



A PROJECT REPORT

ON

**ENVIRONMENTAL ANALYSIS ON CONSEQUENCES OF
INCOMPATIBLE LAND USES IN CORE AREA ILORIN
(A CASE STUDY OF ADETA AND ISALE OJA)**

BY

**ISAAC ESTHER OMOTOLA
HND/23/URP/FT/0020**

SUBMITTED TO:

**THE DEPARTMENT OF URBAN AND REGIONAL PLANNING,
INSTITUTE OF ENVIRONMENTAL STUDIES, KWARA STATE
POLYTECHNIC ILORIN.**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF HIGHER NATIONAL DIPLOMA (HND) IN URBAN
AND REGIONAL PLANNING.**


JUNE, 2025

CERTIFICATE

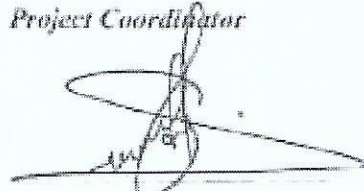
I hereby certified that the information given in this project was obtained as a result of the observation and measurement made by me and that the survey was carried out in accordance with survey laws, regulations and departmental instructions.


TPL: M.Y. YAHAYA
Project Supervisor

27/07/2025
Date


TPL: M.I. YAHAYA
Project Coordinator

29/7/25
Date


TPL: E.S. ADEKANYE
Head of Department

31/7/25
Date


External Supervisor

31/7/25
Date

DEDICATION

This project report is dedicated to God Almighty, the planner of the universe who through His word makes everything beautiful for His protection, provision and guidance. Also to my Parent, for their unwavering support throughout my programme.

ACKNOWLEDGEMENT

I give all glory, honor, and adoration to Almighty God for His mercy, goodness, grace, protection, provision, and guidance upon me throughout the period of this programme may His name be highly exalted. I will like to acknowledge my able, dynamic, and ever dependable supervisor, in person of TPL. M.Y. YAHAYAH for the sacrifice of his time to read through the entire project may you live long to enjoy the fruit of your labour.

My profound gratitude goes to the Head of Department TPL. E.S. ADEKANYE for his fatherly love and support, and all the lecturers in this great and noble department for their impacts in shaping me academically.

I will be an ingrate if I fail to appreciate the most important person who stand by me , support me, encourage me make himself available every time I called in person of Nils Weling may God bless you beyond recommendation, may he supply all you needs thank you.

I specially thank my parent MR & MRS ISAAC for believing in my dreams and supported me in achieving it thank you for your love, prayer advice and financial support, my prayer for you is that when is time to eat the fruit of your labour, death will not snatch you away.

I also appreciate my Brothers and Mr Maher for their love and support heaven will answer your secret prayers in Jesus Name. AMEN.

TABLE OF CONTENTS

Title Page	i
Certification	ii
Dedication	iii
Acknowledgment	iv
Table of contents	v
Abstract	xi

CHAPTER ONE: *INTRODUCTION*

1.1	Background of the Study	1
1.2	Statement of the Problem	2
1.3	Aim	2
1.4	Objectives	2
1.5	Scope of the Study	3
1.6	Historical Background of Ilorin	3
1.7	Significance of the Study	6
1.8	Definition of Terms	7

CHAPTER TWO: *LITERATURE REVIEW*

2.1	Conceptual Framework	8
-----	----------------------	---

CHAPTER THREE: *RESEARCH METHODOLOGY*

3.1	Research Methodology	14
3.2	Research Design	14
3.2.1	Data Types and Sources	14
3.3	Instrumentation for Data Collection	15
3.4	Target Population	15
3.5	Sample Frame	15
3.5.1	Sample Size	16
3.5.2	Sampling Procedure	16
3.6	Method of Data Analysis	16

CHAPTER FOUR: *DATA ANALYSIS, RESULT AND DISCUSSION*

4.1	Descriptive Analysis: Demographic Profile	17
4.2.	Data Analysis according to Research Objectives	19
4.2.1	Distribution of Responses towards Issue Encountered in Relation	19
4.2.2	Distribution of Responses about Market been located near reidnti area	20
4.2.3	Impact of Government on Land Use control and Management	22
4.3	Discussion of Result	28
4.3.1	Research Question I	28
4.2	Reseach Question II	28

CHAPTERFIVE: *SUMMARY, CONCLUSION AND RECOMMENDATIONS*

5.1	Summary	29
5.2	Major Findings	29
5.3	Conclusion	30
5.4	Recommendations	30
5.5	Suggestion for Further Research	31
	Reference	47-51

ABSTRACT

This study examines the environmental consequences of incompatible land uses in the core areas of Ilorin, focusing on Adeta and Isale Oja. Rapid urbanization and unplanned development have led to the coexistence of residential, commercial, and industrial land uses, resulting in environmental degradation and conflicts. Using a mixed-methods approach, this research investigates the impacts of incompatible land uses on environmental quality, public health, and community livelihoods. The findings highlight the need for effective land use planning and management strategies to mitigate the adverse effects of incompatible land uses and promote sustainable development in these areas. The study's insights can inform policy decisions and urban planning practices in Ilorin and similar cities.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

There is no doubt that land is the most vital ingredient of national socio-economic development. Land is wealth no matter its nature or conditions. No land is ever without its purposes, this is because on it depend every economic activity which makes the economist to put it among the factors of production. How a community or country utilizes land determines the level and kind of economic development that takes place in that community or country.

Land though represent only about two fifth of the earth's surface, provides a platform on which man's activities are predicated and its importance to man on earth through all ages can hardly be over emphasized, (Adamu and Kawuwa, 2014). In view of this we can see that land is an essential commodity of man.

In contemporary physical planning literature, the term land use refers to the use to which a site, plot or building is put; it may be residential, commercial, industrial, public, recreational, agricultural or transportation (Obateru 2005). Oduwaye (2013) expatiated further that socio-economic factors influencing land use can be viewed from the sociological, geographical, and economic perspectives. To the sociologist, it is the human being, his psychology, which is the key to the process structure and pattern. Other specific social factors influencing land use are quality of neighborhood, security, prestige, taste, ethnic and social factors. The geographer places emphasis on such things as relief, elevation, climate, location and geology. The economist suggests that it is the economies, which are to be obtained from using a particular piece of land, for example from its accessibility, and centrality that influence land use. The economist also considers the issue of scarcity, demand, nature of use, agglomeration economies, expected revenue, speculation and intervening opportunities. Also cultural factors influencing land use include ethnic origin, religion and tradition. Rapport also noted that individual aspiration to achieve culturally derived satisfaction, also affects land use.

