

NNEWI

STRUCTURE PLAN FOR NNEWI AND SATELLITE TOWNS



UN  HABITAT



Anambra State

STRUCTURE PLAN FOR NNEWI AND SATELLITE TOWNS

Structure Plan for Nnewi and Satellite Towns

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FOREWORD



advancement and are repositories of knowledge and agents of socio-political change.

Cities and urban areas, as potent instruments for economic growth and development, are however predicated on being properly planned, administered and managed.

Upon my assumption of office as Governor of Anambra State, I discovered, to my astonishment, that there was no Structure Plan for any of our cities, including Awka the capital. A closer look at our major cities of Awka, Onitsha, and Nnewi revealed that these cities were inadequately planned and managed. They are outdated in terms of their physical layout, there are poor drainage structures and inadequate sanitation, uncontrolled street trading, mounds of solid waste or refuse, an overcrowded and congested transport system, and deteriorating road facilities. The result has been intolerable overcrowding, congestion, noise and pollution.

Extensive illegal and unregulated building has dominated the cities of Onitsha, Nnewi and other burgeoning urban centres in the State. Buildings are erected with no regard to existing building regulations, health codes or zoning and sub-division regulations – creating slum and squatter conditions, which constitute most urban living in the State. Onitsha has been described by some observers as, “... a sprawling slum city of chaos and disorder – an insult to the art of architecture and a disgrace to urban planning and development”.

This situation, and the characterization of our cities and urban areas, is clearly unenviable and regrettable.

In an effort to stem the tide of this development trend and to realize the developmental potential of well-planned and managed cities, towns and villages, my Government approached the UN-HABITAT in Nairobi,

Kenya, to seek its technical assistance and cooperation in developing and preparing urban structure plans for Awka Capital Territory, Nnewi and Onitsha.

This Report is an outcome of that cooperative effort. My government believes that if the land use proposals, policy and legislative reforms contained in these reports are effectively implemented, Anambra State will realize sustainable development and its contributions to economic and social growth. It is the intention of my government to regenerate and revitalize these cities, and in the case of Onitsha, to prepare and position it to become a leading mega-city east of the Niger.

Effective implementation of these recommendations and realization of the development potential requires - apart from the envisaged massive public investments in infrastructure - the support, coordination and integration of the activities of all stakeholders, including all government Ministries and Agencies, local governments, donor agencies, communities, town union groups and their leaders, business people, traders, land developers, professionals, organizations and trade union associations and all residents of the Anambra State. The support and cooperation required involves, among other things, respecting and complying with the land use development proposals, rules and regulations made in the Structure Plans, as they are in the overall public interest of Anambra State.

I, therefore, commend the implementation of these urban Structure Plans' recommendations to the citizens and residents of Anambra State, particularly to the residents of the respective project cities - namely Awka Capital Territory, Nnewi and Onitsha. I call on all stakeholders to accept the development proposals in the Structure Plans, to support and cooperate with each other, including government agencies and the private sector to achieve sustainable development for Anambra State.

It is recognized that no plan is perfect or valid for all time. These plans are subject to periodic revision and updating. The preparation and adoption of these plans constitute a major beginning – well overdue for the cities and towns of Anambra State.

I would like to take the opportunity to express my government's gratitude to the UN-HABITAT and its Executive Director, Dr. Anna K. Tibaijuka, for the technical assistance extended to the State. Without this, the realization of these Structure Plans would have been impossible. It is our hope that this marks the beginning of a long-standing cooperation between the Anambra State government and UN-HABITAT.

I would like to express my appreciation to Dr Alioune Badiane, Director, ROAAS, for his leadership, and to all the consultants and technical experts who made tangible contributions to bringing about this outcome. Better developed Anambra Cities and towns will be a worthy and deserving tribute to their dedicated efforts.

Lastly, I would like to commend the recommendations and land use proposals of the Structure Plans to all stakeholders to ensure their effective implementation.

A handwritten signature in black ink, appearing to read 'Peter Obi', written in a cursive style.

His Excellency

Peter Obi

Governor of Anambra State

PREFACE



It is my great pleasure and relief to see the end product of the Anambra State Urban Structure Plan Project. These Urban Structure Plan Proposals and recommendations for Awka Capital Territory, Nnewi and satellite Towns and Onitsha and satellite towns are products of painstaking consultations, surveys and analyses by UN-HABITAT consultants.

I am fully aware of the technical, including infrastructural bottlenecks and other difficulties encountered in the process, and I appreciate that these difficulties notwithstanding, the consultant team persisted in their work. The result is this very admirable outcome.

It has been a rewarding experience working with the team and I would like to take this opportunity to thank all of them individually and collectively, for their commitment to the project. I wish also to express my profound gratitude to the State government for its management of UN-HABITAT who made this project possible.


I wish to also thank everyone else who made contributions to the successful outcome of this project, including project communities and their leaders, as well as other partners and stakeholders, including government officials, and those who reviewed and

provided feedback and comments to the draft report, which preceded this final report.

Most importantly, I would like to congratulate His Excellency, the Governor of Anambra State, Mr. Peter Obi, who took the initiative to invite the UN-HABITAT to collaborate with the State in the execution of this project.

The government will ensure that these Structure Plans are conscientiously implemented and periodically reviewed to the best extent possible.

I commend these proposals and recommendations to the citizens and residents of Anambra State in general and in particular, to those of the project cities.



Peter Afuba Esq.

Hon. Commissioner for Lands,
Survey and Town Planning, Awka
Anambra State

ACKNOWLEDGEMENTS



We owe gratitude to so many people, groups and institutions, but space permit mentioning only a few.

We would like to acknowledge the magnanimity of the Governor of Anambra State, H.E. Mr. Peter Obi, for his vision in initiating the project in collaboration

with the UN-HABITAT as the executing agency and for his full support in providing the necessary operational and logistical resources for project execution.

We would also like to thank the State Commissioner for Lands, Survey and Town Planning, Hon. Peter Afuba, for his calmness and equanimity in piloting the execution of the project on behalf of the State government. Similarly, we wish to thank various officials of his Ministry who provided technical and logistic supports: in particular, the Permanent Secretaries of the Ministry, Sir Gregory Obunadike and Barrister (Mrs.) Ada Idigo-Izundu, the Ag. Director of Town Planning Mr. Peter C. Okoye and the Ag. General Manager of the Anambra State Urban Development Board, Mr. Jude E. Ilozulike. We would like to acknowledge the cooperation and assistance of all the officials in the various State Ministries who provided us with relevant data and information to produce this report.

Invaluable technical support was regularly rendered by Engr. Cletus Maduafokwa, Chief Engineer of Anambra State Urban Development Board. We thank the Chairman of the Anambra State Urban Development Board, Arc. Okey Chukwuogo and his staff for hosting the Structure Plan Project.

We would like to give a special acknowledgement to the support and cooperation of traditional rulers and community leaders of the various communities covered in this project, namely H.R.H. Alfred Achebe,

the Obi of Onitsha, H.R.H. Engr. J.U. Nwakobi, the Eze Obosi and his chiefs, H.R.H. Igwe Kenneth Orizu of Nnewi and H.R.H. Igwe Gibson Nwosu, Eze-Uzu Awka. We are also grateful to the following Traditional Rulers: Igwe Reuben Aghanti of Ezinifite, Igwe Christopher Umeaniba of Azuigbo, H.R.H. Leonard Ojiako, Obi of Amichi, H.R.H. B.B.C. Okeke, Igwe of Okija, Representatives of Ukpo Improvement Union, Sir Ezekiel Okeke President-General, Ichi Development Union, Sir A Okechukwu – President Utuh Development Union for attending to the requests for information.

Our special thanks goes to the following resourceful community leaders, namely, Dr. Dozie Ikedife President-General of the Ohaneze Ndigbo, Hon. Ben Ngonadi, the Chairman, Nzuko-Ora Nnewi Professor J.O.C Onyemelukwe and Sir A.E Ibeanu for their various contributions to and assistance on the project.

Lastly, we would like to acknowledge the selfless service rendered in various capacities in the execution of the project by the following: Engr. Daniel Abalogu, TPL Valentine Ezenwa, TPL Vincent Ezenagu, Mr Paul Omaliko, Ifeanyi Ezife, Mr. Ifeanyi Ikem Igwilo and Mr. J. O. J Ulasi, Ms. Uju J Efobi, Ms. Ngozi F Okpara and Ms Ngozi Olisakwe and Chris Onwuagana.

A handwritten signature in black ink, appearing to read 'A. Badiane'.

Dr Alioune Badiane

Director, ROAAS UN-HABITAT,

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1 INTRODUCTION



1.1 PREAMBLE

In 2007, UN-HABITAT and the government of Anambra state, signed a technical cooperation agreement for the formulation of structural plans for Awka Capital Territory, Onitsha, Nnewi and surrounding towns. This cooperation agreement came about when it was realized that these cities were growing up without a development strategy or the proper provision of basic services and infrastructure to sustain a human settlement.

Nnewi, a traditional Igbo town, has expanded since the conclusion of the Nigerian civil war to become an industrial nucleus of the South-east sub-region. It has expanded into the surrounding communities of Ichi, Oraifite and Ozubulu in Ekwusigo local government zone; Nnobi and Awka-Etiti in Idemili South; and Amichi, Azuigbo, Utu and Ukpok, all of which are included in the structural plans. There is the need to adopt a robust city development strategy to manage the urbanization challenges facing Nigeria's cities.

The Nnewi City Structure Plan is a well-articulated strategy to guide the development of the city over the next 20 years. It is geared to achieving the goals of the Anambra State Economic Empowerment and Development Strategy, the Local Economic Empowerment and Development Strategy, the HABITAT Agenda, the Millennium Development Goals and the Vision 2020 of the federal government of Nigeria.

1.2 METHODOLOGY

Over the past decades, planning of land use has witnessed notable changes in concept, methodology, and scope. The process of land use planning has become more inclusive with the participation of the community, engaging city dwellers for their input, in identifying and prioritizing development opportunities - which must form the basis of a flexible city development strategy/structure plan. These are improvements over the old 'master plan' approach built into the Rapid Urban Sector Profiling for Sustainability Studies used in the preparation of the structure plan for Nnewi.

The Rapid Urban Sector Profiling for Sustainability Studies - a participatory methodology for rapid urban profiling - was first developed by UN-HABITAT¹ working with the European Commission on an urban sector profile study in Somalia in 2003, which was later applied in over 20 countries in Africa, the Caribbean and the Pacific. Its scope, content and application have been adequately described elsewhere by UN-HABITAT². In Kenya, Rapid Urban Sector Profiling for Sustainability Studies focused on four urban thematic issues, including governance, slums, gender and HIV/AIDS and the environment. The Rapid Urban Sector Profiling for Sustainability Studies as applied in Egypt addressed six thematic issues, namely Heritage or Historic areas, Governance, Slums and Shelter, Gender and HIV/AIDS, Environment, Basic Urban Services and Local Economic Development. The experience of Egypt was insightful and commendable in that it was used in the preparation of over 200 structure plans over a two-year period. The Egyptian experience, therefore, provides valuable lessons for other developing countries where cities are grappling with growth problems where a structure plan has not been adopted. Since a structure plan based on Rapid Urban Sector Profiling for Sustainability Studies has a statutory basis, it has more muscle if compared to the Rapid Urban Sector Profiling for Sustainability Studies Reports.

The Rapid Urban Sector Profiling for Sustainability Studies is a veritable rapid assessment methodology that is suitable for formulating urban poverty reduction strategy papers at the local, regional and national levels through a participatory, crosscutting, holistic and action-oriented assessment of needs. It involved profiling the city, which provided an overview of the urban situation through a series of interviews with key urban actors and stakeholders. This was followed by a city consultation where priorities were discussed and agreed upon by stakeholders. City level findings provided input for the national profile, and national to sub-regional profile. Both profiles would result in the formulation of specific strategies and policy development. The beauty of the profile was that it provided guidance to international external support agencies to develop their own responses to capacity building and technical and financial assistance³. The Rapid Urban Sector Profiling for Sustainability Studies has been used to enhance dialogue, create awareness of opportunities, identify challenges, and devise response mechanisms that would contribute to the implementation of the

Poverty Reduction Strategy (PRSP) for achieving the Millennium Development Goals. The equivalent of the Rapid Urban Sector Profiling for Sustainability Studies is the Anambra State and Local Economic Empowerment and Development Strategies.

The Rapid Urban Sector Profiling for Sustainability Studies comprises three phases:

Phase 1: which is tagged the city assessment, is the rapid profiling of urban conditions based on defined variables on specific themes, utilizing a participatory approach and administering a comprehensive instrument for data collection

Phase 2: builds on identified priorities and develops detailed capacity - building and capital investment projects

Phase 3: focuses on implementation of the project.

Anambra is the first state in Nigeria to use the Rapid Urban Sector Profiling for Sustainability Studies methodology in the preparation of its urban structure plans, drawing from the Egyptian experience. Since the technique was new to Nigeria, a Team of 10 national consultants selected for study, and several members of the Anambra Ministry of Lands Survey and Town Planning, as well as the Federal Ministry of Housing and Urban development, were trained in the new methodology. During the training, participants were given the opportunity to review and evaluate the Rapid Urban Sector Profiling for Sustainability Studies framework and then to agreed on how the Rapid Urban Sector Profiling for Sustainability Studies would be applied to the cities of Anambra State. They focused on seven thematic issues: Heritage/Historic areas, Gender, Governance, Environment, Slums/secure tenure, Basic urban services and Local Economic Development. The various issues to be investigated were discussed among the stakeholders during the training with the framework to be adopted agreed. Fig 1.1 shows the logical framework of the application of the Rapid Urban Sector Profiling for Sustainability Studies for the cities of Anambra.

¹ UN-HABITAT (2006). *Rapid Urban Sector Profiling for Sustainability (RUSPS) – Project designed and implemented by UN-HABITAT and financed by the European Commission, Government of Italy, Government of Poland and Government of Netherlands*

² UN-HABITAT (2000). *Op cit. and several other Profile Studies completed for Somalia, Egypt Sierra Leone.*

³ UN-HABITAT (2006). *Op cit*

The Rapid Urban Sector Profiling for Sustainability Studies was used in the profile studies of Awka, Nnewi and Onitsha between January to May 2008. For ease of application, the questionnaires were re-arranged and administered to three groups, namely government agencies, non-governmental organizations and research institutes and justice/legal agencies. Each set of questionnaires covered relevant issues from the seven thematic areas so that at its conclusion, consultants gathered impressions on all spheres of development from all the groups.

During fieldwork, questionnaires were administered directly by consultants and field assistants on groups' and individual's bases. This approach proved interactive, mentally stimulating, less time consuming, and more effective. The questions reviewed the existing situation from the stakeholders' perspective, their views of the cause, existing initiatives to remedy the situation, possible means of stakeholder intervention and their desires for the future.

Following an initial analysis of the data, a city consultation was held in each of the three cities. The forum, which involved several stakeholder groups, reviewed the findings of the study and ascertained that there was a consensus on proposed improvements. People were drawn from government, traditional rulers, community based organizations, non-governmental organizations, professional bodies, academic and research institutions, women and youth organizations, trade organizations (National Union of Road Transport Workers and Owners), artisans/tradesmen, industrialists and religious organizations.

Instead of preparing individual city profile reports⁴, it was decided that a Draft Structure Plan should be prepared that would be based on the needs, and goals of Anambra State. These Drafts were reviewed by experts and different sectors of Anambra government for comment. The final report⁵ incorporated the government's critical comments.

The report created a focus on development. It reaffirmed the fact that everyone has a stake in the affairs of their community, and in assisting the various tiers of government in identifying, planning, and guarding against negative developmental trends in Nnewi and other emerging urban centres.

1.3 THE STRUCTURE PLAN AREA

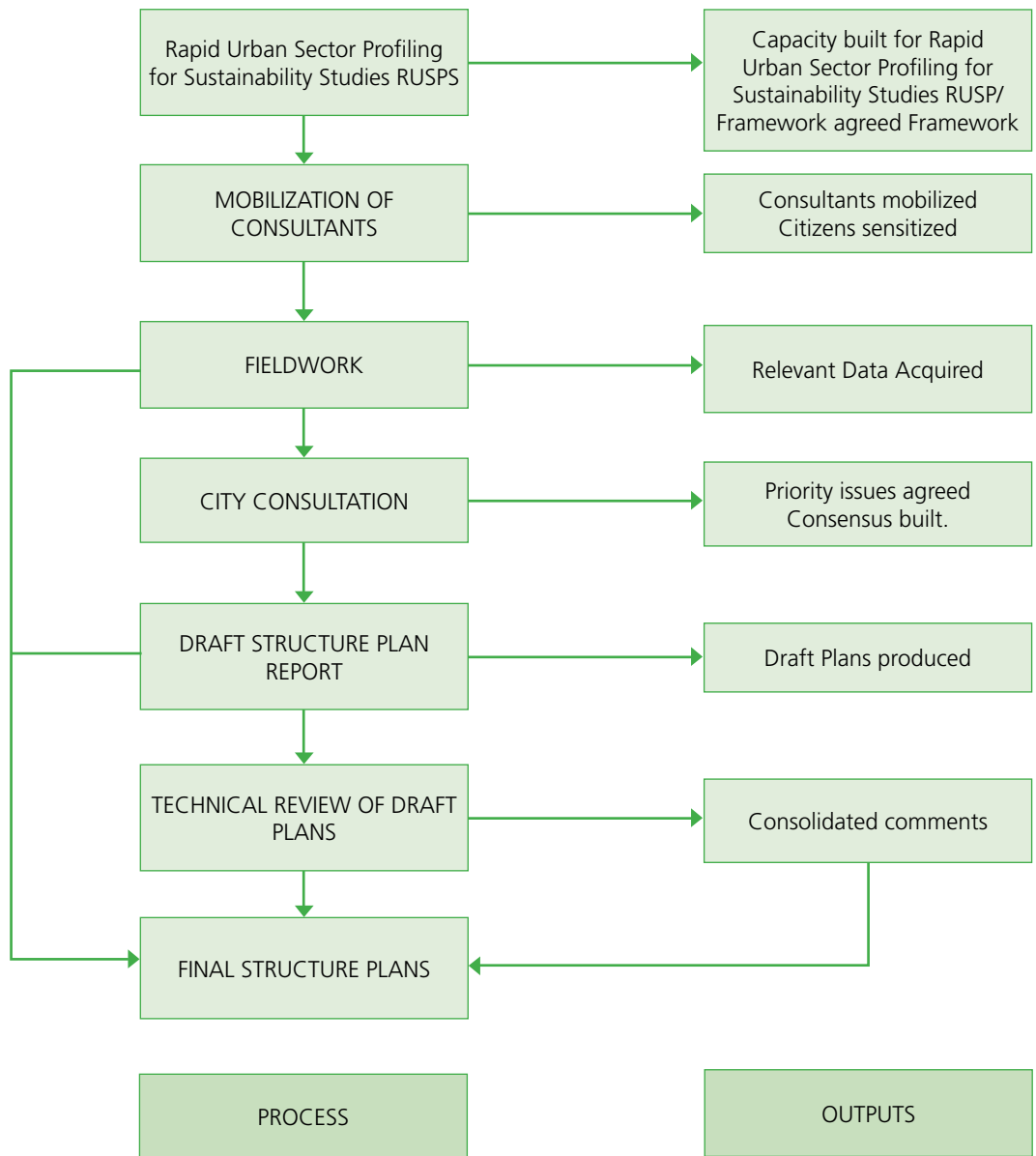
Part of the methodology involved agreeing on what areas would be covered by the structure plan. This was necessary in view of the problems presented by rapid urbanization and the emergence of urban corridors in the state.

For Nnewi, the Structure Plan area encompasses Nnewi North local government. Nnewi expanded in response to population growth into the surrounding towns of Ichi, Oraifite, Ozubulu, all in Ekwusigo local government Area; Nnobi, Awka-Etiti all in Idemili South local government area; Amichi, Azigbo, Utu and Ukor all in Nnewi South local government. These settlements are inter-linked, both socially and economically. The area for the Nnewi structure plan covers the boundaries of the satellite settlements and therefore, the boundaries of Ekwusigo, Idemili and Nnewi South local governments, covering 72 square kilometers, with approximately one-third of this area fully built (Fig 1.2).



⁴ Development of the Anambra State Urban Profile Report, and an individual city profile would incorporate all the information collected on the three cities as a resource mobilization strategy document.

FIG 1.1: FRAMEWORK FOR THE CONDUCT OF RAPID URBAN SECTOR PROFILING FOR SUSTAINABILITY STUDIES



1.4 REPORT STRUCTURE

The Report is divided into 6 chapters as follows:

Chapter 2 follows the introduction in **Chapter 1**, providing a general background on Nnewi and surrounding towns in terms of its geographical setting, its history, economy and demography.

Chapter 3 profiles Nnewi based on seven thematic areas adopted in an investigation. It concludes with an analysis of the strengths, weakness, opportunities and threats (i.e. SWOT analysis).

Chapter 4 is devoted to planning the city over the next 20 years, defining its goals, objectives, planning strategy and justification for the proposed selection.

Chapter 5 discusses the land use planning and management strategies of the structure plan for Nnewi and its neighboring towns.

Chapter 6 deals with the plan's implementation and monitoring arrangements.

2 BACKGROUND TO NNEWI



View of a busy trading street at Nkwo Nnewi Main Market.

2.1 LOCATION AND REGIONAL SETTING

Nnewi is located between longitude $06^{\circ} 52'E$ - $06^{\circ} 57'E$. It is one of the major cities in Anambra South Senatorial Zone of Anambra State. Anambra State is one of 36 states in the Federation and one of five states in the south-east geo-political zone of the country. The other states are Abia, Ebonyi, Enugu and Imo (Fig 2.1).

2.2. NATURAL ENVIRONMENTAL FACTORS

2.2.1 CLIMATE:

Nnewi has a tropical climate influenced by two major trade winds: the warm moist southwest trade winds during the rainy season (April –October) and the north east trade winds during the dry and dusty harmattan (November-March).

2.2.2 TEMPERATURE:

The temperature in Nnewi is generally high (maximum monthly temperatures vary between $27.2^{\circ}C$ and $35^{\circ}C$ and the highest between Feb-March, and

minimum temperatures vary between $18.2^{\circ}C$ to $23^{\circ}C$, the coolest between August and September).

2.2.3 HUMIDITY:

The daily mean humidity for Nnewi, varies between 40% and 92%. It is generally high during the early hours of the day, hitting highest in July during the rainy season and lowest in January during the harmattan.

2.2.4 TOPOGRAPHY AND SOILS:

Topographically, Nnewi is located in the mountains of the south-east. The landscape is undulating in places. Specifically, the topography of the planning area is varied on the western half, rising between 150 to 450 meters in places, punctuated by valleys and hills that determine the natural course of the River Idemili running from north to north-west and also the hills that define the valleys of the tributaries to River Mmili Eze to the south. The eastern half is made up of hills with gentler slopes forming series of plateaus that rise from 450m and peaking at 1050m above seal level (Fig 2.2). The soil in the planning area is porous, non-resistant and non-load bearing. These soil conditions, combined with the steep slopes of the valleys and rivers of Niger

and Idemili have been responsible for the excessive and persistent soil erosions experienced in the sub-region. Occurrences of loamy and humus soils have enhanced the cultivation of vegetable crops.

2.2.5 VEGETATION:

Nnewi and its immediate environs are located in a rain forest vegetation zone, characterized by long elephant grasses in the cultivated parts and in the areas subject to bush burning, by shrubs and trees, sometimes building into thick forest along the river banks of Idemili, Ubu Ekulo, Obolo, Eze and Miri Ele. The most common trees are the palm, (*Elias guinesis*) and mahogany, whose long taproots and hard back enables it to survive the long dry season and to resist serious damage by the bush fires.

2.2.6 THE EFFECTS OF NATURAL CLIMATIC FACTORS ON URBAN DESIGN AND LIVING

Climate, geology and vegetation all influence the lifestyle of a community and how it builds a city and houses. For example, the two prominent trade winds influence orientation and design of buildings. The long span of buildings is oriented in a southwest - northeasterly direction. This is to reduce the intense heat of the southwest and the cold from the northeast. The cropping season begins in March with the commencement of the rains and the traditional New Year begins at the end of the harvesting period (October / November). The porous nature of the soil dictates special foundation and landscape design and nature conservation. Nnewi's high temperatures create warm conditions, which are a great asset in promoting outdoor recreational pursuits and tourism.

2.3 HISTORICAL BACKGROUND

Nnewi's history can be traced back to 11 century AD. The town is named after 'ewi', which means a rabbit, and 'ne', or mother, meaning Nnewi, mother of rabbits. Its organisation structure is configured into four quarters - Otolo, Uruagu, Umudim and Nnewichi - named after tribal descendents headed by Obi, the chief of the quarter. when Nnewi, who is said to have migrated from Orlu, and after whom the town was named. Nnewi was the eldest of four sons of Ikenga and Maku, whose four sons were Otolo, Uruagu, Umudim and Nnewichi and who gave their names to the four quarters of the town¹.

Both Oraifite and Ichi who founded the two other adjoining settlements named after them were said to be extracts of Ikenga by oral historians.

The traditional monarch of the Nnewi is called the Igwe. The present Igwe is His Royal Highness Kenneth Orizu III, who presides over the affairs of Otolo. He is assisted by three Obis, the traditional rulers of three other villages.

From the 14th to 19th centuries, Nnewi was exposed to the outside influences of the British and Europeans in West Africa - an era known for trading in economic products and the slave trade. By mid-19century, the slave trade gave way to a period of evangelism by Christian church missionaries who followed the British colonial administration. Both the missionaries and British colonists brought western civilization which produced positive changes in the town, its institutions, socio-political and religious values. It was said that Christianity was central to the development of the city and through it the landscapes of Nnewi began to experience positive change².

¹ Anambra State Local Government System (2007): *Local Economic Empowerment and Development Strategy (LEEDS)*, p 2.

² *Op cit.*

The Nigerian civil war of 1966-1970 boosted the growth of Nnewi. Fleeing Igbos from the northern part of Nigeria during the war migrated to Nnewi.

Today, residents of Nnewi, like other towns in Igboland, are predominantly Christian. There remains, however, among the population a small number of traditional worshippers: Igbo's norms and traditions regarding patriarchy, marriage, land, cultural ceremonies and activities and outlook on life are still upheld in some sectors of the community.

2.4 DEMOGRAPHIC INDICATORS:

Anambra State - spanning an approximate area of 4,844 km² - occupies about 16 percent of the land in the zone and it is among the most urbanized states in the Federation. Sixty two percent of the population lives in urban areas and 38% live in rural areas. Anambra's population density is 869 persons per km². which by 2006 constituted a population figure of 4.182 million people. This makes Anambra the second most densely populated state in Nigeria, second only to Lagos which has recorded 2,578 persons inhabiting every km² (Federal Ministry of Environment 2008).

2.4.1 POPULATION GROWTH

Data on population characteristics and its distribution are necessary in land use planning in determining housing needs, quantity and space allocation of vital services and facilities, water supply, electricity, education as well as projections for these services based on anticipated growth trends.

The use of census population figures in Nigeria poses some problems, because of the inconsistencies and controversy over the actual numbers. For years, people have contested the accuracy of the census data for Nnewi³. This study relied on the official population figures for the 1991 and 2006 Censuses in determining population growth.

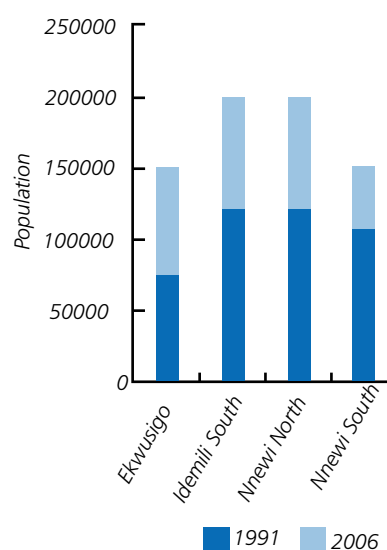
TABLE 2.1: POPULATION GROWTH OF NNEWI AND OTHER LOCAL GOVERNMENTS IN THE PLANNING AREA 1991-2006

Local Government	1991	2006	% annual growth
Ekwusigo	89171	158231	4.84
Idemili South	124122	207683	4.21
Nnewi North	147428	233658	3.66
Nnewi South	121063	157569	1.88
Total	431784	757141	3.57

Source: National Population Commission (1991 and 2006).

Table 2.1 shows the Nnewi Structure Plan area has experienced one of the fastest rates of population growth in the country. The annual growth rate varies from 1.88% per annum for Nnewi South to 4.84% per annum for Ekwusigo. The average growth rate for the area is 3.57 per cent per annum (Table 2.1 and Fig 2.3).

FIG 2.3: POPULATION GROWTH OF NNEWI AND SATELLITE TOWNS: 1991-2006



³ See TAHAL Consultants: Preliminary Report of the Four Urban Water Schemes in eastern Nigeria conducted in 1975. Study of the Development Problems and future Needs of Major Urban Centres by Doxiadis Associates and Bevencot - Movet - Bosboom Consultants' Feasibility Study of Clay Building Materials in eastern Nigeria, September 1975.

2.4.2 MALE FEMALE POPULATION 1991-2006

Analysis of population by sex shows some remarkable variations between the male and female population. In 1991, there were more women than men in all the settlements. The reason for this was that more men died during the civil war (1967-1970), leaving many

children orphaned and many women widowed. The gap was soon to be narrowed or at least levelled out as the 2006 figures show (Table 2.2 and Figs 2.4 and 2.5).

TABLE 2.2: POPULATION OF NNEWI AND SATELLITE TOWNS BY SEX: 1991-2006

Local Governments	1991		2006	
	M	F	M	F
Ekwusigo	42278	46893	82210	76021
Idemili South	59265	64859	108990	98693
Nnewi North	30264	71199	121862	111796
Nnewi South	25719	61617	79962	77607

Source: National Population Commission (1991 and 2006).

2.4.3 HOUSEHOLD POPULATION

From the 1991 data - the only available source - the average household population varied between two persons in Ekwusigo to five persons in Idemili South. The average is five persons per household in the planning area (Table 2.3).

FIG 2.4: POPULATION OF LOCAL GOVERNMENT AREAS IN PLANNING BY SEX: 1991

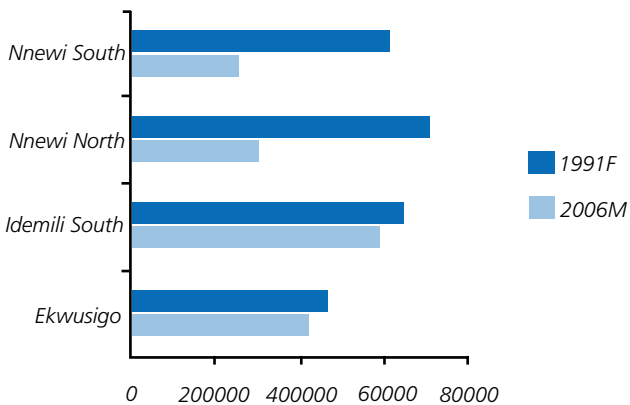
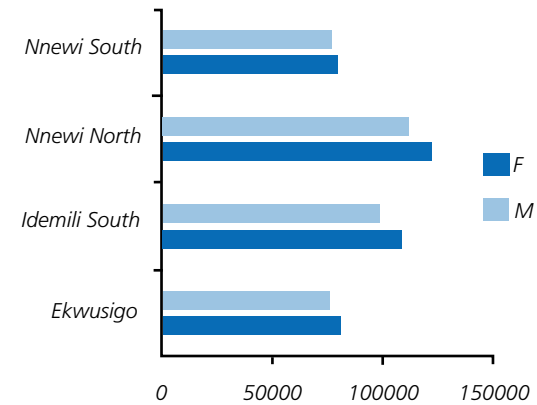


FIG 2.5: POPULATION DISTRIBUTION OF LGAS BY SEX 2006



2.5 ECONOMY

Anambra state leads other Nigerian states in the development of commerce and industry, with towns like Nnewi and Onitsha as the major centres for entrepreneurial activity. The state has the highest level of manpower resources and the lowest level of poverty incidence in the south-east geo-political zone. As an industrial town, Nnewi is known as the 'land of gold', also referred to as the 'Japan of Africa'. Commerce, industry and education have helped the rapid growth of Nnewi as it has attracted industrialists, workers, students, teachers and traders all seeking work.

