



## **Urbanization and its Consequences on the Transitional Rural Settlements of Yenagoa, Bayelsa State, Nigeria**

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**Abstract:** *Urbanization is not only a process of increasing population and spatial expansion but creates un-counting consequences on the fringing local communities. These are manifested through the conversion of agricultural land use, degradation of the environment, sprawling of cultural and traditional economic and social life of the people. It also results in transforming situation of half rural and half urban in all ramifications especially on the impacting settlements. The study aims to assess the consequences of urbanization on the fringing communities of Yenagoa, Bayelsa State, through the identification of local communities presently constituting the suburbs. The study which has been socially oriented, utilized well structured and validated questionnaire to elicit response from 150 respondents who were randomly sampled from about 1500 heads of household. Data were obtained using both secondary and primary sources, and analyzed using descriptive statistical tools. The study unveils the effects of the unguided growth of Yenagoa on the peripheral communities due to increasing surge of human population in these suburban communities. This has created problems of environmental insanity, increasing occupancy rate and human health hazards. The study calls for serious efforts by the various government agencies especially, the Town Planning Authority to check this unguided physical development for the protection of the peripheral environment and the customs of the indigenous people.*

**Key words:** *Urbanization, Transitional Zone, Local Communities Environmental Problems, Physical Planning*

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## **1. Introduction**

In Nigeria, concern for the environment and rapid urbanization has risen in recent years (Onokerhroraye, 1995). This increasing concern is in line with the significant roles the environment plays toward the sustenance of human life and the creation of ecological balance. The challenges of urban environmental management in the coming decades will be enormous in view of the uncontrolled urban growth especially, its spatial expansion to the fringing rural settlements. As such, policy makers in Nigeria must be firmly committed to the management of the urban, suburban and rural areas in the country (Onibokun, 2000). Such policies towards the management of urban environment in Nigeria, especially in Yenagoa, the Bayelsa State capital should as expected, focus on the contemporary issues of urbanization and its associated environmental problems.

The concept of urbanization remains one of the outstanding ideologies of urban planners tending toward the management of cities and their surrounding environment. Thus UNCHS (2000) views urbanization as spatial expansion of an urban area due to migration to the city of interest. Such movements and settlements created congestion and stress on the available cooperate urban facilities especially housing, institutions, transportation and in recent time, on the available employment opportunities resulting in push to the suburbs. Most of the suburbs especially in developing nations are physically unplanned and become increasing parts of the urban environment. Thus, the United Nations projected that half of the world's population would live in urban areas at the end of 2015 (United Nations Centre for Human Settlements, 2000).

Urbanization is not merely a modern phenomenon manifesting physical transformation of rurally surrounding urban settlement, but a rapid and historic transformation of human social roots on a global scale, whereby predominantly village cultures are being rapidly replaced by urban cultures. Waleraira (1996) noted that village culture is characterized by common bloodlines, intimate relationships, and communal behavior, whereas, urban culture(s) is characterized by distant bloodlines, unfamiliar relationships and a complex and/or competitive behavior. This unprecedented movement of people is forecasted to continue and intensify in the next few decades, mushrooming cities to sizes incomprehensible only a century ago. Accordingly, Trewartha (1969) considers urbanization as a cyclical process through which the nations pass as they evolve from agrarian to industrial societies. Also, Davis (1965) reveals that there is a positive correlation between the degree of industrialization and urbanization which has a beginning as well as an end. This is also in line with Davis interpretation of urbanization as the whole process of change and its consequences, when a society gets transformed from an agrarian economy to an industrial economy and from a small homogeneous society to a large heterogeneous mass (Davis, 1967). Such transformation as still referred to urbanization process is classified into behavioral, structural and demographic aspects. The process of urbanization has many dimensions. The various dimensions range from physical spread of land to the social processes by which urbanism inculcates into a population. Clarke (1972) suggests that between these two extremes, lie such dimensions of the process of urbanization as: the proportion of the population living in the urban places; the absolute number of urban dwellers; the growth of the proportion of people living in urban centers and the rate of growth of number of people

living in urban places.

Similarly, the Centre for science and Environment (1989) noted that urbanization occurs when the rural character of a town is gradually replaced by housing and industrial development resulting in more suburbs enclave to become part of the urban centre with its attendant socio-cultural dynamics. The increasing urban growth may be designed with proper impact assessment on the surrounding rural communities as in most cities of the developed world or grow organically with gross effects on the physical and socio-economic life of the people as application in almost all cities of the developing nations including Yenagoa. The study aimed to assess the consequences of urbanization of Yenagoa on the fringing communities and proffer solution while considering the following objectives.