1.2 Statement of the Problem

Incompatible land uses associated with numerous problems which a town planner as to solve. The finding of some problems extracted from both study area are:

1. The city is plagued by insecurity.
2. Noise pollution is a significant problem in urban areas.
3. The environment is often left untidy.
4. Traffic congestion is a daily struggle.
5. Urban slums are a growing concern.
6. Hawking often leads to encroachment on public spaces.

All this above mentioned resulting from mixing compatible landuses with incompatible landuses, it's common in an urban area i.e cur area of an urban centre due to diversity of land use activities such as industrial landuses, commercial landuses, recreational landuses and residential land uses.

1.3 Aim

- a) The aim of this study is to examine the Consequences of incompatible land uses on the environment of Ilorin (Adeta and Isale-oja area of Ilorin Kwara State). With a view to improve and maintain visually pleasant and appealing environment.

1.4 Objectives

To achieve the broad goal, the following objectives are set up:

- Asses the existing general land uses of the study area.
- Analyze the impact of government on land use control and management in the study area.
- Identify the various problems associated with incompatible land use of the study area.
- Provide reasonable recommendation to the problem identified.

1.5. Scope of study

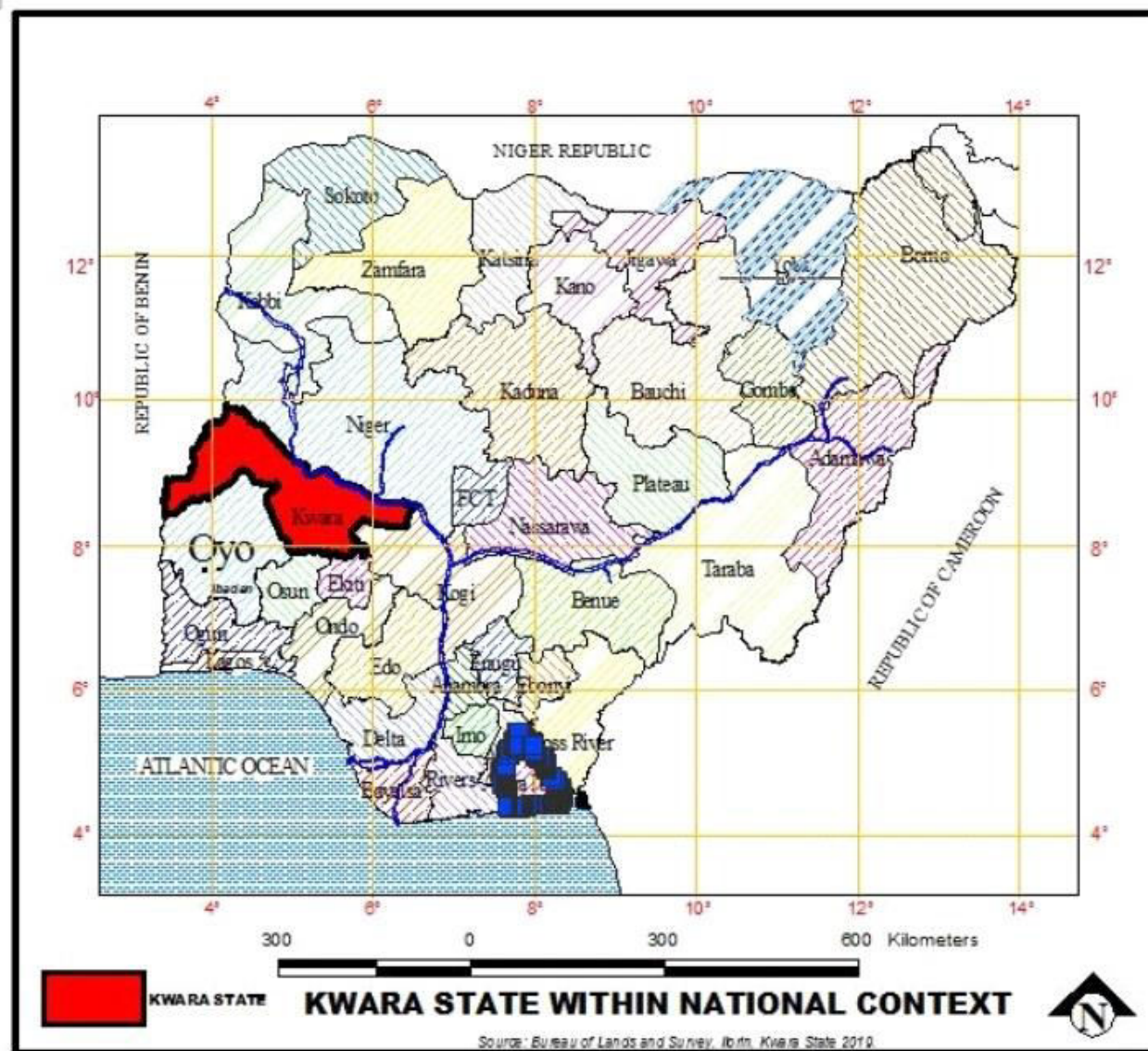
The scope of the study is limited to the cur area of Ilorin metropolis specially Isale-oja and Adeta area of ilorin were the level of incompatible land uses is very high and the residence of the study area built know the implications of the incompatible land uses.

1.6 Historical Background of Ilorin

Ilorin is the gate-way between Northern and Southern Nigeria. It is situated on the latitude 8°3'01 North and longitude 4°32'1 East. It lies on the plain of the South-West plain of Nigeria. It is a transitional zone between the open savannah belt of which is an integral part to the North and forest area to the South. The city which lies along Lagos-Kaduna highway is about 134km away from Ibadan and 360km from Lagos. It is bounded in the North by Kogi state, in the East by Ekiti/Osun states and in the South by Oyo State (see figure 1). Ilorin is about 600km from Kaduna and about 500km from Abuja, the Federal Capital of Nigeria.

