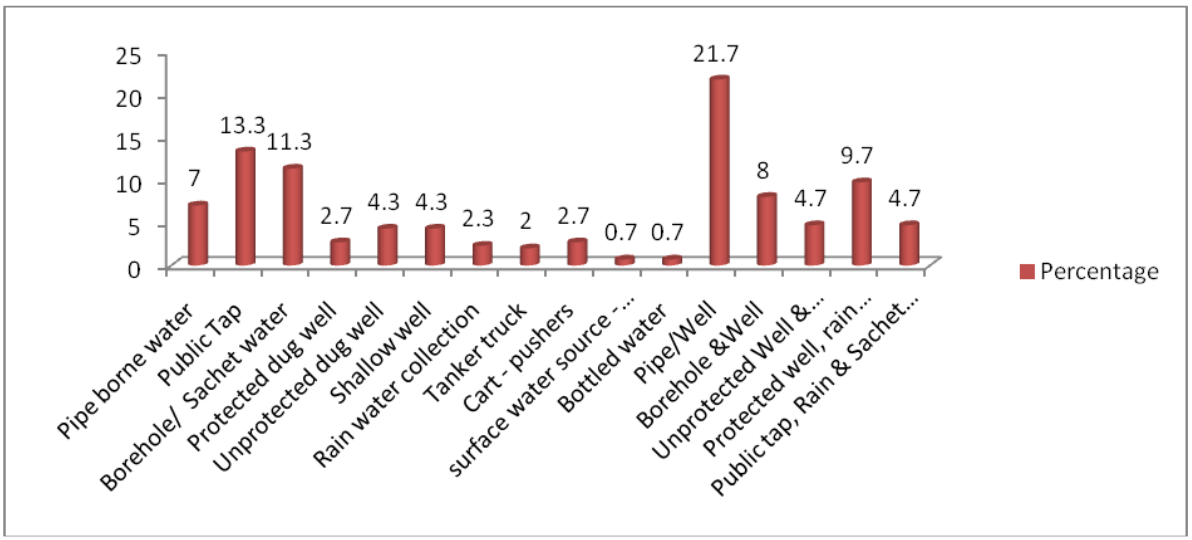


Figure 4.8: Sources of Household Drinking Water

The slum area at Oshogbo appears to be well connected with public water supply (pipe, public tap and wells). However, ***only 42.3% of the households indicated that they always feel they have enough water for daily use and 57.7% feel otherwise***. Across the selected locations, respondents at Isale Osun are divided equally between those who feel they always have enough water and those who feel otherwise. Majority at Atelewo feels they have enough while at Okepopo they feel otherwise (Table 4.17).

Table 4.17: Satisfaction with Water for Daily Use

Community	Yes	No
Isale osun* N=68	X	X
Atelewo N=27	X	
Okepopo N=14		X

*50-50 division

An analysis of the time it takes households to collect water from source and come is presented in Table 4.18. 68.7% of households spend less than 30 minutes, 20.7% of households spend 30minutes-1hour, 5% of households spend 1hour-2hours, 2.7% of households spend 2hours-4hours and only one household spends more than 4 hours.

Table 4.18: Time to Collect Water

How long	Frequency	Percentage
<30minutes	206	68.7
30 minutes - 1hour	62	20.7
1 hour - 2 hours	15	5.0
2 hours - 4 hours	8	2.7
More than 4 hours	1	.3
No response	8	2.7
Total	300	100.0

4.4.4.2 Access to improved sanitation

A. Toilet facilities

Lack of access to water system toilet or improved latrine remains another strong pillar of slum conditions. The use of pit latrine or open defecation is a clear manifestation of slum area. The survey shows that 48.3% of the sampled population still use pit latrine while only 29% uses water closet toilet. 12% shares toilets with other households and 6.7% do it in the open (Fig 4.9).

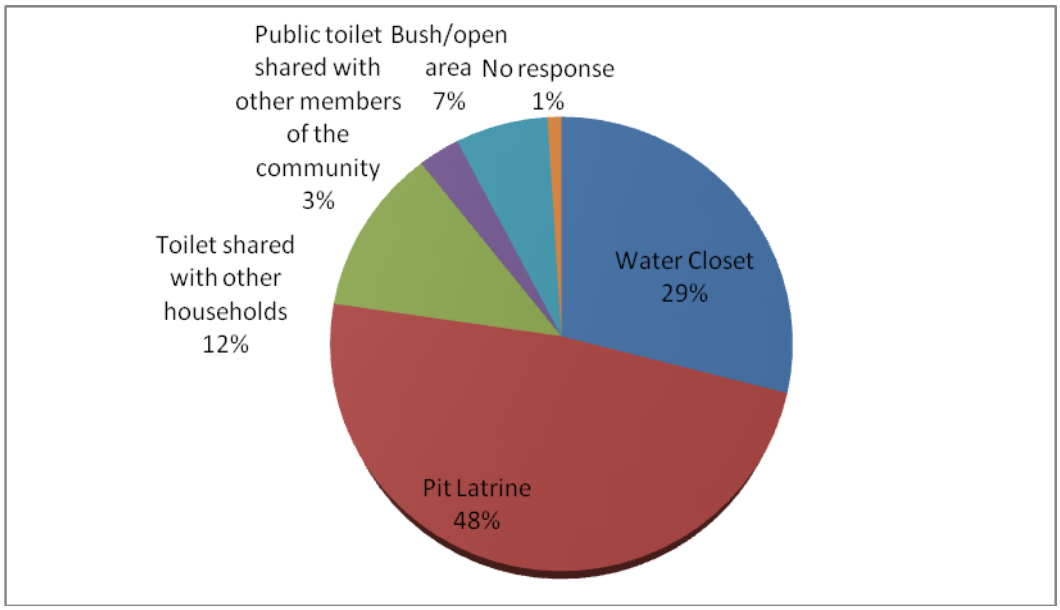


Figure 4.9: Toilet Facilities

B. Waste disposal

The analysis of household waste disposal is presented in Table 4.19. The result shows that a very large number of households (85%) use government collectors. This is also supported by the data from the selected locations. Disposal in open place is very minimal.

Table 4.19: Waste Disposal by Households

Dispose of waste	Frequency	Percentage
Take to open waste dump	23	7.7
Give to cat pushers	3	1.0
Give to government collectors	255	85.0
Store in the backyard	3	1.0
Throw into the gutters	5	1.7
Burn with fire	6	2.0
No response	5	1.7
Total	300	100.0

C. Disease outbreak and disasters

Most of the households have never experienced any environment-related diseases or disasters. Generally, 1.7% has experienced flooding, 9.3% experienced typhoid

outbreak, 3.3% diarrhoea, 2.3% cholera outbreak, 1.3% building collapse and 1% fire.

4.5 NEEDS AND PRIORITIES

A. Ultimate needs

Table 4.20 summarises the ranking of the needs of the slum community in Oshogbo. ***Water, electricity and employment opportunities are the three most important needs required in the community. The least three community needs are public toilet, cottage industry and postal service***. This is a clear pointer to the priority of the people and where governments should channel resources to if their efforts are to be appreciated.

Table 4.20: Ranking of Community Needs

Community needs	Highest percent	Rank
Water	58	1
Electricity	36	2
Employment opportunities	21.7	3
Tarred road	19.3	4
Health facility	18	5
Primary school	13.7	6
Market	13	7
Secondary school	8.3	8
Housing facility	5.7	9
Town hall	5.7	9
Tertiary institution	3.0	11
Gsm facility	3.0	11
Internet facility	3.0	11
Financial institution	1.3	14
Cottage industry	1.0	15
Postal service	0.7	16
Public toilet	0.3	17

Table 4.21 also shows the ranking of community needs across the selected locations. ***Again, water ranks number one in all the locations followed by electricity in Atelewo and Okepopo. Road rehabilitation is also considered as the second need after water in Isale Osun (a neighbourhood around the Oba's palace and the gateway to the renowned Osun Grove which is a world heritage site)***.

Table 4.21: Ranking of Community Needs across selected locations

Community needs	Isale osun N=68	Atelewo N=27	Okepopo N=14
Water	1	1	1
Electricity	6	2	2
Employment opportunities	4		
Tarred road	2		
Health facility	3		
Market	5		

To further drive home the points on what the communities actually require to function, respondents were asked to name just **one need** the majority of the people urgently and seriously required in the community. The results is also summarise on Table 4.22. ***Again, the top three things (needs) listed*** *are* ***water (36.7%), electricity (18.7%), tarred road (10.7%)***.

Table 4.22: Just One Need that is Required

Needs	Frequency	Percentage
Water	110	36.7
Electricity	56	18.7
Tarred road	32	10.7
Public toilet	25	8.3
Employment opportunities	21	7
Security	17	5.7
Nothing	16	5.3
Health facility	13	4.3
Upgrade of infrastructures	6	2
Tertiary institution	2	0.7
Affordable housing	2	0.7
Total	300	100

The lack of safe water in the slum area at Oshogbo is very consistent throughout the analysis. Although the slum area appears to be well connected with public water supply sources, access to water supply for drinking water remains a big challenge. In addition, **57.7%** of the households indicated that **they do not always feel they have enough water for their daily use**.

B. The role expected of government in slum improvement

The analysis of the perspectives of respondents what government should do to uplift the living conditions of the slum community is presented in Table 4.23. ***The top three suggestions are: provision of infrastructure (41.3%), provision of employment provision (17.7%) and provision of power supply (15%).*** On the other hand, the three last suggestions are low cost housing (0.3%), market (0.3%), and drainage (0.3%). This further helps to understand the reasoning of the community and where government emphasis should be.