Agriculture is a thriving industry for people living in the towns and villages surrounding Nnewi.

2.6 LAND USE ACTIVITIES, PATTERNS AND TRENDS

2.6.1 LAND USE IN NNEWI

The Nnewi urban area covers 72 square kilometers, a third of which is occupied by buildings. The unbuilt up areas have been left due to natural barriers to development such as several water/flood courses, erosion sites, ravines, deep valleys, shrines, religious forests and traditional sites.

The land use and urban forms of Nnewi reflect the peculiarities of a traditional Igbo settlement: a palace and market square at the centre, ample open space for recreation, religious, economic and socio-cultural activities. Residential areas are made up of individual family compounds, which are walled and linked by pathways and untarred roads giving access to the people. Nnewi is made-up of four quarters - Otolo, Uruagu, Umudim and Nnewi-Ichi - all converging on the Nkwo Nnewi Triangle. Each quarter is split into smaller villages, each of which is as big as some autonomous communities in Anambra State.

Today, land use in Nnewi comprises residential, industrial, commercial, administrative and agricultural as shown in Table 2.4 and Fig 2.6.

2.6.2 LAND USE IN TOWNS SURROUNDING NNEWI

ICHI: Its built-up area reflects a degree of planning in terms of building layout, but has narrow and untarred road with Eke Ichi as the town's market and the centre of activities. Ichi people, especially Ichi Brothers League, a local association have contributed to the development of the town, deeply interested in planning their community by preparing base maps for the town and concerned about planned use of their land. This strong communal effort in promoting development in the community should be sustained.

TABLE 2.4: LAND USES IN NNEWI

Land use Category	Area in Hectare	% of Total
Residential	2520	42.45
Transport	511	8.61
Commerce	396	6.67
Industry	252	4.24
Recreation	144	2.43
Public	931	15.68
Education	252	4.24
Agriculture/Wood land	931	15.68
Total	5937	100

Source: Field Survey by Consultants, 2008

ORAIFITE: Lying to the west of the Nnewi-Onitsha-Owerri Road, is Oraifite, a budding commercial and industrial town, surrounded by agricultural development, particularly around Odekpe, along the bank of the River Niger. Infrastructural development in the town such as roads, boreholes, cultural and religious buildings, has been due to the efforts of the community and individual investments in the development of their town.

OZUBULU: The town's development - a spillover of population migration from Nnewi - is mostly linear, sprawling along the Onitsha - Owerri Road axis, accommodating several industries along the road. Ozubulu has the potential to accommodate further growth.

UKPOR: Located to the west of Nnewi, Ukpör is an agricultural community having experienced rapid growth over the past two decades, attracting many growing firms attracted. The town's market, known as 'Afor Ukpör', is a major regional market for agricultural produce (mainly foodstuff). The town has substantial open land, ravines, meandering rivers and streams crisscrossing its terrain, making the cost of infrastructure phenomenal due to topographical constraints.

UTUH: Located in a gentle sloping topography and covering an open expanse of land. It has several cottage industries and schools, reflecting the entrepreneurial character of the people, and its importance as an education centre. There is determination to accelerate the growth of Utuh by attracting development to the town. Both Utuh people and the Nnewi local government have released adjoining lands for various government

development proposals. The Otoló/Utuh Residential Layout - already approved by the government - is a case in point. The New Awka-etiti - Amichi - Utuh - Ukpör road has opened up Utuh for further rapid development. The Utuh community is facing problems of gully erosion.

AMICHI: Amichi, located along the New Oba - Nnewi - Uga - Okigwe road, has virtually been swallowed up by the outgrowth of Nnewi. The siting of the Nnewi judiciary on its borders has given the town an administrative importance.

AWKA-ETITI: Awka-Etiti, located on Aguata-Okigwe-Onitsha-Awka road, is a linear town, with a market - Eke Awka-Etiti. The market is linked by other markets - Afor Nnobi and Nkwör Igboukwu - to form a regional market that attracts traders from different parts of Nigeria. Articles of trade include agricultural produce, livestock and timber. The growth of Awka-Etiti is pushing towards Igboukwu, which lies 10 kilometers away and might result in the growth of an urban corridor.

AZIGBO: Sandwiched between Nnewi, Awka-Etiti and Amichi is Azigbo. The town needs a good road network system in order to access its surrounding open lands for development and expansion - an area that has been largely underused. It is possible to attract future development to Azigbo.



View of Erosion threat to residential areas.



NNOBI: The development of Nnobi is largely linear pushing towards Nnewi. Traffic congestion is experienced at the Afor Nnobi market junction, especially on market and festival days at the intersection of the Nnewi – Nnobi - Neni – Agulu roads and the Nkpor – Umuoji – Nnobi – Awka-etiti – Igboukwu – Ekwulobia roads.

Nnewi and surrounding towns are yet to adopt any formal plan that will guide land use development and growth. Due to the absence of any formal planning and non-enforcement of land use and building controls, both conforming and non-conforming uses co-exist. An industry is usually sited on family land, without regard to industrial location requirements and minimum standards and pollution of the environment. Street trading is commonplace with open spaces being converted to markets and roads obstructed by traders. Elegant structures co-exist with slums and low-income dwellings. There is little consideration for providing for a hierarchy of roads that would promote an efficient transport system and the proper functioning of these informal settlements.

Enormous growth has taken place in Nnewi and surrounding towns. Without adequate land use planning and development controls these settlements are bound to haphazard growth patterns, sprawling along major arterial roads and forming formidable urban corridors, ultimately having serious implications for infrastructural provision and urban management. One of the desires of the communities is to prevent the development of urban agglomeration so as to maintain their towns original identity and character.

3 PROFILE OF NNEWI AND SURROUNDING TOWNS



View of the Nkwo Nnewi Main Market from the Uruagu-Bank Road end.

This Chapter profiles Nnewi based on the 7 thematic issues adopted by the Rapid Urban Sector Profiling for Sustainability Studies, namely, Shelter, Slums, Gender, Governance, Environment, Basic urban services, Local Economic Development and Heritage/Historic issues. Transportation issues have also been studied and analysed.

The information was analyzed to understand the strengths, weaknesses, opportunities and threats in any of the thematic areas, and to provide feedback on improvements. The information also helped develop local policies, regulations, institutional and financing mechanisms and helped build the capacity of planning authorities and agencies in achieving sustainable human settlements development and management.

3.1 SHELTER AND SLUMS

‘Slums’ are residential areas in towns and cities without proper access to water and sanitation, no tenure of land or property and where housing tends to be of poor structural quality (UN-HABITAT 2002)¹.

According to UN-HABITAT (2002), slums generate poor health and insecurity and are the most visible forms of poverty in the city. While there have been concerted efforts at national, state, local and global levels to eradicate the slum areas, efforts to improve the lives of people living in the slums has been lacking². An assessment of the slum conditions in Nnewi is imperative when drawing up appropriate strategies for sustainable urbanization.

3.1.1 PROPORTION OF POPULATION LIVING IN SLUMS

Based on the criteria of structural fitness, accessibility by roads and good drainage, large areas of slums are identifiable in both old and new areas of Nnewi. Such areas in Nnewi include Nkwa triangle², Ogbе-Hausa encompassing the informal and illegal developments along the flood plains flanking 100 Foot Road, Orizu Roundabout-Oba and Orizu Roundabout –Ozubulu (Fig 3.1).

¹ UN-HABITAT (2002): State of World Cities Report.

² See National Planning Commission (2003) National Economic Empowerment and Development Strategies. Anambra State Government (2007): Anambra State Economic Empowerment Development Strategies. Nnewi North (2007). Local Economic Empowerment and Development Strategies; Nnewi South (2007). Local Economic Empowerment and Development Strategies; UN-HABITAT (1996): Habitat Agenda; UN (2001); Millennium Development Goals: All these documents emphasized poverty eradication. Both the Millennium Development Goals and UN-HABITAT emphasize improvement to the lives of people living in slums.

In the Ogbé-Hausa slum, where hundreds of city dwellers reside, buildings are huddled together, built on flooded plains and eroded terrain, without planning regulation on location of residences in relation to adjoining roads. They frequently encroach on open spaces, drains, flood channels, and access points. Living conditions are deplorable and there is no road access to buildings, water or toilet facilities. Ten youths per room sleep in a space of nine square meters. These youths leave the slums early in the morning for their various business activities, which include shoe shining, selling suya roasted meat, manicure, cattle rearing and other informal employment (Figs. 3.2).

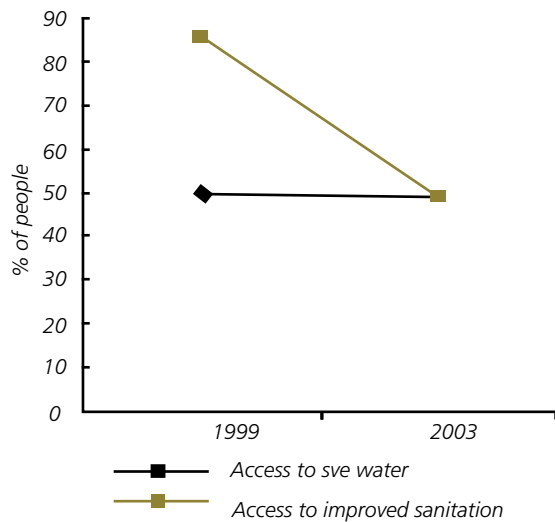
3.1.2 THE NUMBER OF PEOPLE WITH ACCESS TO WATER AND SANITATION

There is an absence of current data for Nnewi on the number of people with access to water and sanitation. Nnewi does not fare well given the figures available for Anambra State. Those with access to safe drinking water in Anambra State declined from 49.9% to 49% between 1999 and 2003 (Fig 3.3). Similarly, the number of people with access to proper sanitation was 85.5% in 1999 but declined to 49% by 2003 (ANSEEDS (2006).

FIG 3.2 VIEW OF OGBE HAUSA SLUM



FIG 3.3: ACCESS TO WATER AND SANITATION IN ANAMBRA STATE 1999-2003



The decline in access to safe water and sanitation must be halted. Anambra State is unlikely to attain the Millennium Development Goal 7 targets 10 and 11. The consequences for their residents living in slums, especially for children, are grave. Without proper access to clean water and sanitation, children are susceptible to water-borne diseases, many dying before they reach the age of five. If they survive, they are unlikely to enjoy an education or anticipate much of a future. The chances of them contracting HIV/AIDS when they are a bit older are high, and most do not survive beyond the age of 40³. Poor drainage and flooding bring mosquitoes - malaria being the highest killer disease in Nigeria.

3.1.3 SECURE TENURE

Land titling is high among the Igbo tribe. Most Igbo's are business people who are familiar with title documents⁴. Land ownership in Nnewi stems partly from the Igbo traditional land tenure system and partly based on the Land Use Decree of 1978. The traditional system - which allocates land only to individual families, in particular to the male child - discriminates against women as well as non-indigenes because tradition dictates that land cannot be sold to strangers.

Under the Land Use Act of 1978, land is owned by the issuance of Customary Right of Occupancy for land in the rural areas, or the issuance of a Statutory Certificate of Occupancy for land in the urban areas.

Poor women have no security of tenure or access to land, due to high land prices, high land speculation, lack of a pro-poor approach to land ownership and the inadequacies of land use planning. When upgrading slum areas, an infringement of the rights of slum dwellers is possible: With no legitimate access to land, poor people often have to resort to encroaching on marginal lands, resulting in the proliferation of slums. This situation needs to be addressed when planning the city.

3.1.4 EXISTING PLANNING POLICIES AND LEGISLATION

Anambra operates an obsolete planning legislation inherited in 1991 from the defunct Anambra State. The legislation has not promoted sustainable human settlements development. The State is not only lagging behind in planning legislation, but also land use plans for control of development. Despite the proliferation of slums and ineffective development control, both the State and local government are still to embrace slum upgrading legislation and adequate planning and management of settlements.

3.1.5 CAPACITY GAPS IN RELATION TO SHELTER AND SLUMS

The above analyses show the magnitude of the proliferation of the slums in Nnewi. A number of issues were identified that need consideration:

- (i) legal protection of the right of slum dwellers from eviction
- (ii) access and credit to land by both men and women in slum areas
- (iii) institutional framework for slum upgrading to include public private partnership in promoting slum upgrading
- (iv) capacity to identify, prioritize, plan and implement projects for slum upgrading.

³ UN-HABITAT (2002). *Op cit.*

⁴ NBS (2006). *Statistical Year Book for 2006.*

It should be noted that improving the lives of people living in slums is imperative because it is part of the global effort in poverty reduction although it is feared that the State will not achieve the targets set by the Millennium Development Goals. Should nothing be done, the slum areas will continue to create conditions of poor health and insecurity, a reduction in human capital, low productivity, an inability of either individuals or groups to generate resources to overcome their poverty. Present planning efforts by the Governor of the State must be a critical and dynamic response to resolve these weaknesses.

3.2 GOVERNANCE

Urban governance is the way in which individuals and institutions - both public and private - plan and manage the affairs of a city. Proper management of urban areas and the provision of essential services constitute key obligations in governance: positioning an institutional framework for the efficient delivery of services, resource mobilization, security, hinged on a culture of transparency and accountability, that includes the promotion of the city through civic participation and engagement.

3.2.1 INSTITUTIONAL FRAMEWORK FOR URBAN GOVERNANCE

The institutional framework for urban governance is complex and cumbersome. It involves the state, local government and the community. Nigeria operates a three-tier government system, comprising the Federal, State and local government, each with their own clearly defined functions spelt out in the Constitution. The Constitution places town and country planning as a role reserved for the State and for local governments, both of which play dominant roles in urban governance.

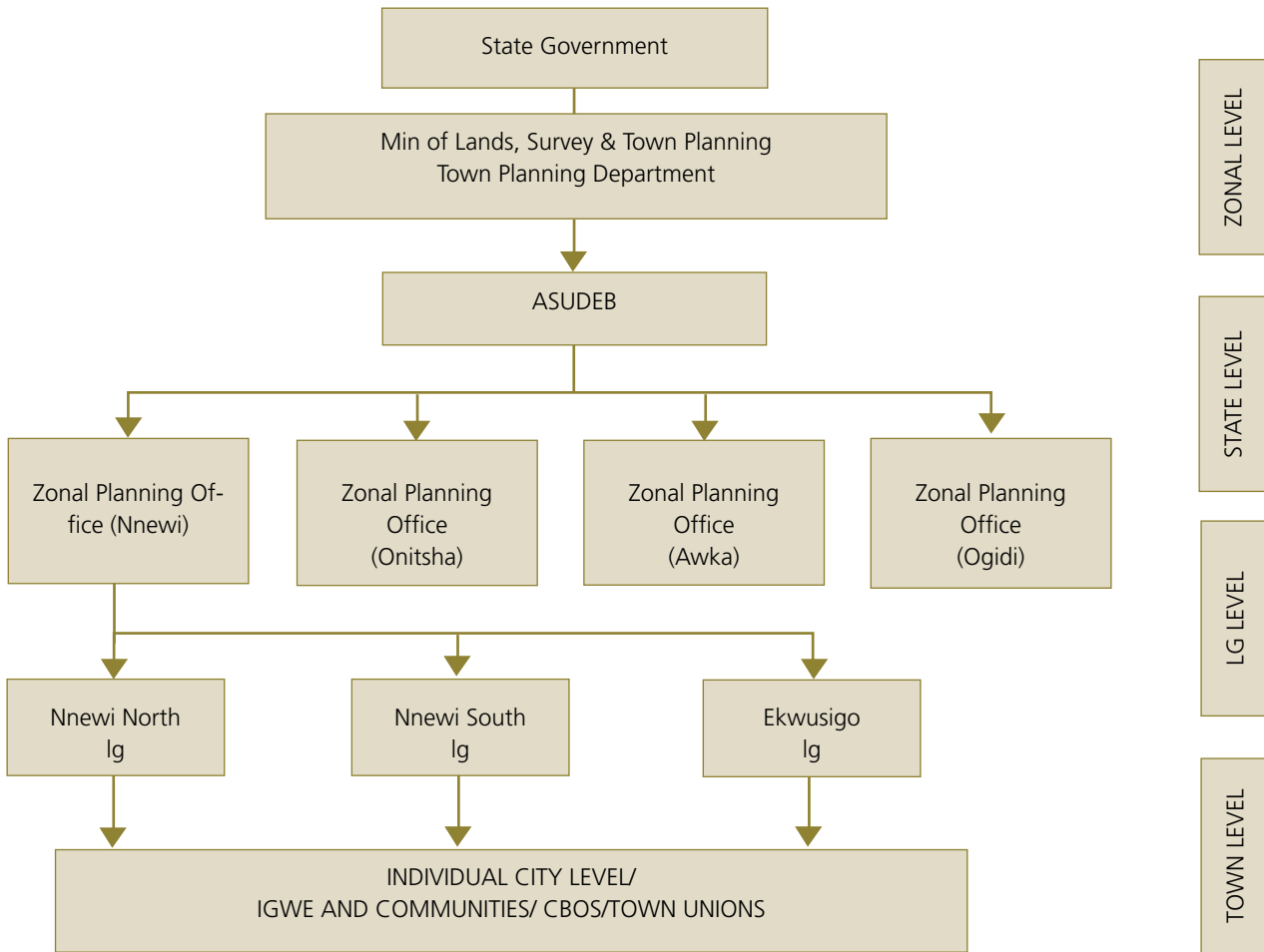
Generally, local government activities in the Anambra State are overseen by the State's Head of Service, appointed by the State government. The Secretary to the local government, Departmental and Sectional Heads, and all support staff of local governments are appointed by the State government. The State government also approves and disburses the central grant to local governments., There is little decentralization of power to local governments, as long as the State continues to exercise a dominant role.

The Anambra State exercises control over the administration of land use planning for urban and rural areas through the Ministry of Lands, Survey and Urban Planning and administered by the Town Planning Department. The other three related departments are Survey Department, Lands Department and the Administrative Department. To discharge its statutory functions, the Town Planning Department has set-up Four Zonal offices under the law that established the Anambra State Urban Development Board. The web of relationships between the State, zonal, local government and the settlements is represented in Fig. 3.4.

ASUDEB - Anambra State Urban Development Board is charged with formulating land use planning for towns and cities and for enforcing development control. The four zonal offices, located in Awka, Nnewi, Ogidi and Onitsha, are required to enforce development control in their respective areas by ensuring that development permits comply with approved plans. The Nnewi zonal office, established in 1989, is one of four zonal offices in the State. They are in charge of Planning. Their jurisdiction covers four local governments in the State, namely, Nnewi North, Nnewi South, Ekwusigo, and Idemili local governments.

All four zonal offices are accountable to an established Board headed by an appointed Chairperson and its membership drawn from professional bodies, parastatals providing utilities, State and local governments and communities. Three full-time staff of the zonal office, including a zonal planning officer, a zonal surveyor and a zonal land officer, all are members of the Board (Box 3.1). Each zonal office oversees planning activities in a number of local government areas, as shown in Fig 3.5. Theoretically, by this arrangement, the entire State would be covered by a physical planning administration. But in practice, only the urban areas are provided for in the legislation that set-up ASUDEB - Anambra State Urban Development Board and the effectiveness of these planning units was in doubt because as you go down to the local government level, capacity for planning and enforcement declines.

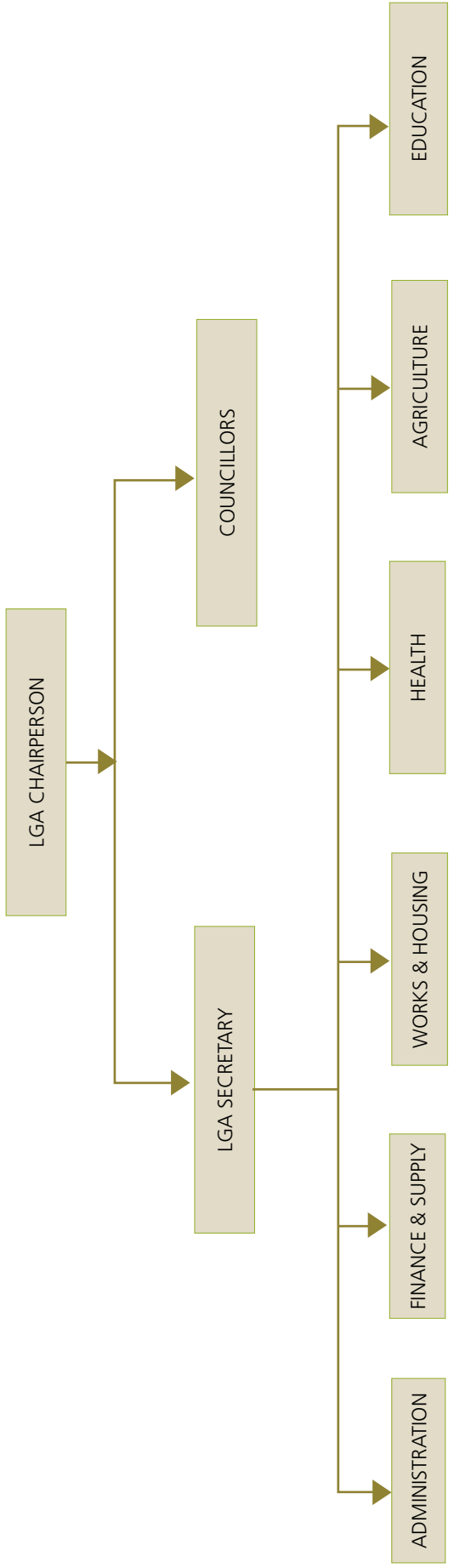
FIG. 3.4: **AGENCIES AND LEVELS OF URBAN GOVERNANCE IN ANAMBRA STATE**



BOX 3.1: MEMBERSHIP OF PLANNING BOARD

- Chair of the Board
- Following full-time staff of the zonal office (zonal Planning Officer, zonal Surveyor and zonal Land Officer)
- One representative each from the Town Planning, Architecture, Building, Civil Engineering, Estate Surveying, Surveying and Law professions
- Three (3) representatives from local governments in the State in rotation and one representative from a chosen local government

FIG. 3.5: TYPICAL LOCAL GOVERNMENT ORGANOGRAM IN ANAMBRA STATE



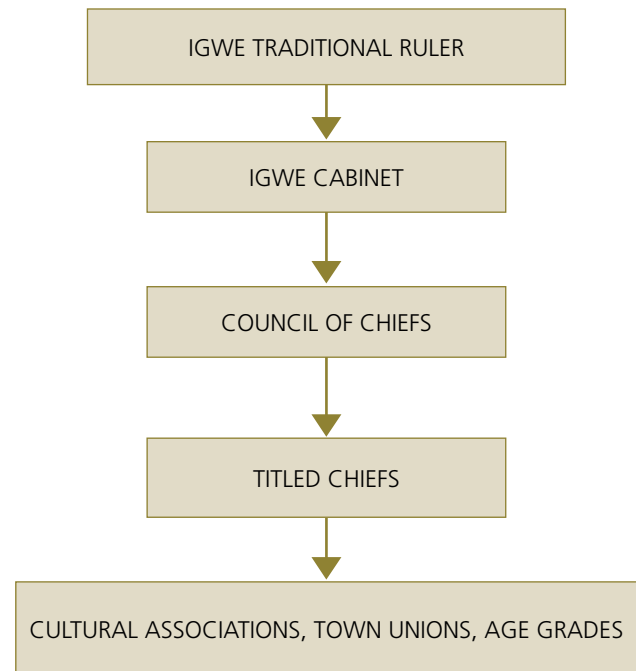
3.2.2 TRADITIONAL GOVERNANCE

Traditional governance of towns, villages and communities in Anambra State is conducted by a monarchical system - a system instituted since 1960 when Nigeria became a republic.

Traditional affairs are run according to the norms and practices of the Igbos. The Igwe, the traditional ruler in the town, presides over cultural ceremonies, arbitrates in communal and individual disputes and represents the community on the State Council of Chiefs. He represents a symbol of continuity in the community. The current traditional ruler of Nnewi, for example, is Igwe Kenneth Orizu, who hails from Otolu, the head of the four villages and he is the 5th in his lineage to assume the throne.

At an urban level, the various communities are organized into age grades with defined roles as well as having the capacity to form their town unions. For instance, the Nzukora Nnewi, Nnobi Welfare Organisation and women's associations, like the Umuada, play an important role in the governance of Nnewi by initiating community self-help projects for improving the city, maintaining law and order and promoting social, cultural and political advancement of the people. The Igwe works with his cabinet and council of chiefs to administer the town (Fig 3.6).

FIG. 3.6: GOVERNANCE STRUCTURE IN TRADITIONAL IGBO SETTLEMENTS



A major problem in urban governance in Nigeria - depicted in Anambra towns - is that the administrative boundaries of urban local governments do not coincide with that of their towns. Most frequently, large urban centres have been subdivided into several local governments. For instance, a medium-sized town like Nnewi has been split into two local government authorities, North and South local government authorities, while large metropolises like Ibadan, Lagos and Kano have been fragmented into several local governments ranging between 11 to 15 for Ibadan and Kano respectively while Lagos Metropolis has a total of 13 local governments. The fragmentation of cities in Nigeria into several local government authorities have impeded the pursuit of good urban governance because it has not allowed for joint land use planning and management of essential infrastructure such as, water supply, waste management, security and pollution control.

The organizational set-ups of both the State and local governments, which have placed several land use planning issues such as budgeting, housing, transportation, environmental health and sanitation in different departments, tend to make effective coordination impossible, without building the necessary networks.

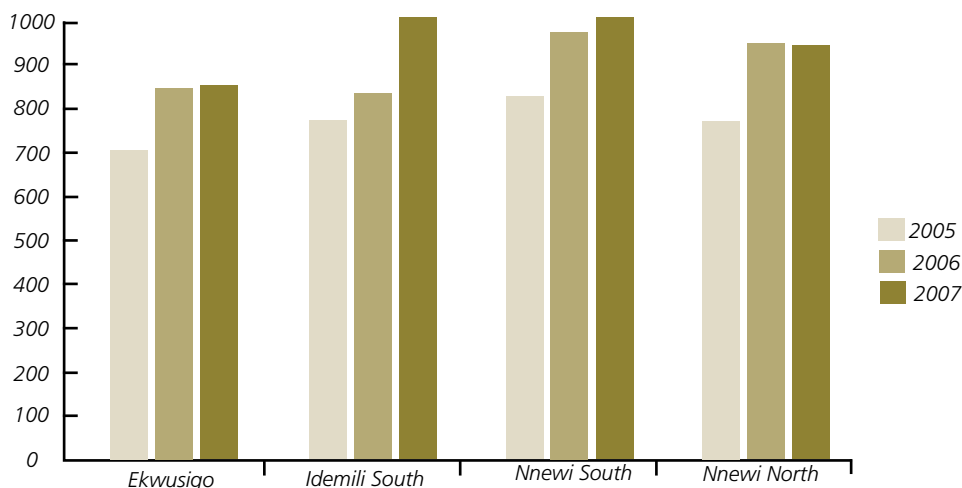
Most local governments and zonal planning authorities are under-staffed and ill equipped to discharge their statutory functions. This is compounded by poor funding of urban infrastructure projects. There is also an absence of institutional and administrative

frameworks, as well as little or no public participation, nor transparency and accountability in approaches to land use planning, development control, resource management and urban administration. Currently the State, Nnewi North and South local governments and traditional rulers - Igwes and his chiefs - and the community play key and distinct roles in the governance of the study area. The varied roles of the various actors need to be harmonized to achieve popular participation, accountability and civic engagement.

3.2.3 RESOURCE MOBILIZATION

Nnewi local government obtains its funds mostly from grants administered through the Federation Account, via central government and managed through the local government joint account. Nnewi South, Nnewi North and Idemili South local governments receive more monthly allocations than the Ekwusigo local government. Annual grants from the Federation Account vary between NGN600m per year for Ekwusigo in 2005, to almost NGN1bn (NGN975m) for Idemili South local government in 2007 (Fig. 3.7).

FIG 3.7: FEDERAL GRANTS TO LOCAL GOVERNMENTS IN THE PLANNING AREA (2005-2007)



Additionally, it is stated that Nnewi local government mobilises internally generated revenues from the following sources:

- o Property rates (development levies, survey charges, etc)
- o Sanitation levies
- o Business fees
- o Parking charges

Data on the amount of funds generated internally was not available. However, Nnewi North and South local governments - like many local governments in the country - have exhibited lower than expected capacities in mobilising internally generated revenues. There has been no positive correlation between capital grants and the provision of infrastructure and services. Generally, local government offices are financially impaired and ill-equipped with outdated machines and heavy duty operational equipment. These shortfalls hamper functions such as waste disposal and road maintenance.

3.2.5 INCLUSIVE DECISION MAKING

The traditional system of governance is inherently participatory. But fusing it with the 'traditions' of state has proved problematic - a situation which dates back to the military era when government was run on autocratic grounds. Evidence available does suggest that the public was involved in the preparation of Nnewi North and South Local Economic Empowerment and Development Strategy document. This practice should be sustained and incorporated into other development efforts, including urban planning and management.

3.2.6 TRANSPARENCY AND ACCOUNTABILITY

Accountability is poor. There is a high level of corruption in local governments and is noted for both Nnewi North and South in their Local Economic Empowerment and Development Strategy documents. The processes of revenue collection and procurement are not transparent. Annual reports are not submitted for verification. It is worse in that sanctions are not enforced.

The high level of corruption of local governments has remained unchecked by the public, many of whom have not paid their taxes, reducing the chances of calling local governments to account for their statutory functions in the provision of essential infrastructure and services. Years of alienation and corruption, has caused the public to show disinterest when it has come to matters of planning, allocation or monitoring of the use of funds for local governments activities. Public enlightenment is needed and a respect for the rule of law to enforce anti-corruption measures so that local governments can begin to discharge their statutory functions.

3.2.7 SECURITY

The security of people and their properties are the responsibility of the police and local neighbourhood watches, which are organized along traditional guidelines (using age grades to be engaged in community watch at nights and it si done in rotation). The police, however are not highly regarded by the public. Instead, people resort to self-policing and/or engaging their own security agents, including the construction of lookout towers where the security personnel keep nightly vigils (Fig 3.8).

FIG 3.8: VIEW OF A TYPICAL SECURITY LOOKOUT TOWER. THIS LOOKOUT TOWER IS NOW A COMMON FEATURE OF THE URBAN ARCHITECTURE.