Ilorin is underlined by crystalline rocks of the pre-cambain complex. Many outcrops of this basement appear at random along low laying river bed as well as on the lopes of hills. The physical characteristics of Ilorin can also be determined by the presence of the three main rivers namely Oyun, Asa and Mora which traverse the city. The Oyun River borders the city some 10km away flowing in a north western direction, while Asa River cuts across the city flowing north-wards. On the western side, the Moro River flows some 11km away from the city centre. All these rivers later converge some 10km North of Ilorin to form the 'Awun' River which joins the River Niger at Jebba. The main river is Asa River that divides the city into two parts. The topography is generally of gentle undulating slope with soft round hills reaching the heights of about 335m. The height of the ridges separates the three rivers rose to about 330m on the west bank and 396m on the east bank of a river. The lowest elevation with the study area is about 270m on both banks of Asa River. Ilorin is 394m above sea level and situated about 50 kilometers of the watershed between the Atlantic basins of the River Niger which is 72 kilometers north of Ilorin.

Figure1: Kwara State within the National context



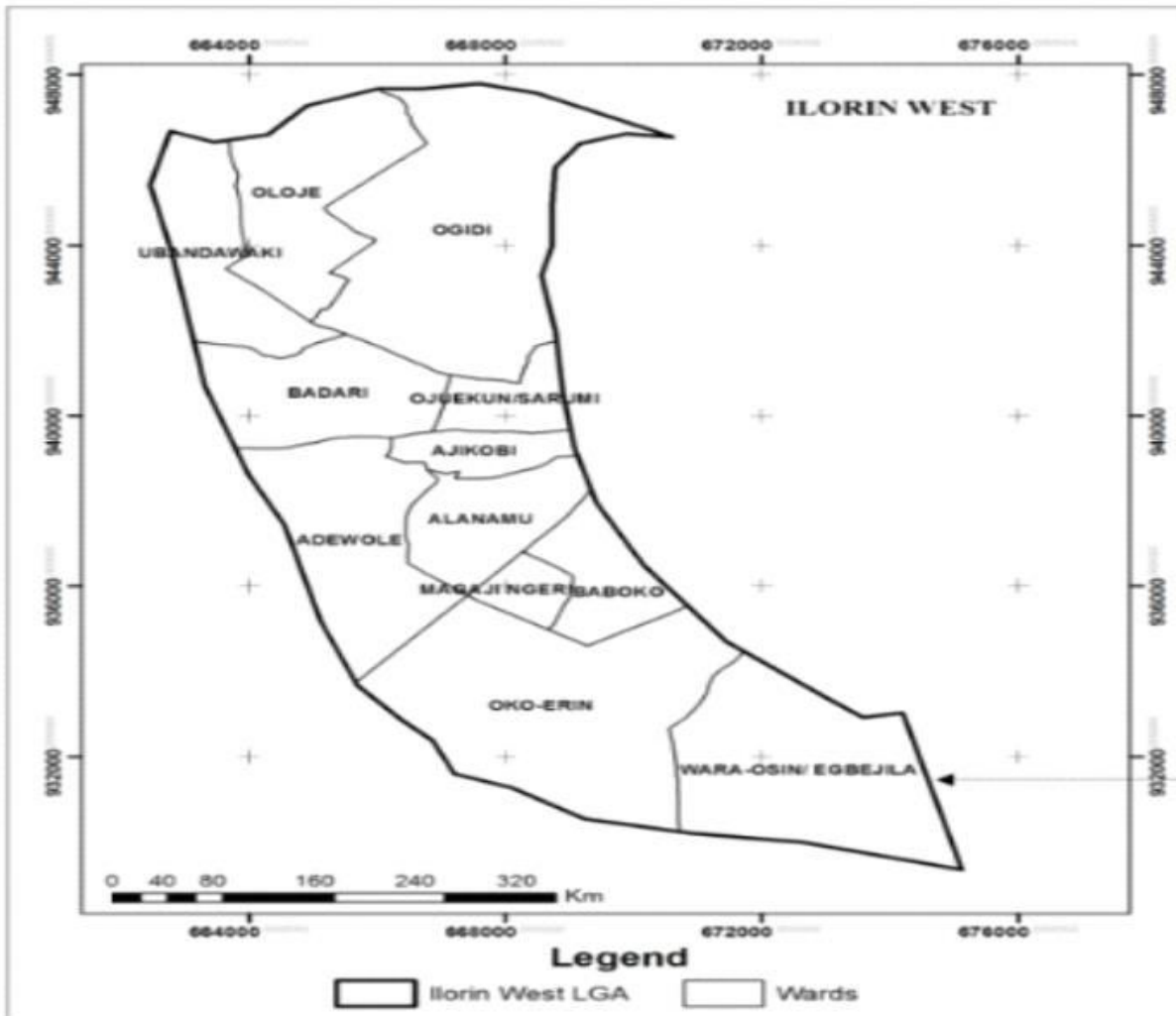
Source: Kwara State Bureau of Land, 2023.

Figure2: Kwara State Map



Source: Kwara State Bureau of land

Figure 3: Ilorin West LGA in Kwara State



Source: Kwara State Bureau of land, 2023.

1.7 Significance of the Study

The significant of this study is to bring light to the effect of incompatibility of land uses in Ilorin metropolis as it can bring confusion when it come to census of commercial and residential property and the desterilize of the central master plan of the area.

This study will awaken the three tiers of governments on the menace of incompatible uses of land and also orientate land holders on the need to avoid selling of land without prior knowledge of it use by the buyers.

The study will also be of immense benefit to policy makers and urban and regional planners to avoid the growth and development of mixed land uses as it can deteriorate to become an incompatible land uses.

1.8 Definition of Terms

Land: Material in the top layer of the surface of the earth in which plants can grow (especially with reference to its quality or use)

Land use: it involves the management and modification of natural environment or wilderness into built environments such as settlements and semi natural habitats.

Incompatible: Incapable of being used with or connected to other devices or components without modification.

Consequences: a phenomenon that follows and is caused by some previous phenomenon.

Conflict: opposition between two simultaneous but incompatible feelings.

Environment: the area in which something exists or lives.