- a. identification of the transitional communities which presently constitute the suburb of Yenagoa
- b. determination of the root cause of the problems associated with the urbanization of Yenagoa
- c. ascertaining the effects of the urbanization of Yenagoa on the economic and socio-cultural life of the peripheral communities
- d. recommending possible intervention policies and programs that may promote cordial development.

Also, urbanization is an off spring of certain human interests with consideration of environmental factors. Accordingly, Sule (1988) and Aguda (1994), five major factors are responsible for urbanization - migration, industrial growth, apathy of government, effective town planning and vested interest forces. Thus, people migrate from rural areas to the town, due to industrial presence pulling for relatively better employment opportunities. This movement caused increased population and gross environmental effects.

Environmental awareness plays key role in urban growth since urbanization has significant effect on the ecological system as experienced in organically growing towns of the developing nations. Lawanson (2006) reveals that rapid urban expansion without effective environmental consciousness means that in virtually every urban centre, a substantial proportion of the population is at risk of natural and human induced environmental hazard with its subsequent ecological imbalance. The above is significant especially in developing nations. Thus, Hagget (1975) points out that in case of developing countries, it may not be proper to represent the process of urbanization because these countries differ from the industrial countries in two aspects. Accordingly, not only the process of urbanization in which these countries had a late start but also more rapid, recording a much higher annual average rate of increase than the one experienced in developed countries.

This rapid increase is uncontestable as Onibukun (2000) maintains that residents of urban centers in Nigeria in the 1950s were less than 15% of the population, but by 1975 this proportion has risen to 23.4% and by 2000 was 43.3%. He further noted that, urban population growth rate is 4.8% annually, clearly higher than the national annual growth rate of 2.2%. The implication is that by 2015 more than half of the national annual population would be urban dwellers. Aina (1992) observed that, the 1991 national population census recorded 359 urban

settlements of at least 20,000 people, and stated that the figure will increase to 450 by 2000.

Subsequently, Chandna (2012) noted that in India, migration has four patterns; rural-rural, urban-urban, urban-rural and rural-urban which is the most predominant of them. Maintaining that when urban population growth rate was 40% in India, the industrial growth rate was about 60% per annum addressing challenges of the additional population, accordingly, this growth took care of the additional job requirement in the cities an observed unlikely situation in Nigeria urban and population management system.

The increase in the urban population has resulted in the proliferation of slums and informal peri-urban settlements known as shanty towns. The shanty towns as described in Aina (1992) are deprived settlements characterized by excessive residential densities, largely uninhabitable housing and the absence of sanitation, poor infrastructure and social services. Slums harbor migrants from the rural areas, who are unable to fit into the urban economy, who consequently find solace in informal activities and antisocial activities as extreme cases. Smart (2002) also noted that, the proliferation of these shanty towns results in the unguided expansion of the urban centers which poses major planning problems as provision of sewage system among other infrastructure proves very difficult. United Nations (1984) identified the urban development challenges of less developed countries to be poverty, public and reproductive health, natural disasters and environmental hazards among others.

Several factors are identified to be responsible for multitude challenges of the cities. Onokerhoraye and Omuta (1994) reveal that Municipal governments have not kept pace with city growth either spatial or in terms of management. Until there is improvement in the capacity of our cities in terms of urban governance and spatial planning, cities of developing countries will continue to experience decay. A more alarming factor is manifested in the general deterioration of the standard of civil services in which priorities are not given to planners in terms of physical planning and urban administration resulting in uncontrolled growth of metropolitan cities. Another cause of urban problem as ascertained by Sule (1988) is the vested interest forces that work against people, but enhance private commercial interests and profits. The city residents are usually powerless to effect decisions that the elites make to enhance their own interests, power and profit.

The growth of cities in this era of industrialization and push button technology is not exactly a total blessing for the Africans (Lawanson, 2006). It brings about its own reversals of traditional values, perhaps most obviously that of institutions, and the inhabitants' radical attitude towards their environment.

Urbanization itself is a value, and such other concomitant values as education, technology and industrialization have brought about a completely different mental posture towards the Africa environment (Kudiabor, 1977). Land and open spaces are no longer as sacred as in the days of old. According to Gerald (1973), land or nature as a whole has acquired much economic value. The sacred groves of ancestral trees, forests, and places consecrated to the gods are fast decreasing in number as Africa struggle to join the industrial and technological age and adopt the scientific spirit which undermine its corporate traditional existence.