3.2.8 CAPACITY GAPS

The following capacity building initiatives are needed in the area of governance:

- (i) Building the capacity of State and local governments to discharge their responsibilities in critical areas that include computing skill, management and resource mobilization, transparency and accountability, participatory budgeting, participatory approach to general development, and in particular, to implement Local Economic Empowerment and Development Strategy and the Urban structure plan for Nnewi
- (ii) Establishing transparent and accountable procedures for awarding contracts, resource mobilization, budgeting and expenditure control
- (iii) Incorporating gender concerns in to matters of governance and in the provision of essential public services, such as access to water, education, and health facilities
- (iv) Promoting partnerships between State and local governments and non-governmental organizations, community-based organizations and the private sector.

3.3 GENDER

Studies show that development issues such as, poverty, education, health, governance, economy, and even urban planning affect men and women differently. Profiling Nnewi along gender lines gives a better understanding of the development issues and how they relate to gender.

The main thrust of this section is to analyze the various gender issues that relate to land use planning, access to land and participation in urban issues.

3.3.1 INSTITUTIONAL FRAMEWORK

To promote gender issues in development, the State established focal agencies. At the State level, it established the State Ministry of Women Affairs and Social Development charged with the coordination of programmes for women and children, implementation of the aims and objectives of government's Family Support programme, promotion of safe and responsible motherhood and maternal health, elimination of all forms of social, traditional and cultural practices and the promotion of gender equality.

At the local government level, responsibility for gender issues was decentralized to the Departments of Health, Education and Social Welfare. These Departments employed focal persons to handle gender issues they are both sexes usually more of women. There is a need to promote a greater synergy between State and local government agencies to make people more aware of women's issues and their rights.

3.3.2 WOMEN AND GOVERNANCE

In Nnewi, three women contested the election of governorship, two women stood for positions in the House of Representatives, and one woman ran for election as a member of the House of Assembly. The last Chairperson of Nnewi North local government was a woman and the current Chairperson is a women. In addition, twelve women ran for election on council seats in the last election.

Women are playing an increasing role in governance. The Civil Service in Anambra State is populated largely with women, mostly employed in education, health and administration ministries. Of the total number of employees in the civil service, 52.6% women are employed in the civil service as against 47.4% men. However, gender imbalance still exists at the senior and junior levels attracting 64.2% and 59.0% men respectively (Table 3.1).

TABLE 3.1: PERCENT MALE-FEMALE EMPLOYMENT IN ANAMBRA CIVIL SERVICE

Cadre	Male	Female
Senior	64.2	35.8
Middle	38.9	61.1
Junior	59	41
Total	47.4	52.6

Source: Field Survey 2008.

A significant number of women are engaged in informal small-scale enterprises and agriculture. They have been active in other aspects of economic and social development, including the formation of cooperative societies, offering assistance to widows and the less privileged, the promotion of environmental sanitation, community projects and law enforcement.

At the community level, faith-based organizations, notably churches and mosques engage in counselling, training of women and youth in matters relating to the prevention of violence, while non-governmental organizations and professional bodies also offer legal aid and capacity building exercises.

3.3.3 GENDER AND VIOLENCE

Domestic violence is on the rise: attributed to the perceived breakdown of family values, the adoption of foreign values and a resistance to women's increasing empowerment. Cases of violence and abuse include rape, maltreatment of widows, denial of inheritance and trafficking. Accurate data on violence against women are hard to come by as the victims – in this case mostly women - are mostly reluctant to report incidences of domestic violence and abuse to the police. Instead, victims lodge their reports of incidences to either the extended family or traditional rulers or faith-based organizations for redress.

3.3.4 GENDER AND HEALTH

The prevalence of HIV/AIDS in the Anambra State is nearly equal to the average of reported incidences for the entire nation. It spread rapidly from 1.8 % in 1991, peaking at 5.8% in 2001/2 and declining to around 4.2% in 2003. More women are affected by the pandemic than men (Tables 3.2 and 3.3 and Figs 3.9 and 3.10). Studies show that measures involving public agencies, non-governmental organizations and community-based organizations have been put in place to prevent the spread of HIV/AIDS, offering voluntary counselling and screening, prevention of mother to child transmission and the promotion of a change in sexual behaviour.

TABLE 3.2: PREVALENCE OF HIV/AIDS IN ANAMBRA STATE AND SELECTED LOCAL GOVERNMENTS (1991-2004).

Locations	1991	1993/4	1995/6	1998/99	2000/1	2003/4
Nigeria	1.8	3.8	4.5	5.6	5.8	5
South-east zone	n.a	n.a	n.a	5.2	5.8	4.2
Anambra State	1.8	2.8	5.8	6.1	6.5	3.8
Awka	n.a	1	2.1	8.4	6.7	4.3
Ekwulobi	n.a	4	4.5	3.7	6.8	2.9

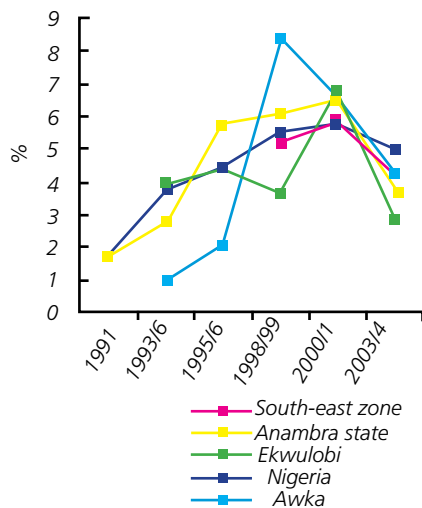
Source: Anambra State (2007); Medical records Department NAUTH

TABLE 3.3: AIDS PATIENTS BY SEX

Sex	2000	2001	2002	2003	2004
MALE	20	17	929	2204	1795
FEMALE	35	11	293	3405	2645

Source: Anambra State (2007); Medical records Department NAUTH

FIG 3.9: PREVALENCE OF HIV/AIDS IN ANAMBRA STATE AND SELECTED LOCAL GOVERNMENTS

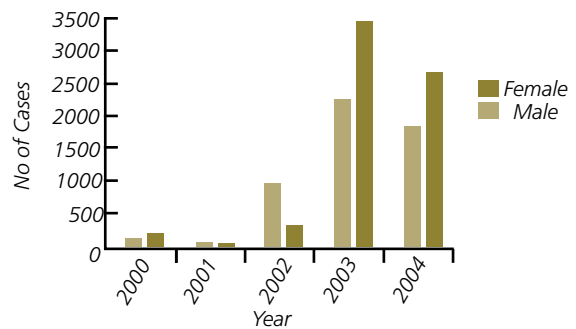


Source: Anambra State (2007)

Other measures include keeping maternal health records; enforcing HIV testing as a routine procedure in antenatal clinics and as a pre-marriage requirement in the Catholic Church, public awareness about the causes and prevention of HIV/AIDS infection. These measures are beginning to produce a change in sexual behavioural and greater care of those infected with HIV/AIDS.

Both maternal and infant mortality rates are high in Nnewi with 69/1000 and 126/1000 respectively (Nnewi LEEDS 2007). Local governments need to do more to reduce both infant and maternal mortality, by setting-up clinics in communities and residential neighbourhoods for accessibility and safe delivery and employing the right staff. These clinics must be properly built with clean and functional.

FIG 3.10: AIDS PATIENT IN ANAMBRA BY SEX (2000-2004)



Although Nigeria has implemented the National Health Scheme, it faces some critical challenges. State and local governments, private sector workers and non-governmental organizations who are yet to join the scheme still pay for medical services.

3.3.5 GENDER AND LAND USE PLANNING

Several gender issues are involved in land use planning. For example, providing employment opportunities for women have serious implications for land use planning and development control. Land must be allocated in the right location. The majority of women live and work in harsh environments. They are largely involved in trading and the informal sector spending hours in harsh climatic conditions. The open market area does not have any basic services. Women need a more conducive working environment. Land ownership favours men more than women and this needs to be addressed through land use planning and policy reforms. Some of the measures that can be taken to accommodate gender equity in land use include providing:

- Parks and open spaces for children
- Lands for housing and business establishments
- Markets offering conducive trading environment
- Secure tenure and access to land for women
- Access to loan and credit for building
- Public toilets for women
- Health centres, schools, water supply in accessible locations for children.

3.3.6 CONSTRAINTS TO ADVANCEMENT OF WOMEN

Some of the harmful traditional and cultural practices, which discriminate against women, persist to this day in Nnewi. The Igbo culture discriminates against women in land ownership, in widowhood, female circumcision etc. There is a need to empower women in line with Article 4 of CEDAW - Commission for the Eradication of Discrimination against Women, which recommends equal opportunities and rights for women and the relevant provisions of the Nigerian Constitution which proscribes discrimination on the basis of gender.

3.4 URBAN ENVIRONMENT

3.4.1 INSTITUTIONAL AND LEGAL FRAMEWORKS

To tackle environmental problems, the Anambra State established the Ministry of Environment. The Ministry established the Anambra State Environmental Protection Agency as its executive organ. This State Environmental Law derives its power from the Federal Environmental Protection Agency Law of 1992, providing for certain categories of development to be supported by Environmental Impact Statements. The Anambra State Environmental Protection Agency co-operates with the Town Planning Department of the Ministry of Lands, Survey and Town Planning, the Ministry of Trade and Commerce, the Ministry of Health, the Chamber of Industry and small-scale industrialists in all environmental issues in the discharge of their duties.

The State also established the Ministry of Lands, Survey and Town Planning to oversee land use planning and management of towns and cities. The State operates on the old planning law inherited created in 1991 from the former Anambra State. It has yet to re-align itself with the new and more robust National Planning Law passed in 1992 - the Urban and Regional Planning Law. The new law empowers both Anambra State and Nnewi local government to prepare and adopt a range of plans, regional plans, sub-regional, urban, local, and rural plans. For planning administration the law also empowers the Anambra State to establish the 'Planning Board' at the state level and the 'Planning Authority' at the local government levels. Anambra State has not set-up these agencies or prepared and adopted for implementation any of the plans specified in the national planning legislation. The decision to prepare a structure plan for Nnewi must be seen as an opportunity to correct the gaps in legislative and administrative frameworks for planning in the state.

3.4.2 WASTE MANAGEMENT

(i) Solid Wastes

Nnewi faces an enormous problem of waste management: indiscriminate disposal of polyethylene bags (which are not bio-degradable), improper disposal of industrial wastes like battery producers, mechanic workshops, paint and tannery works and uncollected mountains of refuse and the associated problems of air, water and land pollution (Fig. 3.11).

The only official waste disposal site is located at Umudim along the Ichi – Nnewi – Amichi federal highway. In most other cases, communities resolve to burning their waste in the open as there are no incinerators. Illegal refuse dumps abound in the city. A typical refuse dump site stretches for about 500m along the Nnewi – Onitsha road near the Saw Mill market. More than 70% of the drainage channels and gutters are obstructed by refuse and/or topsoil. The sullies from house drains and trade effluent often end up in open channels emitting a gaseous stench and causing an unsightly environment. These wastes often find their way into the ground water system, consequently contaminating domestic water and agricultural land.

FIG 3.11: VIEW OF REFUSE BURNING ON THE OUTSKIRTS OF NNEWI: SHOWING THE NEED FOR PROPER WASTE DISPOSAL SITES.



(ii) Liquid Wastes

As there is no central sewage network in Nnewi, disposal of human waste is done through septic tanks and pit latrines. Private sewage collectors are brought in when the septic tanks are full.

Attempts to address the situation have been ad-hoc, sporadic and fragmented, with attention devoted mostly to addressing the symptoms rather than the root cause of the problem.

(iii) Environmental Pollution

The poor disposal of solid, industrial and human wastes has led to the pollution of ground water. The emission of gases from industries and vehicles has created considerable air pollution especially in the city centre.

3.4.3 EROSION

Erosion is a major environmental problem in Anambra State, with more than 20% of land resources already lost to erosion (Fig 3.12). Table 3.4 shows a long list of identifiable erosion sites in the Planning Area. Nnewi, Utu and Nnobi are among the areas most severely affected by gully erosion and flooding in Anambra State. In Utu and Aзуigbo erosion has led to the collapse and submergence of buildings. The Anambra State Anti-Erosion Committee described the erosion as 'highly critical'.

TABLE 3.4: EROSION SITES IN NNEWI AND SURROUNDING TOWNS

TOWNS	EROSION SITES
Uruagu	100Foot Road in Nkwor Nnewi. Nwankwor Edorji- Mmili Agu Orji Agbo- Area Command. Nwankwor Edorji-Isuawo-Mmili Agu Timber Shed-Area Command- Mmili Agu.
Nnewi	Nnewi North, Azigbo, Amichi, Utu, Ukpor, Ichi, Oraifite Nnobi
Otolo	Old Eke Market, Okpuno-Uru-CPS-Mmili Ele, Okpuno-Okwumbodo-Mmili Ele.
Umudim	Umudim Nkwa- Eme Court. Akammili-St John Catholic Church-Mmili Eze.
Nnewich:	Okpuno Nnewichi-Nnobi. Obiofia Nnewichi-mmili Agu. Ichi-Oraifite. Okamgbo Ichi-ugwu Amakom

Source: Field Survey by Consultant 2008.

Erosion is being experienced in the natural landscapes outside the built-up areas, triggered by quarrying activities because of urban development needs and poor land husbandry arising from family activities. As much as 30-35% of the high lands are eroded. In Ichi, Ukpor, Nnewi and Oraifite, erosion of the top soil has filled-up major stream valleys and polluted sources of natural spring water. Government is yet to devise a specific project that addresses environmental damages by erosion and quarrying activities. The only response has been through the limited rehabilitation projects aimed at halting the advance of gullies by the community.

3.4.4 LOSS OF GENERAL AMENITY

Amenity is used in terms of pleasantness of the place and it stands. There is a lack of harmony in development and general amenity in the planning area, arising from poor enforcement of planning regulations, which has resulted in indiscriminate changes of land use, building without approval, encroachments on open spaces, rights of way and roads with temporary and ramshackle structures and by the informal sector. Street trading is not only a menace to proper development, but compounds the problem of traffic congestion, as hawkers and street-traders scramble for space with their vehicles, motorcycles, hand trucks and pedestrians Fig. 3.13).

The core of Nnewi constitutes a huge planning problem: poor, substandard and congested road networks, decaying and un-maintained centre, abuse of planning regulations, and congested and confusing market stalls needing to be re-planned and organized for effective trading.

3.4.5 CAPACITY GAPS

Competing demands, limited funds, inappropriate tools, ineptitude, and corruption have hampered the operations of government agencies responsible for enforcing environmental standards. Both the State and local governments need capacity not only for adopting plans but for enforcing development control. The following capacity gaps require filling:

- Community compliance with regulations is weak
- Waste management agencies are poorly funded
- Absence of Waste management Plan for the city
- Training and equipment support required by the relevant agencies in implementation of plans, enforcement of development control etc
- Advocacy and capacity building required to formulate and pass the required planning and environmental legislations and bye-laws
- Formulation and implementation of priority projects in solid waste management, erosion prevention and soil conservation and landscape improvement projects.

3.5 TRANSPORTATION AND INFRASTRUCTURAL NETWORKS

The phenomenal physical growth of Nnewi, dating back to 1971 - when the Nigerian civil war ended - is yet to be matched by urban planning that integrates land use with transportation planning. Transportation of people and goods is dominated by the private sector. The roads are heavily congested with mini buses, cars, heavy trucks, heavy haulage trailers, water and petrol tankers, tippers and motorcycles commonly known as 'okada'.

3.5.1 ROAD NETWORKS

The road networks are made up of federal, state and local roads (Fig 3.14).

(i) Federal Roads

Three federal trunk roads traverse the urban core, linking the satellite towns, which include:

1. Ichi – Nnewi – Ozubulu- Okija (Route A6, 22.5km);
2. Oba – Ichi – Nnewi – Amichi – Okigwe {R429 (F112)}, 22.10km
3. Nnewi – Nnobi – Ekwuluobia – Umunze {R433 (F112)}, 19.60km

The federal roads are in poor condition, with the asphalt surfacing material completely eroded in places due to poor maintenance.

(ii) State Roads

FIG 3.13: VIEW OF INFORMAL SECTOR DEVELOPMENT IN NNEWI



View of part of Nkwo Triangle Business area.

There are 9 state roads providing major links between Nnewi and surrounding communities. These include:

1. Nkwozuluogu Oraifite - Nkwor Nnewi /Nkwo- to- Nkwor (9.3km);
2. Oraifite – Uruagu /behind St Mary’s (6.58km);
3. Ichi – Akabo ukwu – Uruagu (4.50km);
4. Nnobi – Nnewi Ichi – Uruagu/Ndi Ojukwu (-6.76km),
5. Nnewi (NITEL)- - Awka Etiti –Ichida (9.72km) ;
6. Laselle –Afor Ukpo 6.5km);
7. Eke Amobi – Igirigi Anaedo roundabout/Ekenedili Chukwu Rd.
8. Awka Etiti – Utuh – Ukpo – Iseke (13.30km); and
9. Nkwor Triangle – Eme Court – Oraifite (9.56km).

(iii) Local Roads

These are the numerous township roads which provide the city’s road networks. But they are the worst roads in any urban area as they are supposed to be maintained by local government which has lagged behind in discharging its functions.

3.5.2 TRANSPORT SERVICES

There is minimal government intervention in the transportation sector, especially in the area of the provision of vehicles, provision of traffic signs and regulators (Lights, zebra crossings, traffic wardens, bus stops, etc) and the enforcement of policies and regulations. Land use and transportation do not have an easy relationship as shown below:

Transportation is characterized by:

1. Little or no relationship between land use and transport provisions
2. On-street trading along major roads and spillover of market activities on adjoining roads on market days causes closure of roads. The roads most affected include Nkwor to Nkwor Rd, Uruagu, Afor Nnobi, Afor Ukpokor and Nkwor Oraifite
3. Encroachment of development on rights of way
4. Recklessness and a willful defiance of traffic regulations, especially by commuter buses, drivers and motorcyclists.

3.5.3 TRAFFIC COUNTS AND ANALYSIS

Traffic counts were taken on Tuesday (22/01/08), Thursday (24/01/08), and Saturday (26/01/08) between 7.30am to 12.00pm and 2.00pm to 7.00pm giving a total of 10 hours every day for each of the three Federal roads. These three days to do the traffic counts were chosen because the volume of traffic represents closely the average number of vehicles and motorcycles (Okada) per day for each road. Tuesdays and Thursdays are generally observed on week days when goods arrive at Nnewi in containers, from Port Harcourt and Lagos.

The results obtained are as indicated in the Tables 3.5 to 3.7 below. The volume of motorcycle traffic on the roads is high: more than double the value of vehicular traffics on all the roads in which traffic counts were undertaken (Fig 3.15).

TABLE 3.5: TRAFFIC COUNTS ON ICHI-NNEWI-OZUBULU ROAD

Date	Period	Total hrs	Cars	Trucks	Buses	Motorcycles
Tuesday	7.30am-12.30pm	5	420	84	494	1,980
22/01/08	2.00pm-7.00pm	5	512	41	521	1,922
Thursday	7.30am-12.30pm	5	416	162	567	2,304
24/01/08	2.00pm-7.00pm	5	398	59	542	2,216
Saturday	7.30am-12.30pm	5	371	70	467	1,815
26/01/08	2.00pm-7.00pm	5	420	32	408	1,971
Total		30	2,537	448	2,999	12,208
Hourly traffic			84.5	13.9	99.9	406.9

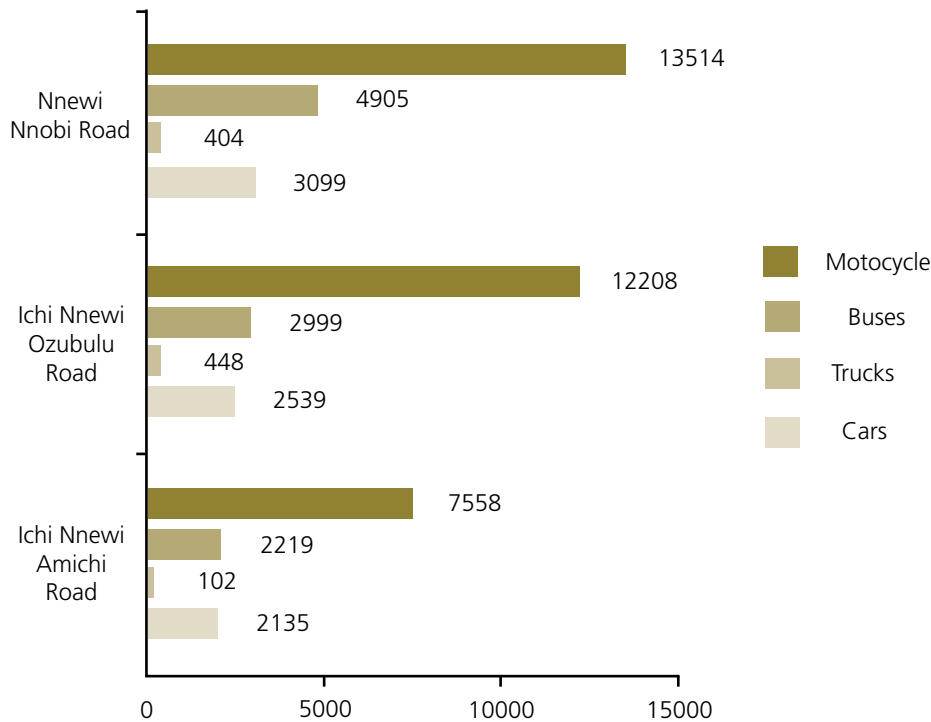
Source: Field Traffic Survey in 2008

TABLE 3.6: TRAFFIC COUNTS ON ICHI-NNEWI-AMICHI ROAD

Date	Period	Total hrs	Cars	Trucks	Buses	Motorcycles
Tuesday	7.30am-12.30pm	5	319	21	361	1,480
22/01/08	2.00pm-7.00pm	5	360	14	383	1,321
Thursday	7.30am-12.30pm	5	381	32	401	1,704
24/01/08	2.00pm-7.00pm	5	402	18	427	
Saturday	7.30am-12.30pm	5	313	12	319	1,642
26/01/08	2.00pm-7.00pm	5	360	5	328	1,420
Total		30	2,135	102	2,219	7,558
Hourly traffic			71.1	3.4	74	251.7

Source: Field Traffic Survey in 2008

FIG 3.15: VOLUME OF TRAFFIC COUNTS ON SELECTED ROADS IN NNEWI



3.6 BASIC URBAN SERVICES

The provision of basic urban services is seen by communities in the planning area as critical to their development and welfare. However, the communities were not happy with the low provisions of these services. Overall on a 1 – 10 point rating, the community scored the existing provision of infrastructure and services less than average.

3.6.1 WATER

Water supply at an average of 70gallons (gls.) per capita - which is required for the planning area - has not been achieved. Residents are dependant on commercial tankers and private boreholes for their water supplies. Water from these sources has not undergone standardized purification processes.

Although the installed capacity of overhead tanks at Uruagu, Otolu and Ozubulu is capable of delivering an output of 1, 350,000 gls./day, it cannot meet the demand of the people, due to population explosion and

a host of other problems. Some of these include use of obsolete water supply pipes for distribution which can no longer withstand the water pressure, loss of pressure due to faulty and burst pipes, and power outages which make pumping of water to overhead tanks impossible. Other problems relating to power cuts are due to non-payment of electricity bills, low morale of staff due to non-payment of salary and poor management.

The capacity of the State Water Corporation needs to be strengthened as well as the need to match water supplies with population growth and distribution in land use planning. This is important in that in the people living in new developments will be serviced with water with all considerations duly articulated at the land use planning and developmental stages.

3.6.2 POWER SUPPLY

The Power Holding Company of Nigeria - responsible for supplying electric power to the state - faces several operational and management challenges like the Water Board. Despite the relatively high population and

the presence of many manufacturing industries in the planning area, the power supply capacity is inadequate. The area is serviced by only one 33KV supply line from Onitsha, which also supplies power to satellite towns of Oba, Ojoto and Ichi.

Energy costs affect the cost of goods and services, consequently making them inaccessible to the poor. Other forms of energy, like kerosene and domestic cooking gas, are expensive and not readily available.

The electricity supply in the area is erratic and it accounts for the rise and widespread use of private generators for domestic, industrial and commercial purposes. Addressing the power supply need of the people is critical for achieving economic growth and social wellbeing.

3.6.3 EDUCATION

Nnewi has 190 public primary schools, 13 junior secondary schools, 18 senior secondary schools, one women's vocational center, and one university (a teaching hospital). In addition, there are a large number of private primary, secondary and vocational centres.

Education was once a thriving social service and a reliable source of income. Between 2000 and 2003 the sector experienced a down turn, devastated by political intrigue and abolition of all private schools, Government first took over private schools by private entities. It is both taking over and abolishing at that time.³ In an effort to rectify the fall-out between government and private investors in education, the government relinquished ownership of some key schools to their former owners. Some communities undertook mini projects to improve the facilities and services in their schools through the Parent Teachers Association.

The education sector can be characterized by inadequate provision of primary and secondary schools, with an uneven distribution in the planning area. The infrastructure in many of the schools is in extremely poor condition. In the satellite communities, the number of teachers has dropped thus widening the teacher:student ratio.

Male enrolment in secondary and primary schools has dropped, especially at the secondary school level, when compared with the figure for women. An increasing number of boys are entering the job market as trainee artisans and sales' boys.

Generally, women, especially those from Nnewi, are well-educated, assertive and play prominent roles in society, contributing to governance, public service and community development. Nnewi has highly educated women with university degree qualifications, many residing outside the city.

3.6.4 HEALTH

Nnewi has a number of good public and private hospitals and other health institutions. Typical among these are Ikedife Specialist Hospital, which is among the oldest and most equipped private hospital in and around Nnewi. Others include the Nnamdi Azikiwe Teaching Hospital (temporary and permanent sites), Ebenator Hospital, Okolo Memorial Hospital, Nnaemeka Hospital and Maternity, Chisom Hospital, Life Foundation Hospital and Maternity, Chimobi Hospital and Maternity etc.

There are seven private, and one General Hospital in Nnewi. The list of other general hospitals in the Planning area include the ones at Ichi, Oraifite, Ozubulu, Nnobi, Amichi and Awka-Etiti. Nnewi General Hospital has been upgraded to a teaching hospital by Nnamdi Azikiwe University. With the exception of Awka Etiti, Azigbo, Ukpok and Utuh, there are general hospitals and basic health centers in all the surrounding communities. These general hospitals serve not only Nnewi urban but also those from surrounding settlements. There are also a number of other private clinics, which serve the population.

Current provisions of health facilities are not sufficient to meet the needs of the people in terms of numbers, quality of service and distribution in the town for accessibility. There is an apparent acute shortage of hospital facilities and equipments, qualified doctors and supporting staff. Most of these hospitals, except Ikedife Specialist Hospital and Teaching Hospital, are in single building premises, with no scope for expansion. The cost of health is prohibitive and beyond the reach of many citizens who are forced to use the services of alternative health providers, like traditional healers and pharmacists. In most of these health centres facilities for emergency services are poor, while medical waste is not properly handled. Most of these hospitals are in remote locations.

3.6.5 EFFECTS OF POOR BASIC URBAN SERVICES PROVISION

A lack of basic services has had a devastating effect on people, particularly on women. It has meant a loss of man-hours in search of water, waste of resources in providing one's own water, electricity, and security and health services. The burden of looking for water and taking children to school in places far away from neighbourhoods weighs more on women than men.

3.7 LOCAL ECONOMIC BASE

The economic base of Nnewi is strong. It derives its income from the industrial, commercial establishments and informal activities, and less from agriculture. Generally, over the last decade, both industrial production and commercial activities have been on the rise.

3.7.1 INDUSTRY

Nnewi is home to several industries with local, national and international markets, although its industrial strength is second to that of Onitsha (Table 3.8 and Fig 3.16). These industries include:

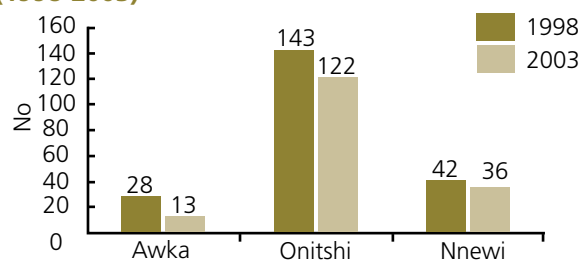
1. Ibetto Group of Companies manufacturing break pads and linings and assembling motorcycle and sale of spare parts
2. Cutix Cables plc manufacturing cutix wires and other electrical accessories
3. Omatha Holdings assembling motor and motorcycle spare parts, rice processing, and production of water in sachets
4. Louis Cater Industries – assemble motorcycle spare parts, manufacturing sachet water, hair attachments and plastics
5. Isaho Industry – Vehicle Assembling
6. Edison Industries – manufacturer of brake pads and linings
7. Innoson Industries: assemblage and distribution of motorcycle, production of motorcycle parts.

TABLE 3.8: INDUSTRIAL ESTABLISHMENT IN ANAMBRA STATE BY MAJOR TOWNS 1998-2003

Locations	1998	2003
Awka	28	13
Onitsha	143	122
Nnewi	42	36

Source: Anambra State (2007). ANSEEDS

FIG. 3.16: INDUSTRIAL ESTABLISHMENT IN NNEWI COMPARED TO OTHER CENTRES IN THE STATE (1998-2003)



3.7.2 COMMERCE

With regard to commerce, Nkwo Nnewi has grown from a traditional market to become a major regional market, attracting people from various parts of the South-East and other parts of Nigeria, notably the South-West and South-South. There are more than six other daily markets, which specialize in the sale of various social goods and services e.g. Electronic Market, Electrical Dealers Market, Timber Market, and Building Materials Market.

3.7.3 AGRICULTURE

In the satellite communities, there has been growth in the agricultural sector: in particular in palm produce and foodstuffs. However, high public transportation costs, bad roads and lack of financial incentives have led to a fall in other agricultural produce.



3.7.4 THE INFORMAL SECTOR

Nnewi boasts a large informal sector, made-up mainly of artisans, petty traders, casual workers and craftsman. Respondents estimate between 70% and 80% of people are in the informal sector. Of this figure, the male female breakdown is 40% male and 60% female. This is due largely to the fact that between 2000 and 2003, political issues caused a halt on payment of salaries forcing many people into the informal sector.

For those in informal trade or running a small business, local government has been known to slow down business by enforcing the payment of rates and charges without the provision of support services. High rents, poor financial support and local government charges, have sometimes forced people to shop sharing - a system by which 2-3 retailers share a premises, hawking or street trading.

The informal sector is becoming increasingly organized, forming occupational groups and drawing up regulations and operational guidelines to protect themselves from police harrasment and exploitation by their temporary employers. They often gather at strategic points in the city where their services are needed.

3.7.5 POVERTY AND UNEMPLOYMENT

Nnewi's strategic role as a centre of commerce, industry and technology, it also provides ample opportunity for employment in these sectors thus attracting people from the rural areas.

According to local government sources, Nnewi has an unemployment rate of about 40%, mostly youths between the ages of 18 and 30 years. This is due to the fact that Nnewi is not an administrative city. These unemployed youths find solace in the informal sector.

The poor and unemployed do not have access to loans and government employment schemes. The Federal Government provides Small Scale Enterprises loans to women through the Ministry of Women Affairs. Those surveyed complained that assistance meant for them was being diverted to the rich who use fictitious names.