LUCs: Land uses/Land covers.

LUCC: Land uses change/Land cover change

CHAPTER TWO

CONCEPTUAL FRAMEWORK, THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 Conceptual framework

LAND

There is no doubt that land is the most vital ingredient of national socio-economic development. Land is wealth no matter its nature or conditions. No Land is ever without its purposes, this is because on it depend every economic activity which makes the economist to put it among the factors of production. How a community or country utilizes land determines the level and kind of economic development that takes place in that community or country.

Land though represent only about two fifth of the earth's surface, provides a platform on which man's activities are predicated and its importance to man on earth through all ages can hardly be over emphasized, (Adamu and Kawuwa, 2014). In view of this we can see that land is an essential commodity of man.

Land is one of three major factors of production in classical economics (along with labor and capital) and an essential input for housing and food production. Thus, land use is the backbone of agricultural economies and it provides substantial economic and social benefits. Land use change is necessary and essential for economic development and social progress. Land use change, however, does not come without costs. Conversion of farmland and forests to urban development reduces the amount of lands available for food and timber production. Soil erosion, salinization, desertification, and other soil degradations associated with intensive agriculture and deforestation reduce the quality of land resources and future agricultural productivity (Lubowski et al. 2006).

Need to mention that in everyday speech land would mean only the earth's soil or the solid part of the earth on which man lives. The term land includes all physical elements in the wealth of a nation bestowed by nature, such as climate, environment, fields, forests, minerals etc. As land means only the solid part of the earth on which man lives, it also means different things to different disciplines and authors, to economists; it refers to all forms of natural resources with

which a particular country has been endowed, that is, resources which are given to man freely by nature. They include the soil, farmland, mineral deposits, forests, sunshine, fishing ground, bodies of water such as lakes, seas, rivers, etc.

Bohannon defined land as a measurable entity divisible into thing like parcel by means of mathematical and technical processes of surveying and cartography. In a geographical context, Vink has defined a tract of land as a specific area of the earth's surface: its characteristics embrace all reasonably stable, or predictably cyclic attributes of the biosphere vertically above and below this area including those of the atmosphere, the soil and underlying rocks, the topography, the water, the plant and animal populations.

FAO defines land as “a delineable area of Earth’s terrestrial surface, encompassing all attributes of the biosphere immediately above or below this surface, including those of the near-surface climate, the soil and terrain forms, the surface hydrology (including shallow lakes, rivers, marshes, and swamps), the near-surface sedimentary layers and associated ground water reserve, the plant and animal populations, human settlement pattern and physical results of past and present human activity (terracing, water storage or drainage structures, roads, buildings, etc.)”

According to the Business dictionary, the term land includes all the physical elements in the wealth of a nation bestowed by nature; such as climate, environment, fields, forests, minerals, mountains, lakes, streams, seas, and animals; While Cambridge English Dictionary, refers to land as the material in the top layer of the surface of the earth in which plant grows, It is also the solid part of the earth.

The term space and land are synonymous as far as Raleigh Barlowe is concerned. He defined land as a space–room and surface within which and upon which life takes place..... land as space includes not only the surface of the earth but also cubic space. Land thus involves the space beneath the surface within which minerals are found and from which they might be removed, the space that man occupies in his daily living, and the space above and about him. It is apparent from the above that land is not synonymous with the ground surface as erroneously conceived in some quarters. The scope of land is far wider than the surface area of the earth.

In physical planning, land is also synonymous with the physical environment of man and natural resources which are below. Natural resources are the component elements of the physical environment. Land embraces the following:

- The earth crust or lithosphere which is the outer(upper) layer of the earth
- The hydrosphere
- The troposphere i.e. gaseous envelope covering the earth
- The biosphere, the realm of vegetation, animals and soil.

Land is the basic for all development and major source of wealth for all government and the people. Its inaccessibility therefore constitutes a great obstacle to development of both the public and private sector of the economy.

Land is a very significant property and is one thing that man could not do without. It is the major determinant factor for the existence of man, plants and animals. For instance, Simpson (1976) said that Land is the source of all materials wealth, from it we get everything that we use or value, whether it be food, clothing, fuel, shelter, metal or precious stones. We live on the land and from the land, and to the land our bodies or ashes are committed when we die.

Going with the above explanation on land, I will confidently say that land holds a central position in human existence and development. Since their appearance on earth, human have used land and its resources to meet their material, social, cultural, and spiritual needs. They have used land for the provision of food, clothing, shelter, and heat; for producing a large variety of goods and services for their own use or market exchange; for moving around and transporting goods; for recreation and leisure; for aesthetic pleasure; for attaining social status and prestige; for spiritual satisfaction; and for claiming territorial sovereignty and in fact I will emphatically say that without land, there is no human.

Land use

Land use involves the modification and management of natural environment or wilderness into built environment such as settlements and semi-natural habitats such as arable fields, pastures,

and managed woods. Land use is the function or functions that humans apply to the land available to them. The study of land use is the study of how the land is managed, including how the natural world is adapted to human needs. The practices vary considerably across the world. The United Nations Food and Agriculture Organization Water Development Division explains that “Land use concerns the products and/or benefits obtained from use of the land as well as the land management actions carried out by humans to produce those products and benefits.”

As Albert Guttenberg (1959) wrote many years ago, “Land use is a key term in the language of city planning.” According to FAO, land use concerns the function or purpose for which land is used by the population; it can be defined as “the human activities that are directly related to land, making use of its resources or having an impact on them.” Land-use is influenced by a variety of factors operating on more than one spatial and temporal level and acting not in isolation but in intricate webs of place- and time-specific relationships. Several theories, originating in the Natural and the Social Sciences and, most recently, in interdisciplinary research, have been advanced to describe and explain land-use.