Table 4.23: Expected Role of Government in Slum Improvement

Needs	Frequency	Percentage
Employment provision	53	17.7
Infrastructural upgrade	124	41.3
Water	43	14.3
Low cost housing	1	.3
Market	1	.3
Provision of soft loan	7	2.3
Good road	10	3.3
Drainage	1	.3
Power	45	15.0
Hospital	2	.7

Public toilet	4	1.3
Nothing	9	3.0
Total	300	100.0

Infrastructural upgrade and water also dominate the expectation from the government across the selected locations.

c. Contributions from Community Members

The expected contributions of community members towards the improvement of living conditions in the slum areas are presented in Table 4.24. ***The results suggest that advocacy or enlightening other community members to support government efforts (58.7%), volunteer personal labour (47%), mobilizing other community members to contribute (46.3), paid professional service (29%), personal financial contribution (26.3%), and volunteer professional service (14%) in that order is how the community members are willing to engage with governments to improve the slum conditions***.

Table 4.24: Willing Contributions from Community Members

Suggested contributions	Frequency	Percentage
Volunteer professional service	42	14.0
Paid professional service	87	29.0
Volunteer personal labour	141	47.0
Personal financial contribution	79	26.3
Mobilizing other community members to contribute	139	46.3
Enlighten other community members to support government effort	176	58.7

At the selected locations, respondents from Isale Osun and Okepopo area are willing to mobilise other community members and also enlighten them to support government efforts. Respondents at Atelewo would contribute volunteer personal labour and also make financial contributions.

These indicate the available assets (both tangible and intangible) that could be harnessed for the successful slum upgrading and human life improvement programmes which cannot be despised in the modern era of community-based urban governance. This is also the focus of inclusive and participatory democracy.

4.6 FOCUS GROUP DISCUSSIONS AND KEY INFORMANT INTERVIEW IN OSHOGBO

FGD/KII

1. Structure

The study engaged traditional rulers, community leaders, market women, leaders of trade association and professional groups.
The list of key informants includes:

1. Chief Taiye Oladele, Baale of Obatedo Oshogbo
2. Market women led by Madam Falilat Oseni, Iyaloja of Better Life Market/Anaye, Ire-Akari, Isale Osun
3. Mr. Wasiu Arogundade, Chairman National Union of Road Transport Workers, Oke-bale
4. Department of Town Planning, headed by Tpl. Oladejo, Director, Town Planning, State of Osun Ministry of Lands and Survey. In attendance were Tpl. Akanmu and Tpl. Ibiyemi

2. Major highlights

A. Major occupation in the community -the commonest occupations identified by the stakeholders are:

- Trading
- Transportation
- Farming
- Sewing
- Hairdressing
- Wood carving

B. Common associations in the community –the major town associations include:

- Market sellers' associations (banana sellers, yam sellers, pepper sellers, meat sellers,
- Hunters' association
- Herbalists
- Transport
- Tailor

C. Description of community/activity
Obatedo Oshogbo land has existed over 200 years as a distinct community from Oshogbo. It was the first community in Oshogbo to install a Baale. After several years of abandonment by previous administrations, the current administration has played significant roles in community improvement especially in the provision roads. There is a borehole for water supply donated by foreign partners.

The market in Isale Osun was established in 1991 by the president Ibrahim Babangida as a multi-purpose community facility served with a customary court, a tie

and dye processing plant, abattoirs for cow and goat and commodity market for agricultural products. The common farm products sold include vegetables, kola nut, banana, palm oil and cocoa, cassava, banana etc. There is a plan to make Isale Osun an autonomous local government area.

The motor park at Oke-Baale was established about 25 years ago under the auspices of the lga. It serves mainly intercity-intrastate services to destinations such as Ibokun, Oke-Imesi, Egbeda Market, Oniyere Coker Village, Esa-Oke, and Otan. Some transporters in the motor park make up to two or three trips daily.

D. Community challenges – the common challenges identified include the followings:

- Poor road network which limit the movement of farm produce to the market.
- Unserviceable borehole leading to acute need for water within the market requiring urgent intervention
- Failure to repay loan facilities by market women
- Lack of toilet facilities especially in the market and Motor Park.
- Lack of modern toilets in houses.
- Lack of credit facilities to farmers and traders in the community
- Inadequate sanitation and waste disposal system
- Inadequate health facilities especially maternity home
- Use of dumpsite within neighbourhoods for waste disposal
- No electricity in the market and motor park
- burning of waste at the motor park
- Unserviceable pipe-borne water facility in Obatedo

E. Needs/priorities

- Upgrading of market to modern standard
- Rehabilitation of borehole in the market
- Improved road network
- Provision of town halls
- Building of modern market in Obatedo
- Provision of electricity in the market and motor park
- Introduction of government waste collection facility
- Building of modern shops and repair of roof destroyed by storm at the motor park.

F. Available community facilities

- Health facilities: dispensary, maternity, private clinic
- Public schools (primary & secondary)
- Private schools (primary & secondary)
- Religious facilities: 8 churches and mosques each

G. Community efforts/self help

- Regular cleaning of market
- Willingness to contribute lands towards building of modern facilities or slum upgrading
- Building of toilets attached to buildings

- Construction of town hall by the Baale of Obatedo

I. Access to credit facility

- Financial assistance in form of loan to market women during Governor Oyinlola administration.
- Systematic contribution by members of NURTW since there has been no assistance by government.

J. Common diseases

- Malaria fever

K. Disasters

- No record of fire disaster in the market
- No record of thefts in the market
- Rain storm which destroyed the roof
- Floods recorded at Obatedo community

3. Conclusions

It is clear that the communities have engaged in some form of self-help or community efforts to attempt an improvement of their conditions. Although a catalogue of needs and expectations were mentioned by the community leaders, some of these such as rehabilitation of water and borehole, improvement of electricity supply, road rehabilitation, market rehabilitation, and public toilets are well in agreement with results from the questionnaire analysis. These, therefore, should form the core or basis for partnership with these communities to improve their conditions and well-being.

Plates 4.5 A and B: FGD at the Palace of the Baale of Obatedo, Oshogbo

4.7 STATUS OF INFRASTRUCTURE IN SLUM NEIGHBOURHOODS OF OSHOGBO

During the GPS and Photographic campaign exercise, a number of general and specific facilities were captured and documented in the slum area. Figures 4.10 shows the location of these facilities and Tables 4.25 shows the name and status of these facilities.