3.7.6 DIRECT FOREIGN TRANSFER

A lot of capital flows into the town on a daily basis because of the town's industrial activities. The area enjoys a large influx of funds from the Diaspora. These resources could be re-channeled into financing projects in the various communities.

3.8 HERITAGE

Nnewi has a rich cultural heritage dating back to the 11th century AD. Culture plays a dominant role in the community. National policies exist for the preservation of cultural sites but tradition determines the operation and maintenance of these sites. The heritage of Nnewi is derived from the rich architecture of their Palaces and the importance attached to traditional religion and cultural practices.

The city's heritage sites are made up of palaces, folklores, shrines and historical events and practices. These include Nkwo Nnewi, Igwe's Palace, Agbo-edo traditional shrine, Nkwo Triangle Cultural Ground, Igwe Orizu Palace, Agbo – Edo shrine, Agbo – Ezemewi shrine, Agba – Alo shrine, Okwu – Uzuokpe Shrine, Okwuani Nnewi shrine, Ogwugwu – Ezekwuabo Okwu-Ele, Okwu – Akpu, Isi Ubu Spring.

Other heritage sites are located in the surrounding communities, including Chief Atuchukwu's Compound, where the peace accord that ended the Nigerian Civil war was signed; the Odida Amichi, a shrine that has a reservoir of ancient trees that have become extinct in Igbo land. The conservation and maintenance of cultural sites are usually undertaken by the community, not government.

3.9 SWOT ANALYSIS

The SWOT analysis undertaken for the seven thematic focuses of RUSPS is contained in Table 3.9. The priority projects identified are also contained against each of the thematic subjects.



Typical shop in Nkwo Nnewi Main Market along Bank Road.

TABLE 3.9: SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS	PRIORITY PROJECT
		GOVERNANCE		
Presence of community willing to participate in governance.	Inadequate funding of Local Governments.	Scope for improvement through the implementation of ANIDS strategies.	Business as usual attitude which supports existing over centralization of power, roles and resources has limited the performance of LGs.	Enact enabling State planning laws, policies and land use standards and institution for urban governance.
Governance structures exist at state, local and community levels.	Inadequate staffing of LGs, ASUDEB, Zonal offices and over-staffing of the Ministry.	Willingness of the public, highly educated workers, retired professionals, CBOs, NGOs, ready to engage in participatory planning.	Lack of funds and poor budgetary allocation and resource mobilization.	Establish and promote participatory planning and budgeting
High regard for cultural norms and traditional rulers.	Agencies lacked understanding of and non-adoption of elements of good urban governance, e.g. transparency and accountability participation, etc.	Government's several new initiatives to improve governance and promote good governance.	Absence of institutional and policy frameworks for governance.	Implement sensitization programme and value orientation.
Existence of New Anambra State Land Information Management System to ensure faster and easier access to land.	Over centralization of decision and resources at state level.	Onitsha Stock Exchange as an avenue for resource mobilization for project.	Lack of political will and continuity.	Promote Safer Cities programme for Nnewi.
	Lack of data and poor record keeping.		Community unrest arising from introducing new initiatives such as slum upgrading and clearance.	New Institutional framework for implementing plan
	Poor project implementation and lack of continuity.		Corruption in government at all levels.	Establish Programme Management Committees (Policy and Technical Committee)
	Traditional norms discriminating against women.			Institute a new revenue generation and accounting system.
	Inadequate administrative framework for urban governance.			Strengthen institutional capacity for promoting good urban governance.
	High crime and insecurity.			

TABLE 3.9: SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS	PRIORITY PROJECT
		SHELTER AND SLUMS		
Existence of National policies and legislation for housing and urban development.	No formal master plan for Nnewi and its surrounding communities and weak development control.	Exploring opportunities in ANIDS programme Structure plan for slum upgrading.	High land prices, high building costs and insecurity.	Upgrade inner slums covering 72km ² , and improve the lives of 50% of the population of Nnewi living in slums by ensuring adequate views to safe water and sanitation.
Existence of legal and cultural system of land ownership.	Absence of state planning laws policies	Willingness of local CBOs and NGOs to improve on their living environment.	Possible resistance to rezoning.	Develop approved Housing Estates
Existence of Ad-hoc approach to land use planning that can be built upon to achieve comprehensive approach.	Non-adoption of comprehensive planning.	Backlog of approved housing estates waiting to be developed.	High land coverage of slum of 72km ² and 51 % of urban population living without access to water and sanitation.	Strategic plan for suburban housing expansion and infrastructure provision.
	Non proper approach to slum prevention, land ownership which discriminate against women and non-Nigerians.		Unwillingness of Local CBOs and NGOs to improve on their living environment.	Passage of relevant legislation and policies and land use standards.
	High land speculation.		Resistance to slum upgrading.	Reform land titling to ensure access to land by the poor, women and non-indigenes.
	Lack of adequate funding from internal and less usage of external sources of funding.		Lack of resources.	Capacity building. Resource mobilization for projects.

TABLE 3.9: SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS	PRIORITY PROJECT
GENDER				
National and international laws and commitments (CEDAW and National Policy) exist on gender and development.	Cultural restrictions on women limiting the effectiveness of women in development.	Building on the inclusive approach adopted for LEEDS, ANSEEDS and Urban structure plan.	Resistance to change and continued adoption of harmful traditional practices.	Adoption of pro-poor approach to land tenure.
State and Local agencies set-up for promoting gender issues.	Lack of access to land and finance for women.	Exploring opportunities in ANIDS programme Structure plan for slum upgrading.	Lack of funds to implement projects and programmes.	Promote gender budgeting.
State and local development strategies (ANSEEDS, LEEDS) encourage promotion of gender in development.	Non-inclusive approach to land use planning and budgeting.	Willingness of community, CBOs and NGOs to be involved in their development.	Prevailing male dominated culture and tradition.	Capacity building.
Existence of educated women, women groups, Community, NGOs and CBOs contributing to development.	Gender imbalance tilting towards men. High child and maternal mortality. Non-existence of gender disaggregated data. Lack of equitable distribution of basic services which inhibit easy access of women and children to school, water supply and health facilities.		HIV/AIDS stigma and related negative attitude	Resource mobilization for projects.

TABLE 3.9: SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS	PRIORITY PROJECT
BASIC SERVICES				
Agencies for provision of school, health, water, sanitation, roads and electricity exist.	Poor maintenance of infrastructure.	The Structure Plan provides an enormous opportunity to correct imbalance in the provision of basic services	Resistance to change.	Construct new schools, health, and water and sanitation facilities.
Community, NGOs and private sector involved in the limited provision of school, health and sanitation services.	Inadequate provision for and inequitable distribution of schools and health centres.	Promotion of public-private partnership in provision of water, health and sanitation.	Lack of political will.	Rehabilitate existing school, health, water and sanitation facilities.
Government's commitment to upgrade basic services.	Poor road networks, inadequate design and construction standards and poor maintenance.	Donor's willingness to provide basic services such as water, health and sanitation.	Lack of resources.	Redesign and rehabilitate old roads.
	Epileptic power supply and poor distribution.			Design and construct new roads to high standard and maintenance.
	Poor educational standard and high figure for drop outs.			Rehabilitate and upgrade old electricity facilities and provide new infrastructure in the town.
	Poor funding of basic services.			Capacity building.
	Capacity gaps of government agencies.			Resource mobilization.
ENVIRONMENT				
Existence of National Policy and legislation on environment.	Weak institutional capacity.	Promote public-private partnerships for resource mobilization and environmental management.	Lack of information and coordination within the three tiers of government.	Improve environmental planning management capacity.
Existence of State agencies for environment and land use planning.	Uncoordinated institutional working arrangements between federal and state and between State and local governments	Utilize Ecological fund and donor resources to develop and implement environmental projects.	Lack of capacity at the local government level.	Establish local urban forum for improved environmental governance.
Federal Government provides funding for environmental projects through Ecological Fund.	Inadequate disposal of solid and liquid wastes.		Lack of inadequate resources for environmental projects.	Develop and implement urban landscape improvement
	Environmental pollution.		Lack of preparedness for managing environmental disasters.	Implement solid waste management plan for Nnewi.

TABLE 3.9: SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS	PRIORITY PROJECT
	ENVIRONMENT			
	Poor urban and sterile environment.		Lack of resources.	Capacity building.
	Inadequate and unqualified staff.			Resource mobilization for projects.
	Poor promotion of partnership between community and private sector.			
	Poor funding of environmental issues.			
	Lack of equipment.			
	Low public awareness of environmental issues.			
LOCAL ECONOMIC DEVELOPMENT				
Thriving industrial, commercial establishment.	Large informal sector attracting 60-80% of youth.	Some donor agencies notably UN-HABITAT, UNICEF, EU, UNDP are active in the planning area.	Inadequate power supply.	Develop New Industrial estate for Nnewi.
Government commitment to promoting industrial and commercial activities.	High enterprising community.	Direct Foreign Transfer that can be used for projects.	Effect of globalization	Rehabilitate Old Markets and establish new ones.
On going programme to assist the unemployed and SMIS and SMEs.	Unfriendly government regulation, on location and multiple taxation etc	Government commitment to promote Nnewi as the Japan of Africa.	Resistance to re-locate industries to new estates.	Develop Business Parks small and medium enterprises
	Lack of access to funds and valuable information.	The structure plan provides an opportunity a standard industrial estate for Nnewi.	Lack of resources.	Improve power supply
	Industries located among residential areas.			Link Nnewi to the National Rail lines.
				Capacity building.
				Resource mobilization for projects.

TABLE 3.9: SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS	PRIORITY PROJECT
HERITAGE				
Existence of government policy on culture and heritage.	Poor development and maintenance of heritage sites.	High potential for developing eco-tourism.	Effect of modernization on culture.	Rehabilitation and conservation of heritage sites include landscape improvement.
Nnewi is rich in places, shrines and folklore.			Lack of resources.	Promote the heritage sites for tourism.
Community committed to preservation of cultural events.				Capacity building. Resource mobilization.

4 ENVISIONING THE FUTURE



4.1 PREMABLE

One of the stated purposes of the Structure Plan is to achieve the goals of Anambra State Economic Empowerment and Development Strategy, Local Economic Empowerment and Development Strategy, the HABITAT Agenda, the Millennium Development Goals and the Vision 2020 of the Federal Government.

Envisioning the city of Nnewi and its environs, several problems had to be resolved quickly. First, there was a need to capture the vision of the state, local governments and the community on which the structure plan would be based. Second, there was a need to formulate this vision to reflect the peculiarities of Nnewi and its environs.

4.1.1 THE VISION OF ANAMBRA STATE

The vision of the State was captured in the goals of Anambra State Economic Empowerment and Development Strategy, which was based on the Millennium Development Goals. The goal of Anambra State Economic Empowerment and Development Strategy is:

To reduce poverty and unemployment by creating wealth necessarily to vastly improve the living standard of Anambrians.

To achieve the Anambra State Economic Empowerment and Development Strategy a range of policies, strategies and achievable targets were pinpointed for the state in critical sectors of the economy - agriculture, commerce and industry, education, health, water supply, environment and infrastructure including housing as well the promotion of other reforms of the public service. The Anambra State Economic Empowerment and Development Strategy identified development challenges, bordering on inadequate land use and environmental planning and management, accounting for non-function and liveable human settlements, which underscore the need for a major planning exercise being executed for the three largest cities in the state (namely Onitsha, Nnewi and Awka).

4.1.2 THE VISIONS OF NNEWI'S LOCAL GOVERNMENT:

The visions of local government has been to capture the Local Economic Empowerment and Development Strategy. For instance, the goal of Nnewi South is:

'To achieve the set national development objectives and the Millennium Development Goals at the local government level". The objectives include the creation of wealth, employment, generation, and poverty reduction, the development of economic and social infrastructures in the Local government area and institutionalization of values orientation, accountability, transparency and the due process. This is with the view to increasing the general standard of living of the people, increasing productivity and improving service delivery'.

This goal emphasizes poverty reduction, good governance (such as transparency and efficiency in service delivery), promotion of economic growth and improvement in infrastructure towards improving the living standards of people.

The vision of Nnewi North is aimed at:

'Reducing poverty, creating/generating wealth, improving the living standards of the population of the council area or host communities, encouraging development policies generated by the host communities, encouraging public participation in government business with direct impact on the living standards of the people of the host communities.'

This vision emphasises poverty reduction with an emphasis on local participation and democracy in the attainment of the goals of Local Economic Empowerment and Development Strategy for Nnewi North.

To sum up, both Anambra State Economic Empowerment and Development Strategy and the Local Economic Empowerment and Development Strategy for Nnewi North and South, emphasize poverty reduction and the achievement of the Millennium Development Goals in the State. By implication, since the Goals touch on the Habitat Agenda, the government is committed to the achievement of the Habitat Agenda.

4.2 THE VISION OF NNEWI STRUCTURE PLAN

Deriving from the above reviews, the VISION of Nnewi is:

To develop Nnewi as the foremost efficient, functional, livable, inclusive and sustainable industrial and commercial centre in Anambra State.

Specifically, the vision is:

4.3 PLANNING GOALS AND OBJECTIVES

4.3.1 GOALS:

The needs of the community formed the bedrock of the goals defined in the Anambra State Economic Empowerment and Development Strategy and the Local Economic Empowerment and Development Strategy documents for Nnewi North and South local governments. These documents emphasize the promotion of economic growth, maximizing the use of new and existing services and facilities and achieving an urban environment where it is convenient to live, work and play.

It is recognized that the present concern for promoting commerce and industry in Nnewi will continue to play a dominant role in the future. Many other surrounding communities have relied on Nnewi for their own economic growth. It is necessary to accord importance to these activities as vehicles for creating jobs, and tackling poverty.

The goals of the Structure Plan to be met by 2020 include:

To make significant contributions to achieving all the goals of Anambra State Economic Empowerment and Development Strategy, Local Economic Empowerment and Development Strategy, the HABITAT Agenda, the Millennium Development Goals for poverty reduction, universal access to education, reduction in child and maternal death, halting the incidence of HIV/AIDS, tuberculosis and malaria, environmental sustainability and global partnership for development as they relate to Nnewi and surrounding towns

To provide a tool/framework for promoting sound and equitable economic growth, welfare of the people, good governance, environmental sustainability, infrastructural provisions and capacity building

To promote an integrated approach to sustainable development by ensuring that environmental and human settlements issues are integrated into economic and social policies and programmes and ensuring the participation of all stakeholders in the implementation of the proposals and recommendations of the Structure Plan

1. To mobilize resources for the realization of the different proposals and recommendations of the Plan.

4.3.2 OBJECTIVES:

All the above goals are Millennium Development Goals-based all must be translated to the needs of Nnewi and its environs. If the objectives of the Structure Plan are to be attainable and properly monitored they must be specific, measurable, attainable, realistic and time-bound (i. e. SMART). It was necessary to define the objectives of the plan in relation to the set targets of the Goals and the use of the targets and indicators (Box 4.1).

The objectives of the Structure Plan include the following:

- (i) **Contribute to the eradication of extreme poverty by 2015 for 50% of the residents of Nnewi who are poor, by promoting rapid and economic growth, job creation and sustainable livelihoods in Nnewi by:** (a) reserving and ensuring development of lands for industrial, commercial and business uses and development (b) re-developing the Central Business District area of Nnewi to accommodate small, medium and large scale commercial activities (c) reserving land for the development of business parks, activity centres, mechanic village, warehouses, markets etc (d) carrying out road improvements and establishing mass transit systems for the efficient movement of people, goods and services (e) linking Nnewi with national rail lines for the efficient movement of people, goods and services.
- (ii) **Contribute to achieving universal access to education for both men and women in Nnewi, to achieve 100% enrollment for boys and girls, raise the adult literacy level to 80% by 2015 by** (a) reserving lands for primary, secondary and tertiary education as well vocational centres in accessible locations and related to population distribution



BOX 4.1: MDGS AND TARGETS

Goal 1: Eradicate extreme poverty.

Target 1: Halve between 1990 and 2015 the number of people whose income is less than \$1 a day.

Target 2: Halve between 1990 and 2015, the number of people who suffer from hunger.

Goal 2: Achieve universal primary education.

Target 3: Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete primary schooling.

Goal 3: Promote gender equality and empower women.

Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005 and in all levels of education no later than 2015.

Goal 4: Reduce child mortality.

Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.

Goal 5: Improve maternal health.

Target 6: Reduce by three-quarters, between 1990 and 2015 the maternal mortality rate.

Goal 6: Combat HIV/AIDS among 15-24 year old women.

Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS.

Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and tuberculosis.

Goal 7: Environmental sustainability.

Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental loss.

Target 10: Halve by 2015, the number of people without sustainable access to safe drinking water.

Target 11: Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers.

Target 30: Number of population with sustainable access to improved water sources.

Target 31: Number of urban population with access to improved housing.

Goal 8: Develop global partnership for development.

Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and non-trading and financial system.

Target 13: Address the special needs of the Least Developed Countries (includes tariff and quota free access for LDC's - Least Developed Countries exports, enhanced programme for debt relief for HIPC - Highly Indebted and Poor Countries and cancellation of official bilateral debt and more generous ODA Official Assistance for committed to poverty reduction):
13.1: Per capital overseas development assistance to Nigeria.
13.2: Debt service as a percentage of exported goods and services.

Target 14: Address the special needs of land lock countries, small island developing states.

Target 15: Deal comprehensively with the problems of developing countries through national and international measures in order to make debt sustainable in the long term.

Target 16: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth.

Target 17: In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries.

Target 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communication.

to address imbalance in existing provisions and the provisions and management of old and new facilities to high standard to accommodate population growth.

(iii) **Promote gender equality and empower women** by promoting inclusive and participatory approaches to development and ensuring access to land and secure tenure for all.

(iv) **Contribute by 2015 to the reduction by half high maternal and child mortality rates, and halt/reverse the high incidences of HIV/AIDS and malaria in Nnewi and environs** by: (a) reserving lands for providing additional health facilities in accessible locations to address imbalances in existing provisions and to provide new ones to accommodate population growth (b) ensuring orderly urban development by enforcing land use standards and controls for buildings, roads, drainages, sanitation, air circulation, pollution control etc to achieve safe and healthy environment.

(v) **Achieve environmental sustainability by 2020 in Nnewi and satellite towns** by (a) improving the lives of all the people living in slums of Nnewi namely Nkwa, Ogbe Hausa and 100Foot and those living in suburban slums through upgrading these slums to provide access to water, sanitation, education, communal facilities, access roads drainages and improved housing and general environment (b) implementing action plans for erosion control and protection of fertile agricultural land in the plan area (c) reducing the incidences of environmental pollution by reserving lands for safe disposal of wastes, separation of industries from residential compounds (d) conserving the heritage of Nnewi by preserving and rehabilitating historic and cultural building and landscapes (e) improving overall amenity in the city through beautification including tree planting, paving of walkways, providing roadside drains, street lighting (f) enforcing planning standards and control of development in relation to set-back, air-space and ventilation towards achieving a healthy and safe living environment.

(vi) **Promote social interaction and a fulfilled communal life for the residents of Nnewi and environs** through the provisions and equitable distribution of community facilities such as town halls, cinemas, children playground, public parks and gardens to meet the recreational needs of the people.

(vii) **Promote good governance of Nnewi** through provision of the necessary legal, policy and land use standards and institutional framework for

efficient administration of planning in the State, Nnewi and environs.

(viii) Promote national and global partnerships for the development of Nnewi by public-private partnerships, and building on the current effort by increasing international cooperation attracting funds for development from multi-lateral and bi-lateral organizations to complement the effort of the State and local governments in financing the different recommendations and proposals of the Structure Plan.

(ix) Capacity building through training and raising awareness of key staff and equipping relevant government agencies at State and local government levels (including Office of Lands, Survey and Town Planning, Ministry of Town Planning, Works and Housing, ANSEPA, ASUDEB (XXX PLEASE SPELL OUT BOTH ACRONYMS. THANKS. EDITOR.) as well as relevant agencies), the community and the civil society organizations in critical areas of capacity gaps notably to effectively implement, monitor, evaluate and coordinate the Structure Plan.

4.4 POPULATION AND LAND USE PROJECTIONS

Population projection is central to long-range land use planning, as all socio-economic man influence land use demands. In particular, housing provision is dictated by population size.

The Plan's assumption is that the existing population living in the planning area will grow through a natural increase and from migration.

The plan also assumes that the income distribution structure will remain unchanged. The Gross Domestic Product will also increase at the same rate as in the past ten years, enabling the level of income to increase at the same rate.

The plan is based on the past growth trend of 4.5% per annum achieved between (1991-2006). Using 5% annual growth rate the population of Nnewi and its environs is expected to rise to approximately 750,000 people by the year 2027¹. This projection is based on the composite population of Nnewi North and South local government. If the population of other local governments in the planning area is taken into account the figure would be about 2.6 million by 2027.

Based on the population projections, the land required for commercial use was estimated on the basis of per capita space standards, applied to the population, deriving from facility space requirements. Projections for industrial land use are not easy for many reasons. The industrial sector is the least integrated study of all urban economic activities. Estimates of land requirements are usually based on the fact that the share of the Gross Domestic Product contributed by manufacturing is expected to grow at the same rate throughout the planning period as it has in the past years. Standards for land for industries can also be obtained by comparing existing patterns based on facilities provided and those needed for manufacturing.

Land needed for transportation by using the conventional 20% additional land for circulation and 15% additional for social infrastructure is used as the operational guide.

With this projection, it is envisaged that planning for the population increase will have grown more than four times. The State, local governments and city authorities need to do more to fill the existing gaps in the provision of essential urban infrastructure and to meet the additional needs that will arise from the anticipated population growth. This will call for a greater commitment to the sustainable management of existing resources throughout the Plan period (Table 4.1 to 4.3).

¹ The formula $A = P(1 + r)^n$ has been used for computation where
A = Projected Population;
P = Population in the base year;
n = number of years

r = rate of growth per annum
The formula becomes $A = 450,000(1 + 5/100)^{37}$
 $A = 450,000(1.05)^{37}$ which gives a value of 746,633.124 approximated to 750,000.

TABLE 4.1: POPULATION PROJECTION 1991-2027

Year	Population
1991	268,500
2006	392,000
2010	425,000
2015	500,000
2020	580,000
2025	650,000
2027	750,000

TABLE 4.2: PROJECTIONS FOR WATER REQUIREMENT FOR NNEWI URBAN BY 2027

Year	Population	Daily qty. of water required (glns.)	Daily qty of water from water corporation (glns.)	Difference gallons
1991	121,065	8,474,550	1,350,000 approx	-7,125,550
2007	264,270	18,490,900	450,000	-18,048,900
2027	701,187	49,083,090	49,083,090	0

Source: Field survey, 2008.

TABLE 4.3: PROPOSED EDUCATIONAL FACILITIES

Educational facilities	No.	2006 Population	Facilities per population	2027 projected Population	Facilities required Projected population	New facilities to be provided
Primary School	190	432000	2274	750000	330	140
Junior Secondary	13	432000	33231	750000	23	10
Senior Secondary	18	432000	24000	750000	31	13

4.5 URBAN FORM FOR NNEWI

Employment and housing densities in Nnewi indicate that the whole area will be in intensive use for urban development by the year 2028. Nnewi, Ichi, Oraifite, Ozubulu, Utuh, Azigbo, Amichi, Awka-Etiti, Nnobi and Ukpore are the existing neighborhoods in which rapid urbanization is taking place and is expected to continue in the future. The towns of Uke, Alor, Nnokwa and Ideani which are on a prominent transportation axis are under-developed with low density (village settlement pattern) and likely to experience less rapid urbanization. In view of this, four different urban scenarios have been considered:

URBAN FORM 1 involves the continued use and expansion of the existing Central Business District, involving an overhaul of existing infrastructure and the enforcement of regulations and bye-laws. The option also calls for an integrated circulation development. Though simple, this option does not address fundamental structural deficiencies and gives no room for expansion.

URBAN FORM 2 involves relocation of existing commercial, trading and business activities within the Nkwor Nnewi complex and relocated to the periphery. The central area would be redesigned for residential and socio-cultural activities. Although this would result in the decongestion of the city centre, it would require the investment of huge capital. It would hamper the economic pace of the city with the reorganization and dislodgement of existing businesses.

URBAN FORM 3 involves the creation of multiple activity centres. These centres would be self-supporting with employment opportunities. This option would result in the decentralization of the existing Central Business District, notably Nkwor Triangle and Nkwor Nnewi Market and the growth of multiple activity areas. It would also encourage employment in areas presently deficient in job opportunities and achieve a balance in the growth of the city.

URBAN FORM 4 considers bifocal development. This would involve the creation of two main focal points of activity and the redistribution of activities and services. The old Central Business District would be de-emphasized while growth would be directed to the new Business District.

Bearing in mind the indices listed above and the findings of the study, Form 3 is recommended. It involves the creation of several activity centres that meet the needs of residents living at a distance from the city centre. This proposal would permit short and long term strategizing. It would also permit a gradual relocation of activities and limit the socio-economic impact on the various communities.

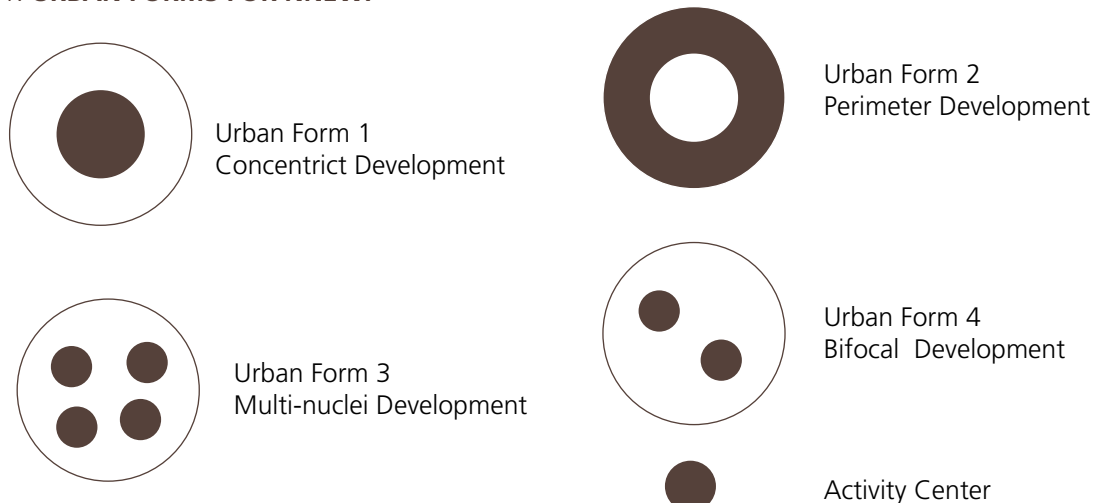
As shown in the following figures each with the same density has been examined. Each circle corresponds to the delineated area of the new city and it is assumed to contain a population by 2027 of an estimated 750,000 people. These densities are likely to be distributed within the present existing and rapidly urbanizing neighborhoods.

Each plan (urban form) is evaluated in terms of the proposed land use and transportation relationships. The whole area is divided into zones corresponding to existing neighborhoods. Populations and employment are designated to each zone. Work trip patterns which respect the goals of freedom of choice of work place and residence are translated into necessary trips expected to take place during peak periods of work travel.

The Plan for Nnewi and its environs took into consideration certain indices which may have direct or indirect influence on its future form. These included:

- National and regional policies regarding urban development
- The focus and growth of sister cities
- Regional demographic and socio – cultural trends
- Economic base and degree of public / private investment
- Availability of natural resources.

FIG 4.1: URBAN FORMS FOR NNEWI



5 LAND USE PROPOSALS



Foodstuff trading activities at Nwafor Uruagu Market, Nnewi.

5.1 LAND USE PLANNING AND ALLOCATION STRATEGIES

Land use planning and design of the Structure Plan was hinged on adopting an integrated and participatory approach to land use allocation and relating this to the projected population growth. It also entailed advancing broad land use development and control measures for architectural design and redesign, development redevelopment and maintenance for priority projects identified for the thematic areas.

Fig 5.1 shows the land use proposals for Nnewi and its environs up to 2007. The proposals discussed the different land use proposals along the broad land use groups.

5.2 RESIDENTIAL LAND USE:

Housing provision has a fourfold strategy: (i) to improve the existing stock by slum upgrading (ii) to develop land area approved for housing in the existing schemes to the highest standard (iii) to allocate land to new housing areas to cater for the needs of a growing population (iv) to enforce development control measures to check illegal conversions of residential buildings and

surrounding spaces into shops or offices.

The land use proposals for housing comprise the following:

- (i) Upgrading inner and suburban slums in Nnewi and to improve the lives of 50% of the population by ensuring adequate access to safe water and sanitation. The inner slums include (i) the area bordered by the inner Orbital Roads: the Nkwor Market zone, the Nkwor Triangle, NITEL/Ikedife/Eke Amobi/Nnewi-Amich Road to Traffic Light/Ozubulu-Nnewi road axis and Nnewi the High School/Nnobi/Nkwor Triangle/Nnobi-Oba Old Road/Bank Road-Nnewi High School and Bank Road/ St Mary Junction/New Nnewi-Oba Road/Eke Uruagu axis (ii) The Igwe Orizu Eke Amaobi market and Nwafor Uruagu market. The upgrading of these area would include improving circulation, transportation, environmental quality and carrying out landscape planning and management.
- (ii) Develop approved housing estates, as shown Table 5.1.
- (iii) Planned Housing Expansion and infrastructure provision for the allocation of additional lands for low, medium and high density housing

TABLE 5.1: EXISTING LAYOUTS IN NNEWI URBAN

S/N	Name of Layout	Location	Time of Approval	Status as at Date
1	Obaa Layout	Umuobaa, Umudimkwa – Umudim Nnewi	31 March, 2008	Undeveloped
2	Unity Layout	Umudim Nnewi		Undeveloped
3	M/I Layout	Otolo Nnewi/Utu town	10-Apr-97	Undeveloped
4	Eme Court Layout	Umudim Nnewi		Partially developed
5	L M/I GRA Layout	Nnewi, Oraifite, Ozubulu		Undeveloped
6	Okwuzukpe Residential L/O	Umuenem Otolo Nnewi	15-Jan-04	Undeveloped

Source: Town Planning Department Awka

developments in Otolo, Uruagu, Umudim, Nnewi-Ichi, Ichi, Oraifite, Ozubulu, Utuh, Amichi, Nnobi, Awka-Etiti and Azigbo, all of which are destined for expansion. Lands for high-density housing have been reserved along the Eke Awka-Etiti - Nnobi - Nnewi core routes, the tract of land between Nkwo Oraifite and the proposed industrial area. Medium and low density residential development will form pockets around the low income areas (Fig.5.1).

5.2.1 MEASURES FOR DEVELOPING NEW HOUSING AREAS

New residential areas should be developed as neighbourhoods with essential services and facilities based on broad land use zoning standards (Table 5.2).

TABLE 5.2: PROPOSED LAND USE STANDARDS

S/N	Proposed Land use	Approximate Area per 100 hectares	Percentage of Total	Remark
1	Residential	60 – 66	60 – 66	
2	Commercial	4.5 – 5.0	4.5 – 5.0	
3	Industries – Large, Medium and Small	5.0 – 5.5	5.0 – 5.5	
4	Public and Semi Public	10.0 – 10.5	10.0 – 10.5	
5	Parks and Open Spaces	2.5 – 3.0	2.5 – 3.0	
6	Roads	10.2 - 10.5	10.2 – 10.5	

Source: Town Planning Land use Allocation Standard.

