

SOCIO-ECONOMIC AND ENVIRONMENTAL IMPACTS OF INFORMAL SETTLEMENTS IN ADO-EKITI METROPOLIS

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Abstract

Background: Informal settlement in Ado - Ekiti metropolis based on available evidence is confirmed to be on the increase as a result of an upsurge in her population, which came up mostly through immigration. Basically, informal settlement is one of the numerous effects of development and urbanization. The unplanned and illegal settlement in the metropolis has now grown beyond reasonable limits, such that the consequential socio-economic and environmental effects have started to generate much concern. This issue is becoming complex by the day, hence, the call for urgent and decisive attention. **Objectives:** This study sought to unravel the mystery behind informal settlement in the metropolis, identify socio-economic and environmental challenges, as well as to suggest probable solutions to the identified challenges. **Methodology:** Both primary and secondary data were sourced and utilized for the study. The primary data was collected through a well-designed questionnaire which was later administered to 400 respondents randomly chosen across the study area. Descriptive statistical technique was employed in the analysis of the collected data. **Results:** It is established that informal settlement has grown tremendously and consequently developed serious socio-economic and environmental impacts in many stances. These among others include: drug and alcohol abuse, crime, rape, severe poverty, poor service delivery, inadequate sanitary facilities, poor housing qualities and development. Most of the challenges are, however, caused by unemployment, scarcity and high land values in the metropolis, etc. **Conclusion:** Government should regulate the cost of both land acquisition and building materials as well as encouraging individual intending house developers to obtain necessary documents through government urban planning officials as this will facilitate good housing scheme in the metropolis. Also, the establishment of an integrated rural development programme should be instituted. **Unique contribution:** This paper has been able to advance probably solutions to the attendant socioeconomic and environmental consequences of informal settlement in Ado-Ekiti metropolis with the view that urban planners will build upon to mitigate such effects. **Key recommendation:** Government should as a matter of urgency look into the issue of the spread of informal settlement in Ado-Ekiti metropolis.

Keywords: Environment, Housing, Informal Settlement Socio-Economic.

INTRODUCTION

Land is a free gift of nature, and an integral part of the universe on which life depends. That is, it constitutes the solid part of the earth crust inhabited by man, animals and plant. From the view point of economist, land constitutes the physical area which we trample upon, the atmosphere above it, and the subsoil underneath it as well as the natural resources found in it. (Furnival, 1909). The outlined concepts of land such as the physical, legal religious, etc according to Olabode (2020) have assisted in defining the interest which is vested on land and these goes a long way to determine its uses.

Be that as it may, land is unequivocally important for the existence of life in aspect of agriculture for food production, shelter for human population, development of infrastructures and other amenities meant to enhance standard of living on the earth.

Regrettably, land is fixed in supply with an ever increasing demand to meet the basic needs of human population. Consequently, man has gone extra steps of reclamation of wet lands which is attended by high "threshold cost" (Adeleke, undated). These great demands for land now is at disparity with its demand a century ago. The ever increasing population of humans and their insatiable wants for expansion - urbanization, agriculture, industrialization, road construction, etc has mounted unquantifiable pressure on available land with little or no effort to increase its supply.

Basically, shelter being the second most essential want of man requires a great deal of land to develop habitants for human population. Part 1 section 3 of the Land Use Act of the Federal Republic of Nigeria categorized land into two viz: urban and rural lands. Urban lands according to the Act are lands found within the areas designated as Urban Areas and are controlled by the State Authority while other lands are Rural Lands and are taken charge of by the Local Government Councils (Onokerharaye, 1995). In view of the above, all lands within the vicinity of State Administration Capitals are urban lands and are administered by a body designated to do so by the State Authority with a workable and functional Master Plan for its development. Ado - Ekiti being the state capital of Ekiti State is not devoid of this rule, where the land administration is vested on the commissioner of Land and Housing of the state.