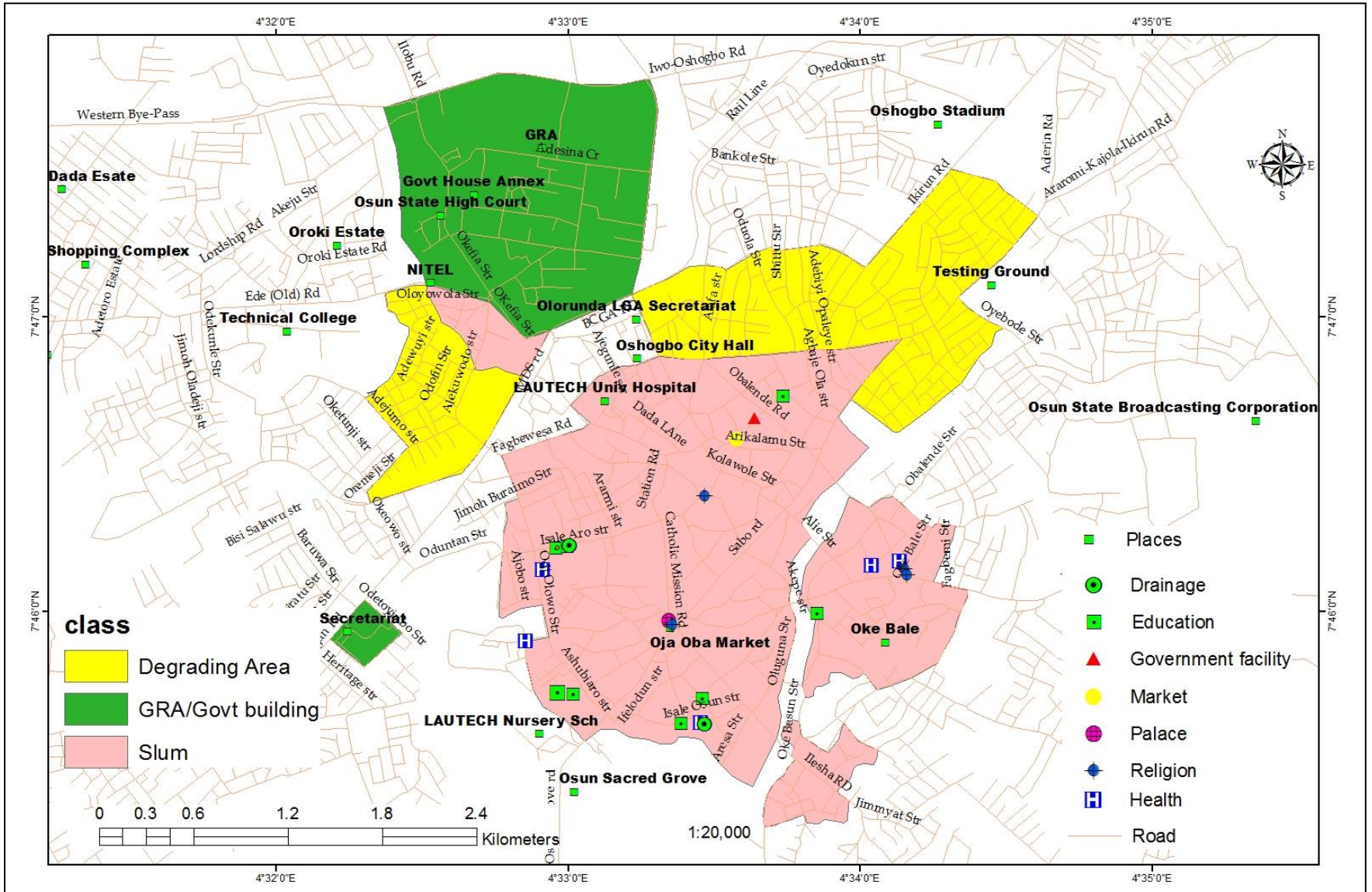


Fig 4.10: General Facilities in Oshogbo Slum Area

Table 4.25: Facilities Captured In the Surveyed Slums in Oshogbo

S_N	STATE	LGA	Community_	Facilities	Facility	Long	Lat	Ownership	Condition
1	Osun	Olorunda	Oluode	FRWSP (Ministry of Water)	Government Facility	4.5606	7.7776	Federal Govt	Not working
2	Osun	Olorunda	Oluode	Oluode Market	Market	4.5596	7.7764	Local	Good
3	Osun	Olorunda	Oluode	Cathedral of of All Saints Anglican Church	Religion	4.5578	7.7732	Local	Good
4	Osun	Oshogbo	Oja - Oba	Palace	Palace	4.5558	7.7662	Community	Good
5	Osun	Oshogbo	Oja - Oba	Central Mosque	Religion	4.5559	7.7659	Community	Good
6	Osun	Oshogbo	Oke - Bale	St. Andrus Anglican Church	Religion	4.5692	7.7691	Local Government	Good
7	Osun	Oshogbo	Oke - Bale	Olohudehin Mosque	Religion	4.5693	7.7688	Community	Good
8	Osun	Oshogbo		Drainage	Drainage	4.5578	7.7604	Government	Fair
9	Osun	Oshogbo		Old classroom Laro Timelin	Education	4.5494	7.7621	Community	Fair
10	Osun	Oshogbo	Fagbemi Oni Shopping complex	Drainage	Drainage	4.5501	7.7704	Community	
11	Osun	Olorunda	Olowo Ope	St James RCM Elementary School	Education	4.5623	7.7789	Government	Okay
12	Osun	Oshogbo	Ifelodun Lane, Isale Osun	Bello Mun, Islamic international Nursery and Primary School	Education	4.5577	7.7618	Private	Good
13	Osun	Oshogbo	Oke Bale	Oke Bale Comprehensive Health Centre	Health	4.5673	7.7693	Local Government	Good
14	Osun	Oshogbo	Oke Bale	Lara Hospital	Health	4.5689	7.7696	Private	Good
15	Osun	Oshogbo	Oke Bale	Standard Nursery and Primary School	Education	4.5642	7.7666	Private	Poor
16	Osun	Oshogbo	Isale Osun	A.U.D, Elementary School	Education	4.5565	7.7604	Government	Very Good
17	Osun	Oshogbo	Isale Osun	National programme on Immunization	Health	4.5575	7.7605	Government	Fair
18	Osun	Oshogbo	Isale Osun	Laro Timehin Middle School	Education	4.5503	7.7620	Government	Very Good
19	Osun	Oshogbo	Isale Osun	Asubiaro Hospital	Health	4.5475	7.7650	Government	Very Good
20	Osun	Oshogbo	Odi - olowo	Our Lady of Fatima Hospital	Health	4.5485	7.7690	Private	Very Good

S_N	STATE	LGA	Community_	Facilities	Facility	Long	Lat	Ownership	Condition
21	Osun	Oshogbo	Isale Aro	St. Clares Nursery and Primary School	Education	4.5493	7.7703	Private	Good
22	Osun	Oshogbo	Isale Aro	Anglican Bishop Shopping complex	Market	4.5494	7.7703	Private	Good
23	Osun	Oshogbo	Isale Aro	Our Lady of Francis School	Education	4.5500	7.7704	Goverment	Good
24	Osun	Oshogbo	Isale Aro	Bishops Court	Religion	4.5499	7.7704	Private	Good

CHAPTER FIVE

SUMMARY OF OUTCOMES, SLUM REDEVELOPMENT STRATEGY, RECOMMENDATIONS AND MONITORING AND EVALUATION PLANS

5.1 INTRODUCTION

Deficiency in infrastructure and related basic services (power supply, water and sanitation, roads and public transport, solid waste disposal) and lack of ability to generate employment is a central challenge for the slum areas in Oshogbo. For this city to achieve its full potentials as a thriving centres with improved human living conditions, well-targeted investment in improving the environmental conditions and basic municipal infrastructures are essential elements. The impacts of infrastructure deficiencies are very acute in these slum areas. There is lack of access to basic municipal services which further exacerbate individual and household family poverty levels and thus aggravating other composite vulnerabilities. Experiences from these slum areas in Oshogbo suggest that the possibility of meeting the target of the Millennium Development Goals (MDG), which winds down in 2015, especially with regards to halving the proportion of people without adequate access to water and sanitation services looks very unrealistic in these slum neighbourhoods.

The thrust of this section of the report is to summarise the outcomes from Oshogbo, assess the assets and threats available to the slum areas as well as suggesting some slum upgrading and human lives improvement strategies in the slum neighbourhoods.

5.2 SUMMARY OF OUTCOMES

This project on slum identification and needs assessment study of Oshogbo is part of the effort by the Department of Urban and Regional Development (DURD) of the Federal Ministry of Lands, Housing and Urban Development (FMLHUD) to begin the study of Nigerian cities with the view to collecting, collating, analyzing and synthesizing data on slums and blighted areas and to propose inclusive renewal strategies and prioritize implementation action plans and programmes.

The Specific Terms of Reference as Stated by the DURD are:

- Identification and delineation of the slum areas
- Provision of site photographs of the slum areas
- Preparation of an overview of the physical characteristics including housing conditions, drainages, roads, schools, health centres, abattoirs, sewage, solid and liquid waste collection and disposal points, places of worship, markets, civic centres and playgrounds, etc.
- Assessment and analysis of basic infrastructures and services required by the inhabitants to uplift their living conditions
- Preparation of strategic proposal using phased development method for improving slum conditions
- Provision of evaluation and monitoring strategies for successful implementation of projects

The study utilized both the remote sensing and social surveys approaches to data collection and analysis. The activities carried out include desk review and literature search; collation of physical and social criteria for slum identification; collation, processing and analysis of maps and satellite imageries; delineation of candidate slum clusters and preliminary slum area maps; field work planning and field reconnaissance; field social surveys including questionnaire administration and FGD and KII; GPS and photographic campaign; data analysis and integration; in house stakeholders validation workshop, and drafting of the final reports.

The followings are the summary of the findings for Oshogbo:

- The town of Oshogbo has been expanding at a rate of about 21% per annum which is tremendous
- Four (4) slum clusters – Isale Osun/Oja Oba/Oluode/Odi Olowo axis, Oke bale, Ilesha Road after River Oshun and old Ede Road beside the GRA were identified and delineated from satellite imageries.
- The identified slum covers an area of about 5.64km^2 or 564.36ha and a perimeter of about 19.4km. This area represents about 3.7% of the present built up area of Oshogbo.
- The largest Cluster- Isale Osun/Oja Oba/Oluode/Odi Olowo axis - approximates the old Oshogbo town or traditional city core and covers about 4.28km^2 or 427.84ha (about 76% of the entire slum area) and a perimeter of about 10km.
- The slums represent a matured stage of slum brought about by combination of gradual degradation of formal housing and social filtering processes and variety of informal housing development processes
- Two clusters of *degrading zone that cover about 2.48km^2 (248ha)* were also identified between Ikirun Road, Testing ground and Olorunda LGA Secretariat/Oshogbo city hall; and around MDS, Alekuwodo and Adejumo streets before the Technical College on old Ede road.
- Trading or business dominates the major occupation or source of livelihood
- Strong social network exist, 75% belongs to a group or association
- 60% of buildings are constructed of concrete materials
- Among the environmental indicators, number of people living in a building, solid waste disposal, pedestrian access to building and traffic congestion were rated good. Eight indicators including planning, squatting, building appearance, road conditions, access to building and drainage were rated poor.
- For public infrastructure, refuse collection and public primary and secondary schools were rated as present and working. Electricity, public water supply and public health centre were rated as present but in bad conditions. Recreation/relaxation facility, public toilet facility, post office, civic centre, children's playground, roadside walk, police station, street lights and abattoir were adjudged to be absent.
- On common issues, communication, access to food and being able to perform cultural and religious rituals were rated good. Housing/shelter, fuel for cooking, sanitation/toilet facility, children school and access to water were considered poor.

- Combination of pipe borne water and well was considered the major source of drinking water.
- Majority (57.7%) of households do not always feel they have enough water for daily use
- Pit latrine remains the major type of toilet facility available
- 85% of households dispose their waste through government waste collectors
- Water, electricity and employment opportunities are the three most important needs required in the slum community.
- Access to water is the primordial need
- The top three expectations from the government are: provision of infrastructure, access to employment or sources of livelihood and improvement in electric power supply.
- Advocacy or enlightening other community members to support government efforts , volunteer personal labour, mobilizing other community members to contribute, paid professional service, and personal financial contribution are what the communities are willing to offer in partnership with other stakeholders to improve their living conditions

5.3 SUSTAINABLE LIVELIHOOD ASSETS AND THREATS IN THE SLUMS

The need to make use of land, infrastructure, and other natural, social, human, cultural and financial resources in the most efficient, cost effective and sustainable way is important for sustainable slum upgrading and improvement of human living conditions. All slum upgrading plans should have strong physical, cultural and social connections. The inclusive or sustainable livelihoods approach is important to this. This participatory approach enables the slum dwellers to own the whole process of redevelopment and human living conditions improvement from the onset and to deploy their local assets to keep the system running once it is set in motion.

The sustainable livelihoods approach focuses on the human livelihood as capabilities, assets and activities required by people for a means of living. It deals with the end-point and final resting place of policy, planning, projects, interventions and investment which is improvement in human living conditions. A sustainable slum improvement or re-development strategy must create a context in which sustainable development and livelihoods can flourish. This is where the assets possessed by the people as a community and user of urban infrastructure become important. A livelihoods approach is useful in recognising the needs of different income groups and inequality of provision. It allows attention to be focussed on people's own definitions of deprivation – which in this case means a lack of, or little, access to basic urban infrastructure and services.

Thus, in proposing inclusive slum re-development and human living conditions improvement strategy, it is important to consider the peculiarities of Oshogbo with respect to the natural, physical, social, cultural and economic assets that can be tapped into, as well as the threats that must be addressed. It is also important to consider the priorities and aspirations of the people – what do they consider the important or pressing issues to improving their living conditions - in order to guarantee cooperation and partnership.

Table 5.1 summarises the assets base and Table 5.2 summarises the threats for the slums in Oshogbo.