The private sector is a major provider of housing, providing 84% of the housing stock. The private sector offers many possibilities but mostly for owner-occupation. Therefore, the role of the private sector is expected to dominate in the realization of the structure plan.

It is proposed that:

1. Government should create an enabling environment for private sector's participation in the provision of infrastructure in the existing and proposed housing layouts through the Build, Own and Transfer (BOT) method. Adopting and enforcing a new bye-law for development control
2. Participatory approaches should be adopted in needs definition and formulating the housing plan design and construction
3. House ownership strategy should enable owners to easily change their tenure arrangements as their conditions, needs, resources and preference change
4. To achieve 60% home ownership
5. Housing to be provided should be of a high quality, satisfying a variety of needs and, attractive to all income groups
6. Housing estates should be designed adopting the 'Neighbourhood Concept', as a self-contained unit, providing for a hierarchy of road, essential services and facilities e.g. primary and nursery schools shopping plaza, clinic, community halls and recreational parks
7. Positioning a shop of sorts within walking distance of most homes in the city and many work places.

The constraint on housing provision is more a matter of securing finance than land. Other constraints include land use standards for public housing, which, if rigidly applied, may limit the choice of housing. There is a need to find a lasting solution to securing finance not only for housing but other land use proposals.

5.2.2 SLUM PREVENTIVE MEASURES

To prevent the proliferation of slums, both the State and Local Planning Authorities need to embrace and sustain long-range planning of land uses in cities and periodically monitor and review the implementation of plans.

The Planning Authorities must adopt prop-poor planning approaches and provide adequate land for the rich and poor, men and women, to cope with the anticipated population growth.

Planning approvals for all buildings in new layouts must ensure that all infrastructures in the estate have been provided before building activities commence.

There are few examples of slum upgrading in Nigeria. The slum clearance in Isale Eko is one example which led to the development of Suru Lere. Another is in Badiya (Box 5.1). Slum upgrading projects are undertaken regularly at an international level by the World Bank and the UN-HABITAT¹. From these experiences, we have learnt what works and what does not. The strategies that work in slum upgrading include one or a combination of several of the following:

1. Strong political support at all levels of government
2. Community participation and institutionalized community driven initiative
3. Progressive development as opposed to one-off intervention
4. Adopting a pro-poor building codes and use standards
5. Upgrading slums in-situ where possible
6. Restricted use of bulldozing slums unless it becomes the only solution feasible but it will have to be undertaken with the consent of the dwellers
7. Relocation of slum dwellers, especially from encroached infrastructure may be the only available strategy to adopt
8. Adopting the principle of subsidiarity, i.e. devolving responsibility for accountability to the lowest appropriate level as the most critical factor
9. Community ownership and empowerment that are ingredients for participation and sustainability
10. Involvement of donor agencies in the schemes to back national governments up in implementing slum upgrading projects
11. Adopting strict design, engineering and cost standards.

¹ See World Bank (2006): *Direction in Development: Thirty Years of World Bank Shelter Lending: What we have learned*. Eds. Robert M. Buckley and Jerry Kalarickal, World Bank Washington.

BOX 5.1: COMMUNITY PARTICIPATION AS KEY TO SUCCESS OF SLUM UPGRADING PROJECTS

Most successful sites and services and urban planning projects relied on community participation as shown by the following best practices

Nigeria: Olaleye-Iponrin, Lagos involved the Lagos State, Mainland Local Government and UNICEF was adjudged a success because it was fashioned on slum upgrading concept that would have adversely affected 200,000 families had total clearance been undertaken. It was participatory and contributed to improving the lives of the people without disrupting their social set-up.

El Salvador: In El Salvador, the sites and services project with FUNDASAL, demonstrated how participation eventually led to well developed communities with a strong sense of belonging.

Angola: In Angola, a striking example of ownership and empowerment took place during the preparation of the Lobito Benguela Urban Environmental Rehabilitation Project in 1990. The simple introduction of know-how in building latrine covers spawned a local industry based on local resources that produced 2, 00 covers before the loan was even signed.

Asia; In Asia, the Tondo Foreshore Project involved the community in both slum upgrading and sites and services projects; the community was empowered and thus developed into a strong local political force.

In Indonesia: The Kampong Improvement Programme is one of the largest slum upgrading projects to be undertaken and among the best in terms of urban poverty relief. It started as an indigenous initiative that was supported by several World Bank Projects but retained a strong sense of local decision-making and local construction methods. Several factor contributed to the success which include (i) local ownership built on long tradition of mutual aid and self-help; (ii) strong political support; (iii) multi-disciplinary team which replicated the project following strict design, engineering and cost standards.

5.3 SETTLEMENT POLICY

It is recommended that the designated planning area - covering some 72 square kilometers - should be developed with special attention to their peculiar needs of the community, identity and character of the landscape. These communities include Ichi, Oraifite, Uruagu with the rivers, Ekulo, Obolo, (Ichi), Ele, (Uruagu) Eze, (Oraifite) and others and the existing woodlands between communities.

The great challenge for planners will be on how to arrive at the best method to integrate all the communities into the Nnewi City and maintain their identities. The recognition of each community as an urban neighbourhood is strongly recommended.

Roads provide an enormous opportunity for integrating communities. The designated areas contain sections of the natural communication system – the Onitsha – Owerri Expressway, the old Oba – Ichi – Nnewi, Oba – Ichi – Nnewi – Okigwe, the Nnewi – Ozubulu federal highways and a number of state and local roads. These roads could be improved along with an improvement to the landscape. It is recommended to:

- i. Link the settlements to the Nnewi Core (via the orbital roads) by means of good axial roads (dualized motor ways) to ease communication between settlements and the Core and to reduce travel times to the Core to be no more than 40 minutes between these communities
- ii. Link the settlements to the town centre by means of aesthetic pedestrian walkways and linear parks so as to absorb the interim shock of the transition between the villages and the city centre
- iii. Eliminate uneconomic uses in the settlements by replacing them with land use activities relocated from the Core
- iv. Provide rental accommodation and home-owners housing adjacent to each other, linking them with village greens, children's playground, open spaces and activity centres as shown on the Plan.

5.4 COMMERCIAL LAND USE

Nnewi and its environs have several markets that can gainfully contribute to the state's economic growth and poverty reduction. The strategy is to improve and upgrade the existing markets and allocate more land for new markets to cope with the expanding commercial activities and population growth. The structure plan provides for a maximum range of well-coordinated market outlets to broaden people's choices.

5.4.1 IMPROVING EXISTING MARKETS

The markets within Nnewi include Nkwor Nnewi, Eke Amobi, Afor Uruagu, Orié Agbor and Afia Okpuno-Egbu. Others are Nkwor Oraifite, Eke Ichi, Eke Amichi, Afor Nnobi, and Eke Awka-Etiti. Of these markets, it is proposed to develop Nkwor Triangle as a major Regional Market providing for indoor shopping facilities.

These markets should be redeveloped and redesigned to cater for the needs of women and the informal sector, attracting between 60-70% of business operators. Specific proposals to improve these markets include:

- a. The provision of spaces for a wide range of commercial land use options
- b. To reduce traffic congestion in the Central Business District
- c. To ensure optimum and efficient utilization of facilities
- d. Attract clientele patronage and optimize government revenue.

5.4.2 NEW MARKETS

Three new markets are proposed: two of which would be developed as open markets to be located at Oraifite, which is opposite the industrial layout and at Ozubulu, which is 1 km from the mechanic village. The third market would be the cattle market to be located in Oraifite (refer to plan). This would be equidistant from the core and reasonably separated from any of the trade association's sites in the Nkwor Nnewi Market. The latter is presently located in the centre of the old town but it will be moved to the periphery. The idea is to attract traders in the market to move to the periphery and decongest the town centre.

In developing these markets the following policies shall apply:

- Locating wholesale and warehousing uses to be adjacent to the markets and within the Central Business District.
- Providing direct truck access from the peripheral highway to each market
- Relocating trade market stalls and motor/truck parks including the stalls for timber, electrical/electronics, motor spare parts and building materials from the present locations in the town centre to form separate markets
- Incentives for people willing to move, such tax relief/wavers by government
- Implementation of promotional activities to ensure that people are enlightened and sensitized about the project.

5.4.3 DISTRICT ACTIVITY CENTRES

The Plan provides for 30 district centres for Nnewi and Environs including Ichi, Eke-Amobi, Ozubulu, Nnobi, Awka-Etiti, Amichi, Azigbo, Utuh, Oraifite, Nnewi-Ichi, Uruagu, Otolo etc.

These centres vary in size and scale but possess facilities for economic, social and cultural interaction. They could accommodate malls and medium to large scale businesses, large enough to ensure competition. These district shopping centres would accommodate shops, pubs, restaurants, eateries, offices, community halls or meeting places to hold up 100 people and other services.

5.5. WAREHOUSING

In line with Nnewi's emergence as an industrial hub, land has been reserved for new warehouses on the periphery, along Onitsha – Owerri Expressway at Oraifite to complement the existing ones in the city centre. This will help decongest the city centre, as huge trucks/trailers conveying goods directly into the markets cause traffic congestion. The proposed warehouses is along the highway that provides direct access to the Seaports of Lagos and Port Harcourt.

5.6 OFFICES

Nnewi is an industrial heartland of the State. In anticipation that it will continue to attract more firms as well as service industries, additional land for industries and offices has been reserved for these uses in the Structure plan. It is expected that demand for additional offices should be accommodated in the town centre, around and in outlying rural areas.

5.7 FORMAL AND INFORMAL BUSINESSES

Growth is expected in the formal business sector. This is because more firms will be attracted by the conducive business environment and anticipated low investment costs. Land is earmarked for this sector within the Central Business District and in the neighborhood's activity centres.

The informal sector consists of hawkers, petty traders, artisans, mechanics and shoe shiners to name a few. The Profile study revealed that both the unemployed and the informal sector have started organizing themselves to undertake formal business. It is anticipated that the informal sector would decrease during the plan period. The Structure Plan hopes to sustain this effort by creating a more conducive working environment for the informal sector, such as the creation of business parks and incubators and shops to leap out of poverty. Government extending to the unemployed and small scale businesses would be encouraged in policy as a way of ensuring that the informal sector receives the required assistance.

It is recommended that:

- Working spaces for the informal sector should be provided in activity centres and away from the city core
- Government authorities should review their stipulated rates, charges, stall size and requirements for business establishments in order to make them
- Government should formulate a set of incentives relevant to both the formal and informal sector.

5.8 PETROL STATIONS.

Many petrol stations in the project area are poorly located, mainly close to high activity areas lacking the stipulated floor space for parking, turning, offloading, etc. It is recommended that:

- A minimum setback of 15 meters from service roads must be enforced throughout the urban area and a minimum of 30 meters along all orbital/peripheral or expressways
- More stringent measures to be applied to the location of filling stations
- A minimum length of 50 meters and width of 30 meters be upheld by filling stations.

5.9 INDUSTRY

A major defect in the development of industry in Nnewi has been the spontaneous emergence of family compounds, along side industrial sites in the city, creating pollution problems.

In recognition of Nnewi as an important industrial centre, the Structure Plan has allocated a large area of land abutting the Emeka Ofor Road, extending to parts of Ozubulu as a separate Industrial Estate. The chosen site combines several advantages, which include:

1. Removal of pollution from residential areas so that toxins emitted from industries do not infiltrate residential areas
2. Easy access to the main transportation and haulage routes
3. Better organization of the city
4. Enhanced business and employment opportunities
5. Encourage growth while limiting distance to work.

Acknowledging the intentions of the government to provide small-medium enterprises cluster areas within Nnewi, the proposed estate combines the following added advantages:

- Easy access from the proposed orbital road and proximity to Onitsha through the Onitsha – Owerri Road
- Proximity to warehouses and the proposed trailer park
- Access to a natural water source (Miri Eze stream)

The government is encouraged to maintain its waiver on premium charges for industrial land. In addition, it is encouraged to facilitate access to loans from SMEDAN, FSSI (XXX PLEASE SPELL OUT IN FULL. THANKS. EDITOR. XXX) and external donors. Credits and loans for women, cooperative societies and small-medium enterprises.

The strategy is to encourage the growth of employment while limiting long journeys to work by establishing an agglomeration of industries i.e. within one industrial complex. This would be achieved by siting industries where they would be easily accessible. It is proposed that the Ozubulu Machine Tools Industry would form the main industrial hub for Nnewi. In addition, large and medium scale industries would be encouraged as a supplement in these locations.

The Structure Plans provide for a number of neighborhoods, namely Uruagu, Nnewi-Ichi, Otolo/Azigbo/Amichi to locate small-scale industries, notably neighborhood craft centres and small industrial parks, which are considered essential to the economic wellbeing of the entire planning area and the state at large.

At the villages of Utuh and Ukor, a small business park would be provided to create jobs and check the incessant migration into the city.

Development in the countryside would be subject to ecological and environmental impact assessments.

The plan also recognizes that making land available is not sufficient in itself to attract employment. Initiatives to promote the growth of employment in Nnewi and its environs should be undertaken and adequately supported.

5.9.1 INDUSTRIES

The plan acknowledges the fact that special industries such as poultry farms and bakeries need not be confined to industrial estates and that flexibility must be maintained.

Heavy industries in the area may require special locations such as flat land, port facilities, and closeness to river courses. A substantial part of both Oraifite and Ozubulu land adjoining Ogbaru and lying along the water-fronts of Idemili and Niger rivers may accommodate these investments. For this proposal to work, it is strongly recommended that the abandoned Okija Boat bay be resuscitated immediately. This will not only create new employment opportunities, but also open up the hinterland. It would also enhance river transportation between Onitsha, Ogbaru, Oraifite, Okija, Oguta and Port Harcourt.

It is recommended that the area of Edison Brake pads and linings industry located behind the Ichi Community Secondary School former Ichi Technical School in Edoji Uruagu be dedicated for special industrial establishment. A small portion of this expanse land is already marked out as a sanitary filling ground.

5.10 GREEN BELT

It is considered important to create a green-belt of 500 meters wide between the adjoining rural homesteads from the proposed agro-industrial zone, which stretches to include the specialized industrial area towards the bank of the River Niger. The proposed Green-belt would prevent environmental pollution and growth of communities towards the industrial estate. Within the green belt generally, development would be limited to whatever is related to agriculture, forestry, sports and recreation and perhaps cemeteries.

Special land uses by institutions or other uses appropriate to rural areas, for reasonable degree of control will be strengthened to ensure against presumption of all forms of built development where the danger of coalescence is particularly acute.

5.11 MECHANIC VILLAGE

To prevent proliferation of disorganized mechanic workshops in Nnewi, the Plan recommends a site for mechanics at Ozubulu along the Nnewi – Ozubulu road. This would be developed as a comprehensive mechanic village and a craft centre to accommodate all mechanics when fully developed.

5.12 INSTITUTIONAL LAND USE

5.12.1 ADMINISTRATION

Nnewi has its administrative headquarters in Nnewi North along the Nnewi – Ozubulu road. Its present location has been retained in the new proposal. However, there is a need to upgrade the infrastructure and services.

5.12.2 EDUCATION

The population of Nnewi and its environs have a comparatively high literacy level. This edge can only be maintained with a modern educational system capable of developing the full potential of the community and equipping them with the relevant skills for the future. The provision of schools as well as other basic services must relate to existing as well as anticipated demographic growth and social change.

The profile study gives the figures of the present educational facilities: 190 public primary schools, 13 junior secondary, 18 senior secondary, one women's vocational center, and one university (a teaching hospital). In addition, there are a large number of private primary, secondary and vocational centres. These figures look impressive but in terms of distribution around the city, some residential districts do not enjoy the provision of primary and secondary schools. Due to data problems and non-availability of cadastral maps during field-work, it was difficult to analyze the distribution of these facilities in relation to population distribution. The equitable distribution of primary and secondary schools would need to be determined by the State Ministry of Education and Local Government Education Departments in collaboration with the appropriate planning authorities. The landscapes and buildings of all existing schools and their facilities would be greatly improved and high standards of teaching would be maintained, while new art schools would be provided by the state in the new housing areas.

Based on the projected population growth, increasing demand for technical and professional skills, land has been reserved for building a new University at Azigbo. Two centres are proposed for Uruagu Nnewi and Azigbo/Amichi. It is recommended that the government and stakeholders collaborate to upgrade the infrastructure of existing community schools.

5.12.3 HEALTH

The Profile study in Chapter 3 indicates that Nnewi has an acute shortage of hospital facilities, operational equipment, qualified doctors and supporting staff. Nnewi's anticipated population growth would make demands on the health facilities.

It is proposed to:

- (i) Improve and upgrade existing health facilities
- (ii) Establish three new General Hospitals at Azigbo, Oraifite and Nnewi-ichi
- (iii) Develop three Specialist hospitals including (heart, neurology, liver, ear, and nose) to be established at the boundary of Igboukwu and Ichida along Nnobi – Ekwulobia road as shown on the Plan and converting two existing hospitals Ichi general hospital and Ikedife hospital to specialist hospitals
- (iv) Develop a Dispensary and a Maternity Clinic in each neighborhood equipped with HIV/AIDS test kits
- (v) Establish a Veterinary Clinic in the agricultural zone of Oraifite
- (vi) Improve and maintain the landscape and buildings of all health facilities.

5.12.4 RELIGION

Nnewi is predominantly a Christian community, though a lot of people still attach tremendous importance to traditional religion. This explains the presence of a good number of shrines and deities in the town, still regarded as sacred institutional monuments. It may be worth preserving some as historical monuments and using them as open grounds.

The growth in churches has demanded a review of their location. This is because the rituals involve a noisy mode of worship. For the purposes of this Plan, it is assumed that the space requirements for the different religious denominations would be uniform and based

on well-articulated and defined space standards. At the local level, it is estimated that a number of churches/mosques would serve one neighborhood. The issue of national religious facilities/operational dimensions will clearly be a matter of policy decision. In making the above decision, it is assumed that most religious functions would be conducted at either a neighborhood or sectoral centre level. It is recommended that:

- Planning approval should be given to 3,000 – 5,000 persons on 0.2 – 0.5 hectares of space
- A Joint Churches Working Forum should be formed to set the criteria for the establishment of religious centres. This should be incorporated into the land use design standards to be developed by the Planning Authority
- Each neighborhood within the plan area should make 3.0 – 4.2 hectares of land available for major religious facilities
- Special consideration should be given to special categories of Churches/Mosques, such as Cathedral and/or Pentecostal Headquarters. This is because adequate facilities for Churches or Mosque would be expected to serve between 20,000 – 50,000 people
- All Churches/Mosques must provide adequate parking on site and ensure that public roads are not unnecessarily blocked from free flow of traffic during a service. They should also ensure adequate landscape development and maintenance of their buildings.

5.13 RECREATION AND CULTURE

5.13.1 RECREATION

Engaging in recreation and relaxation is an integral part of communal life and it is an important part of a healthy and purposeful life. Most importantly, recreation should be based on choice, interest, spontaneity, and initiative. Recreation, entertainment and amusement take multiple forms, including sports, athletics; walking, swimming, fishing, sailing, and picnicking; dances, drama and music and many other leisurely pursuits.

Apart from Anedo Halland and other village/community halls, Nnewi lacks recreational and entertainment facilities, especially, organized open spaces and walkways, street landscapes and urban furniture. There are virtually no parks, play grounds (except in schools), stadia except a private one (Gabros

Stadium), gymnasias, swimming pools, fishing piers, cinemas or theatres. An average Nnewi man spends 12 hours of his time on his business, eight hours on planning his business and only four hours on relaxation and leisure activities (Table 5.3).

To correct this imbalance in the lives of the people of Nnewi several recreational facilities are proposed:

1. Sports Hall as part of the redevelopment of Ngwor Civic development as well as a Community Hall in each community
2. Parks and playgrounds in each residential neighbourhood
3. A large city park for Nnewi
4. City Greening/Tree Planting in the Planning Area should be implemented to achieve a drastic change from the current drab and un-attractive landscape of the city
5. A library in each community hall
6. Public grounds/village squares in the surrounding communities
7. City stadium in Nnewi to compliment the existing ones at Rojeny Recreational Center Oba and Gabros Stadium Umudim Nnewi privately owned and the Power Mike Stadium Onitsha
8. To landscape about 10 hectares of land along St. James Church Road in Ichi and develop as a golf course
9. Clubs, restaurants, eateries and hotels should be provided in each residential community to cater for the needs of social clubs in the area some of which include Nnewi Youth League, Anedo Social Club, Honda Social Club (Ichi) etc.
10. Cinemas in strategic places in the city and district centres
11. Swimming pools in recreational centres and in hotels
12. Five Star Hotel at Amichi at the road junction of Awka-Etiti – Iseke and New Oba – Okigwe (See Plan) to complement existing provisions.

TABLE 5.3: PROPOSAL FOR PARKS AND RECREATIONAL FACILITIES

Facility	No of Units	Size (Ha)	Location
Regional Park	1	1	Otolo Nnewi
Zoological Garden/ Amusement park	1	20	Behind Ichi General Hospital
Entertainment Park	3	0.5	1 Behind Nnewi North LGS, 2. Behind Edison Industry Edoji Uruagu 3. Near Udoji school Ozubulu
Stadium	1	20	Former site for South-East University, Obiofia Ichi
5 Star Hotel	1	1 – 1.5	Beside Nnewi judiciary Amichi.
Golf Course	1	5	Along St James Church Rd. Ichi.

Source: Projections by Consultants 2008

5.14 CULTURE

Nnewi people have a rich culture, with festivals, marriages and traditional functions and the elaborate palaces. To boost Nnewi as a tourist attraction, it is proposed that its diverse and rich cultural resources and facilities should be developed.

5.15 TRANSPORTATION AND TRAFFIC MANAGEMENT PLAN

5.15.1 Proposal for Improvement of Road Networks

The roads in Nnewi centre generate a lot of traffic. Increased traffic volume is expected given the Structure Plan is predicated on improving living standards and economic growth.

The strategies to solve the transport problems of the city include:

- (i) Upgrading and rehabilitating all existing narrow roads to a high standard of construction and design (Figs. 5.2 and 5.3)
- (ii) Build new roads to a high standard to cope with increased traffic
- (iii) Decongestion of traffic in the centre.

To improve traffic flow in the city the following is proposed:

(i) Ring Roads:

Constructing two ring roads – inner and outer – to divert all through-traffic on the radials to satellite towns without having to pass through the congested city centre. The external ring road is 40.06 kilometers long as shown in the alignment on the map, while the inner ring road is about 16.53 kilometers length. Both roads should be designed as dual carriageways (7.30m carriage wide) and surfaced with asphalt and provided with concrete side drains and shoulder.

In addition to the above, the ring roads should be provided with the following:

- Adequate signs and pavement makings
- Kilometer posts indicating distance
- 2.0 metre walkways on sides (for the inner ring roads only) with provisions for –U- drainage system (1.20 meters x 1.00 meters), electric conduits and water lines under them
- Bus stops and motorcycles stands particularly for the inner ring roads and lay-bys for the outer ring roads
- Pedestrian or zebra crossings at all the busy junctions, particularly at the inner ring road junctions with the arterial roads and all locations in the urban area with heavy pedestrian traffic across the roads
- Traffic lights at road junctions particularly the inner ring road junctions with the arterial roads

- Street lighting
- Appropriate landscape treatment to enhance the aesthetic appeals of the streetscapes.

(ii) Improvement of Arterial Roads:

The major radial roads leading from Nnewi Core to the satellite towns shall be widened to be at least a double carriageway. Traffic counts conducted on the three Federal roads revealed that they were heavily trafficked. As shown in Table 5.4 several of these roads are earmarked for improvement to the standard design and construction specified in Table 5.5.

In addition, these road sections should be provided with the following:

- Signings and pavement markings
- Pedestrian crossings at busy junctions
- Traffic lights particularly at road junctions
- Provision of Bus stops and motorcycle (okada) stands. These should be located no closer than 10 metres apart and no more than 60 metres from the nearest intersections.
- Appropriate landscaping in the form of pedestrian paved walkways and roadside planting.



Traffic and business along unpaved road in Nnewi.

TABLE 5.4: ARTERIAL ROADS RECOMMENDED FOR IMPROVEMENT

• Ichi – Nnewi – Ozubulu	Federal road	22.48 kilometers
• Ichi – Nnewi – Amichi	Federal road	22.47 kilometers
• Nnewi – Nnobi – Nnokwa	Federal road	10.56 kilometers
• Nkwor Oraifite – Nkwor Nnewi	State road	9.42 kilometers
• Nnewi (Otololo) – Azigbo – Amichi	State road	7.63 kilometers
• Nnewi (NITEL) – Awka-Etti	State road	9.63 kilometers

TABLE 5.5: RECOMMENDED STANDARD FOR ROAD DESIGN

• Carriageway width (7.30 meters)
• Hard shoulder width (2.75 meters both sides)
• Raised walkways (2.00 meters both sides)
• Drainage 1.0 meters x 1.20 meters (under the walkways. The gutter inlet shall have Gratings at appropriate intervals. Ducts for electricity conduits and water lines are also to be provided under the walkways).

(iii) Grid Roads

Nine existing roads have been proposed for widening from single to double carriageways to serve as grid roads. (See fig 5.16). Their junctions with other roads, particularly the Arterial and the Ring roads, should be aligned to eliminate any traffic conflict. A detailed study of the requirements in the improvement of these roads is summarized in Table 5.6.

TABLE 5.6: ARTERIAL ROADS PROPOSED FOR IMPROVEMENT

List of Arterial Roads Recommended for Improvement

Ichi – Nnewi – Ozubulu Road

- Provision of a fly-over and a round-about to arrest traffic conflicts at the junction (Amukor) with Nnobi – Nnewi-Ichi – Obi Uruagu Road.
- Installation of Traffic Light at the junction with Bank Road beside Nnamdi Azikiwe University Teaching Hospital permanent site.

Ichi – Nnewi – Amich Road:

- Introduction of a “T” or Trumpet interchange at the market junction – chainage 12 + 250 – to address the traffic conflict occasioned by slow moving timber/building material-laden trucks moving in and out of the market.
- The five Nos. junctions at St. Mary’s Pro Cathedral between chainages 10 + 950 and 9 + 060 are to be adequately channelized with raised islands. They shall be provided with pedestrian crosses, road furniture, signings and traffic lights (solar preferably).
- A 15.0 meter radius Round-about is proposed for the junction at chainage 21 + 770 with Awka-Etiti – Utuh – Ukpok – Iseke road.
- An additional lane of 725 meters long proposed at the Okwenu hill (Ugwu Akpati Ozu) between chainage 12 + 150 and 12 + 875 to serve as an auxiliary climbing lane for slow timber/building materials laden trucks that are Ichi or market – bound.
- Introduction of a 15.0 meter radius Round-about at the junction with Igwe Orizu Road, opposite Eke Amaobi Market.

Nnewi – Nnobi – Nnokwa Road

- Correction of the substandard (sharp) horizontal curves between Cutix Junction and old NEPA Office Building at Nnobi.
- The two junctions (“ ” and “ ”) are to be adequately channelled with raised islands. They will be provided with pedestrian crosses, road furniture, signings and traffic lights (solar preferably)

Oraifite – Uruagu – Nnewi (St. Mary’s Anglican Church) otherwise known as Sir Emeka Offor Road.

- The first half of the road, St. Mary’s is to be revisited to bring it up to the required standard for single carriageway mentioned under Arterial roads above.

List of Arterial Roads Recommended for Improvement

Nkwozulogu Oraifite – Nkwor Nnewi (Nkwor - Nkwor) Road

- Additional 3 cells (3.0 metres x 2.0 metres) box culver of 24 metres in length is recommended for this road at Obiofia Ichi valley. The wrongly located and poorly completed box culvert (12.0 metres in length) at the valley is recommended for extension to 24.0 metres.

Nnewi (NITEL) – Awka-Etiti – Ichida Road

- This road should be revisited to bring it up to the required standards of a single carriageway mentioned under Arterial Roads above.

Nkwo Triangle – Eke Amaobi (Igwe Orizu Road) section: (0.24 km)

- This section should have a maximum width of 24.60 metres made up as follows Fly-over bridge (at the junction along Igwe Orizu Road) = 12.19 metres.
- Hard Shoulder (outer side of the section only) = 2.75 metres.
- Turning Lane (17 meters radius) for traffic from Nnobi-end = 3.75 metres
- Turning Lane from Nkwor Market end = 3.65 metres
- Walkways (2.0meters on either side) = 4.00 metres.

Nnewi – Nnobi – Nnokwa section: (0.21km)

Total road width of this section should be 17.70 metres made up as follows:

- Carriageway (7.30 metres)
- Hard Shoulder (outer side only) = 2.75 metres
- Turning lane for traffic from Ozubulu and Ichi ends. = 3.65 metres
- Walkways (2.0 meters on either side) = 4 metres

Ichi – Nnewi – Ozubulu section: (0.28km)

This section shall have a maximum total road width of 27.14 metres as follows:

- Fly-over bridge with walkways = 12.19 metre
- Turning lane for traffic from Ozubulu end and for Ichi – bound traffic = 3.65 metres
- Turning lane for traffic from Hundred foot road (Nkwor Nnewi Market) = 3.65 metres
- Ozubulu/Nnobi – bound lane = 3.65 metre
- Walkways (2.0 meters on both sides) = 4.00 metre.

Source: Proposals based on a field survey by the Consultants 2008.

Other recommendations for improving traffic and transport system include:

- Enact and strictly enforce bye-laws against encroachment on right-of-way to eliminate traffic congestion
- Provide pedestrian and vehicular traffic segregation on the following roads around the Nwafor Uruagu market along Nkwor to Nkwor road, Eke Amobi Oba – Ichi – Nnewi – Amichi road at Otolu-Nnewi, Afor Nnobi along Nnewi – Nnobi – Nnokwa; and Eke Awka-Etiti along Nnobi – Igboekwu – Ekwulobia roads
- Provide Bus stops and Okada stands shall be coordinated with the local government. Laws prohibiting indiscriminate loading and off-loading of vehicles along the roads, particularly within the urban center, are to be strengthened and strictly enforced
- Streamline the unwanted disruptive activities of commuter passenger bus operators like National Union of Road Transport Workers
- Promote PPP (Public private partnership) in the development of taxis and inter city buses by creating enabling environment through incentives
- Design guides and standards should be adopted for bus-stops and taxi parks to ensure that they are well located and do not impede free flow of traffic. All roads in urban areas should be provided with adequate drainage, walkways and landscaping that includes colourful paving slabs and trees that give shade.

5.15.2 PUBLIC TRANSPORT SERVICES

‘Okada,’ the local name for motorcyclists, is the most common means of transport in Nnewi. Motorcyclists are known to be reckless, causing fatal accidents. They do not abide by any designated traffic laws, and they tend to drive indiscriminately at road junctions and intersections, activity centres, markets and motor parks from where they convey people to their destinations. There is need to control their locations and to give them designated parks and routes.

5.15.3 RAILWAY LINE

A rail line is proposed for Nnewi Urban to link with the Federal government’s proposed rail line between Onitsha and Port Harcourt via Owerri. This would greatly reduce the presence of heavy – duty haulage vehicles on the roads and the resultant congestion, reduce haulage costs of raw and finished materials, and reduce production costs.

5.16 SANITATION

Nnewi has poor sanitation. There is no central sewerage system. Most roads have no drainage system. The few drains that do exist are blocked with sand and debris. Septic tanks in homes schools, collages, hospitals, hotels and industries is the common practice, but it is not ideal as sullies from house drains and trade effluents end up in open channels and pools of water. This creates a horrible stench and an unsightly environment because there is no water borne drainage system. During the rainy season (May - September), storm water stagnates in pools, bringing mosquitoes and poor health.