Shortly, after the creation of the state in 1976, the State Capital Development Agency came into existence to see to the development of the new capital city of which a master plan of the metropolis was drawn and an arm created inside the SCDA to control development in the new city named Development Control Unit. It is important, therefore, to note that, the ineffectiveness and carefree attitude of the State Capital Development Agency and its organs in many states of the federation have created a situation in which housing accommodation for both residential and commercial uses become scarce. This has in turn led to land freedom, alterations and distortions of the Master Plan of the state capital. In other words, many shanties, slums and unauthorized developments have emerged within the cities and sub-urban areas around the cities. These developments have grave consequences of blockage to drainage, building on water pipe line and under way-leaves of High Tension Electric lines, flood plains, consumption and conserved land and vegetated land from surrounding.

In most developing countries of the world, based on the words of Huchzermeyes and Karam (2006), informal settlements have marked the urban landscape for at least half a century. An estimated 25% of the world's urban population lives in informal settlements, with 213 million informal settlement residents added to the global population since 1990 (UN-Habitat, 2013). Informal settlements according to Hadizadeh (2003) is considered as a settlement that compasses self-grown housings without legal identity that are haphazardly spread within and around cities. In another perspective, Napier (2007) defines informal settlements as a place with structures been built by cheap, less durable, expiring and loose materials and equipment that has inefficient urban services and are built outside legal urban areas.

However, considering the definition of human settlements are identified by using criteria like: basic services, improper building structures, unhealthy and dangerous environmental conditions, unsafe residency right, poverty and social deprivation which are originally referred to as an emergency (UN-Habitat 2005).

Considering the various definitions stated above, it is clear that informal settlement has been defined by different scholars based on perceptions, consideration of environmental peculiarities and other reasons. Nevertheless, the basic points are relatively the same in various ways depending on the planning and legal framework of the country where it exists. Meanwhile, for the purpose of this discussion, informal settlement is considered as residential buildings that do not have formal planning approval, built on 'planned' and 'unplanned' areas, with little or no basic services.

The expansion of cities, resulting from continuous migration of people from places of poor opportunities to places of better opportunities in a bid to sustain their livelihoods have drastically increased the number of unauthorized settlements in the urban areas (Huchzermeyer and Karam, 2006). Similarly, Napier (2007), stresses that informal settlement are often created through a process of resultant self-help and they consist of non-conventional housing built without complying with legal building procedures, which remain not serviced and are mostly occupied by people living in abject poverty.

In a nut-shell, there are many factors that are interconnected that are influencing unauthorized settlements within and around cities of the world. These include: population growth; rural - urban migration, inadequate affordable housing and ineffective housing policy; weak planning and urban management policies; economic vulnerability; marginalization; and displacement caused by conflict, natural disasters, and climate change (UN-Habitat, 2015; Tang, 2020). The growth of Informal settlements is a global issue with the growth of urban population. Informal settlement is often devoid of good planning, very dense and are characterized by irregular settlement pattern with structures without formal land tenures (Akirso, 2021). That is, upon inadequate planning, informal settlements are disorganized such that, the spaces which are supposedly meant for basic services and essential infrastructures are occupied with houses characterized by poor environmental conditions. Such environment is marked with soil erosion, floods and pollution (water, land, and air). (Hurskainen, 2004).

Wekesa, Steyn and Ofieno (2011), established that physical condition which is characteristically dependent upon income level and socio-economic conditions of informal settlements tend to be injurious to the inhabitants well-being. Hence, it worsens the socio-economic and increases environmental problems which is against the law of sustainable development. The concept of sustainable development according to Onoherhoraye (1995), emerged in recent years following the growth in the worldwide concern for the devastating ecological crisis in the Sahel and man-made disaster such as Bhopa in India and Chernobyl in the USSR. According to World Commission on Environment and Development (WCED, 1987), sustainable is a development that meets the needs of the present generation without compromising the ability of the future generation to meet their needs. Development involves the purposeful change of the inherently complex environmental systems. Thus, developmental

activities imply activities in the physical environment, take into consideration crucial issue of continuity and sustainability (Ogundele and Jegede, 2014). The sole aim of sustainable development is to see that the needs and aspirations of the present are provided without future compromise of the ability to meet up with their needs. This implies that any development process that ignores sustainability would hardly make positive and enduring impact that could stand the test of time. It is therefore, call for concern to ensure that standard and quality management of housing units in the urban areas are embarked upon.