There are many types of land use which includes the following:

- Residential land use
- Recreational land use
- Transportation land use
- Agricultural land use
- Commercial land use
- Industrial land use

Climate as land use determinant

Knowledge that climate varies from region to region dates to ancient times. The early Greeks (such as Aristotle, circa 350 BC) classified the known world into Torrid, Temperate, and Frigid zones based on their relative warmth. It was also recognized that these zones varied systematically with latitude and that the flora and fauna reflected these changes as well. With the

further exploration of the world, naturalists noticed that the distribution of climates could be explained using factors such as sun angles, prevailing winds, elevation, and proximity to large water bodies. The two weather variables used most often as indicators of climate are temperature and precipitation. To classify climates accurately, climatologists require a minimum of 30 years of data to describe the climate of an area. The invention of an instrument to reliably measure temperature—the thermometer—dates only to Galileo in the early 17th century. European settlement of and sporadic collection of temperature and precipitation data from distant colonies began in the 1700s but was not routine until the mid-19th century. This was soon followed in the early 20th century by some of the first attempts to classify global climates using actual temperature and precipitation data.

Climate also contributes to the determination of land use as people consider it before putting a land into use. Climate can be measured at different scales (macro, meso, or micro). The climate of a large (macro) region, such as the Sahara, may be described correctly as hot and dry. Climate can also be described at meso-scale levels; for example, the climate of coastal Southern California is sunny and warm, with dry summers and wet winters. Finally, climate can be described at local scales, such as on the slopes of a single hill. This is termed a microclimate. At the microclimate level, many factors will cause the climate to differ from nearby areas. For example, in the United States and other regions north of the Tropic of Cancer, south-facing slopes tend to be warmer and drier than north-facing slopes because they receive more sunlight.

According to Veldkamp and Fresco (1996), land use change is determined by spatial and temporal interaction between biophysical factors (e.g. soil, climate, vegetation and topography) and anthropogenic factors (e.g. population size and density, technology levels, economic conditions, the applied land use strategy, and social attitude and values). Agarwal et al. (2002), developed an analytical framework that illustrates these interactions very well and summarized models of human- environmental dynamics based on three critical dimensions: time, space and decision-making. Time and space are the first two dimensions, as all biophysical and human processes operate within them, and decision- making (the third dimension) is relevant to where human processes are involved. Cultural conditions, individual's perceptions of the world, influence what they consider to be important, and suggest appropriate or inappropriate courses of action. Nevertheless, cultural differences have important impacts on direct drivers, (Nelson et al.,

2006). Cultural factors can influence consumption behavior; therefore, can be a particularly important driver of environmental change.

Haven torch all the determinants of land use, I decided to come up with my own personal determinants as they affects the choice of people in putting land into use. My determinants of land use are listed below.

- Technology
- Transportation

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research methodology

This chapter involves the presentation of the various methodological approaches that will be utilized in the course of this study. It includes the study of population and its characteristics, the techniques to be adopted in getting the data needed, as well as the method to be adopted in the analysis of the collected data. Two things are usually faced under the term “methodology” the methodology itself and the method.

According to Barley (2000), methodology means the philosophy of the research process and this includes assumption and value that serves rational for the research, while the method simply means the research techniques used for gathering data.

3.2 Research Design

Research design is perceived to be an overall strategy adopted by the researcher whereby different components of the study are integrated in a logical manner to effectively address a research problem. In this study, the researcher employed the survey research design; this is due to the nature of the study whereby the opinion and views of people are stamped. The two study area are suitable for the project topic, because the study area is mix land use, it's been used for both commercial and residential land use.

3.2. Data Types and Sources

There are two types of data and they are; primary data and secondary data.

Primary Data

Primary data was collected through various means like direct personal observation, oral interview, telephone conversation as well as questionnaire administration.

Secondary Data

This involves the extraction of relevant information from documented publication, textbooks, journals as well as internet expiration that are relevant to the subject of the study. In other words, they are collected from both published and unpublished works.

Types of Primary Data/ Sources

Types of primary method used in this research work are as follows; Interview, physical observation, questionnaire.

Interview

Personal interview was conducted to collect data that are reliable and valid from respondent. The interview was conducted by meeting with the respondents and getting information from them. As part of this project, personal interview was carried out.

Questionnaire

3.3 Instrumentation for Data Collection

The research instrument used in this research work is the questionnaire which is in line with the study objectives aimed at providing answers to the research questions.

3.4 Target Population

According to Gilbert (2002), since it is not possible to deal with the whole target population, one must identify the portion of population in which one can access. For the purpose of this research work, the target population comprises of the staff of Kwara State Physical Planning Authority and land Owners in the study area.

3.5 Sample Frame

In the cause of carrying out this study, there were 59 buildings in Adeta area while 71 are in Isale-oja area of Ilorin metropolis, making a sum of 130 buildings to be sampled. The case study was chosen as a result of untidy confusion, high population rate, and traffic congestion as a result of a mixture of incompatible uses to which land has been subjected. These problems are very

common, in most urban area where many activities such as commercial and services activities from, residential, industrialization and recreational location are been found Urban landscape structure of Kwara State, especially due to expansion of residential areas, increasing the risks of a chaotic urban development.

3.5.1 Sample Size

The sample size is a percentage representation of all elements in a sample frame. In other words, it is the representation of the sample frame which the researcher intends to carefully understudy while carrying out the research.

3.5.2 Sampling Procedure

The sampling procedure used in sampling the respondents in this research work is systematic random sampling.

3.6 Method of Data Analysis

The responses were analyzed using the frequency tables which provide answers to the research questions.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 DESCRIPTIVE ANALYSIS: DEMOGRAPHIC PROFILE

Descriptive analysis showcase the result obtained from demographic characteristics of respondents. It gives a basis for the backgrounds with other analyses are drawn, this is shown below;

Table 4.1.1: Distribution of respondents' age range

Age range	Frequency	Percentage
20-30	102	81%
40-50	15	11.9%
60-70	9	7.1%
80-90	0	0%
Total	126	100

Source: Author's field survey.2025

From table 4.1.1 102 respondents which represent 81% were between ages of 20 years to 30 years, while 15 respondents which represent 11.9% were between ages of 40 years to 50 years and 9 respondents which represent 7.1% were between ages of 60 years to 70 years. This means the number of respondents that falls in the age range of 20 to 30 years has the higher frequency.

This is because respondents in the age range of 20 to 30 years have access to many sources in other to evaluate the survey analysis.

Graph showing the distribution of respondents' age range.