Priority should be given to the collection, treatment and disposal of sewage and storm water. If a sewerage system cannot be installed immediately, it is suggested that a system of covered sylik pattern of drains should be considered.

Public toilets/comfort stations should be provided in public places such as in the parks, traditional markets, libraries, schools, and other similar centres.

Local government, whose statutory duty it is to provide sanitation should undertake the following activities:

- Enact and enforce all necessary bye-laws ensuring proper and adequate disposal of all forms of waste
- Provide adequate number of refuse and dumping facilities within the urban area particularly the commercial areas where much refuse/cartage are daily generated and make provision for their prompt evacuation to the main refuse dumping site/s
- Control industrial/workshop refuse/effluents by prescribing an appropriate system of disposing dangerous waste, which should include the enforcement of built in treatment plants by industries. Disposal site/facilities should be made for small scale or road-side workshops that cannot afford private treatment plants

- Cleaning the streets/roads on a regular basis, particularly in the city centre as is now the case in cities like Benin City (King Square), Abuja, Owerri and Calabar should be introduced
- Enforce a monthly environmental sanitation exercise
- Provide adequate public conveniences (toilet facilities)
- Ensure all the open concrete line drains, particularly in the city centre, are covered with concrete slabs. The drains should have inlets (gratings) placed at intervals. This checks direct dumping of solid waste.

5.17 WATER SUPPLY

The profile study showed that the State's Water Corporation has not been providing sufficient water to Nnewi and its environs. The Corporation currently meets less than 25% of the water needs in the area. The inadequacy of the provision of water has driven many consumers to using dangerous sources of water supply.

While supply of water by the Corporation remains the best source of water, government should set-up a body to investigate the Corporation's under-capacity. If this is not done the problem will become more acute as the population continues to expand.

The projected population of Nnewi in 20 years time is 710 180 people, with a projected water demand of 49,083,090 gallons of water per day; this means the daily demands will exceed five times the present figure. The existing Corporation's overhead tank facilities are not coping with the current demand and it needs to be expanded. It needs to install an additional 323 tanks to meet the demands of an increasing population.

One proposal is to source water from streams with low dry weather flows but with enough annual discharge by storage of wet weather flows in reservoirs impounded by dams thrown across their valleys. Additionally, It is proposed to source water from streams with low dry weather flows but with enough annual discharge by storage of water during wet weather flows in reservoirs created by dams across their valleys. Rivers Ubuh and Eze (Miri Eze) have been identified and proposed for this project. Both rivers, if properly dammed and installed with water treatment plants, would be able to meet expected water demands of the population of Nnewi and its environs.

5.18 ELECTRICITY SUPPLY

It is proposed that a new 132KVA power line should be installed from Onitsha, exclusively for Nnewi. This would go a long way to solving the erratic power supply. The government's determination to work with private power generation companies to improve the power supply in Nnewi and its environs is commendable and should be actualized.

In the distribution of power lines in the cities, this should be done with the utmost consideration to the aesthetics of the city. Overhead power cable lines hanging like spider cob-webs should be buried underground along roads and streets, particularly those in the city core. This would improve streetscapes and remove the insecurity they pose to urban dwellers.

5.19 FIRE SERVICES

There is no fire fighting station in Nnewi. Fire emergencies are handled from either Onitsha or Awka. This is most improper and inadequate. There are fire hydrants located within the industrial establishments and hospitals but these are not enough. With no fire fighting station at Nnewi, considerable damages that can be suffered in situations of fire outbreak can only be imagined than described.

The Plan recommends a site for a Fire Station along the new Oba – Okigwe Road, near the proposed luxury park. Pending the building of the fire station it is simply proposed to locate a fire station in Nnewi.

5.20 ENVIRONMENTAL QUALITY

5.20.1 LINEAR PARKS

The concept of developing linear parks is not new in city planning. Usually, linear parks are developed in cities to achieve a park system, that ensures all open spaces are linked, forming a network of mosaics/pools of green spaces, linked by other finger-like green spaces. Linear parks enhance the pattern of human traffic in cities, and specifically along the river valleys and side roads where pedestrians, cyclists and anyone engaged in leisure pursuits can freely move.

Urban landscapes include common land, flood plains, water logged areas, designated archeological sites, public open spaces and sports' areas. Nnewi abounds with these landscape resources that can be developed into a linear park. This would require a detailed study that should be part of developing and implementing a Landscape and recreational plan for Nnewi.

5.20.2 REFUSE DISPOSAL

Nnewi faces indiscriminate, careless and uncontrolled littering of its streets and open spaces with polythene bags, sachets for packing water, food raps and other non-bio-degradable materials, creating an ugly and odious city. Dry refuse consists of organic and inorganic materials like empty cans, broken glass, paper and cardboard, dry leaves, vegetable waste, yam peels and garbage.

Of noteworthy is the strip of land along the New Oba – Nnewi - Okigwe road (Ugwu Akpati-Ózu) where there is an almost half a kilometre stretch of garbage. It has gradually encroached on to the all-important Oba – Okigwe highway, causing accidents and environmental pollution and constituting danger to life and health. The intention of the sanitation authority initially was to fill a ravine in the vicinity of this garbage spot with the mountainous heap of waste. Elsewhere in the city there are similar developments but none as bad as the one described above. One of the biggest problems facing Nnewi is the disposal of waste which is threatening the environment and health of the city. Nnewi is regarded as one of the dirtiest cities in Nigeria.

The city has no official system for refuse collection and its disposal. Even though an environmental authority exists, its impact on Nnewi is barely noticeable. It is the intention of this Plan to reverse this situation. The following sites have been proposed for refuse disposal:

- (i) The land behind Edison Industry extending to Ojoto
- (ii) Obiofia Nnewi-Ichi (deep valley) also for the establishment of a Refuse Recycling Plant
- (iii) Oraifite/Ozubulu valley near the Industrial zone
- (iv) A site near the mechanic village, Ozubulu
- (v) A site behind the Trailer Park and Ozubulu Machine Tools Industry

- (vi) Each of these sites must be given the appropriate landscape treatment to screen off the site of the garbage and plant scented flowers to detract from undesirable smells from the disposal sites.

While the Structure Plan strives to identify waste disposal sites, the development of these sites and the entire machinery for achieving a sustainable refuse disposal for the city would require articulating a solid waste plan for the city, which tackles the various issues of collection, disposal, funding and management of the entire system.

In the short-term, the following measures for the State and Local Environmental Agencies are recommended to improve the sanitation of Nnewi:

- (i) Set-up a task force to check the indiscriminate littering in the urban area with non-degradable materials
- (ii) Impose heavy fines on all offenders big or small who may wish to throw such materials either from moving vehicles or while walking along streets and the creation of Mobile Courts to enforce the penalty and collection of fines
- (iii) Enforce the provision of dustbins in all commercial shops, precincts, while in business spaces to provide huge steel litter bins located at strategic locations along all streets and major activity areas
- (iv) Devise and implement an organized system of waste collection
- (v) Provide dust bins at every bus stop, pedestrian crossing, and at regular intervals along the electric poles
- (vi) Ensure that refuse trucks are carefully covered by tarpaulins while conveying wastes from collection points to disposal points
- (vii) Ban all street hawking/trading with immediate effect and all affected traders be relocated into the existing local markets and activity centre.

These recommendations require immediate adoption and implementation as a beginning for the creation of the New Nnewi of the Structure Plan.

5.20.3 URBAN AESTHETICS

Nnewi is situated on a varied topography of woods, hills and valleys, all of which add to its unique character. It has several imposing mansions that are surrounded by untended public spaces and unauthorized building extensions which detract from the beauty of the buildings in the city. Few family houses have beautifully landscaped gardens.

The Plan for restructuring the city includes instilling a culture of environmental sustainability where everyone - developers, industrialists, homeowners and shopowners, as well those in the informal sector - takes an interest in improving their premises by developing all open spaces or their private gardens. All applications for a development permit should require a landscape plan. New laws should ensure that property owners become responsible for the improvement of their physical surroundings, construction of drainages and maintenance of buildings.

5.21 CEMETERIES

There are no regular cemeteries in Nnewi except some very old ones, which are now being built upon. Traditionally, the Igbo bury their dead in the family compounds. This culture may need to change so that a central cemetery needs to be provided. The Plan recommends a burial ground for the non-Igbos close to Hausa Market. The Structure plan also encourages Churches to provide for burial grounds in their premises for burying their members.

5.22 CONSERVATION

Nnewi is rich in culture, folklore, history and architectural artifacts made-up of palaces, shrines. Table 5.5 is a summary of these artifacts as identified in the course of the field work. The Structure Plan proposes that these sites be preserved as historical monuments for promoting culture and eco-tourism. The Structure Plan also proposes a tourist center to be developed in Amichi (see Plan).

Each of the four villages in Nnewi, all of which historically have common boundaries at the Nkwor Triangle, has a traditional market usually attached to either the Igwe's palace or Obi' abode. The markets are Eke Amaobi, Nwafor Uruagu etc. Similarly surrounding communities – Ichi, Oraifite, Ozubulu, Utuh, Ukpok, Amichi, Azigbo, Awka-Etiti and Nnobi have their own traditional markets. It is recommended that the sites of these markets should be preserved and redesigned to provide modern trading facilities and activity center.

TABLE 5.7: HISTORICAL SITES RECOMMENDED FOR CONSERVATION

- Nkwor Triangle
- Igwe Orizu Palace with many ancient relics and artifacts
- Agbo-Edo
- Agbo-Ezemewi
- Agbo-Alo
- Okwu-Uzukpe
- Okwuani Nnewi
- Ogwugwu – Ezekwuabo
- Okwu – Ele
- Okwu – Akpu
- Isi Ubu Spring.
- Palace of Obi of Uruagu
- Palace of Obi of Umudin
- Palace of Obi of Nnewi-Ichi
- Atuchukwu House where the Peace Accord for the end of the Nigerian Civil War was signed
- Obinna Shrine.

6 IMPLEMENTATION ARRANGEMENTS



Typical Commercial Motorcycles and Spareparts shop in Nkwo Nnewi Main Market.

6.1 NEED TO ADOPT SUSTAINABLE DEVELOPMENT PARADIGM

A well-planned city of Nnewi and its environs and the responsible use of natural resources would be of great benefit to the State's long-term development. Conversely, the failure to include environmental measures in development decisions would undermine current efforts to enhance the quality of life of its residents.

In an effort to achieve environmental sustainability, the United Nations Environment Programme Global Scenario Group in its evaluation of global practices found that development practitioners had adopted three scenarios with varying results. The scenarios include:

- (i) Pursuit of economic growth: Practitioners continue to emphasize development through globalization-driven economic growth, with little attention to other aspects of development
- (ii) Guiding promotion of economic growth through policies: the emergence of the political will to constrain and guide growth through sustainability policies, in accordance with the targets for Goal 7, and the pursuit of this aim as a proactive strategic priority of governments

- (iii) Holistic and integrated approach to promoting sustainable development: transition to a new development paradigm by societies and governments, where civil society, institutions and individuals, as well as the State collectively act to find new forms of sustainable development.

In the first scenario, the amount of resources allocated to the development of the environment is small and fluctuates in accordance with economic circumstances. In general, this development paradigm cannot halt, much less reverse environmental degradation that has accompanied economic growth.

In the second scenario, the emphasis is still on economic growth, but with the possibility of linking to policies to alleviate poverty, inequalities and environmental degradation, among other sustainability issues. Although environmental management is of overarching concern, it has not been enough to eradicate poverty or to provide environmentally sustainable integration of populations.

In the third scenario, the emphasis is on “great transitions” towards achieving sustainable development. Here a conscious and focused effort is made to promote environmental sustainability. Reforms for integrating sustainable development into public policies are more radical and tangible, and lead to more profound changes at the local, national, regional and global levels. National and international laws and institutions would be designed to enhance inter-generational social justice, improve equity in all areas and produce economic and social transformations that would keep unsustainable lifestyles or forms of production in check and where necessary reverse the damage already done to the environment. This kind of transformation requires a sharp and continuous increase in resources and a rapid improvement in the economic, financial and fiscal instruments promoting these practices, as well as development of institutions that would guide and encourage these changes in an increasingly democratic, participatory and communal way.

The United Nations Environment Programme Group asserts that the first and second scenarios do not easily lead to environmental sustainability. According to the United Nations Environment Programme Group, it is only the third scenario that would achieve radical strides towards environmental sustainability.

The development scenario of the Anambra State as well as many states in Nigeria fits neatly into the first scenario. The goal is to transit quickly from the first scenario towards the adoption of the third scenario.

6.2 IMPLEMENTATION STRATEGY

The recommended strategies of the Structure Plan undertaken in Anambra State include:

- (i) The adoption of an integrated and participatory approach to land use planning, land use allocation, architectural design and redesign, development redevelopment and maintenance for priority projects identified for the thematic areas
- (ii) The promotion of institutional, policy, legal and land use standard reforms required to successfully implement the structure plan by setting up new and improved structures and processes

- (iii) The promotion of general as well as specific capacity building programmes in the different thematic focus to fill the identified gaps and empower the various agencies to discharge their roles
- (iv) The adoption of a result oriented financial strategy to mobilize adequate resources to implement the plan, drawing on a range of sources of funding including annual budgets, mobilization of funds from donors, utilizing PPP, using the capital market to mobilize funds and encourage community funds through cooperative, and micro-finance mechanisms.
- (v) The adoption of a results based management to scheduling activities, implementing, monitoring and reviewing the structure plan.

6.3 NEW LEGAL AND INSTITUTIONAL FRAMEWORKS

6.3.1 NEW URBAN AND REGIONAL PLANNING LAW FOR THE ANAMBRA STATE

Existing legal and institutional frameworks for planning in the State cannot cope with the implementation of the Structure Plan. The legal framework for planning in the State was inherited from the defunct Anambra State in 1991. Many states in Nigeria have adopted the new legislation based on the Urban and Regional Planning Law of 1992. The government of the Anambra State is expected to pass a new Planning Law based on national legislation. This law will be called Anambra State Urban and Regional Planning Law, and it will incorporate the essential elements of the Urban and Regional Planning Law of 1992, and the recently approved National Building Code (2006). The new Law is expected to modify the existing Anambra State Urban Development Board Edict No. 6 of 1988 and resolve all issues militating against smooth planning administration in the State to successfully decentralize planning administration to the local level.

6.3.2 ESTABLISHMENT OF STATE PHYSICAL PLANNING BOARD

The Profile study revealed that nearly all the institutions exhibited a problem in carrying out their functions. Experts foresaw the need for establishing a new institutional framework for physical planning in the State.

It is proposed that a Physical Planning Board should be established. Figure 6.1 shows the organogram of the proposed institutional framework. The Town Planning Department, under the control of the Ministry of Lands Survey and Town Planning, would provide oversight functions in the implementation of the Structure Plans, by providing policy direction and advisory roles to government on town planning matters.

The proposed Physical Planning Board would replace the existing Anambra State Urban Development Board. The new Board should include the following departments:

- o General Administration
- o Development Control
- o Project Monitoring and Evaluation
- o Planning Information
- o Urban Renewal
- o Rural Planning
- o Urban Planning
- o Open Spaces and Recreation
- o Resource Mobilization
- o Regional Planning, each with appropriate professional divisions

Each of these departments should be headed by a Director (Town Planning) while the Board would be under the charge of a Commissioner. This is close to the Federal Capital Development System, which operates in the Federal Capital Territory. Under this arrangement, the entire state would be planned and controlled as a PLANNING AREA.

6.3.3 ESTABLISHMENT OF THE NNEWI PLANNING AUTHORITY

It is recommended that a Planning Authority for Nnewi is set up to steer the Structure Plan at the local government level (for Nnewi South).

The details of the structure and operation of the Planning Authority would be contained in the proposed new planning law which would provide for the structure, organization and functions of the various departments.

The new law would provide for the establishment of Trust Funds for each local government authority in the State to mobilize resources for the implementation of the structure plans. The same law would provide for the collection of payments of levies on properties whose values increased as a result of planning schemes and compensation of acquired lands.

6.3.4 ESTABLISHMENT OF STRUCTURE PLAN IMPLEMENTATION COMMITTEES

The process of formulating the Structure plan involved a participatory approach because many of the stakeholders are involved in urban planning, development and management. This participatory approach achieves complimentary roles and cross-fertilization of ideas by different stakeholders and then pooling scarce resources to implement the different proposals in an efficient and cost-effective way.

The institutional framework for the implementation of the structure plan would involve the participation of all Ministries and their relevant departments, all departments of local governments, civil society organizations and the private sector.

The following Programme Implementation Committees and Technical Working Groups are proposed:

6.3.4.1 STRUCTURE PLAN FINANCE AND POLICY COMMITTEE

To successfully implement the Structure plan, a commitment from the highest political and legislative levels would be needed, as much as the support of grassroots organizations. One proposal is establish a Structure Plan Finance Approval Committee to be chaired by the Executive Governor of Anambra State. Other members should include:

- Deputy Governor of Anambra State
- Representative of the Budget Committee of Anambra State House of Assembly
- Hon. Commissioners of the following Ministries:
 - Agriculture and Natural Resources
 - Ministry of Commerce, Industry and Tourism
 - Education
 - Finance and Budget
 - Health
 - Information and Culture
 - Justice
 - Works, Housing and Transport
 - Youth and Sports

- Environment and Solid Minerals
- Women Affairs and Social Development.
- Economic Planning and Development.
- Office of Lands, Survey and Town Planning.
- Local Government Service Commission.
- Office of the Head of Service.
- Office of the Secretary to the State Government.
- Auditor General State.
- Auditor General Local Government.

This Committee would meet twice a year to approve a budget, give policy directives and review and approve Annual Progress Reports on the Project. The Office of the Secretary to the government of the Anambra State would be the Secretary to the Committee supported by the Honourable Commissioner for Office of Lands, Survey and Town Planning as the custodian of the Structure Plan Project.

6.3.4.2 INTER-MINISTERIAL AND GOVERNMENTAL PROGRAMME IMPLEMENTATION COMMITTEE

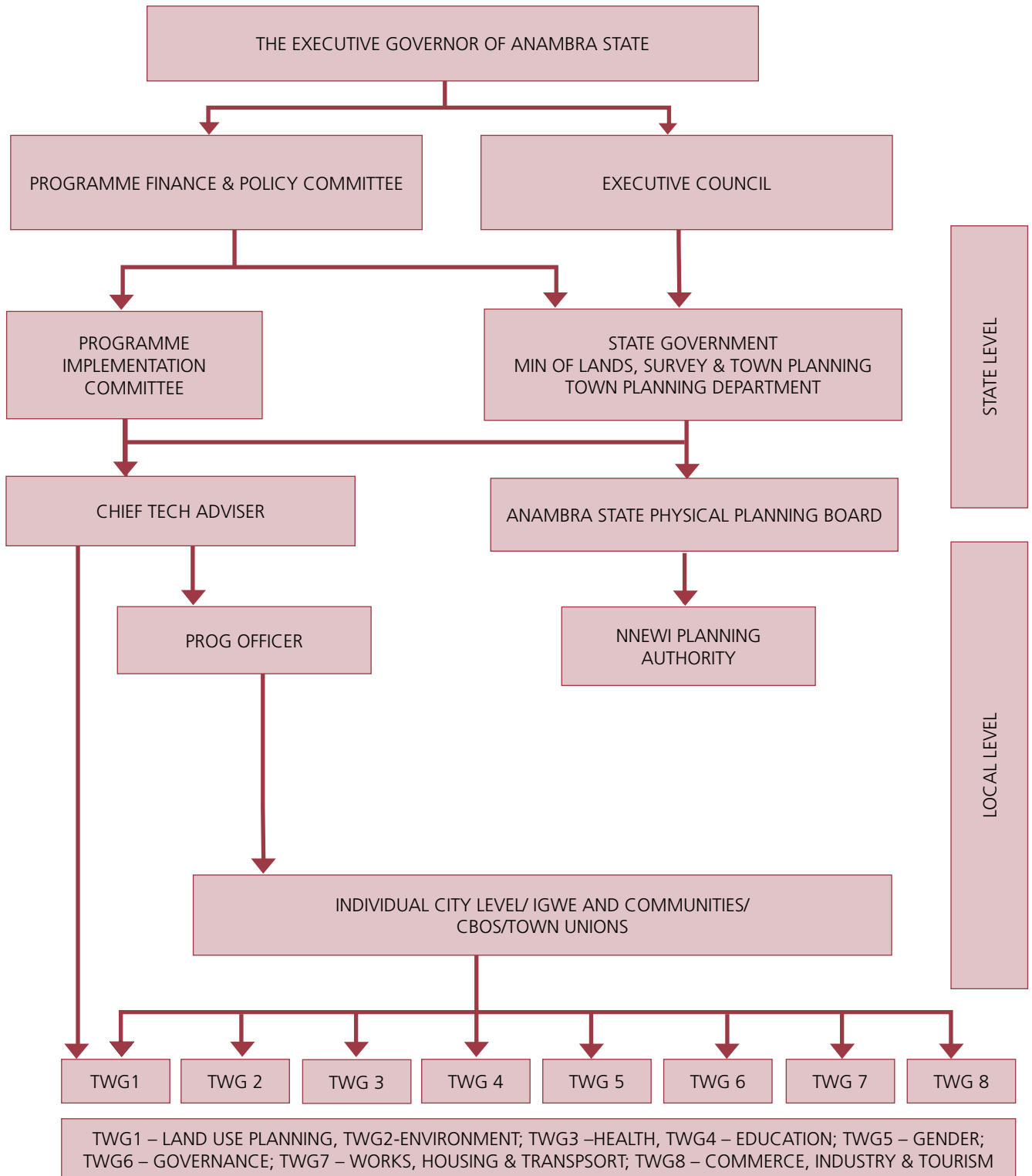
The structure plan cuts across ministries and the two tier government. It is proposed that an Inter-Ministerial and inter-governmental PIC (Programme Implementation committee) is set up which would report to the PIC . This Committee would be chaired by the Honourable Commissioner for the Office of Lands, Survey and Town Planning. Other members to be included are:

- The Permanent Secretary Office for Lands, Survey and Town Planning
- Director of Town Planning
- Director of Land Survey



Capitol petrol filling Station along Nkwo Triangle Road.
(Typical mixed land use at the city center)

FIG 6.1: PROPOSED INSTITUTIONAL STRUCTURE FOR IMPLEMENTING THE STRUCTURE PLAN



TWG1 – LAND USE PLANNING, TWG2-ENVIRONMENT; TWG3 –HEALTH, TWG4 – EDUCATION; TWG5 – GENDER; TWG6 – GOVERNANCE; TWG7 – WORKS, HOUSING & TRANSPSPORT; TWG8 – COMMERCE, INDUSTRY & TOURISM

Directors of departments of the following Ministries:

- o Agriculture and Natural Resources.
- o Ministry of Commerce, Industry and Tourism
- o Education
- o Finance and Budget
- o Health
- o Information and Culture
- o Justice
- o Works, Housing and Transport
- o Youth and Sports
- o Environment and Solid Minerals
- o Women Affairs and Social Development
- o Economic Planning and Development

The Chairmen from the Local Governments in the Structure Plan Area

Directors from the following departments of local governments:

- o Education
- o Health
- o Works and Transport
- Representatives of the Organized Private Sector
- Representative of the Community
- Representatives of non-governmental organizations

This Committee would meet on a quarterly basis to consider work plans and approve work plans and review programmes. The Committee would provide an annual budget to be considered by the Finance and Policy Committee.

6.3.4.3 ESTABLISHMENT OF TECHNICAL WORKING GROUPS

At the Project level, there would be eight technical Working Groups to work on the technical day-to-day implementation of different project activities. These technical working groups include:

- TWG1 – LAND USE PLANNING
- TWG2 – ENVIRONMENT
- TWG3 – HEALTH
- TWG4 – EDUCATION
- TWG5 – GENDER
- TWG6 – GOVERNANCE
- TWG7 – WORKS, HOUSING AND TRANSPORT
- TWG8 – COMMERCE, INDUSTRY AND TOURISM

6.4 INTERIM IMPLEMENTATION ARRANGEMENTS

6.4.1 APPOINTMENT OF CHIEF TECHNICAL ADVISER AND PROGRAMME OFFICERS

It is hoped that these posts would be filled within the next two/three years. An interim structure needs to set up while more radical institutional and legal reforms in urban planning and management can unfold in the Anambra State.

It is proposed that a Chief Technical Adviser is appointed in the overall management of the Structure plan projects for the three cities of Awka, Nnewi and Onitsha. The Chief Technical Adviser would be attached to ASUDEB. His role would be to trouble-shoot on all matters of implementation to ensure that all the planned objectives are delivered on schedule.

The responsibilities of the Chief Technical Adviser would include:

- Providing advisory, technical and managerial supports to ASUDEB and Office of Lands, Survey and Town Planning in the implementation of the Structure Plans
- Work Planning
- Project Monitoring and Evaluation
- Preparing Quarterly and Annual Project Progress Reports
- Financial Planning working with the Ministry
- Work with the Ministry to prepare the necessary documentation for consideration by the PIC and Programme Finance and Policy Committee.

The Chief Technical Adviser would be assisted by a Programme officer in each of the project towns of Nnewi, Awka and Onitsha. The Programme Officers would work to facilitate the smooth implementation of the project and be attached to the ASUDEB Zonal Offices at Nnewi, Awka and Onitsha. Their responsibilities would be to coordinate the activities of the Working Groups.

The structure should be in place for three-years by which time it is anticipated that the Office of Lands Survey and Town Planning and the administrative structure of urban planning and management involving the local governments and ASUDEB Zonal Offices would have been put in place.

6.5 PHASING PLAN

The Nnewi Structure Plan - covering a 20-year period, - requires that the various land use proposals are implemented in phases, as shown below.

6.5.1 PLANNED IMPLEMENTATION OF ACTION PLANS JAN-DECEMBER 2009

Structure plan is a broad policy framework upon which detailed actions can be made. The Structure plan has identified several action plans that should be undertaken for successful implementation.

Table 6.1 is a summary of the phasing of the implementation of the various proposals to be implemented in the first and second quarter of 2009.

TABLE 6.1: PLANNED PROJECT ACTIVITIES FOR 2009

Activities/Outputs	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Approve Structure Plan by Government	X			
Popularize the Structure Plan in the three towns among public and civil society organizations and public agencies.	X			
Organize Donors Pledging Conference on the Proposals of the Structure Plan	X			
Establish new Administrative Legal instruments for planning in the State	X	X		
Establish and Equip and staff the Planning Authorities for Nnewi, Awka and Onitsha.	X	X		
Pass the necessary laws to back and empower the implementation of the Structure Plan of Awka.	X	X	X	X
Appoint members of the Structure Plan Committees, Technical Working Groups and inaugurate	X			
Establish the monitoring teams/committees for the Implementation of the Structure Plan.	X			
Establish a trust Fund for the Authority and designing the revenue collection system for the Trust Fund.	X	X		
Prepare and approve annual budget for the project take off and subsequent implementation.	X			
Appoint Chief technical Adviser and three Programme Officers for the implementation of the Structure Plan.	X			
Set-up Planning Committee at the Local Government to administer Development Control.	X			
Action Plan for Redevelopment of the Nnewi CBD	X	X		
Slum Upgrading Plan for Nkwa Triangle, 100 Foot, Ogbe-Hausa and Suburban-Slums	X	X		
Comprehensive Solid Waste Management Plan for Nnewi	X	X		
Location and Design of New Industrial Estate for Nnewi	X	X		
Location and design Guidelines for Business Parks in precincts	X	X		
Transportation Improvement Plan for Federal, State and Local Roads	X	X		

TABLE 6.1: PLANNED PROJECT ACTIVITIES FOR 2009

Activities/Outputs	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Establish Urban Observatory in Nnewi for data collection, monitoring and evaluation and review of Structure plan and disaggregation of data by gender	X	X	X	X
Location and Site Design for Nnewi New Markets for Electrical, Timber, Food and Building Materials.			X	X
Action Plan for New Schools, Health Centres, Plaza, Business Parks in Nnewi and Environs.			X	X
Action Plan for providing essential infrastructure and basic services in Approved Layout			X	X
Design and Infrastructure Plan for Planned Suburban Housing Expansion of Nnewi and Environs (including water, electricity, shops, plazas, educational and health facilities)			X	X
Action Plan for Erosion Control and Conservation of Ecological Sites.			X	X
Landscape Improvement Plan for Nnewi for Parks, Gardens, Recreational Facilities			X	X
Luxury Bus park Ichi/Akabukwu Uruagu (Site used for Rehnard Bunke's crusade) and Heavy Goods Vehicle Motor Park (Ozubulu).			X	X
Suburban Water supply Extension			X	X
Suburban Electricity Supply Extension			X	X
Design of Nnewi Stadium			X	X
Acquisition Plan for designated lands for various land use proposals including housing, commerce, industry, parks and gardens, recreational facilities, health and education facilities.			X	X
Establishment of Refuse Disposal and recycling industry at the "bad valley" probably with foreign assistance and cooperation.			X	X
Action Plan for Bus route throughout Nnewi urban			X	X
Landscape design for Regional Park located at (Otolu/Utuh)			X	X
Rehabilitation and equipping of all existing hospitals in Nnewi			X	X
Establishment of Urban Security Association			X	X
Site Design for Nnamdi Azikiwe Teaching Hospital Permanent site at Otolu Nnewi			X	X
Landscape Design for a Zoological Garden Recreational Center (behind Ichi General Hospital)			X	X
Develop system for street addressing, revenue generation	X	X	X	X

6.5.2 POLICY REFORMS 2009-2010

TABLE 6. 2: PROPOSED POLICY AND INSTITUTIONAL REFORMS 2009-2010

Activities/Outputs	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Approve Structure Plan by Government	X			
Popularize the Structure Plan in the three towns among public and civil society organizations and public agencies.	X			
Organize Donors Pledging Conference on the Proposals of the Structure Plan	X			
Establish new Administrative Legal instruments for planning in the State	X	X		
Establish and Equip and staff the Planning Authorities for Nnewi, Awka and Onitsha.	X	X		
Pass the necessary laws to back and empower the implementation of the Structure Plan of Awka.	X	X	X	X
Appoint members of the Structure Plan Committees, Technical Working Groups and inaugurate	X			
Establish the monitoring teams/committees for the Implementation of the Structure Plan.	X			
Establish a trust Fund for the Authority and designing the revenue collection system for the Trust Fund.	X	X		
Prepare and approve annual budget for the project take off and subsequent implementation.	X			
Appoint Chief technical Adviser and three Programme Officers for the implementation of the Structure Plan.	X			
Set-up Planning Committee at the Local Government to administer Development Control.	X			
Action Plan for Redevelopment of the Nnewi CBD	X	X		
Slum Upgrading Plan for Nkwa Triangle, 100 Foot, Ogbe-Hausa and Suburban-Slums	X	X		
Comprehensive Solid Waste Management Plan for Nnewi	X	X		
Location and Design of New Industrial Estate for Nnewi	X	X		
Location and design Guidelines for Business Parks in precincts	X	X		
Transportation Improvement Plan for Federal, State and Local Roads	X	X		
Establish Urban Observatory in Nnewi for data collection, monitoring and evaluation and review of Structure plan and disaggregation of data by gender	X	X	X	X
Location and Site Design for Nnewi New Markets for Electrical, Timber, Food and Building Materials.			X	X
Action Plan for New Schools, Health Centres, Plaza, Business Parks in Nnewi and Environs.			X	X
Action Plan for providing essential infrastructure and basic services in Approved Layout			X	X