STATEMENT OF THE PROBLEM

The growth and aggressive expansion of Ado-Ekiti metropolis is witnessed with the birth of many illegal settlements within and around the city. In other words, considering the state of policies and processes as a sector in Ado-Ekiti, the state capital of Ekiti state in relation to the rate at which her population increases geometrically, it is crystal clear that informal settlement is indeed spreading fast.

The numbers of informal settlements have continued to increase as people migrate into the city in search of better job opportunities and to maintain their good living conditions. The rapid increase in the population coupled with the inability of the government to meet up with the increase in demand for plots of land for buildings has led to the springing up of illegal settlement. Informal settlement, therefore is becoming an eyesore in the metropolis as there are many non-conventional structures built up within and around the city without adhering to the legal building procedures.

Many literatures, discussing the effects of informal settlement in many developing and developed countries of the world have been published. However, there is an adage that says, a tree or flower that grows well in a particular city may not grow well in another city. This is to say that, the effects of one event in other cities of the world might not be the same effects in Ado-Ekiti. Consequently, Ado-Ekiti informal settlement impacts deserve a separate attention since this has not been proven, and, this has motivated this study.

The concern of this study, therefore, is to examine both remote and immediate socio-economic and environmental effects of the informal settlements in Ado-Ekiti metropolis. It is hoped that the results of this study when completed and published will contribute immensely to the body of literatures on informal settlement and its effects on both the inhabitants and the entire environment of the metropolis. In addition, planners, government environmental development agencies, corporate bodies and individuals will build upon the reports to enhance intervention on better planning which will subsequently eliminate the emerging challenges from informal settlements.

The Study Area

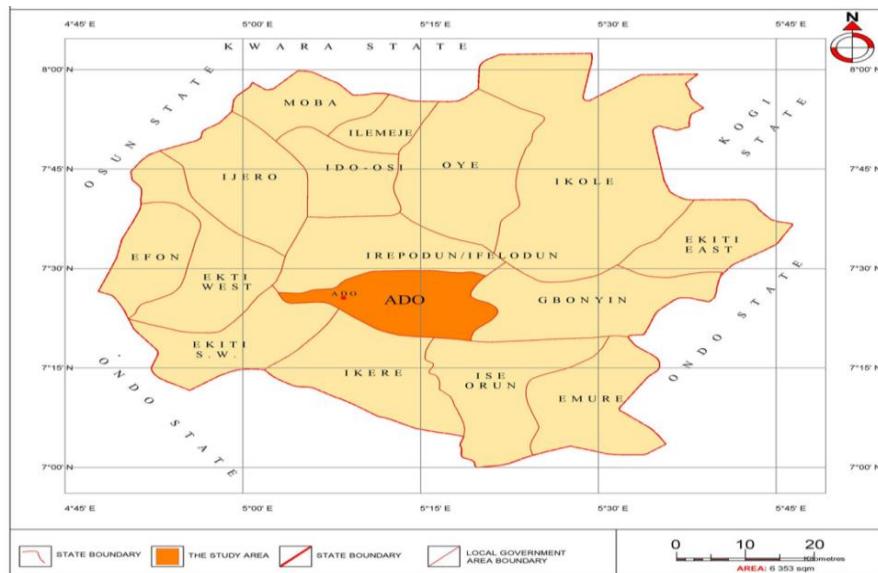


Figure 1: Map of Ekiti State Showing Ado-Ekiti (The Case Study)

Ado-Ekiti metropolis, the study area is the state capital of Ekiti State. The metropolis lies between $7^{\circ}34'$ and $7^{\circ}45'$ north of the Equator and between Longitude $5^{\circ}10'$ and $5^{\circ}18'$ east of the Greenwich Meridian. In other words, it is situated about 48 kilometers north of Akure, the capital of Ondo State, and about 750 kilometers south west of Abuja, the Federal Capital Territory (FCT). Ado-Ekiti is bounded in the north by Iworoko-Ekiti, about 16 kilometers away from the metropolis; to the east is the Afao-Ekiti, also about 16 kilometers away; to the west are Iyin-Ekiti and Igbede-Ekiti about 20km away from the city and to the south is Ikere-Ekiti, about 10km away. The city is a nodal settlement located at the heart of the state, hence, she enjoys convergence of many roads that leads to many other settlements in the state. The estimated population of Ado -Ekiti metropolis according to UN (2023) is 536,000. The city enjoys two major seasons namely: the dry and wet seasons. The wet season lasts between seven and eight months, while the dry season covers between four and five months. The city enjoys a climate that is characterized by relatively high temperatures throughout the year. The average annual maximum and minimum are 31 degrees Celsius and 24 degrees Celsius respectively (Adebayo, 1993; Aladelokun, 2018).