Table 4.1.2: Distribution of respondents' gender

Gender	Frequency	Percentage
Male	78	61.9%
Female	48	31.1%
Others	0	0%
Total	126	100%

Source: Author's field survey.2025

From table 4.1.2 78 respondents which represent 61.9% were male, while 48 respondents which represent 31.1% were female. Which means the number of male respondents is higher than female respondents in the study area. This is because due to lack of time and space for the female respondents in the area.

Graph showing the distribution of respondents' gender.

Table 4.1.3: Table showing the level of respondents' Education.

Level of Education	Frequency	Percentage
--------------------	-----------	------------

Primary	0	0%
Secondary	9	7.1%
Tertiary	81	64.3%
Others	36	28.6%
Total	126	100%

Source: Author's field survey.2025

From table 4.1.3, 81 respondents represent 64.3% were graduates of tertiary institution, which assured us the level of education of the respondents were mostly tertiary institution graduate. While 36 respondents which represent 28.6% belongs to the others in respect to the level of their education. 9 respondents represents 7.1% were O'level graduates.

Graph showing the distribution of respondents' level of education.

4.2 DATA ANALYSIS ACCORDING TO RESEARCH OBJECTIVES

Table 4.2.1: Distribution of responses towards issues encountered in relation to land use as market.

Question 4	Frequency	Percentage
Noise	18	14.6%
Insecurity	18	14.6%

Untidy Environment	45	36.6%
Unorganized trade	42	34.2%
Total	123	100%

Source: Author's field survey.2025

From table 4.2.1, 45 respondents which represent 36.6% assured us that untidy environment as issues encountered, while 42 respondents which represent 34.2% assured us that unorganized trade were the issues encountered. 18 respondents which represent 14.6% chose noise and insecurity as issues encountered in relation to land use as a market respectively. Which means untidy environment is the major issues encountered in relation to land use as a market according to respondents in the survey area.

Graph showing the distribution of responses toward issues encountered by respondents in relation to land use as a market.

Table 4.2.2: Distribution of responses about market been located near a residential area.

Question 5	Frequency	Percentage
Not appropriate	84	66.7%
Appropriate	9	7.1%
Normal	24	19.1%
There is no alternative	9	7.1%

Total	126	100%
-------	-----	------

Source: Author's field survey.2025

From table 4.2.2, 84 respondents which represent 66.7% agreed that a market been located near residential area is not appropriate, while 24 respondents which represent 19.1% believes it is normal for a market to be located near residential area. 9 respondents which represent 7.1% believe that it is appropriate and there is no alternative for a market been located near residential area.

Graph showing the distribution of respondents' opinions about market been located near a residential area.

4.2.3 IMPACT OF GOVERNMENT ON LAND USE CONTROL AND MANAGEMENT.

Table 4.2.3 shows frequency, mean scores and standard deviation of the impact of government on land use control and management.

s/ n	ITEMS	CM	N C	C M	C M	C M	MEA N	SD	REMARK
1	Nurtured of land use control and management over the years.	39	36	48	6	3	26.4	10.5	Accepted
2	Increase chances of land assessment.	24	60	24	12	6	25.2	18.7	Accepted
3	Reduction of land difficulties in land accessibility.	27	45	30	21	3	25.2	13.6	Accepted
4	Sustainability towards social equality and economic development.	33	39	33	18	3	25.2	13.1	Accepted
5	Increase in security tenures.	24	24	54	27	3	26.4	15.4	Accepted
6	Reduction of land scarcity.	15	42	30	27	6	24.0	12.4	Rejected
7	Provision of a reliable land data base.	24	36	30	18	12	24.0	8.5	Rejected

8	Reduction of the incidence of land speculation.	21	42	33	18	9	24.6	11.6	Rejected
9	Sustainability towards environmental protection.	24	27	42	27	6	25.2	11.5	Accepted
10	Reduction of illegality in land transactions.	21	24	45	30	9	25.8	11.8	Accepted

CRITERION MEAN X= 25.2, GRAND MEAN 25.2

Source: Author's field survey.2025

Table 4.2.3 above shows the mean scores of response of respondents on the impact of government on land use control and management. The significant mean scores are those that are above the cutoff 25.2. The respondents agree that nurtured of land use control and management over years with the scores of 26.4, increases chance of land assessment with the scores of 25.2, reduction of land difficulties in land accessibility with the score of 25.2, sustainability towards social equality and economic development with the scores of 25.2, increase in security tenures with the scores of 26.4, sustainability towards environmental protection with the scores of 25.2 and reduction of illegality in land transactions with the scores of 25.8. While the insignificant mean scores are below the cutoff 25.2. The respondents disagree that reduction of land scarcity with the scores of 24.0, provision of a reliable land database with the scores of 24.6 and reduction of the incidence of land speculation with the scores of 24.6. Therefore, from the table above, the respondents have positive response towards impact of government on land use control and management, as their grand mean scores of their response is above 25.2. Thereby huge impact of government on land use control and management.

- **THE VARIOUS PROBLEMS ASSOCIATED WITH INCOMPATIBLE LAND USE.**

Table 4.2.shows the frequency, mean scores and standard deviation of the various problems associated with incompatible land use.

s / n	ITEMS	CM	N C	C M	C M	SA	ME AN	SD	REMARK
1	Declining soil fertility and soil erosion.	51	27	12	27	6	24.6	15.6	Accepted
2	Negative changes in landscape quality.	24	51	21	24	3	24.6	15.3	Accepted
3	Increase frequency of floods and floods damage.	21	42	30	18	12	24.6	10.5	Accepted
4	Lowering both productivity and aesthetic quality.	21	27	15	51	9	24.6	14.5	Accepted
5	Increase higher residential traffic.	24	36	18	27	18	24.6	6.7	Accepted
6	Increase overcrowding.	24	30	15	36	15	24.0	8.3	Rejected
7	Pressure infrastructural facilities	33	24	30	27	9	24.6	8.4	Accepted

	and social amenities.								
8	Deteriorating man-land relationship.	21	39	27	30	6	24.6	11.0	Accepted
9	Increase environmental pollutions.	33	27	21	27	15	24.6	6.1	Accepted
10	Negativity on the nation's economy.	18	48	21	27	9	24.6	13.1	Accepted