TABLE 6. 2: PROPOSED POLICY AND INSTITUTIONAL REFORMS 2009-2010

Activities/Outputs	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Design and Infrastructure Plan for Planned Suburban Housing Expansion of Nnewi and Environs (including water, electricity, shops, plazas, educational and health facilities)			X	X
Action Plan for Erosion Control and Conservation of Ecological Sites.			X	X
Landscape Improvement Plan for Nnewi for Parks, Gardens, Recreational Facilities			X	X
Luxury Bus park Ichi/Akabukwu Uruagu (Site used for Rehnard Bunke's crusade) and Heavy Goods Vehicle Motor Park (Ozubulu).			X	X
Suburban Water supply Extension			X	X
Suburban Electricity Supply Extension			X	X
Design of Nnewi Stadium			X	X
Acquisition Plan for designated lands for various land use proposals including housing, commerce, industry, parks and gardens, recreational facilities, health and education facilities.			X	X
Establishment of Refuse Disposal and recycling industry at the "bad valley" probably with foreign assistance and cooperation.			X	X
Action Plan for Bus route throughout Nnewi urban			X	X
Landscape design for Regional Park located at (Otolo/Utuh)			X	X
Rehabilitation and equipping of all existing hospitals in Nnewi			X	X
Establishment of Urban Security Association			X	X
Site Design for Nnamdi Azikiwe Teaching Hospital Permanent site at Otolo Nnewi			X	X
Landscape Design for a Zoological Garden Recreational Center (behind Ichi General Hospital)			X	X
Develop system for street addressing, revenue generation	X	X	X	X

6.5.3 PHASING OF THE IMPLEMENTATION OF ACTION PLANS 2010-27

Commencement and full implementation of the following Action Plans will be as listed in Table 6.3

TABLE 6.3: PHASING OF THE IMPLEMENTATION OF ACTION PLANS 2014-2027

Activities/Outputs	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Approve Structure Plan by Government	X			
Popularize the Structure Plan in the three towns among public and civil society organizations and public agencies.	X			
Organize Donors Pledging Conference on the Proposals of the Structure Plan	X			
Establish new Administrative Legal instruments for planning in the State	X	X		
Establish and Equip and staff the Planning Authorities for Nnewi, Awka and Onitsha.	X	X		
Pass the necessary laws to back and empower the implementation of the Structure Plan of Awka.	X	X	X	X
Appoint members of the Structure Plan Committees, Technical Working Groups and inaugurate	X			
Establish the monitoring teams/committees for the Implementation of the Structure Plan.	X			
Establish a trust Fund for the Authority and designing the revenue collection system for the Trust Fund.	X	X		
Prepare and approve annual budget for the project take off and subsequent implementation.	X			
Appoint Chief technical Adviser and three Programme Officers for the implementation of the Structure Plan.	X			
Set-up Planning Committee at the Local Government to administer Development Control.	X			
Action Plan for Redevelopment of the Nnewi CBD	X	X		
Slum Upgrading Plan for Nkwa Triangle, 100 Foot, Ogbe-Hausa and Suburban-Slums	X	X		
Comprehensive Solid Waste Management Plan for Nnewi	X	X		
Location and Design of New Industrial Estate for Nnewi	X	X		
Location and design Guidelines for Business Parks in precincts	X	X		
Transportation Improvement Plan for Federal, State and Local Roads	X	X		

TABLE 6.3: PHASING OF THE IMPLEMENTATION OF ACTION PLANS 2014-2027

Activities/Outputs	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Establish Urban Observatory in Nnewi for data collection, monitoring and evaluation and review of Structure plan and disaggregation of data by gender	X	X	X	X
Location and Site Design for Nnewi New Markets for Electrical, Timber, Food and Building Materials.			X	X
Action Plan for New Schools, Health Centres, Plaza, Business Parks in Nnewi and Environs.			X	X
Action Plan for providing essential infrastructure and basic services in Approved Layout			X	X
Design and Infrastructure Plan for Planned Suburban Housing Expansion of Nnewi and Environs (including water, electricity, shops, plazas, educational and health facilities)			X	X
Action Plan for Erosion Control and Conservation of Ecological Sites.			X	X
Landscape Improvement Plan for Nnewi for Parks, Gardens, Recreational Facilities			X	X
Luxury Bus park Ichi/Akabukwu Uruagu (Site used for Rehnard Bunke's crusade) and Heavy Goods Vehicle Motor Park (Ozubulu).			X	X
Suburban Water supply Extension			X	X
Suburban Electricity Supply Extension			X	X
Design of Nnewi Stadium			X	X
Acquisition Plan for designated lands for various land use proposals including housing, commerce, industry, parks and gardens, recreational facilities, health and education facilities.			X	X
Establishment of Refuse Disposal and recycling industry at the "bad valley" probably with foreign assistance and cooperation.			X	X
Action Plan for Bus route throughout Nnewi urban				
Landscape design for Regional Park located at (Otolu/Utuh)			X	X
Rehabilitation and equipping of all existing hospitals in Nnewi			X	X
Establishment of Urban Security Association			X	X
Site Design for Nnamdi Azikiwe Teaching Hospital Permanent site at Otolu Nnewi			X	X
Landscape Design for a Zoological Garden Recreational Center (behind Ichi General Hospital)			X	X
Develop system for street addressing, revenue generation	X	X	X	X

6.6 CAPACITY BUILDING

The capacities of the Office of Lands, Survey and Town Planning, ASUDEB/State Physical Planning Board and the Planning Authorities to be set-up at local government Levels/Zonal Offices need to be strengthened by providing the required equipment, staff and training. Much of the training required has

been identified in the different sections of the proposal, as well as in Table 6.4. The capacities of these agencies need to be strengthened for plan implementation, participatory approaches, resource mobilization, project planning, implementation, monitoring, review, and evaluation.

TABLE 6.4: CAPACITY BUILDING ACTIVITIES 2009-2007

Activities/Outputs	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Approve Structure Plan by Government	X			
Popularize the Structure Plan in the three towns among public and civil society organizations and public agencies.	X			
Organize Donors Pledging Conference on the Proposals of the Structure Plan	X			
Establish new Administrative Legal instruments for planning in the State	X	X		
Establish and Equip and staff the Planning Authorities for Nnewi, Awka and Onitsha.	X	X		
Pass the necessary laws to back and empower the implementation of the Structure Plan of Awka.	X	X	X	X
Appoint members of the Structure Plan Committees, Technical Working Groups and inaugurate	X			
Establish the monitoring teams/committees for the Implementation of the Structure Plan.	X			
Establish a trust Fund for the Authority and designing the revenue collection system for the Trust Fund.	X	X		
Prepare and approve annual budget for the project take off and subsequent implementation.	X			

TABLE 6.4: CAPACITY BUILDING ACTIVITIES 2009-2007

Activities/Outputs	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Appoint Chief technical Adviser and three Programme Officers for the implementation of the Structure Plan.	X			
Set-up Planning Committee at the Local Government to administer Development Control.	X			
Action Plan for Redevelopment of the Newwi CBD	X	X		
Slum Upgrading Plan for Nkwa Triangle, 100 Foot, Ogbe-Hausa and Suburban-Slums	X	X		
Comprehensive Solid Waste Management Plan for Newwi	X	X		
Location and Design of New Industrial Estate for Newwi	X	X		
Location and design Guidelines for Business Parks in precincts	X	X		
Transportation Improvement Plan for Federal, State and Local Roads	X	X		
Establish Urban Observatory in Newwi for data collection, monitoring and evaluation and review of Structure plan and disaggregation of data by gender	X	X	X	X
Location and Site Design for Newwi New Markets for Electrical, Timber, Food and Building Materials.			X	X
Action Plan for New Schools, Health Centres, Plaza, Business Parks in Newwi and Environs.			X	X
Action Plan for providing essential infrastructure and basic services in Approved Layout			X	X
Design and Infrastructure Plan for Planned Suburban Housing Expansion of Newwi and Environs (including water, electricity, shops, plazas, educational and health facilities)			X	X
Action Plan for Erosion Control and Conservation of Ecological Sites.			X	X
Landscape Improvement Plan for Newwi for Parks, Gardens, Recreational Facilities			X	X
Luxury Bus park Ichi/Akabukwu Uruagu (Site used for Rehnard Bunke's crusade) and Heavy Goods Vehicle Motor Park (Ozubulu).			X	X

TABLE 6.4: CAPACITY BUILDING ACTIVITIES 2009-2007

Activities/Outputs	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Suburban Water supply Extension			X	X
Suburban Electricity Supply Extension			X	X
Design of Nnewi Stadium			X	X
Acquisition Plan for designated lands for various land use proposals including housing, commerce, industry, parks and gardens, recreational facilities, health and education facilities.			X	X
Establishment of Refuse Disposal and recycling industry at the "bad valley" probably with foreign assistance and cooperation.			X	X
Action Plan for Bus route throughout Nnewi urban			X	X
Landscape design for Regional Park located at (Otolu/Utuh)			X	X
Rehabilitation and equipping of all existing hospitals in Nnewi			X	X
Establishment of Urban Security Association			X	X
Site Design for Nnamdi Azikiwe Teaching Hospital Permanent site at Otolu Nnewi			X	X
Landscape Design for a Zoological Garden Recreational Center (behind Ichi General Hospital)			X	X
Develop system for street addressing, revenue generation	X	X	X	X

6.6 FINANCIAL OUTLAY

It is essential that long-range physical planning should be accompanied by fiscal planning.

The costs involved in the implementation of the different proposals are enormous. Consultants estimated that the total outlay of the Nnewi Structure Plan over a twenty year period would be about NGN375 billion. The next stage would be to carry out a detailed investment plan for the implementing of the structure plan.

For the effective launch of the Plan, USD1m per year should be set aside for recruiting technical staff and the provision of essential operational and logistical support, including the cost of recruiting a chief international technical adviser and programme officers for each city.

6.6.1 SOURCES OF FUNDS:

The sources of funds would involve one or a combination of the following:

(i) Annal Budget of the State and local governments: The first source of funding would come from local and national governments. Both need to

arrive at a formula for sharing the cost of the project's implementation: possibly 30% from local governments and 30% from the State, while the remaining 40% could be sourced from other independent sources. Borrowing to implement the project would not be inevitable provided that the cost incurred could be recouped over time.

The community needs to be involved: they too could make a contribution to the project. If they mobilized their resources they could contribute as much as 10% of the targeted project cost for the area.

(ii) Public-Private Partnerships: Another strategy would be the promotion of public-private partnerships in the funding of the projects of the Structure plan. For PPP (XXX PLEASE SPELL OUT IN FULL. EDITOR. XXX) to work, government should provide enable the private sector to contribute financially and allow this sector to be involved in the management of aspects of the plan. Given the provision of infrastructure is involved, it would be necessary to involve the Urban Development Bank of Nigeria and the Federal Mortgage Bank of Nigeria, as well as the Commercial Banks in Nigeria in the implementation of the different projects in the Planning Area.

(iii) Mobilizing funds from the Capital Markets: The Nigerian capital market is structured to provide medium and long term funds to the public and private sectors in order to finance projects essential for production, infrastructural and /or economic development.

In the past, these funds were raised through the government and municipal bonds. These bonds are a financial facility that enables government to meet the cost of public infrastructure or amenity. These bonds are issued with the guarantee that over the repayment period, government would pay the interest on the bond and redeem the principal by the time the bond matured. The capital is mobilized and liquidated over the repayment period. The capacity of government to use this method of funding should be considered.

(iv) Mobilizing funds from bilateral and multilateral organizations and International Development Banks: Bilateral and multilateral organizations provide funds to developing nations to facilitate development. These financial facilities are more attractive when they assist or have a direct impact on poverty alleviation, gender development and on the wellbeing of the citizens of the recipient country. The conditions are often as stringent as those of the capital markets. The State should collaborate with multi- and bilateral donors to mobilize funds funding urban infrastructural projects. Some of these organizations include the African development Bank, the World Bank, Shetler Afrique, the International Finance Corporation.

(iv) Community Resources: Mobilize funds from communities through taxation and user-charge mechanisms. It is necessary to partner with Micro-Finance institutions to mobilize funds in this way.

6.6.2 LIST OF DONOR AGENCIES ACTIVE IN ANAMBRA STATE

Apart from the technical cooperation resulting in the production of this Structure plan by the UN-HABITAT, the Anambra State has been fortunate enough to work with several donor agencies in promoting some projects in health, water and general development over the past decade. Some of these donors are:

- World Health Organization (the Roll Back Malaria Programme)
- EU-SRIP/EU-WSSSRP/ EU-PRIME
- UNICEF (RUWASSA)
- UNFPA

- UNDP (several capacity building projects in economic planning, aid coordination poverty eradication)
- World Bank (FADAMA 111) and
- GHAIN/FHI.

The Anambra State has benefited from the following national programmes in the prevention of HIV/AIDS.

6.7 MONITORING AND REVIEWING

For the Structure Plan to respond to changes, it has to have an in-built flexibility and review mechanism.

A quarterly monitoring of the delivery outputs should be undertaken while annual reviews of the performance of the plan should be carried out, which involve all stakeholders. During this process critical changes may become evident or necessary adjustment may need to be made.

Comprehensive Annual Review Reports should be considered by the PIC and Programme Finance and Policy Committees.

The Planning Authorities, in conjunction with other stakeholders, are encouraged to develop a set of indicators against which the performance of the plan can be evaluated, and which take into account some of the relevant variables defined in the collection of data under RUSPS as well as urban and housing indicators, and the universally agreed variables for monitoring the attainment of the Millennium Development Goals, especially those dealing with poverty eradication, education, gender, health, HIV/AIDS, environmental sustainability and partnership building.

In June 2027, a comprehensive review and evaluation of the Structure Plan should be conducted that involves all stakeholders. The report should feed into the next long-term Structure Plan for Nnewi and its environs.

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4. The Urban Governance Initiative (TUGI); promotes demand given urban governance through information sharing, networking and special pilot activities. www.tugi.apdip.net

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ACRONYMS

AD	Anon Domino
ANIDS	Anambra Integrated Development Strategy
ANSEEDS	Anambra State Economic Empowerment and Development Strategy
ANSEPA	Anambra State Environmental Protection Agency
ASUDEB	Anambra State Urban Development Board
C of O	Certificate of Occupancy
CBD	Central Business District
CBOs	Community-based Organizations
CEDAW	Commission for Eradication of Discrimination Against Women
CRO	Customary Right of Occupancy
CTA	Chief Technical Adviser
EU	European Union
FMBN	Federal Mortgage Ban of Nigeria
HIPC	Highly Indebted and Poor Countries
HIV/AIDS	Highly Infectious Virus/Acquired Immune Deficiency Syndrome
HOS	Head of Service
IFC	International Finance Corporation
LDC	Least Developed Countries
LEEDS	Local Economic Empowerment and Development Strategy
LG	Local Government
LGs	Local Governments
M/F	Male/Female
MDGs	Millennium Development Goals
NGOs	Non-Governmental Organizations
NITEL	Nigerian Telecommunications Ltd.
NWO	Nnobi Welfare Organization
ODA	Official Development Assistance
PHCN	Power Holding Company of Nigeria
RUSPS	Rapid urban Sector Profiling for Sustainability
SEEDS	State Economic Empowerment and Development Strategies
SMART	Specific, Measurable, Achievable, Realistic and Time-bound
SWOT	Strengths, Weaknesses, Opportunities and Threats
TWG	Technical Working Group
UDBN	Urban Development Bank of Nigeria
UN	United Nations
UNEP	United Nations Environment Programme
UNFPA	United Nations Fund for Population
UNICEF	United Nations Fund for Children

FIG 2.1: MAP OF ANAMBRA STATE SHOWING NNEWI AND SATELLITE TOWNS

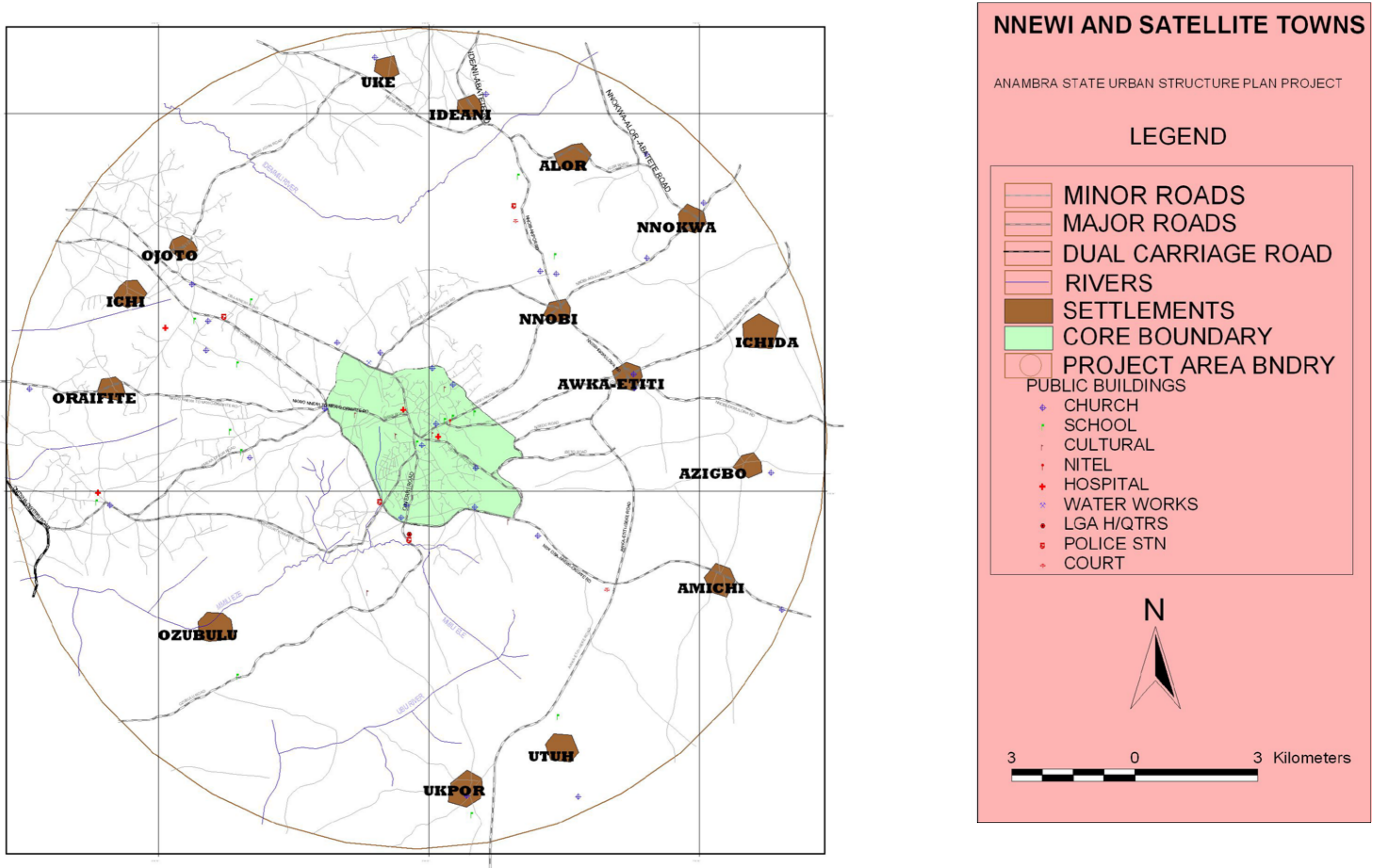
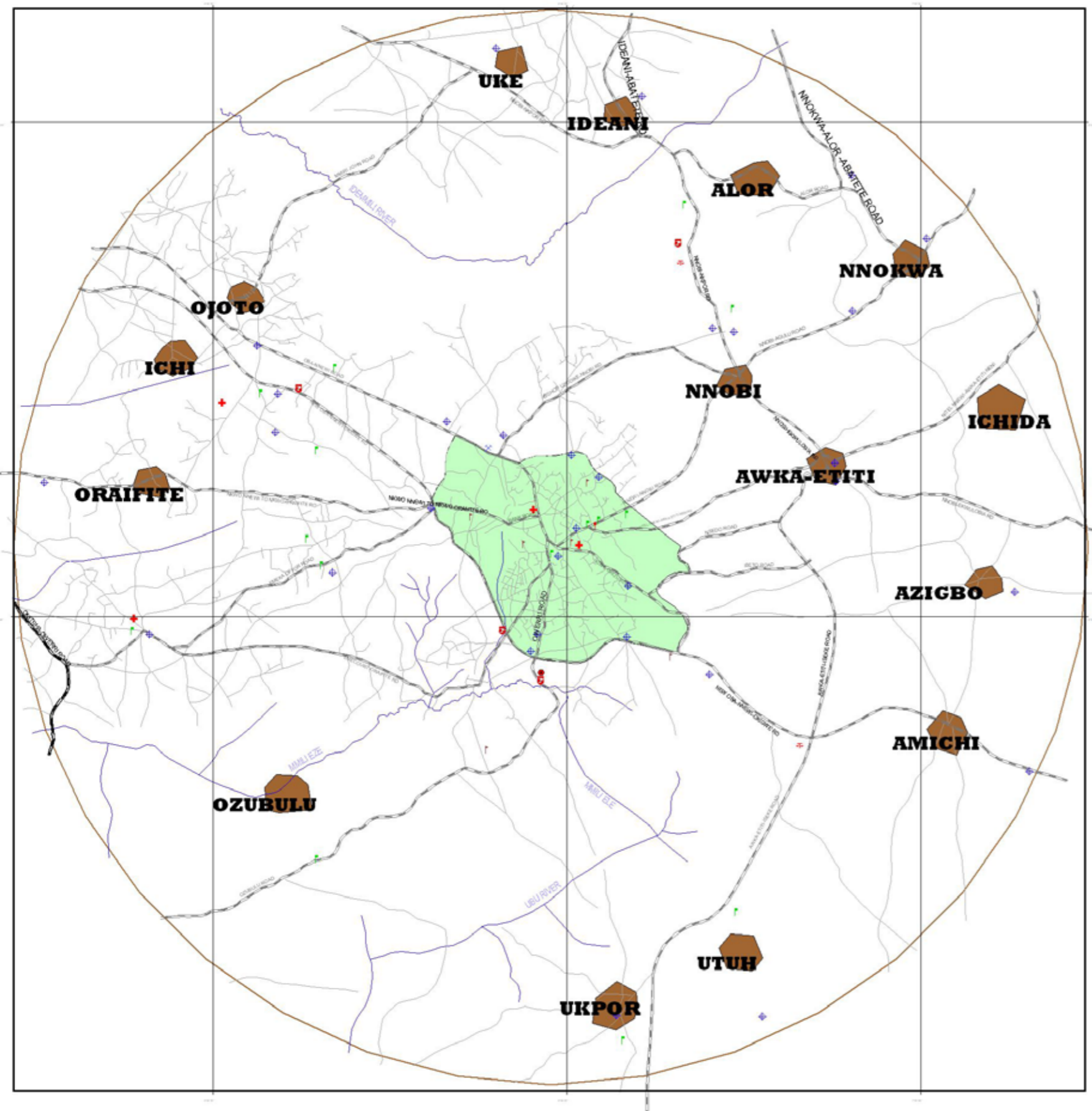


FIG 2.1: MAP OF ANAMBRA STATE SHOWING NNEWI AND SATELLITE TOWNS



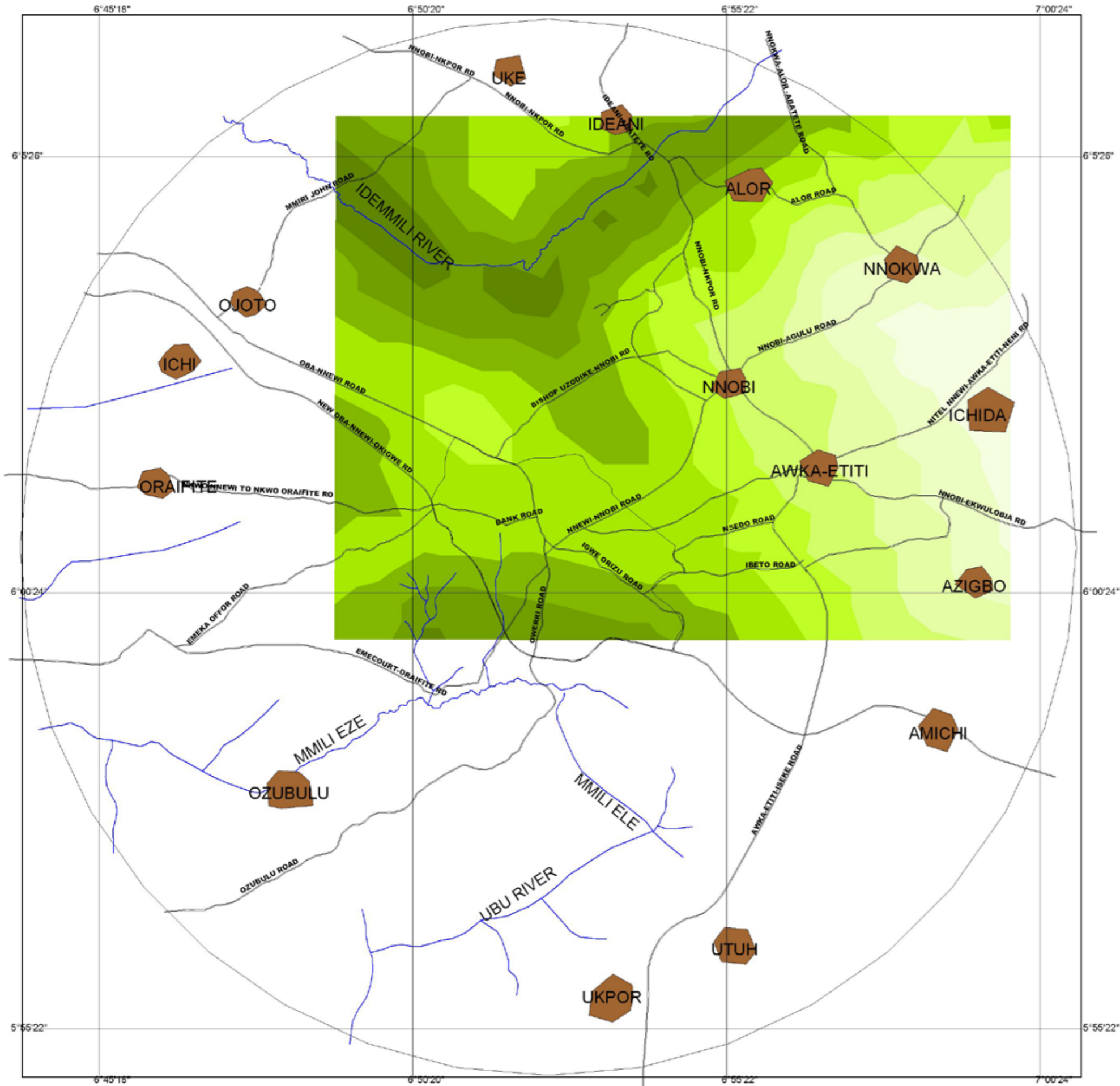
NNEWI AND SATELLITE TOWNS

ANAMBRA STATE URBAN STRUCTURE PLAN PROJECT

LEGEND

	MINOR ROADS
	MAJOR ROADS
	DUAL CARRIAGE ROAD
	RIVERS
	SETTLEMENTS
	CORE BOUNDARY
	PROJECT AREA BNDRY
PUBLIC BUILDINGS	
	CHURCH
	SCHOOL
	CULTURAL
	NITEL
	HOSPITAL
	WATER WORKS
	LGA H/QTRS
	POLICE STN
	COURT