METHODOLOGY

400 respondents were randomly chosen across the streets, especially in the new communities with notable informal settlement within and around Ado-Ekiti metropolis. These new communities among other include: Ijadu, Ikigbinis, Olusola ogungbe, Odo-Ado and Olorunda. Primary data was collected through a well-designed questionnaire. Observation with a well developed check-list of issues relating to the environment was equally carried out to ascertain the extent of the impacts of informal settlement. In addition, secondary data was utilized in the

study. These include information gotten from textbooks, journal articles, articles from the internet, maps and periodicals to mention but a few. Descriptive statistical techniques were employed in the analysis of the collected data.

RESULTS AND DISCUSSION

Table 1: Gender Distribution of Respondents

Female	160	40%
Male	240	60%
Total	400	100%

Source: Researchers' field work (2023)

Table 1 shows that 60% of the 400 respondents from the selected areas are men and 40% are women. The reason why men are more than women, living in informal settlement area can be attributed to the roles men play in society. This is to say, that men are expected to take care of women and children, therefore, they leave their homes in search of better opportunities and end up living in informal settlements as a result of poverty and inadequate supply of housing at the urban centres. Women are expected to stay back home in rural areas to take care of children and their aged ones. In addition, men are believed to be more rugged and can withstand any living condition than women.

Table 2: Marital Status

Marital Status	Frequency	Percentage
Single	170	42.5
Married	230	57.5
Total	400	100

Source: Researchers' field work (2023)

Table 2 shows that 42.5% of the respondents are single while 57.5% are married. Some people are married to support each other, others were married before moving to the settlement and some left their spouses back in rural areas and came to the urban areas for better opportunities.

Table 3: Employment Status

Employment	Frequency	Percentage
Employed (Public/Civil Service)	110	27.5
Employed (Private)	100	25
Personal Employment	80	20
Unemployed	110	27.5
Total	400	100

Source: Researchers' field work (2023)

Table 3 shows that 27.5% of the respondents are employed as either public or civil servants, while 25% of the respondents are employed privately (Private Engagement/firm), when 20% of the respondents are into personal employment, while the other 27.5% is unemployed. It shows the majority of the informal settlement dwellers are engaged directly or indirectly, by

summing up those that are either publicly employed, privately employed and those that are personally engaged/employed. The percentage of those that are employed is 72.5%.

Table 4: Source of Water

Type	Frequency	Percentage
Tap (Public and Private)	30	7.5
Well/Boreholes	315	78.75
Stream/River	30	7.5
Rain	25	6.25
Total	400	100

Source: Researchers' field work (2023)

Evidence from total households surveyed as depicted on Table 4 shows that 7.5% get their water supply from tap (pipe borne water); 78.75% obtain theirs from wells or boreholes, while 7.5% get their water supply from stream/rivers, while 25% is from rain. This is an evidence that essential facilities and amenities are inadequately provided. This depicts a grave housing challenge which requires an urgent decisive attention.

Table 5: Distribution of Cooking Space by Type

Type	Frequency	Percentage
Kitchen	80	20
Passage	100	25
Outside Houses	160	40
Rooms	60	15
Total	400	100

Source: Researchers' field work (2023)

Available data shows that cooking is mostly done outside in the courtyard when the weather is favourable and under a specially provided shelter in bad weather. Usually, such cooking are accomplished by the use of firewood and coal especially during the hike in prices of kerosene and gas. However, a sizeable number carried out their cooking in the house corridors in the passage or even in the sitting room, which is made possible through the use of gas cooker and stove using kerosene.