CRITERION MEAN= 24.54,

GRAND MEAN= 24.54

Source: Author's field survey.2025

From table 4.2.4 above shows the mean scores of response of respondents on the various problems associated with incompatible land use. The significant mean scores are those that are above the cutoff 24.54. The respondents agree that declining soil fertility and soil erosion with the score of 24.6, negative changes in landscape quality with the scores of 24.6, increase frequency of floods and floods damage with the scores of 24.6, lowering both productivity and aesthetic quality with the scores of 24.6, increase higher residential traffic with the scores of 24.6, pressure infrastructural facilities and social amenities with the scores of 24.6, deteriorating man-land relationship with the scores of 24.6, increase environmental pollutions with the scores of 24.6 and negativity on the nations' economy with the scores of 24.6. While the insignificant mean are scores that are below the cutoff 24.54. The respondents disagree with increase overcrowding with the scores of 24.0. Therefore, from the table above, the respondents have positive response towards the various problems associated with incompatible land use, as their grand mean score of their response is above 24.54. Thereby the various problems associated with land use have huge consequence on the incompatible land use.

• **RECOMMENDATION TO THE VARIOUS PROBLEM IDENTIFIED**

Table 4.2.5 shows the frequency, mean scores and standard deviation of response of respondents on the recommendation to the various problems identified.

s/ n	ITEMS	CM	NC	CM	CM	CM	MEAN	SD	REMARK
1	Provision of land use plan.	66	30	21	6	0	24.6	23.3	Accepted
2	Development control by authorities.	51	42	24	6	0	24.6	19.8	Accepted
3	Using approved standards for any land use development.	42	51	18	12	0	25.8	17.6	
4	Public enlightenment Campaign on built environment.	57	24	18	18	6	24.6	17.2	
5	Adherence to level of zoning guidelines.	39	48	12	18	6	24.6	16.1	
6	Sufficient and updated data on land use and population.	51	39	18	12	3	24.6	17.7	
7	Adequate coordination at various level of	45	42	24	9	3	24.6	16.9	Accepted

	planning.								
8	Proper prosecution of land use violations.	42	33	24	12	6	23.4	13.2	Rejected
9	Improving environmental sustainability	36	54	15	15	3	24.6	18.1	Accepted
10	Considering the socio-cultural and economic conditions of the people.	51	33	15	21	0	24.0	17.2	Accepted

CRITERION MEAN= 24.54,

GRAND MEAN= 24.54

Source: Author's field survey.2025

Table 4.2.5 above shows the mean scores of response of respondents on recommendations to the various problems identified. The significant mean scores are those that are above the cutoff 24.54. The respondents agree that provision of land use plan with the score of 24.6, development control by authorities with the scores of 24.6, using approved standards for any land use development with the scores of 25.8, public enlightenment campaign on built environment with the scores of 24.6, adherence to level of zoning guidelines with the scores of 24.6, sufficient and updated data on land use and population with the scores of 24.6, adequate coordination at various level of planning with the scores of 24.6, improving environmental sustainability with the scores of 24.6 and considering the socio-cultural and economic conditions of the people with the scores of 24.6. While the insignificant mean scores are scores that are below the cutoff 24.54. The respondents disagree with proper prosecution of land use violations with the scores of 23.4. Therefore, from the table above, the respondents have positive response towards recommendation to the various problems identified, as their grand mean scores of their response

is above 24.54. Thereby very effective recommendations will be implemented for the various problems.

4.3 DISCUSSIONS OF RESULT

4.3.1. RESEARCH QUESTION ONE

HOW TO ACCESS THE GENERAL LAND USES IN THE STUDY AREA.

Generally, the major land use at the study area is a market, which the survey indicated a lot of issues encountered which include noise of the traders and the activities been carried out at the market, also it was indicated that insecurity is part of the issues encountered, unorganized trading activities where there is no proper arrangement of traders. In table 4.2.1, it was indicated that untidy environment is the major issues encountered in relation to market been located in the study area. The respondent expresses their desire towards the location market around a residential area, it was considered not appropriate as it was indicated in table 4.2.2 above.

4.3.2. RESEARCH QUESTION TWO

WHAT ARE THE IMPACT OF GOVERNMENT ON THE LAND USE CONTROL AND MANAGEMENT IN THE STUDY AREA?

The result of the analysis of table 4.2.3 shows that the respondents realized the impact of government on land uses control and management, which aid them to analyzed the consequences of incompatible land use at the study area so as to reduce the illegality in land transactions which it will definitely increase the chances of land assessment in order to provide sustainability towards social equality and economic development. Reliable land database will enhanced the reduction in land difficulties and efficient land accessibility. Sustainability towards environmental protection will effectively increase land security tenures and tends to reduce the incidence of land speculations.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

This chapter presents the summary of the whole study, the contributions which the study have on the knowledge, effects of major findings, limitations of the study, conclusion, recommendations and the suggestion for further research.

5.1 SUMMARY

This research work is aim at examine the consequences of incompatible land uses on the environment of Ilorin (Adifa and Gegele, Ilorin, Kwara state). In order to know the perception of respondents on the consequences of incompatible land use on the environment, to assess the existing general land uses in the study area, impact of government on land uses control and management, to identified various problems associated with incompatible land uses and provide reasonable recommendations to the various problems identified. A well-structured questionnaire was administered to the staff of Town planning authorities living in the study area and other professions in the study area. The total number of 126 respondents were selected which comprises of 78 males and 48 females. The data obtained from the research work were analyzed base on frequency distribution, mean and standard deviation. The outcomes have being explicitly shown in Table 4.1.1, 4.1.2, 4.1.3, 4.2.1, 4.2.2, 4.2.3, 4.2.4 and 4.2.5.

5.2 MAJOR FINDINGS

1. The study revealed that respondents have perception towards untidy environments as the major issues encountered in relation to land use as a market.
2. The study revealed that respondents do not agree with a market been located near a residential area and it is considered not appropriate.
3. The study shows that the perception of respondents on the impact of government on land uses control and management.
4. The study revealed the various problems associated with incompatible land uses on the environments.

5. The study shows that the perception of respondents toward the reasonable recommendations to the various problems identified.

5.3 CONCLUSION

This study was set to examine the consequences of incompatible land uses on the environments of Ilorin. The assessment of the existing general land uses on the study area and the impact of government on land use control and management and identification of various problems associated to incompatible land uses on the environments. This research work is carried out to see how respondents living within the study area react to the consequences of incompatible land uses on the environments as it has huge impact on the households and national economy.