Table 5.1 Identified asset Base for the Slums in Oshogbo

Asset	Oshogbo
Economic	▪ Large informal sector economy ▪ Great resilience and capacity for diversification
Physical	▪ 60% of houses constructed of concrete
Human	▪ Generally significant population ▪ Significant virile household heads – 26-45 years ▪ Creative and adaptive population – mostly into trading ▪ Literate population – about 55% had above primary education
Natural	▪ Possible development in every front - city surrounded by farmland and fallow land ▪ Osun River – presents potential for riverbank parks and urban green areas
Social	▪ Good social network – 75% belongs to one association or another ▪ Long term commitment – 45% are landlords ▪ 74% of landlord have access to tenure ▪ Engaged in some form of self-help or community efforts ▪ Willing to volunteer personal labour ▪ Willing to engage in community mobilization and enlightenment
Cultural	▪ Historic settlement dated back to 17th century ▪ Old and historic building – potential for archeological preservation ▪ Osun grove – a world heritage site with immense tourism potentials ▪ Traditional arts, carving and dyeing – presents potential to compliment cultural tourism ▪ Strong traditional community identity

Table 5.2: Identified Possible Threats for the Slums in Oshogbo

Threat	Oshogbo
Economic	▪ Weak financial base - 45% earn less than N25000/per month ▪ Financial institutions absent
Physical	▪ Very rapid spatial expansion – 21% per annum ▪ 38.3% of the houses constructed of mud
Human	▪ Large household size, over 90% has above 4 persons per household
Natural	▪ Areas around the Osun River risk flooding at high flow

5.4 SUSTAINABLE SLUM REDEVELOPMENT STRATEGY

The task of redeveloping an existing slum is a complex challenge because it presents a completely different scenario in comparison with developing a virgin area that would ordinarily grant room for flexibility. The people who live and work in slum areas have feelings and aspirations which must be respected. The goal of slum redevelopment and upgrading should thus address poverty alleviation, decentralization and governance and propagate rights based approaches to providing basic urban services, improve the livelihoods and impact maximally on the state of people living and working in slums and not to increase their agony through drastic and draconian measures.

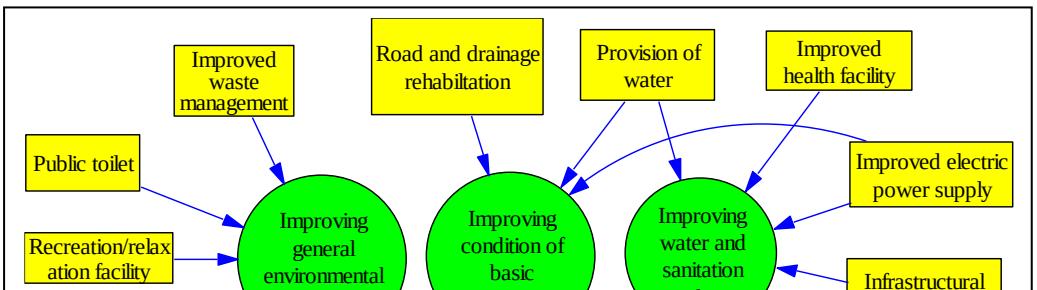
The Federal Government of Nigeria's National Urban Development Policy aims to improve the living standards of the Nigerian people, by facilitating adequate, efficient and functional service delivery. This is to be achieved by providing infrastructure developed to design standards that make urban facilities and amenities more affordable, through investments.

The identified slum areas in Oshogbo face three key urban challenges. These are:

- The need to invest in upgrading the slums with the insertion of physical and social infrastructure (which are currently lacking or in serious decrepit state) to bring them up to a basic living standard.
- The need to invest in regeneration of the slum areas to bring infrastructure and buildings that have suffered neglect, including renewal where original functions have been lost and/or decline or progressed to the point of no return.
- The need to invest in local economic development and empowerment by activating the local assets to create jobs and improve livelihood, financial independence and living conditions. This will feed-back into the system to contribute to maintenance of physical and social infrastructure and restoration and maintenance of restoration of urban functions.

The provision of basic infrastructure, such as water and sanitation, is an entry point to slum upgrading. The main dimensions of improving the lives of slum dwellers refer to access to water and sanitation, secure tenure, durability of housing and ensuring sufficient living area. According to the UN-Habitat (2008), these are to be achieved by guaranteeing accountable urban governance, promoting a leading role for local authorities, supporting decentralization and local democracy, building partnerships to deliver basic services, empowering the urban poor, developing innovative financial systems, motivating leadership at all levels, and funding large-scale slum upgrading. This underscores that every tier of governments is important and has a role to play in slum upgrading and redevelopment. In addition, the roles of other stakeholders from the local community based organizations, private sectors, to the international development partners are also critical to the success of any slum upgrading strategy.

Figure 5.1 shows the strategy to address slum challenges and improve human performance systems in the slums of Oshogbo. This has been termed as the flywheel of slum improvement and prosperity.



From the systems analysis point of view, addressing the urban basic facilities including road and drainage, water, electricity, health facility, public toilet, waste management and recreation facility, among others, is the ***entry point or preconditions*** into slum upgrading. As a first level platform, these have to be provided by the government and its agencies, with support from other stakeholders including the private sectors, volunteer organizations and international development partners. At this stage, the slum dwellers will begin to benefit in terms of employment and utilisation of community contracting to implement small infrastructure works. Generally, community contracting where community members are hired to do the construction work using labour-based methods provide job opportunities for the community members and it is cheaper for the government on the long run. This, in turn, enables the slum community members to earn an income, and hence to improve their livelihoods, or to invest in improved housing and infrastructure.

This first platform of providing these basic services is ***a trigger or preconditions*** to addressing the key challenges and human aspirations within the slum areas. These key aspirations or ***desired conditions*** are: improving the general environmental conditions, improving the conditions of basic infrastructure and improving water and sanitation conditions. These are interconnected and take inputs from all the urban

basic services. Slums represent composite condition resulting from breakdown or degradation of many urban basic infrastructure and services. The combination of the three desired conditions will lead to general improvement in slum conditions which will translate into improvement in human well-being. At the level of individuals and households, it will ***generate living benefits*** which provide improved access to water and sanitation, health, social services, housing and education, among others.

This improved slum conditions is expected to improve the social and psychological well-being of the slum dwellers and enable the ***individuals and community to activate the development and utilization of common assets*** (physical, natural, economic, social and cultural). At this stage, the slum communities would begin to organise themselves into groups and cleavages, actively participate in decision making concerning them, and take charge of their own needs related to housing, services and infrastructure. It is also expected that they will begin to establish project management committees that will monitor and coordinate the implementation of project activities at the local level. It is also expected that the communities will organize themselves to be involved in the construction, operation, and maintenance of the facilities provided in order to gain maximum benefits. This activation stage is expected to lead to ***socio-economic benefit stage*** with improved access to employment and livelihoods opportunities and improved financial independence and economic prosperity among the slum dwellers. In essence, individuals and households living conditions are expected to improve considerably.

This prosperity or socio-economic benefit stage is expected to lead to a ***sustainable improved living condition stage*** where improved individuals and households living conditions will feed back into the system and cause individuals and households to contribute maximally to improvement in environmental, basic infrastructure and water and sanitation conditions. The cycle will then go on and thus spins the flywheel of slum improvement and prosperity faster and faster.

5.5 RECOMMENDATIONS

This study has profiled the physical and social state of slum areas of Oshogbo. The goal of slum redevelopment and upgrading is expected to address poor urban basic facilities and services, the high incidence of poverty, civic duty and responsibility, decentralization of governance to include the communities and all those who live and work in the slum, as well as the issue of rights based approaches to providing basic urban services where the slum dwellers will own the process to improve their conditions and livelihoods. Further recommendations should thus include strategy for participatory planning at neighbourhood levels and participatory implementation at community level.

These points are known to the Federal Government of Nigeria and in particular, the FMLHUD as the driver of good urban development, management and governance in Nigeria. Delivering the keynote address at the National Housing and Slum Summit, the Vice President of the Federal Republic of Nigeria, Arc. Namadi Sambo submits: ***for a more holistic approach to slum reduction, there is the need for proper planning of urban places, broad-based improvement efforts based on creating economic***

opportunities for the residents and respect for the rule of law. People who live in slums have emotional attachment to their poor homes and better choices must be offered to goad them into relocating in instances when drastic slum improvement measures are implemented.

Beyond the efforts of the Federal tier to confront the slum challenge, the Vice President recognised the role of balanced inter-agency collaboration amongst all stakeholders as well strengthening of institutions responsible for implementing planned initiatives. He expressed strong preference for continuous engagements and dialogue with affected slum residents as well as inclusion of issues related to the allocation of financial and human resources in the projects. That is inclusive governance in slum upgrading. The physical approach of evicting slum dwellers under the guise of slum redevelopment is contrary to the principle of human development, inclusive governance and participatory slum upgrading. The hard approach of eviction and relocation should be seen as the last option and should be done only when alternatives that are in consonance with the emotional and social aspirations of slum dwellers have been offered. Authorities concern should be ***planning with*** the slum dwellers and not plan ***for them***.

Based on the findings, the following recommendations are suggested for implementation on the short term (immediate to 3 years), medium term (3-6 years), and long term (6-9 years) time-line.