Table 6: Distribution of Toilets by Types

Type	Frequency	Percentage
Water Closet (W/C)	60	15
Pit Latrine	100	25
Pail/Bowl	80	20
None	160	40
Total	400	100

Source: Researchers' field work (2023)

Table 6 shows that in the informal settlement area of Ado-Ekiti metropolis, bush and dunghill as toilets is predominantly used. This in actual fact presents a very ugly situation. It makes the housing environment very dirty and stinking. In some of the places, pit latrines are still in use.

That is from the survey 15% of the dwellings have water closet; 25% make use of pit/latrines; 20% make use of bucket and bowls; while 40% have no means of toilet, except the nearby vacant plots.

Table 7: Distribution of Location of Bathroom

Type	Frequency	Percentage
In the house	120	30
Outside the house	100	25
None	180	45
Total	400	100

Source: Researchers' field work (2023)

Table 7 shows that 30% of the respondent dwellers have their bathroom within the building; 25% have theirs outside the building but within the courtyard or near the buildings. A good number of them do not have anything as bathroom at all. Dwellers belonging to this group usually took their baths very early in the morning or very late in the evenings for the purpose of privacy.

From the available evidence, it is clear that in spite of the importance of bathroom, very little attention is given to their provision in the informal settlement areas of the metropolis.

Table 8: Distribution of Refuse Disposals Method

Type	Frequency	Percentage
Public dumpsite-dung (Street)	160	40
Government planned waste management	80	20
Personal arrangement- landfill/incinerator	60	15
Tipped in rain water	100	25
Total	400	100

Source: Researchers' field work (2023)

Table 8 shows that 40% of the dwellers in the informal settlements dumped their wastes on public dumps where nobody cares for them; only 20% of the dwellers indicates that they disposed their wastes through the government planned waste management system; 15% of the dwellers in the informal settlements dumped their wastes personally by landfills and incinerator. A good number of the dwellers in the informal settlements also indicate that they disposed their wastes by throwing them into drains during rainfall.

From the available data, therefore, it is evidenced that wastes are usually disposed on open grounds near the dwellings in the informal settlements within and around the metropolis. These dumps are directly affecting the health of the inhabitants living closer to them, especially during raining season when they are left to rot away and decay through the natural processes of decomposition. Some of the disposed wastes are burnt during dry season, which is a source of air pollution.

Table 9: Electrification

Form of Electricity	Frequency	Percentage
Prepaid	65	16.25
Postpaid	180	45
Illegal Connection	95	23.75
No Electricity	60	15
Total	400	100

Source: Researchers' field work (2023)

Table 9 reveals that there are different forms of connections (electricity) as stated above for the purpose of this study, such as; prepaid, postpaid, illegal connections, and no electricity, with 16.25%, 45%, 23.75%, and 15%, respectively.

Table 10: Roads and Access

Road Function	Surface Type	Condition
Main Access Road	Tarred	Fair
Roads in settlement	Untarred	Fair

Source: Researchers' field work (2023)

The main access road is tarred and in fair condition, with potholes. The residential roads are untarred and are in fair condition. Roads are barely passable in some areas of this settlement, while some parts are moderate.

Table 11: Approval of Houses (Legality of Structures)

Status	Frequency	Percentage	Explanation
Approved Survey	80	20%	20% of the study area was duly surveyed.
Approved plan	60	15%	15% have an approved plan.
Certificate of Occupancy	40	10%	10% applied and collected the Certificate of Occupancy.
Illegal Structures	220	55%	55% are illegal structures.
TOTAL	400	100%	

Source: Researchers' field work (2023)

Table 11 above gives a description of the condition of houses in the study area, however, some people did the survey and plan without going through the normal channel for government approval.

Table 12: Environmental Challenges Present in the Study Area

Environmental Challenges	Frequency	Percentage
Land pollution (Waste)	180	45
Flood	80	20
Erosion	100	25
Deforestation	20	5
Air pollution	20	5
Total	400	100

Source: Researchers' field work (2023)

A total of 45% of the people who responded revealed that land pollution is the highest environmental issue in their settlement, as waste is disposed indiscriminately, 20% believed that flood is the environmental issue that is obvious in the settlement, 25% of the respondents agreed that erosion is more of an issue in the settlement due to lack of planning, 5% of the respondents agreed that deforestation is one of the environmental issues and 5% accepted that air pollution is one of the environmental problems, maybe due to indiscriminate burning of waste.