FIG 2.2: TOPOGRAPHY OF NNEWI AND SATELLITE TOWNS



**NNEWI AND SATELLITE TOWNS:
DIGITAL ELEVATION MODEL**

ANAMBRA STATE URBAN STRUCTURE PLAN PROJECT

LEGEND

- SETTLEMENT
- MAJOR ROAD
- PROJECT AREA BOUNDARY
- CORE
- RIVER

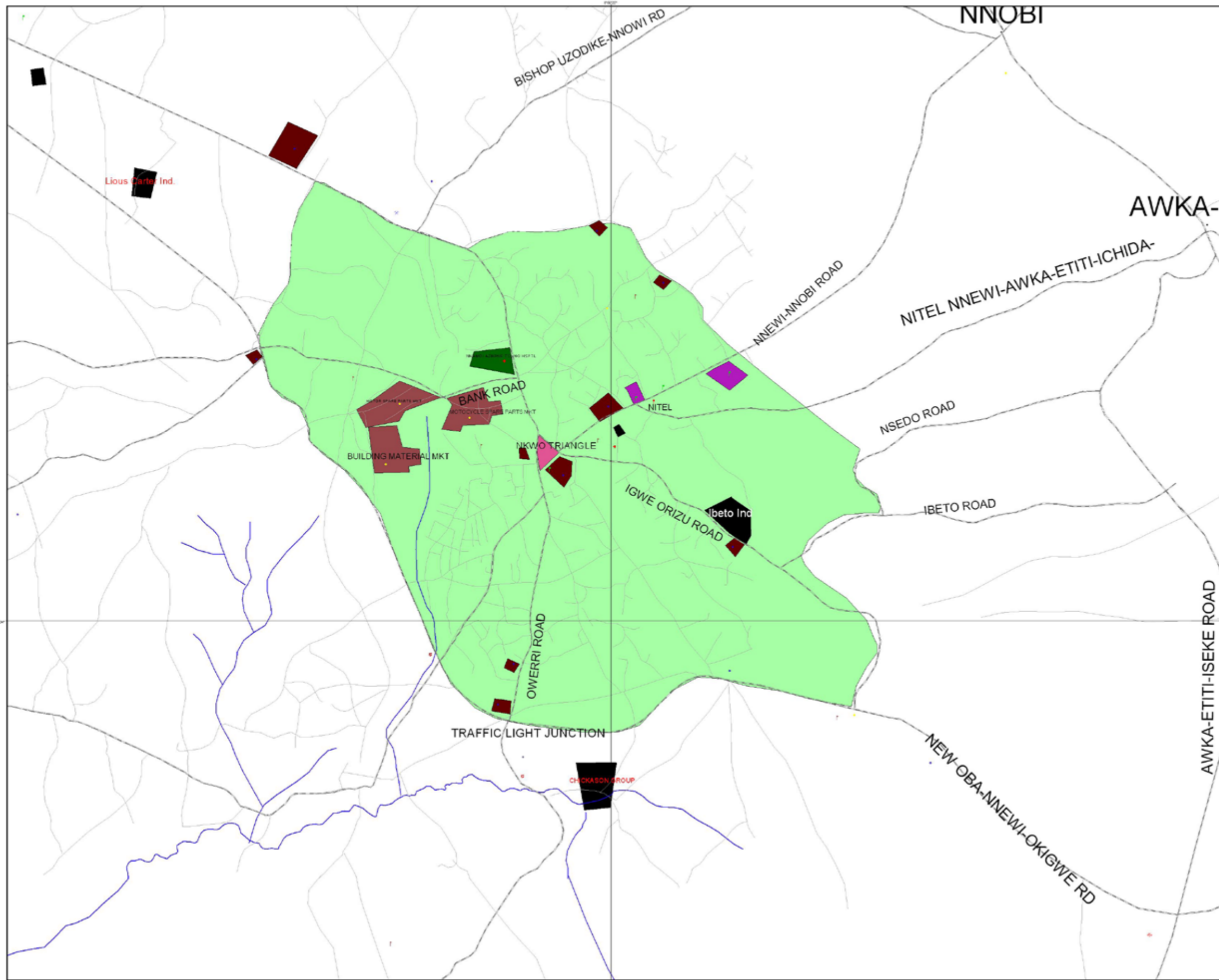
**NNEWI DIGITAL ELEVATION MODEL
ELEVATION RANGE**

	950 - 1050M
	850 - 950M
	750 - 850M
	650 - 750M
	550 - 650M
	450 - 550M
	350 - 450M
	250 - 350M
	150 - 250M

N

0 4 Kilometers

FIG 3.1: NNEWI URBAN CORE



NNEWI URBAN CORE

ANAMBRA STATE URBAN STRUCTURE PLAN PROJECT

LEGEND

- MINOR ROADS
- MAJOR ROADS
- DUAL CARRIAGE ROAD
- RIVERS

PUBLIC BUILDINGS

- CHURCH
- SCHOOL
- CULTURAL
- NITEL
- HOSPITAL
- WATER WORKS
- LGA H/QTRS
- POLICE STN
- COURT
- MARKET

- NKWO TRIANGLE
- MARKETS
- SCHOOLS
- INDUSTRY
- HOSPITAL
- CHURCH
- CORE BOUNDRY

N

0 1 Kilometers

FIG 3.12: NNEWI SATELLITE TOWNS: GULLY EROSION SITES

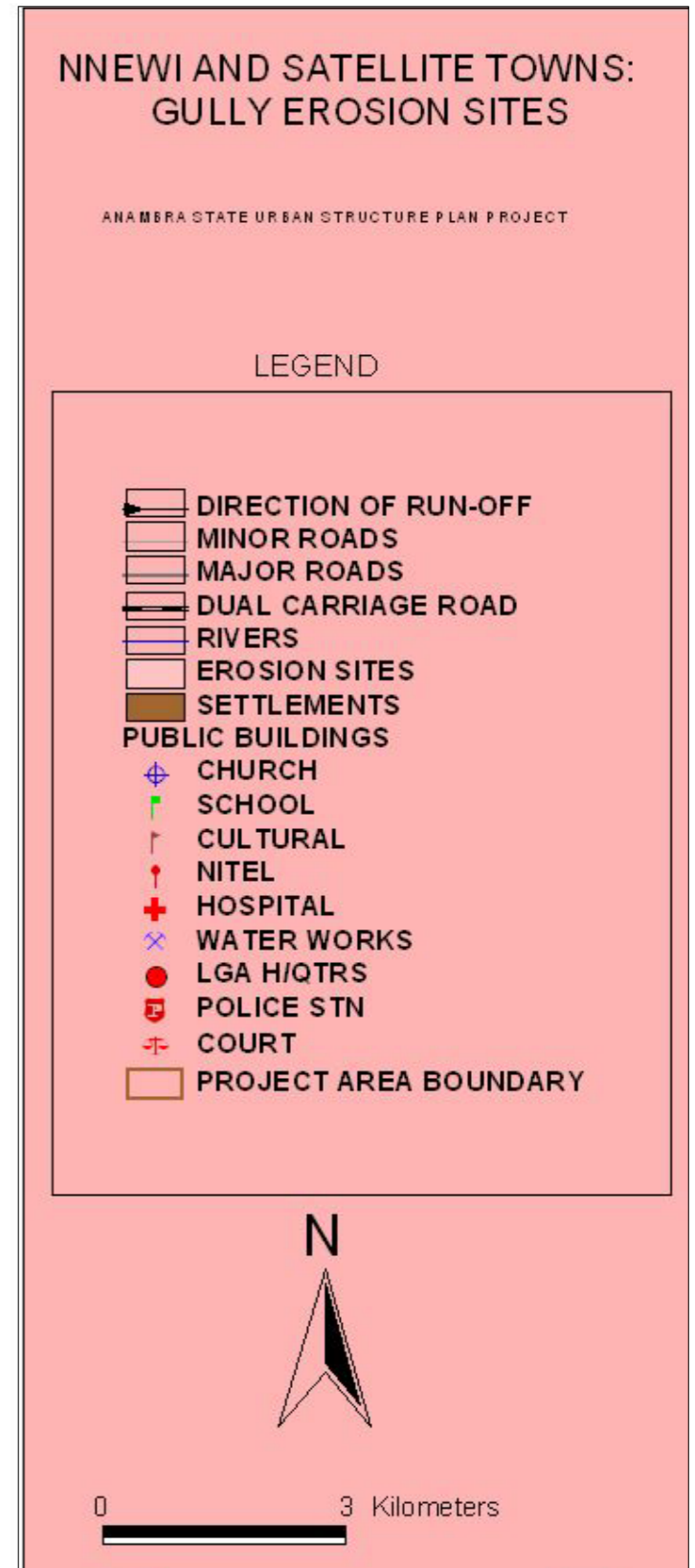
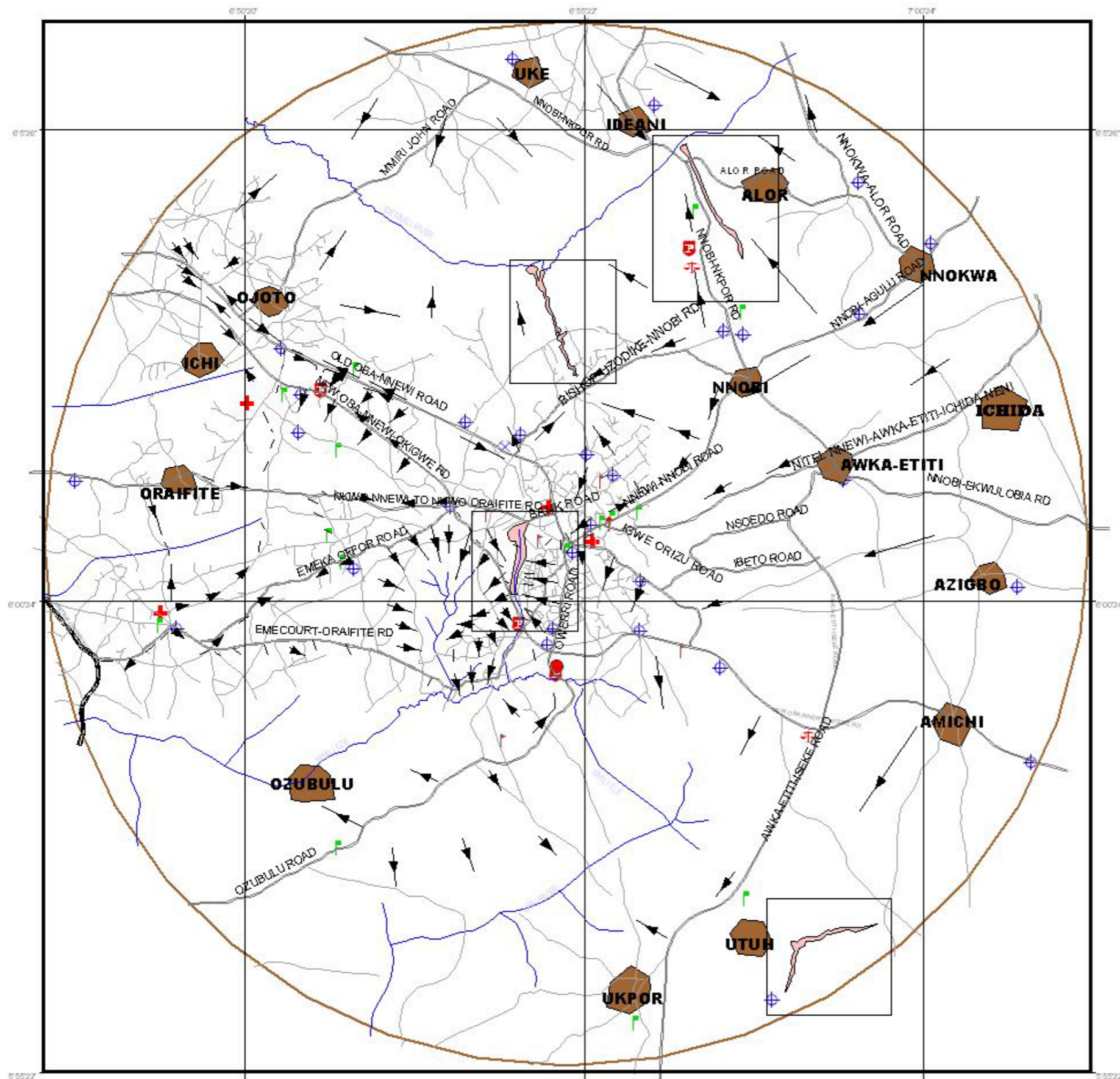


FIG 3.14: NNEWI AND SATELLITE TOWNS: EXISTING ROAD NETWORK

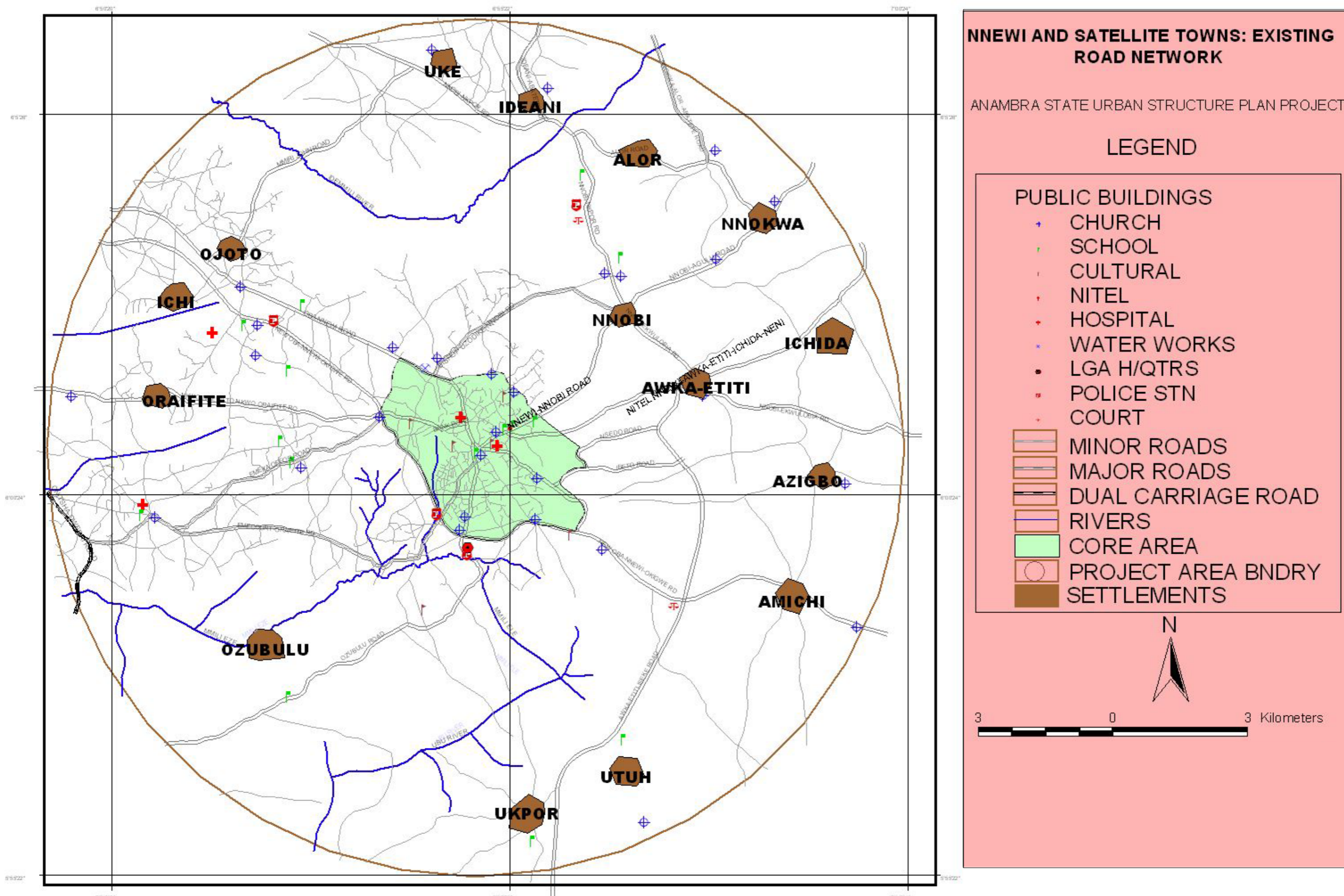
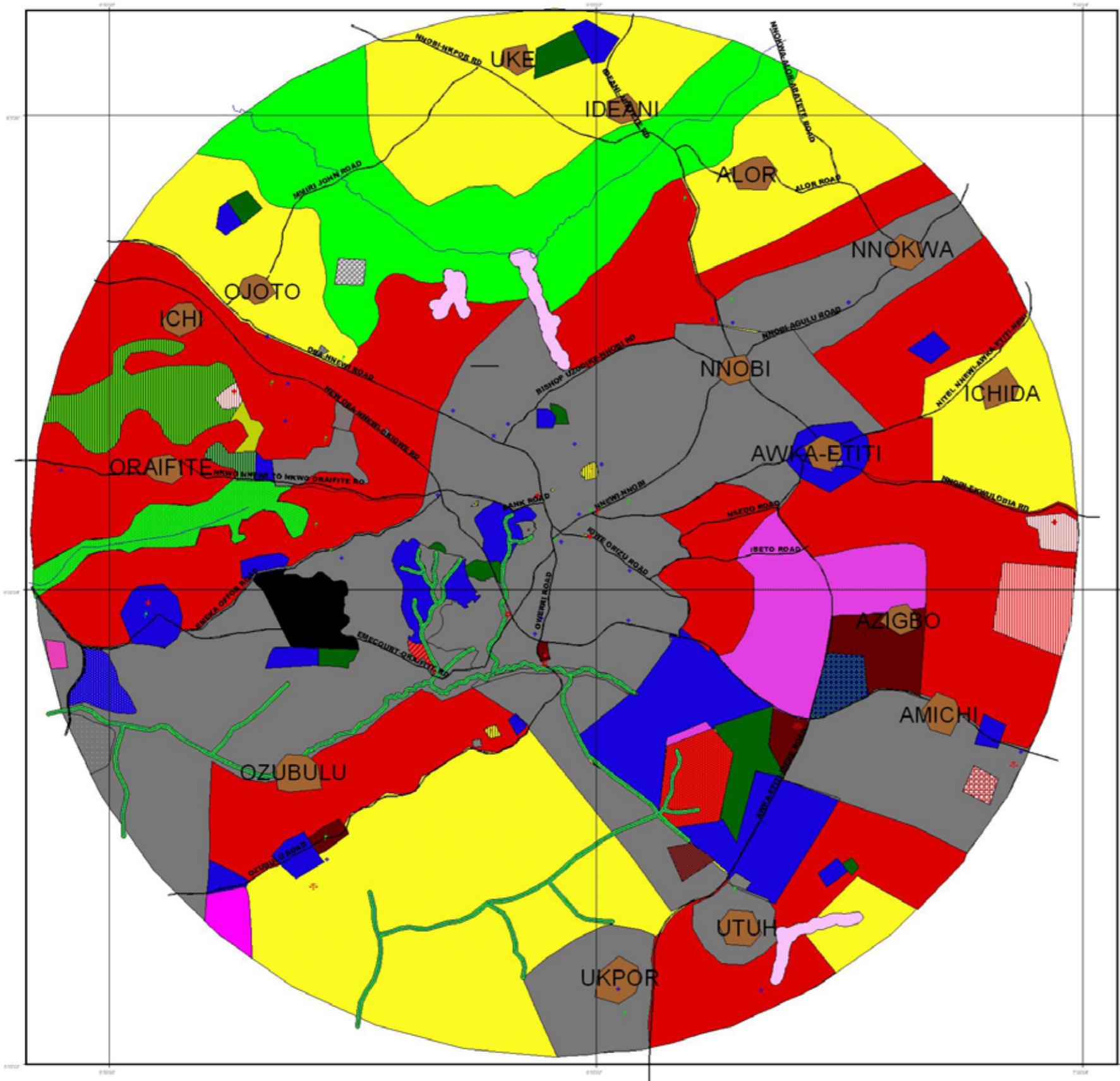


FIG 5.1: NNEWI SATELLITE TOWNS: PROPOSED LAND USES



**NNEWI AND SATELLITE TOWNS:
PROPOSED LAND USE.
BIFOCAL (OLD AND NEW CENTRES)**

ANAMBRA STATE URBAN STRUCTURE PLAN PROJECT

LEGEND

- PUBLIC BUILDINGS**
 - CHURCH
 - SCHOOL
 - CULTURAL
 - NITEL
 - HOSPITAL
 - WATER WORKS
 - LGA/HOTRS
 - POLICE STN
 - COURT
 - FIRE SERVICE
- SETTLEMENTS**
- RIVERS
- DUAL CARRIAGE WAY
- MAJOR ROADS
- 40M RIVER BUFFER
- PROPOSED LAND USE**
 - HIGH DENSITY RESD
 - MED DENSITY RESD
 - LINEAR PARK
 - LOW DENS RESD.
 - COMMERCIAL
 - CIVIC CENTRE
 - CONSERVATION
 - OPEN SPACE
 - MOTOR PARK
 - LUXURY BUS PARK
 - REGIONAL STADIUM
 - GOLF COURSE
 - SPECIALIST HOSP
 - ZOOLOGICAL GARDEN
 - INDUSTRIAL ZONE
 - HAUSA MARKET
 - TRAILER PARK
 - SKIL ACQUISITION CNTR
 - GOVT INSTS
 - PROPOSED UNIVERSITY
 - PROPOSED HOTEL
 - TOURISM
 - AGRIC LAND
 - TEACHING HOSP
 - LANDFILL/REFUSE RECYLNG PLANT
 - MECHANIC VILLAGE
 - PROJECT AREA BOUNDARY
 - CEMETARY



0 3 Kilometers

FIG 5.2: NNEWI AND SATELLITE TOWNS: PROPOSED ROAD NETWORK

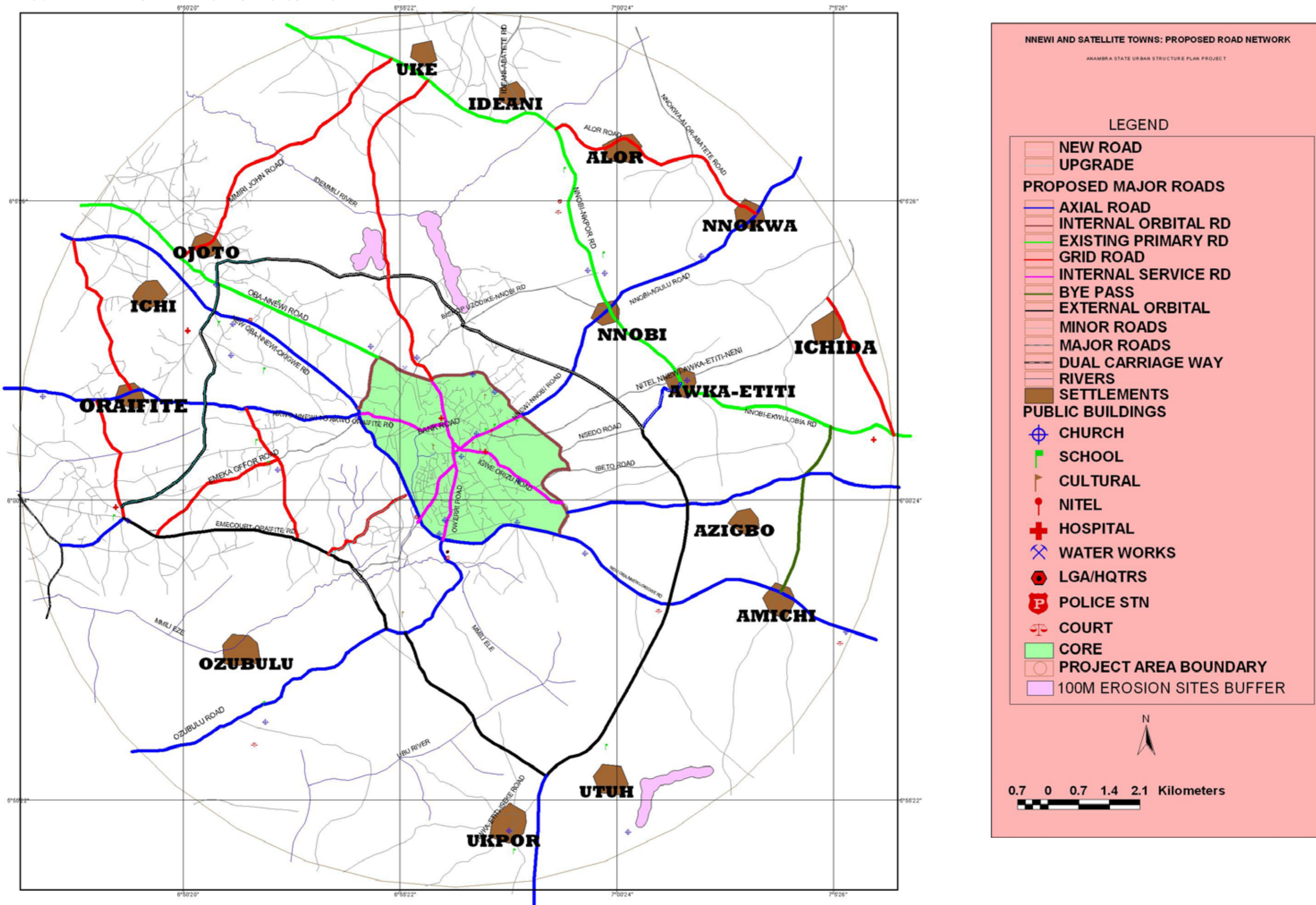
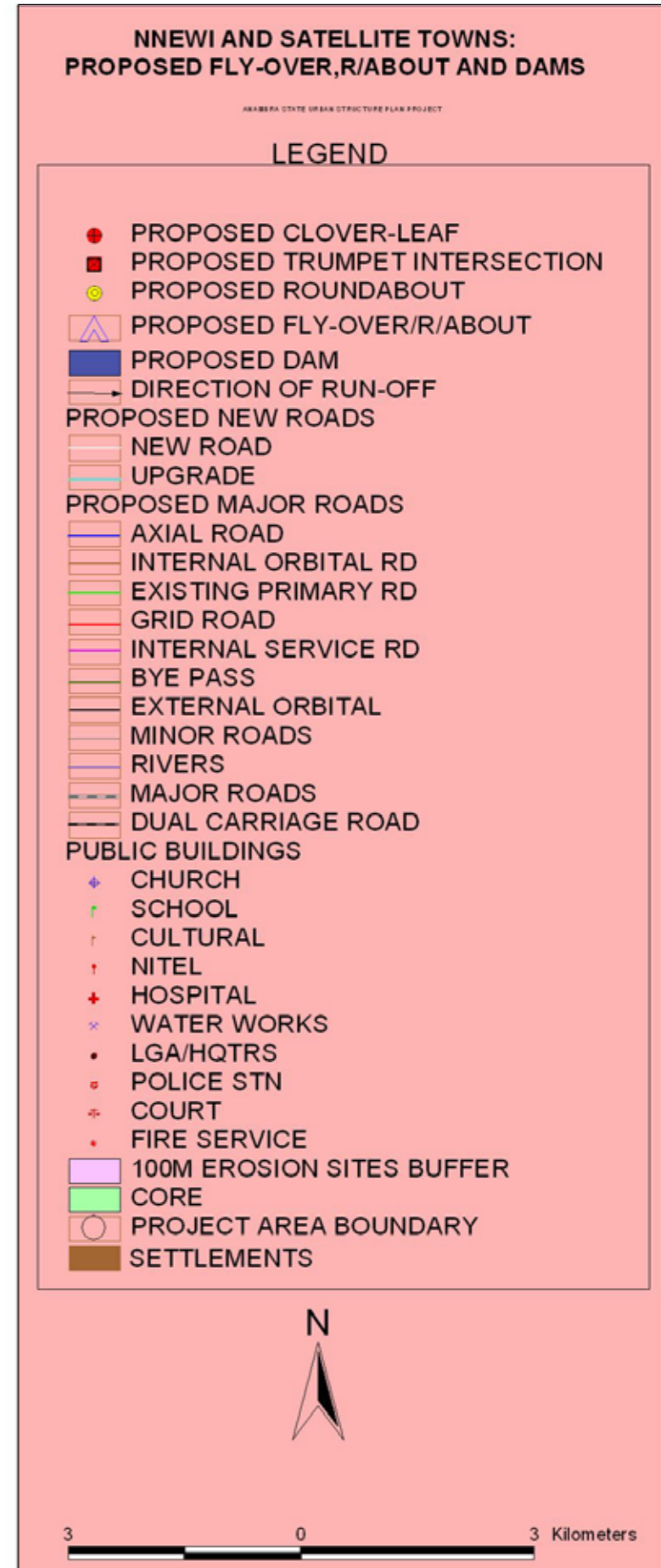
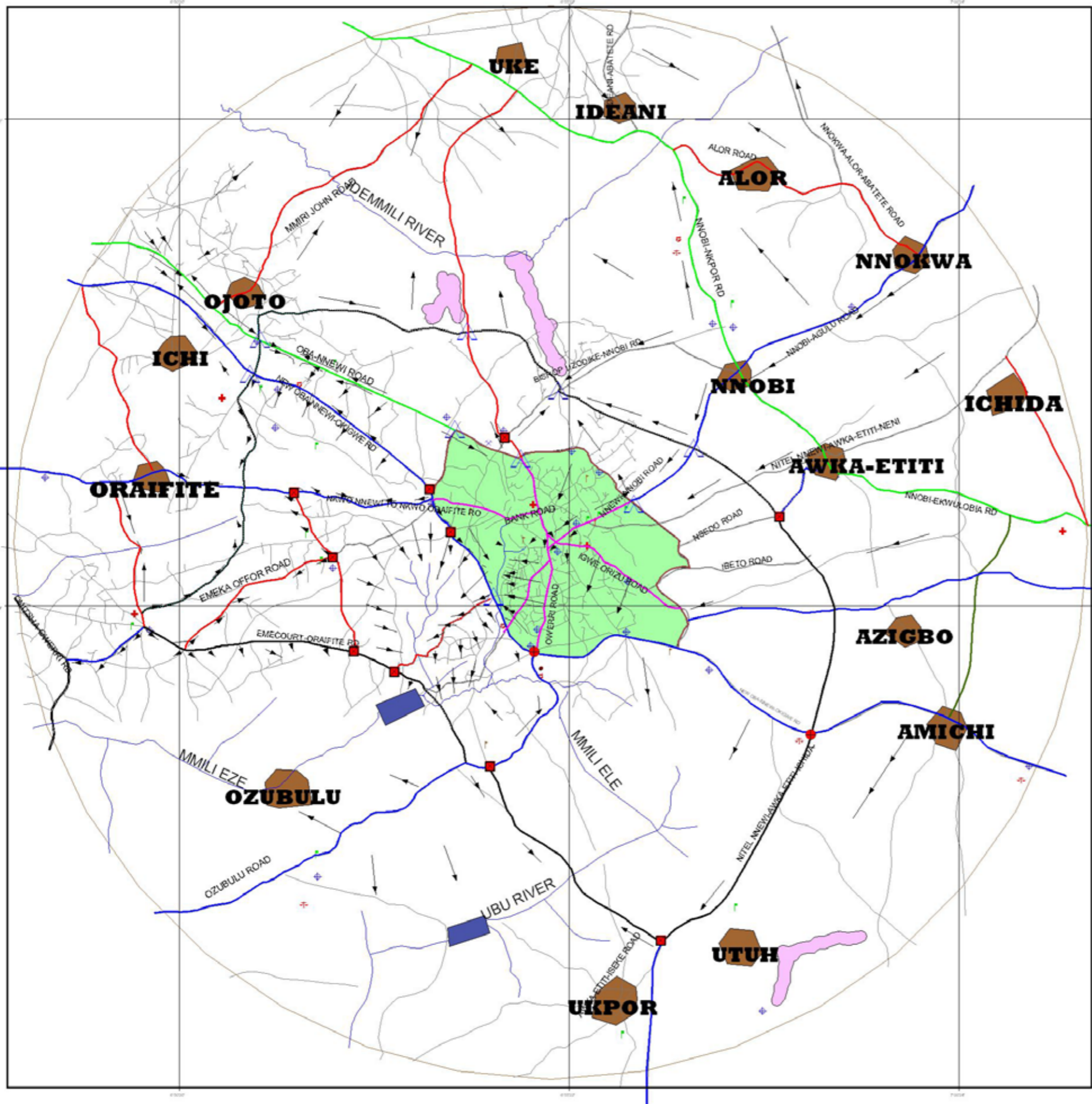


FIG 5.2: NNEWI AND SATELLITE TOWNS: PROPOSED FLYOVER AND ROUNDABOUTS



Anambra, with a population of over 4 million people in 2006, is the second most urbanized states in the country, having 62% of its total population living in urban areas. Unfortunately, past Governments since creation of the State in 1991 have failed to adopt city development strategies for its many fast growing cities to cope with rapid urbanization. Following decades of neglect and poor urban governance, the profiles of these cities indicate that they are characterized by decayed inner and suburban sprawling slums, inadequate sanitation, uncontrolled street trading, mountains of uncollected wastes, overcrowded and congested transport systems and roads with poor drainages, noise and air pollution

It was for the purpose of reversing this ugly and undesirable trend that the Government of His Excellency of Peter Obi forged a viable technical cooperation agreement with UN-HABITAT in 2007 to provide technical assistance in the preparation of structure plans for three cities, namely Awka Capital Territory, Nnewi and Onitsha. By so doing, it is the first ever bold attempt to prepare and adopt a robust and dynamic city development strategy for any city in the State. The structure plan for each city covers 20 years (2009-2028). The goals of the structure plans are towards achieving environmental sustainability in the context of achieving State and Local Economic Development Strategies, Millennium Development Goals and Habitat Agenda, orderly and healthy development, the contributions of cities to sustained economic growth, poverty reduction, sustainable livelihoods, good governance and gender empowerment.

This Report, which is the structure plan for Nnewi, is a tangible outcome of this cooperative effort. For the next 20 years, the Structure Plan envisions that Nnewi will be planned and developed as 'the foremost efficient, functional, livable, inclusive and sustainable industrial and commercial centre in Anambra State'. Specifically, to promote Nnewi as an efficient and commercial city, the structure plan is designed to achieve the economies of scale industries located together by attracting the existing diverse industries in family compounds to a well-laid out industrial estate. The structure plan also proposes to de-congest and rebuild the present CBD to provide more functional spaces for shops, movement of goods and people and parking for vehicles, by relocating some of the many markets in the inner areas to peri-urban areas coupled with other radical proposals for urban renewal, city beautification, development of parks and substantive improvements to the existing transport infrastructure through road widening, traffic management and the development of warehouses and rail terminal.

The report contains comprehensive land use proposals, identification of action planning areas, policies, land use standards and implementation and funding arrangements. The proposed implementation strategy emphasizes strong political commitment, participation and civic engagement, adopting an integrated approach, decentralization of planning function to local government, legal and institutional reforms, pro-poor approach to land reform, action planning, capacity building, resource mobilization, monitoring and evaluation.

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