Short-Term (Immediate To 3 Year)

SN	Recommendations	Objectives	Performance Indicators	Implementation Authority
1	Mobilization and sensitization of stakeholders – State Government, Local Government and the communities about the slum development Master Plan.	To create the synergy and establish partnership` between all the stake holders (including development partners, NGOs, the private sector and the community)	Agreed blue print for slum upgrading and livelihood improvement	FMLHUD, and other institutional stakeholders in Osun State (Ministry of Lands Physical Planning and Urban Development and its agencies)
2	Immediate intervention in water provision through motorized or tanker-supplied potable drinking water.	To provide temporary relief measures with the view to reducing the suffering on access to drinking water thereby improving the water and sanitation conditions	Temporary improvement in access to drinking water	Osun State Government Agencies – State Water Corporation, Rural Water Corporation,
3	Immediate provision of public toilet facilities to improve sanitation	To improve sanitation conditions	Increase in number of people with access to improved toilet facility	Osun State Ministries of Environmemnt, Works, O' Sanitation, O'waste, NGOs and CBOs
4	Immediate rehabilitation and upgrading of inner streets through direct labour.	Improve accessibility to the slums. To create livelihood opportunities for slum dwellers.	Improvement in street conditions	Osun State Minstry of Works, O' YES, and the LGAs

5	Immediate clearance of drainage and gutters through direct labour.	To improve the general environmental conditions. To create livelihood opportunities for slum dwellers	Improved, clean and free flowing drains	Osun State Government Minsitry of Works (In Partnership With O, YES, O' WASTE, LGAs and CBOs)
6	Sustain the repair, rehabilitation and improvement of structures in primary and secondary schools and healthcare facilities already embarked on by Osun State government.	To improve the condition of schools and health facilities To create livelihood opportunities for local artisans	Improvement in public schools and health facility	Osun State Ministries Education and Health, O' SCHOOL, LGAs and Development Partners)
7	Mobilization of the community members for street cleaning and beautification.	To begin the process of instituting civic duty and responsibility and decentralization of urban governance To utilise local assets including paid and voluntary professional and technical services	Clean and green environment	Osun State Ministry of Environment, O' YES, O'WASTE, O' SANITATION, OSEPA, the LGAs, NGOs and CBOa
9	Rehabilitation of abattoirs	To improve food hygiene and sanitation To improve income generation	Improved handling and packaging of meat products	Osun State Ministry Of Health, O' BEEF, O'SANITATION, LGAs and Public-Private-Partnerships and Local Associations

Medium Term (3-6 Years)

SN	Recommendations	Objectives	Performance Indicators	Implementation Authority
1	Investment in design and provision of municipal infrastructure including public water supply, public recreation and relaxation areas and children's playground, public toilet, street light and waste management (including recycling and reuse) facilities, civic centers, etc.	To improve urban basic infrastructure, general environmental conditions and water and sanitation conditions. To create employment and access to livelihoods for skilled professionals and unskilled labourers To improve the general economy of the slums through utilization of community contracting to implement small infrastructure works	Improvement in urban basic infrastructure and services	FMLHUD, Osun State Government, the LGAs, Development Partners, and Private Investors.
2	Improve supply and distribution of electric power.	To support other urban basic services including health and water and	Increase in number of hours of stable electricity	Federal Ministry of Power, Osun State Government, Development Partners and

		sanitation To boost local production		Private Investors
3	Creation of digital GIS-based database for slum management in Kaduna.	To track progress made in slum upgrading and living conditions improvement plans across space To monitor degrading areas and other areas with possibility of slum development. To improve data sharing and synergy between the FMLHUD and Kaduna State and participating LGAS	A functional GIS infrastructure and database	FMLHUD, Osun State Government Ministry of Lands, Physical Planning & Urban Development, Survey and GIS unit

Long Term (6-9 Years)

SN	Recommendations	Objectives	Performance Indicators	Implementation Authority
1	Rehabilitation and improvement of housing stock through accessible 'special housing improvement loan facility'	To assist property owners in the slum to improve the physical conditions of their housing stock	Improved physical condition of houses	FGN, FMLHUD, Osun State Government and Private Financial and Mortgage Institutions
2	Designate the area with the nearby Osun River grove as a cultural tourism zone.	To restore and preserve old and historic buildings To encourage increased production of local/traditional arts, crafts, tying and dyeing industries, To designate part of the traditional market (Oja Oba) as arts and craft market to service visitors to the nearby Osun river grove which is a world heritage site. To create tremendous livelihood opportunities and stimulate the local economy.	Improve building aesthetics Increase in production of local arts and crafts Improved livelihood opportunities in tourism related activities	Osun State Government – Ministry of Culture and Tourism, Ministry of Environment, LGAs and Private Investors
3	Redevelopment of the floodplain of Osun River into a riverbank park and green areas to complement the Osun grove and the adjoining new cultural tourism zone	To improve the general environmental conditions To generate employment.	Parks and green areas	FMLHUD, Osun State Government Ministries of Environment, Culture and Tourism, Works, Justice, and Private Investors

4	Leverage on existing cultural, economic and social asset bases and networks	To sustain the flywheel of slum improvement and prosperity by utilizing existing micro-cleavages e.g. cooperatives and community contracting groups to improve local outputs.	Sustained outputs from local productions	Osun State Government and its agencies, LGAs, and community associations
5	Implement urban development policy and strengthen existing institutions	To develop capacity for slum prevention and curtailment To improve on advocacy and citizenship education with regards to urban environmental management	Strengthen the capacity of the FMLHUD to design and execute slum improvement strategies. Establishment of a unit to concentrate on slum management and upgrade in the physical planning department of Osun State. Empower LGAs to improve advocacy on citizenship responsibility and urban environmental education	FGN, FMLHUD, Osun State Government, LGAs, Local Associations

Funding is crucial to slum redevelopment and upgrading. It is clear that the FGN alone will likely not be willing to put down the enormous funding required for the slums upgrading and improvement of livelihoods in Oshogbo. This report is a good document to begin the process of negotiation for assistance from, and partnership with, international development partners including the UN-Habitat with regards to slum upgrading and livelihood improvement in the slums of Oshogbo. It is also a vital document to institute a basis for partnership with local actors including the State Government and LGAs, NGOs as well as private investors to mobilise the necessary support for actualizing the strategy and recommendations.

5.6 MONITORING AND EVALUATION

There is the need to monitor and track progress recorded on slum upgrading and human living condition improvement projects and plans. This will include the ability to track progress in intervention strategies and projects and monitor what it translates into in space and time across the target slum neighbourhoods. This also means ability to be able to compare environmental indicators and performance of urban facilities across neighbourhoods in the slum areas. This will enable the gauging of the progress

on how much resources are translating into actual improvement in human living conditions across space.

The recommended monitoring and evaluation tool in this case is GIS. The current field data and slum areas maps generated in this project for the slum areas in Oshogbo could serve as the base. The required inputs into the M&E from spatial perspective will include the following:

5.6.1 Geoinformation database

Every bit of data about the land base, urban basic infrastructure and services, human livelihood activities, natural, available and potential economic, social and cultural assets, etc is important. These data need to be sourced, processed, integrated and stored within a GIS for easy interrogation and updates. An Urban Geographic Information Systems (UGIS) tailored to target areas in Oshogbo (e.g. OSHOGBO-UGIS) can be developed for the project. In this case, the identified slum area maps and facility location data and photographs collated from the field can form the base. Mapping of the target slums using high resolution satellite imagery is urgently required to provide high resolution data for the recommended intervention strategies.

It is very likely that some States may have embarked on high resolution aerial photographic mapping campaign or acquisition of high resolution satellite imageries of their cities and other target areas in recent years. Some of these data may also be lying in one office without the knowledge of sister ministries/departments because of poor coordination and lack of data sharing. Where this is predictably correct, there will be the urgent need to engage all stakeholders and extend the search for spatial data to ministries other than the ministries in charge of Urban Development. Some other offices including Survey Offices/Departments, Ministry of Works (especially for road and other infrastructure) and externally coordinated projects (e.g. past World Bank Assisted Projects in the communities) may also have some urban spatial data and information that could be accessed.

A way to integrate these agencies and offices from inception is to:

- Have an enlarged stakeholders' workshop where data needs and requirements for slum upgrading and urban basic services improvement are discussed
- Design a well-structured questionnaire instrument to elicit information from the ministries and agencies, first on their (spatial) data needs, and secondly on the data that is available within their archives.
- Appoint one or two data focal person(s) in each agency
- Have a committee of data focal persons across the ministries and across the state.

5.6.2 Capacity building

Technical and human capacity for GIS and spatial information gathering and management needs to be developed at FMLHUD headquarters and at the Federal Controllers' offices in the State. The State Ministries in charge of Urban Development should also be encouraged to participate in the capacity building process. The field

experience reveals that Osun State has GIS-based data about the slum areas in Oshogbo and they have good idea about the extent.

5.6.3 Periodic image acquisition for updates

Periodic image acquisition (at least once a year) should form part of the M&E strategies. This is to periodically monitor the extent of success and how much the efforts are translating into improvement in basic services and infrastructure across space. For example, from HR imageries one can quickly know how many of the roads have been upgraded (say in the last one year) and how much the face of the target areas has changed within the period.

5.6.4 The TOR

All the points discussed above can be fashioned into a term of reference for the geoinformation component of the M&E to include:

- Access, acquisition, integration and harmonization of baseline data
- Access to possibly available large scale aerial photograph or acquisition of new high resolution satellite data for target areas
- Acquisition, installation, and test run of GIS hardware and software at the FMLHUD headquarters
- Training of trainers – training of key personnel who will be able to train some other staff on the job
- Periodic acquisition of satellite imageries to monitor project success across target areas
- Managing and updating the system

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APPENDIX I – QUESTIONNAIRE

FEDERAL MINISTRY OF LANDS, HOUSING AND URBAN DEVELOPMENT

NEEDS ASSESSMENT STUDY OF SLUMS OSHOGBO IN NIGERIA

HOUSEHOLD QUESTIONNAIRE

General (to be filled before getting to respondent)		
Household code number		Survey details
Name of interviewer…… ……..		Date of survey:……/……/……..
1	lga:	start time:
2	town:	finish time:
3	locality:	
4	street name:	
Household information		
5	Age of household head	6. Gender of household head
	ð 16-25 years	ð male ð female
	ð 26-40 years	
	ð 41-55 years	
	ð 56-70 years	
	ð above 70 years	
7	Age and gender of informant(s) for this assessment (if different from household head)	informant 1: age:..... ð male ð female
		informant 2: age:..... ð male ð female
		informant 3: age: ..... ð male ð female
8	ethnic group of household head	ð Hausa/Fulani
		ð Yoruba
		ð Igbo
		ð Others.....
9	marital status of household head	ð Single
		ð Married
		ð Separated/divorced
		ð Widow/widower
10	occupation of household head	ð Artisan
		ð Farmer

		ð fishing		
		ð trading/business		
		ð civil servant		
		ð professional		
		ð unemployed		
		ð other (please specify).....		
11	What is the commonest local occupation in this community			
12	monthly income of household head	ð less than ₦10,000		
		ð₦10,001 - ₦25,000		
		ð₦25,001 - ₦50,000		
		ð₦50,001 - ₦100,000		
		ð₦100,001 - ₦250,000		
		ð₦250,001 - ₦500,000		
		ð above ₦500,000		
13	highest educational status of household head	ð primary		
		ð secondary		
		ð post-secondary/technical		
		ð HND/B.Sc.		
		ð Postgraduate		
		ð Quranic education		
		ð No formal education		
		ð others (please specify)…….....		
14	Total number in household	Children (<5years)..... children (5-18years)……		
	men..... Women..... .	Elderly (above 65years).....		
	Children…… …….	Disabled.....		
15	which of the following associations do you or your household members belong to (tick as many as applicable)	associations	yes	NO
		ð professional guild or association		
		ð religious institutions		
		ð landlord association		
		ð vigilante association		
		ð community development association		
		ð town association		
		ð elders forum		
		ð cooperative society		
		ð others (specify).....		