CONCLUSION

In this paper, we have tried to highlight the relationship of high rate of population growth in Ado-Ekiti metropolis to the existing level of socio-economic performance and the attendant environmental challenges. From the available data, therefore, it is obvious that the rapid growth of population in the city is unfavourable to rapid socio-economic development in the area.

However, governments have spent huge amount of money on education, housing and environmental sanitation, yet the provision of these is still inadequate. Such investment according to Adewuyi (1978) constitutes investments that do not yield immediate direct returns into the economy. Be that as it may, since government is spending too much to reduce the shortage of these essentials in the metropolis, this has eventually make expenditures on industries and agriculture inadequate. The balance has resulted to disequilibrium in the demand and supply of goods and services delivery, inadequate sanitary facilities, poor housing qualities and development, to mention but a few. It is also evidenced that the market forces are not enough to absorb all those that have migrated to the city seeking employment and better living condition, hence, the rural-urban migration has turned to a stupendous growth.

Unfortunately, industrial growth which explains, to a large extent, the growth of cities in many advanced nations is almost absent in Ado-Ekiti metropolis. It is regrettable to note that many of such industries that had existed are now moribund. Consequently, the city is no more capable of offering gainful employment to all the migrants which has, therefore, given birth to prostitution, roguery stack poverty and chaotic housing shortage and road blockages in many sections of the metropolis, as many illegal structures have sprang up. There is inadequate infrastructure such as insufficient electricity, no sanitation and inadequate drainage system. Electricity poses the highest challenge in the informal settlement areas as the majority of the inhabitants use electricity which is connected illegally. This has in many occasions induces fires. Many of the houses are located on floodplain which induces urban floods in the metropolis.

Finally, the social well-being of certain portion of the metropolis is nothing to talk about. The dwellers of such places suffers from drug and alcohol abuse, crime, rape, severe poverty. This is similar to the situation at Jika Joe in Pietermaritzburg as reported by Msunduzi Municipality (2015). Such places as Atikankan and the likes in Ado-Ekiti are considered unsafe and have track records of a number of social vices which in turn have impacts on the metropolis at large. For instance, the opening of taverns in the area has serious effects on the livelihoods of children and young adults as they are exposed to alcohol at tender ages.

RECOMMENDATIONS

Having established that the movement of rural dwellers to the urban areas has explained one of the major sources of the population growth in the city, the establishment of an integrated rural development programme should be instituted. For instance, basic opportunities and platforms should be evenly spread to basic rural areas, especially the direct or neighbouring towns and communities to the metropolis. This according to Ekong (1977) is the perception of development as a normative concept concerned with the fulfilment of the necessary conditions for the realisation of human dignity including minimum income, employment and lessening of inequality. In addition to the above, local government councils should be empowered and given autonomy. This will encourage the Local Government Areas to embark on meaningful and visible projects that will ease off some of the challenges (socio-economic and environmental) within the rural areas.

Since it has also been established that there exist many illegal or informal structures in the metropolis, this study thereby advocates demolition of such structures and enforcement of existing laws governing approved layouts and master plans as regard the city. Also, in as much that the government has the highest duty to advance solutions to housing challenges and demands, it is therefore, a necessity for the government to embrace the principle of redevelopment programmes and urban renewal. This will go in no small measure in helping to mitigate the challenges emanating from illegal structures.

Housing policies should be critically examined as to enhance more accommodating and peculiar to the reality on the metropolis environment. Government should also invest and consider housing as another commodity in the market. This in essence as prescribed by Ogundele and Jegede (2014) will facilitate the inhabitants to own their personal government approved houses at cheaper rates. Similarly, Abiodun (1985) opined that interested individual housing developers should be encouraged. Therefore, direct housing construction should be permitted, since individuals often build faster than the government.

Regularization process should be encouraged where possible through the government agencies that are in charge of lands and housing. Prospective house owners should be made to go through a newly arranged plan of doing all the necessary registration to become legal occupants. However, the cost of regularization should be considerable and relatively affordable to attract informal dwellers. The government should provide solutions to challenges facing waste management agencies in the metropolis as well as ensuring accessibility through new urban planning policies that are practicable.

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