This research work noticed that there are problems associated with incompatible land uses in urban area, this includes insecurity, noise pollutions, untidy environments, traffic congestion as a result of a mixture of incompatible land uses to which land has been subjected.

To these sets of problems are very common in most urban area where many activities such as commercial and service activities from, residential, industrialization, recreational location are been found urban landscape structure of Kwara state suburban area has change lately. The consequences of this residential expansion have led to malfunctions, outlining a disadvantage area due to environmental problems.

The incompatibility in Adifa area and Gegele area of Ilorin metropolis is very pronounced that it is assumed to be associated with some problems which include untidy environment, high population rate, traffic congestion and un-aesthetic living environment.

5.4 RECOMMENDATIONS

Conclusively, based on the findings of this study, the following recommendations are made:

- The households should adhere to land use developments guidelines and encourage public enlightenment this is due to the fact that the respondents have positive perceptions toward public campaign on built environment.

- The government authorities should encourage adequate coordination's at various levels of planning.
- The Town planning authorities should adopt using of approved standard for any land use developments and proper prosecution of land use violators.
- The Town planning authorities should control the land use developments, considering the socio-cultural and economic conditions of the people in order to improve the environmental sustainability.

5.5 SUGGESTIONS FOR FURTHER RESEARCHS

- This work could be extended further to cover most area in Ilorin metropolis, other urban area in Kwara state, some other rural area in the state and other states in Nigeria.
- Further research can also be carried out on the effects of incompatible land use and development in Kwara state and other state in Nigeria.
- Further research can also be carried out on the impact of land management on the efficiency of public land accessibility in Kwara state and other State in Nigeria.
- Further research can also be carried out on the socio-cultural and economic factors on land management and land use since Nigeria is considered as a heterogeneous country in terms of Culture and Traditions.

REFERENCES

- Adamu S.J and Kawuwa A.S., (2014); A Review of the Nigerian Land Use Act of 1978: Journal of Environmental Sciences and Resource Management, Vol. 6. No.2.
- Albert Guttenberg., (1959); Multidimensional Land Use Classification and How it Evolved: Reflections on a Methodological Innovation in Urban Planning. Vol.1.
- Bradshaw, A.C.J., N.S. Sodi, K.S.H. Peh and B.W. Brook., (2007); Forest-flood relation still tenuous comment on ‘Global evidence that deforestation amplifies flood risk and severity in the developing world’
- Cristian, I.I., Constantina, A.T., (2011); Temporal analysis of incompatible land-use and land-cover: The proximity between residential areas and gas station in Bucharest suburban area.
- De Jong L, De Bruin S, Kroop J, Van Vilet J; (2021): Understand Land-use Change Conflict: A Systematic Review of Case Studies.
- Emenike B. Obani and Chinelo P. Igwe., (2021); Impacts of Land Management on the Efficiency of Public Land Accessibility in Owerri, Imo State; Mgbakoigba, Journal of African Studies, vol 8 No. 2
- Hui, E.C.M, Bao H, (2013); The Logic Behind Conflicts in Land Acquisitions, in Contemporary China: A Framework Based Upon Game Theory Land Use Policy.
- Kilicoghi C, Cetin M, Aricak B, Servik H, (2021); Integrating Multi Criteria Decision-Making Analysis For a GIS-Based Settlement Area.
- Kwara State Bureau of Land., (2023); Kwara State Within the National Context.
- Lai Y, Huang G, Chen S, Lin S, Lin W, Lyu J, (2021); Land Use Dynamics and Optimization from 2000 to 2020 in East Quang Dong Province.
- Lubowski, R.N., Bucholtz, S., Claassen, R., Roberts, M.J., (2006); Environmental Effects of Agricultural Land-Use Change: The Role of Economics and Policy

McCabe, BIC, (2020); Home Owners Association as Private Governments; What We Know, What We Don't Know and Why It Matters.

McErow and Newell, Stutts M, (2016); Defining Urban Resilience: A Review Land Scope Urban Plan.

Md. M. Rahman and G. Szabo., (2020); Multi-objective urban land use optimization using spatial data: A systematic review. Sustainable Cities and Society 74.

Mwesigye F, Matsumoto T, (2016); The Effect of Population Pressure and Internal Migration on Land Conflicts: Implication For Agricultural Productivity In Uganda

Obateru, (2015); Expatiatl Further That Socio-Economic Factors Influencing Land Use Can Be Viewed From The Socio Logical; Geographical and Economic Perspectives.

Oduwaye, (2013); Expatiatl Further That Socio-Economic Factors Influencing Land Use Can Be Viewed From The Socio Logical; Geographical and Economic Perspectives.

Qian Zuo, Yong Zhou, Li Wang, Qing Li, Jingyi Liu, (2021); Impacts of Future Land Use Changes on Land Use Conflicts Based on Multiple Scenarios in the Central Mountain Region China.

Rahman M.T.U, Tabassum F, Rasheduzzaman M.d, Saba H, Sarkar L, Ferdous J, Uddin S.Z, Zahedul Islam, A.Z.M., (2017); Temporal Dynamics of Land Use/Land cover Change and its prediction using CA-ANN model for southwestern coastal Bangladesh Environ.

Roderick D. and Mckenzie, (1926); Human Ecology for Reconceptualizing society and the social: Beyond the group.

Seto K.C, Golden J,S, Albeti M, Turner II B.L, (2017); Sustainability in an Urbanizing Planet. Proc. USA.

Simpsons, R.C., 1976; Land Law Registration in Cambridge: C.U.P., (1976) xlix and 726 pp. Vol. 25.

Till, H., Katharina, H., Hannes, J.K., Katharina, S., Qirui Li, Heiko, F.,(2017); Sustainability impact assessment of peatland-use scenarios; Confronting land use supply with demand. Ecosystem services FoPIA Peatland management

UN Habitat Goal II (2016); Make Cities Inclusive, State Resilient and Sustainable.

ADETA DRAINAGE



ADETA SECONDARY SCHOOL



ISALE OJA MOSQUE ILORIN



ISALE OJA