Housing condition								
16	When was the building you live in constructed?	**tick one only**						
		ð less than 5years						
		ð 5-10years						
		ð 11-20years						
		ð 21-40years						
		ð more than 40years						
		ð i don't know						
17	construction material of walls of building occupied	tick one only						
		ð wood						
		ð concrete						
		ð zinc						
		ð mud						
		ðothers (specify).....						
18	How long have you been living in this community?	ð i was born here						
		ð less than 2 years						
		ð 2-5 years						
		ð 6-10 years						
		ð 11-20 years						
		ð more than 20 years						
19	Why do you live in this community?	explain.....						
20	What is the residential status of the household head?	ð landlord						
		ð tenant						
		ð squatting						
		ð other (please specify).....						
21	if you are a landlord, do you have any legal document for your house/land	yes	no					
22	if yes to #21, which of this do you have	customary freehold right	c of o	survey plan	land certificate			
Environmental conditions								
23	how will you rate/rank your community with regards to the	**indicators**	**1-good**	**2-poor**	**3-bad**	**2-bad**	**4-worse**	**5-WORST**
		planning of the area						
		squatting area						

	following indicators	building appearance						
		number of people living in a building						
		road condition						
		solid waste disposal						
		sewage/effluent discharge						
		motorable access to the buildings						
		pedestrian access to the buildings						
		traffic congestion						
		noise pollution						
		drainage/gutter/water channel						
		general cleanness of the environment						

24	which of the following is present in your community	**indicators**	**present and good/working**	**present, but bad**	**not available**
		public water supply			
		electricity supply			
		recreation/relaxation facilities			
		children playground			
		road side walks			
		public toilet facility			
		trees on the street			
		street lights			
		refuse collection point			
		public primary schools			
		public secondary school			
		private primary school			
		private secondary school			
		tertiary institution			
		market			
		civic center			
		church			
		mosque			
		public health center			
		private clinic			
		petro/gas station			
		financial institution			
		post office			
		police post/station			

		abbatoir					
25	how will you rate the following issues in your community	**indicators**	**1-good**	**2-poor**	**3-bad**	**4-severe**	**5-critical**
		ð water					
		ð sanitation/toilet facilities					
		ð food					
		ð employment/ livelihood					
		ð housing/ shelter					
		ð fuel for cooking					
		ð health care					
		ð being able to perform cultural and religious rituals					
		ð security					
		ð children school					
		ð transportation					
		ð communication					
		ð others (specify).....					

26	What is the main source of drinking water for your household?	ð pipe borne water
		ð public tap
		ð borehole
		ð protected dug well
		ð unprotected dug well
		ð shallow well
		ð rain water collection
		ð tanker truck
		ð cart-pushers
		ð surface water sources - river, stream, pond, etc
		ð bottled water
		ð sachet water
		ð others (specify)
27	How long does it take to go there, collect water and come back **(if not in the dwelling)**?	**tick one only**
		ð < 30 minutes
		ð 30 minutes – 1 hour
		ð 1 hour – 2 hours
		ð 2 hours – 4 hours
		ð more than 4 hours

28	do you feel your family always have enough water for use daily	**tick one**
		yes
		no
29	What toilet facility does your household use?	**tick one**
		ð water closet
		ð pit latrine
		ð toilet shared with other households
		ð public toilet shared with other members of the community
		ð bush/open area
30	how do you dispose your waste	take to open waste dump
		give to cat pushers
		give to government collectors
		store in the backyard
		throw into the gutters
		burn with fire
31	have you or your household ever experience any of the following:	ð flood
		ð fire
		ð building collapse
		ð typhoid outbreak
		ð cholera outbreak
		ð diarrhoea outbreak

Needs assessment

32	Needs: rank your first 10 needs in order of priority. *1 for the most important and 10 for the least important.*	**indicators**	**SCORE**
		electricity	
		water	
		tarred road	
		primary school	
		secondary school	
		tertiary institution	
		health facility	
		postal office/postal agency	
		financial institution	
		cottage industry	
		market	
		gsm facility	
		internet facility	
		housing facilities	

		town hall	
		employment opportunities	
		others (please specify)	
33	if you are to mention only one thing the majority of people want in this community, what will you say		
34	in your own view, what do you think government should do to uplift the living conditions of the people in this area		
35	what can you as an individual contribute towards the improvement of the slum condition in this area	tick as many as appropriate	
		volunteer professional service	
		paid professional service	
		volunteer personal labour	
		paid personal labour	
		personal financial contribution	
		mobilizing other community members to contribute	
		enlighten other community members to support government effort	
		any other (please list)-------	

THANK YOU FOR YOUR TIME

APPENDIX II: FACILITY FORMS

INFRASTRUCTURAL FACILITIES / FEATURES FORM - CATEGORY A

Sn	State	LGA	Community/Cluster	Name of Facility/Feature	*Ownership	**Condition	Picture No
1							
2							
3							
4							
5							
6							

INFRASTRUCTURAL FACILITIES / FEATURES FORM - CATEGORY B (SCHOOLS AND HEALTH FACILITIES)

Sn	State	LGA	Community/Cluster	Name of School/Health facility	*Ownership	Estimated Capacity	**Condition-inside	**Condition-outside
1								
2								
3								
4								
5								

FACILITY INDEPTH - SCHOOLS

	1	2	3	4	5
School name					
Location					
Est student Population					
No of Teachers					
No of Class-rooms					
Availability of playing field					
General condition of surrounding					
Condition of building					
Condition of classes					
Condition of Toilets					
Water					
Electricity					
Any other observation					

FACILITY INDEPTH - HEALTH

	1	2	3	4	5
Health Facility name					
Location					
Type					
Est Patients catered for					
No of Doctors					
No of Nurses					
No of beds					
General condition of surrounding					
Condition of building					
Electricity					
Water					
Any Other observations					

APPENDIX III: SUMMARY OF OUTCOMES FROM THE SLUM AREAS IN ABA, KADUNA, AND OSHOGBO

The summary of the situation across the three cities is provided under the followings:

- General environmental conditions
- Conditions of basic infrastructures
- Assessment of common issues
- Slum conditions which captures information on
  - Sustainable access to safe water
  - Access to improved sanitation
  - Access to durable structure/housing
  - Overcrowding
  - Access to tenure
  - Access to social services
- Needs assessment of the communities

The ratings represent the highest category of responses for each indicator based on the simple majority rule. So it does not consider a situation of close or very close tie between two indicators.

Environmental Conditions

Table 1 summarises the perception on the environmental conditions across the slums in the three cities. The rating is from good to worst as shown on the scale.

Table 1: Perception of Environmental Condition across the cities

Indicator	Aba	Oshogbo	Kaduna
Planning of the area	Poor	Poor	Poor
Squatting	Poor	Poor	Poor
Building appearance	Poor	Poor	Poor
Number of people living in a building	Good	Good	Poor
Road condition	Worst	Poor	Poor
Solid waste disposal	Poor	Good	Bad
Sewage/effluent discharge	Poor	Poor	Bad
Motorable access to the buildings	Worst	Poor	Poor
Pedestrian access to the buildings	Bad	Good	Poor
Traffic congestion	Poor	Good	Poor
Noise pollution	Poor	Poor	Poor
Drainage/gutter/ water channel	Worst	Poor	Bad

Ratings Scale	Good	Poor	Bad	Worse	Worst

Oshogbo and Kaduna seem to have fared better than Aba on most of the indicators. While Oshogbo has "good" in the number of people living in a house, solid waste disposal, pedestrian access to building and traffic congestion, and "poor" on the others; Kaduna oscillates between poor and bad in these indicators. Aba on the other

hand recorded "worst" in a road condition, motorable access to buildings, and drainage/gutter, and poor in other ones except number of people living in a building.

Conditions of Basic Infrastructure

Table 2 summarise the conditions of basic infrastructures across the slum areas in the three cities. The scale is from present and good to absent or not available. In all the cities, basic infrastructure including recreation area, children playground, public toilet, road sidewalks, and street lights are not available in the slums. Electricity is rated poor in all, public water supply is acknowledge only in Kaduna, refuse collection and public primary and secondary schools are rated as present and good only in Oshogbo, financial institutions, police post/station, post office and abattoir are also rated as not available. Markets are rated in the three cities as being in bad condition.

Table 2: Conditions of basic Infrastructure across the cities

Indicators	Aba	Oshogbo	Kaduna
Public water supply	Absent	Absent	Bad
Electricity supply	Bad	Bad	Bad
Recreation/relaxation facilities	Absent	Absent	Absent
Children's playground	Absent	Absent	Absent
Road side walks	Absent	Absent	Absent
Public toilet facility	Absent	Absent	Absent
Trees on the street	Absent	Absent	Absent
Street lights	Absent	Absent	Absent
Refuse collection point	Absent	Good	Absent
Public primary schools	Bad	Good	Bad
Public secondary schools	Absent	Good	Bad
Private primary schools	Good	Good	Good
Private secondary schools	Good	Good	Good
Tertiary institution	Absent	Absent	Absent
Market	Bad	Bad	Bad
Civic centre	Bad	Absent	Absent
Church	Good	Good	Good
Mosque	Absent	Good	Good
Public health centre	Absent	Bad	Bad
Private clinic	Good	Good	Good
Petrol/ gas station	Absent	Absent	Absent
Financial institution	Absent	Absent	Absent
Post office	Absent	Absent	Absent
Police post/ station	Absent	Absent	Absent
Abattoir	Absent	Absent	Absent

Ratings scale	Good=present and good	Bad=present and bad	Absent= not available

Assessment of Common Issues

The assessment of common issues across the slums in the three cities is summarised on Table 3. Issues regarding water and sanitation, healthcare, access to employment or livelihoods, housing and shelter and children school were rated poorly in all the cities. The only issues that received pass marks are food, ability to perform cultural and religious rituals, and communication.

Table 3: Rating of Community Issues across the cities

Indicator	Aba	Oshogbo	Kaduna
Water	Poor	Poor	Poor
Sanitation/ toilet facilities	Poor	Poor	Poor
Food	Good	Good	Good
Employment/livelihood	Worst	Poor	Poor
Housing/ shelter	Poor	Poor	Poor
Fuel for cooking	Poor	Poor	Poor
Health care	Poor	Poor	Poor
Being able to perform cultural &religious rituals	Good	Good	Good
Security	Poor	Good	Good
Children school	Poor	Poor	Poor
Transportation	Poor	Good	Poor
Communication	Good	Good	Good

Rating Scale	Good	Poor	Bad	Severe	Critical

Slum Conditions

Access to Water

The most significant source of drinking water in each of the city is shown on Table 4. Combination of water from borehole and purchased sachet water is the major source of drinking water in the slum at Aba. For Oshogbo, it is combination of public piped water and dug well, while Pipe borne water is the dominant in Kaduna.

Table 4: Sources of Household Drinking Water across the cities

Source of drinking water	ABA	OSHOGBO	KADUNA
Pipe borne water			X
Public tap			
Borehole/ sachet water	X		
Protected dug well			
Unprotected dug well			
Shallow well			
Rain water collection			
Tanker truck			

Cart - pushers			
Surface water source - river, stream, pond			
Bottled water			
Pipe/well		X	
Borehole &well			
Unprotected well & sachet water			
Protected well, rain &sachet water			
Public tap, rain & sachet water			
Total			

The slum dwellers of Aba and Kaduna feel they do have enough water for their household daily use, while those in Oshogbo feel otherwise (Table 5).

Table 5: Have Enough Water

Community	Yes	No
Aba	X	
Oshogbo		X
Kaduna	X	

Sanitation

Water closet is the major type of toilet facility available in Aba and Kaduna, while Pit latrine remains the commonest used by the slum population in Oshogbo (Table 6). It has been shown earlier that public toilet facility is not available.

Table 6: Toilet Facility

Major Toilet Facility	Aba	Oshogbo	Kaduna
Water closet	X		X
Pit latrine		X	
Toilet shared with other households			
Public toilet shared with other members of the community			
Bush/open area			

Waste Disposal

Table 7 summarises the major means for disposing waste in the slum communities in the three cities. Waste disposal seems to be more coordinate and efficient in Oshogbo than Aba and Kaduna. This is also consistent with the views on the environment and basic facilities where waste collection and disposal is rated better in Oshogbo than the other two cities.

Table 7: Waste Disposal

Dispose of waste	Aba	Oshogbo	Kaduna
Take to open waste dump			X
Give to cat pushers	X		
Give to government collectors		X	

Needs Assessment

Community Needs

For all the basic facilities, the urgent needs of each community seem to be different. Road/ street rehabilitation, electricity and access to employment or livelihoods in that order dominate the need in Aba. Water, electricity, access to employment and road/street rehabilitation in that order dominate the needs in Oshogbo and Kaduna (Table 8).

Table 8: Ranking of the topmost Community Needs

Community needs	Aba	Oshogbo	Kaduna
Water		1	1
Electricity	2	2	2
Employment opportunities	3	3	3
Tarred road	1	4	4
Health facility		5	
Primary school		6	
Market		7	
Secondary school			
Housing facility			
Town hall			
Tertiary institution			
Gsm facility			
Internet facility			
Financial institution			
Cottage industry			
Postal service			
Public toilet			

Ultimate Need

In mentioning just one thing that is ultimately desirable to improve human living conditions, road/street rehabilitation mentioned in Aba. For Oshogbo, it was access to water, while Kaduna was spilt roughly between electricity, road/street rehabilitation and access to the means of livelihood (Table 9).

Table 9: Just One Need that is required

Needs	Aba	Oshogbo	Kaduna*
Water		X	
Electricity			X
Tarred road	X		X
Public toilet			
Employment opportunities			X
Security			
Nothing			
Health facility			
Upgrade of infrastructures			
Tertiary institution			
Affordable housing			
Total			

*None has up to 25%

Expectations from the Government

Table 10 summarises, according to priority, the main expectations from the government on slum improvement. Infrastructural upgrade (which is a complete package) tops the list in Aba and Oshogbo, while access to employment is the ultimate in Kaduna (Table 10).

Table 10: Expected Role of Government in Slum Improvement

Needs	Aba	Oshogbo	Kaduna
Employment provision	3	2	1
Infrastructural upgrade	1	1	2
Water		4	4
Low cost housing			
Market			
Provision of soft loan			
Good road	2		
Drainage			
Electricity/Power		3	3
Hospital			
Public toilet			
Nothing			
Total			

Willing Contribution for Community

Table 11 shows what the people are willing to contribute in partnership with the government. Across the three cities, slum dwellers are willing to volunteer their personal labour as well as mobilizing and enlightening other community members to support government efforts. In addition, professionals in Aba are willing to volunteer their professional services while people are willing to make personal financial donations in Kaduna. These are strong social assets and sense of citizenship, social responsibility and community that cannot be wished away in these cities.

Table 11: Willing Contributions from Community Members across the cities

Suggested contributions	Aba	Oshogbo	Kaduna
Volunteer professional service	X		
Paid professional service			
Volunteer personal labour	X	X	X
Personal financial contribution			X
Mobilizing other community members to contribute	X	X	X
Enlighten other community members to support government effort	X	X	X

Sustainable livelihood assets

The need to make use of land, infrastructure, and other natural, social, human, cultural and financial resources in the most efficient, cost effective and sustainable way is important for sustainable slum upgrading and improvement of human living conditions. All slum upgrading plans should have strong physical, cultural and social connections. The inclusive or sustainable livelihoods approach is important to this.

The sustainable livelihoods approach focuses on the human livelihood as capabilities, assets and activities required by people for a means of living. It deals with the end-point and final resting place of policy, planning, projects, interventions and investment which is improvement in human living conditions. A sustainable slum improvement or re-development strategy must create a context in which sustainable development and livelihoods can flourish. This where the assets possessed by the people as a community and user of urban infrastructure becomes important. A livelihoods approach is useful in recognising the needs of different income groups and inequality of provision. It allows attention to be focussed on people's own definitions of deprivation – which in this case means a lack of, or little, access to basic urban infrastructure and services.

Thus, in proposing inclusive slum re-development and human living conditions improvement strategy, it is important to consider the peculiarities of each city with respect to the natural, physical, social, cultural and economic assets that can be tapped into, as well as the threats. It is also important to consider the priorities and aspirations of the people – what do they consider the important or pressing issues to improving their living conditions - in order to guarantee cooperation and partnership.

Table 12 summarises the assets base and Table 13 summarise the threats for the slums in Aba, Oshogbo and Kaduna.

Table 12: Identified asset Base for the Slums In The Three Cities

Asset	Aba	Oshogbo	Kaduna
Economic	▪ Large informal sector economy ▪ Great resilience and capacity for diversification ▪ Sewing and tailoring substantial – presents potential for specialization and agglomeration and expansion ▪ Big and renown local and international markets –center of commerce	▪ Large informal sector economy ▪ Great resilience and capacity for diversification	▪ Large informal sector economy ▪ Great resilience and capacity for diversification ▪ 70% earn above N25,000 monthly income
Physical	▪ 84.7% of buildings constructed of concrete	▪ 60% of houses constructed of concrete	▪ 71% of houses constructed of concrete
Human	▪ Generally significant population ▪ Significant virile household heads – 26-45 years ▪ Creative and adaptive population – mostly into business/ trading ▪ Literate population – 96% had formal education to at least primary school level.	▪ Generally significant population ▪ Significant virile household heads – 26-45 years ▪ Creative and adaptive population – mostly into trading ▪ Literate population – about 55% had above primary education	▪ Generally significant population Significant virile household heads – 26-45 years ▪ Literate population – only 1.3% had no formal education
Natural	▪ Possible development in every front - city surrounded by farmland and fallow land ▪ Aba River – presents potential for riverbank parks and urban green areas	▪ Possible development in every front - city surrounded by farmland and fallow land ▪ Osun River – presents potential for riverbank parks and urban green areas	▪ Possibility of development in the western flank, and also in the east with new bridges being constructed ▪ River Kaduna – presents enormous potentials for floodplain agriculture and river park ecotourism
Social	▪ Religious Network – 79% belongs to a religious group ▪ Engaged in community self-help projects ▪ Willing to volunteer personal labour ▪ Willing to Volunteer professional service ▪ Willing to engage in community mobilization and enlightenment	▪ Good social network – 75% belongs to one association or another ▪ Long term commitment – 45% are landlords ▪ 74% of landlord have access to tenure ▪ Engaged in some form of self-help or community efforts ▪ Willing to volunteer personal labour ▪ Willing to engage in community mobilization and enlightenment	▪ Good social network – 92% belongs to one association or another ▪ Engaged in community self-help projects ▪ Long term commitment -46.5% are landlords ▪ 85.3% of the landlords have access to tenure ▪ Willing to volunteer personal labour ▪ Willing to engage in community mobilization and enlightenment ▪ Willingness to make financial contributions
Cultural	▪ Close to the Aba stadium – potential for sports tourism ▪ Strong traditional community identity	▪ Historic settlement dated back to 17th century ▪ Old and historic building – potential for	▪ Historic city ▪ Renown administrative and military center ▪ Well mixed population with

Asset	Aba	Oshogbo	Kaduna
		archeological preservation ▪ Osun grove – a world heritage site with immense tourism potentials ▪ Traditional arts, carving and dyeing – presents potential to compliment cultural tourism ▪ Strong traditional community identity	great diversity ▪ Strong traditional community identity ▪ Close to the Ahmadu Bello Stadium – potential for sports tourism

Table 13: Identified Possible Threats for the Slums in the Three Cities

Threat	Aba	Oshogbo	Kaduna
Economic	▪ Weak financial base - 65% earn less than N25,000/pm ▪ Financial institutions absent	▪ Weak financial base - 45% earn less than N25000/per month ▪ Financial institutions absent	▪ 30% still earn less than N25000/per month
Physical	▪ Rapid spatial expansion – 5.4%pa	▪ Very rapid spatial expansion – 21%pa ▪ 38.3% of the houses constructed of mud	▪ Rapid spatial expansion – 4.5% pa ▪ 25% of houses constructed of mud
Human	▪ Large household size – 70% has more than 4 persons per household ▪ Relatively high density	▪ Large household size, over 90% has above 4person per household	▪ Relatively high density in Kaduna urban villages ▪ Large household size – about 75% has more than 4 persons per household
Natural	▪ Aba River divides the city into two unequal halves – causes flooding of surrounding areas	▪ Areas around the Osun River risk flooding at high flow	▪ Slum clusters close to the Kaduna River floodplain (e.g. Ungwan Rimi, Kabala Doki and Barnawa) risk flooding at high flow
Social	▪ Long term commitment may be lacking - 70% are tenants		• Explosive mix of population – frequent ethnic and religious clashes

APPENDIX IV: EXPERT INTERACTIVE SESSION

Minutes of the Expert Interactive Session for the Slum Study Report on Three Cities (3) held at the MGIS Room, Faculty of ARTS, University of Lagos, Akoka-Yaba, Lagos Tuesday, July 29, 2014

Present

	NAME	ORGANISATION
1	Prof. Peter O. Adeniyi	Polad Technologies ltd
2	Victor Ilechukwu (Ph.D)	University of Lagos
3	Chike Anikamadu	FMLHUD, Abuja
4	Badru Gbolahan	University of Lagos
5	Lana Olalekan	FMLHUD, Abuja
6	Mayowa Fasona	University of Lagos/Polad Technologies ltd Consultant
7	Ege Emmanuel	University of Lagos/Polad Technologies ltd Consultant
8	Prof. Iyiola Oni	University of Lagos
9	Omotayo Awomosu	Spatial Resource Consulting
10	Peter O. Elias	University of Lagos/Polad Technologies ltd Consultant
11	Ayo Adejumo	Ayo Adejumo and Co
12	Banjo Kayinsola	Ayo Adejumo and Co
13	Gloria C. Agu-Nwofor	G.C. AguNwofor and Co
14	Ajayi Olalekan	University of Lagos
15	Oni Adebukola F.	University of Lagos
16	Val Ofogba	Lensprings and Co
17	Olatunji Babatola	University of Lagos
18	Alabi Soneye	University of Lagos
19	Joyce Omenai	University of Lagos
20	Osuade Oyediran (Arc)	University of Lagos
21	Gbenga Obe	Polad Technologies ltd
22	Sam Udofia	University of Lagos
23	Muyiwa Adeniyi	Polad Technologies ltd

Opening Remarks

The interactive session was called to order by the Managing Director/CEO of Polad Technologies Ltd, Prof Peter O. Adeniyi at 9.00 am, with a welcome and introductory remark where the purpose of the session and strategy to be adopted was outlined.

This was followed by a brief remark by the Deputy Director, FMLHUD; Mr. L.C. Anikamadu where the importance attached to the slum identification and needs assessment study by the Ministry was accentuated. Specifically, he noted that the study will among other things, help reduce the embarrassing lack of reliable data on the identification of slum phenomenon in the country while also setting the stage for meaningful and well-coordinated interventions and possibly charting the course for the development of a virile national slum policy and strategic plan. He therefore challenged all present to make best use of the opportunity to bring to birth a proactive report that would attract due attention and set the stage for "cities without slums" in Nigeria.

Brief Presentation Of The Methodology And Major Findings Of The Slum Study

Dr. M.J Fasona, the lead consultant presented the adopted methodology and major findings of the slum study. As presented, the methodology adopted for the study entails the use of questionnaires, field observation, key informant interviews, focus group discussions and photo campaigns while the results were in the form of tables, charts and pictures depicting the conditions of the selected slum indicators. Also presented are the findings of the needs assessment of the residents of the three cities under study.

Presentation and Discussion Of Slum Upgrading Strategy

The peculiar slum upgrading strategy for each of the cities under study were presented by members of the consulting team. Specifically, Dr. M.J. Fasona presented the slum upgrading strategy for Kaduna, Dr. E.E Ege presented the strategy for Aba while Dr. P.O. Elias presented the slum upgrading strategy for Oshogbo.

Presentation, discussion/review and agreement/validation of recommendations on slum upgrading action plans for the three (3) cities

The general observation/suggestions that cut across the three cities are:

- Dr. Victor Ilechukwu suggested that the rapid areal expansion of the cities would have been better depicted if they were related to the population growth estimates in the cities.
- Mr. Omotayo Awomosu opined that the designed rating scale for the perception of the state of infrastructure is unconventional especially the last two scales (i.e. Worse and worst).
- He also noted that the slums were not properly identified or demarcated/singled out since no names were linked to specific slums. He thus suggested that each identified slum should be named after the major road in the area.

- Prof. Oni suggested that there is the need to assess the level/state of ongoing intervention by other bodies so as to know the necessary point of intervention.
- The need to introduce the assessment of gender, resettlement and compensation issues into the study was also highlighted.
- Also noted is the need to develop a strategy to contain future growth of slums.
- Mr Omotayo Awomosu also indicated that the slum upgrading strategy recommendations are not encompassing enough as some germane aspects are missing. He thus suggested a design which contains a column for recommendation, objectives, activities, deliverables, timelines and implementing agencies.
- The timelines for the slum upgrade plans was also amended, with the short term increased to 1-3years, medium term increased to 3-5yrs while the long term was increased to 5yrs and above.
- The need to separate the report into three with each city standing alone and each having their own photo album was emphasised.

Specific validated recommendations for slum upgrading in Aba

Short term (1-3yrs)

- The specific names of the implementation agencies should be mentioned
- The establishment of a slum upgrading unit in the planning department of the FMLHUD which should be replicated in all state ministries of lands and urban development. This is to ensure that the recommended slum upgrade strategies are championed by a specific agency in collaboration with others.
- Creation of a GIS database to monitor slum upgrade success or failure.
- The search for donors or international development partners to fund slum upgrading exercises.

Medium term (3-5yrs)

- Community based organisations (CBOs) and local government areas should be involved in the implementation to ensure their participation.

Long term (>5yrs)

- The need to create another pole in the state by moving a section of the artisan in the market to another locality to ensure the decongestion of the area.

Specific validated recommendations for slum upgrading in Kaduna

Short term (1-3yrs)

- Public places where the clearance are to be done should be noted
- The need to sensitize the citizens and especially the butchers on the use of the abattoirs
- There is also the need to introduce private-public partnership system to effectively run the abattoirs

- The establishment of a slum upgrading unit in the planning department of the FMLHUD which should be replicated in all state ministries of lands and urban development. This is to ensure that the recommended slum upgrade strategies are championed by a specific agency in collaboration with others.
- Creation of a GIS database to monitor slum upgrade success or failure.
- The search for donors or international development partners to fund slum upgrade exercises.

Medium term (3-5yrs)

- The need to improve the distribution of electricity through the provision of transformers.
- The specific agencies that will implement the recommendations should be mentioned.

Long term (>5yrs)

- The need for social instead of special housing
- Specific attention should be paid to the decongestion of slum areas. This can be done by developing medium cost housing estates where medium income households can move to thereby decongesting the slum areas.
- The need to involve community based organisations (CBOS) in the implementation of the slum upgrade strategies

Specific validated recommendations for slum upgrading in Oshogbo

Short term (1-3yrs)

- The specific public areas should be mentioned. Examples should include; market, shopping malls, parks etc.
- The need for tenure improvement to ensure buy- in since most inhabitants of the area are tenants and so do not have much at stake.
- The establishment of a slum upgrading unit in the planning department of the FMLHUD which should be replicated in all state ministries of lands and urban development. This is to ensure that the recommended slum upgrade strategies are championed by a specific agency in collaboration with others.
- Creation of a GIS database to monitor slum upgrade success or failure.
- The search for donors or international development partners to fund slum upgrade exercises.
- The implementation agencies should be Osun State Government, Local Government Area, trade associations and community based organisations.

Medium term (3-5yrs)

- The need to improve the distribution of electricity through the provision of transformers

- The specific agencies that will implement the recommendations should be mentioned
- Responsible agencies should include the state government, LGAs and the private sector.

Long term (>5yrs)

- Specific attention should be paid to the decongestion of slum areas. This can be done by developing medium cost housing estates where medium income households can move to thereby decongesting the slum areas.
- Development plans for the Osun-Oshogbo groove should be conceptualised
- Provision of ancillary facilities should be improved
- Complimentary services like parks, shopping malls, hotels and golf course should also be encouraged.
- The local stakeholders should be encouraged to take ownership of the slum upgrade exercise

Closing remarks

The MD/CEO of Polad Technologies Ltd thanked the participants for their constructive contribution to the session which he noted would greatly improve the final report of the slum study. He thereafter wished them journey mercies.