Bartore (1990) mentioned the serious impact of urbanization upon African environment and families as a reversal of values. One great attraction of urban life, the reason for city

population growth is the possibility of making a decent living, which in short, means more income for the families. In practice, this means establishing new income away from home mostly by young men, women and masculine heads of families. For the Africans, that is a tragic reversal of value, since African families are closely knitted. Unity and togetherness in the family are the basic value.

In these days, the quest for more money and better living condition has pushed rural dwellers out to the city, gradually it has alienated many heads from their family ties, worse still, it has continued to tear the families apart, which is one of the social problems of migration and urbanization. Onibukun (2000) further asserts that among all the problems which are alleged to have their etiology in urbanism, frequent reference has been made to the breakdown of African kinship and family life in town.

The suburbs, also known as urban fringe or zone of transition is believed to have been observed during the medieval time. Suburbs are those urbanized communities, which lie outside the corporate limits of a large city but are culturally and economically dependent upon the central city (Dobriner, 1958). Though, the transformation as observed always has direct effect on the rural communities in terms of physical, social and economical changes. The urban fringe as asserted by Duncan and Reiss (1956) is that area in which the countryside is in the process of transformation from rural to urban mode of settlement.

Another definition that embraces the processes and structural properties of the suburbs is that suggested by Pryor (1976). Accordingly, it is defined operationally as the zone of transition in the land use as well as social and demographic characteristics, which lies between the continuously built-up urban area of the central city and the rural hinterland. It is characterized by incomplete range and penetration of urban utility services; uncoordinated zoning or planning regulations; population density that is below that of the central city but above that of surrounding purely rural district with relatively absence of non-farm dwellings, occupations and land use, and urban and rural social orientation.

The transitional zone is a problem environment because it attracts various and sometimes incompatible land uses accompanying with its unpleasant and obnoxious characteristics. According to Carter (1981), some of the obnoxious industries, establishments and land uses inadvertently imposed on the suburbs by institutional factors include refuse dump sites, sanitary landfill, quarries and slaughter house, in which; their operations assault the unprotected environment causing a lot of environmental disasters through the generation of noise, smoke, dust and odor and solid waste.

The suburbs has had to experience all sorts of new problems and difficulties in its new way of life in the city; such as slums, poverty, loneliness or estrangement, poor sanitation, light outages, joblessness, organized and unorganized crime waves, and traffic jams etc. The cover of open space and nature in its hitherto rural setting has now to contend with overcrowded cities and rundown apartment buildings. The overall lack of habitable space and high cost of education and living standard have brought about his reversal in the African traditional values. In a way, monogamy for the African is a reversal of traditional value, since polygamy or plurality of wives was the ideal and primal value for the traditional Africans.

The effects of urbanization are far reaching. Onokehoraye (1995) observed an increasing

competition and breakdown of facilities, utilities and services due to the high population living in the urban areas. Many people including farmers who moved to cities in search of a better life end up as casual laborers, as they lack adequate education and accommodation, resulting in the formation of slum settlements. Slum settlements are urban areas that are heavily populated with substandard housing and very poor living conditions.

As a result, several problems arise that contribute to the outbreak of diseases and facilities, utilities and services such as water, electricity, sewage disposal system, drainages etc. are broken down or scarcely provided. Urban expansion inevitably covers some agricultural land, creating changes in land value and land markets around the cities. The absence of land-use plan or strategic planning framework to guide land-use change culminates in haphazard urban expansion. There is little effective control over land-use conversions from agriculture to non-agricultural uses (Gerald, 1973; Onyemelukwe, 1979).

This unregulated urban physical expansion brings many serious consequences; segregation of low income groups in illegal settlements on the worst, resulting in hazardous environment. Socially, the obvious effects of urban life; emotional stress, loss of family structure, congestion and congested traffic, noise/environmental pollution etc. are having an overbearing effect on the urban dwellers (Adeyemo, 2002). Many suburban dwellers take for granted access to basic public services such as drinking water supply, housing solid waste disposal, transportation, and health care.

Industries tend to cluster in suburbs where regulations are weakly implemented. The pollutants that eminent from motor vehicles and the industries, particularly nitrogen oxides hydrocarbons and other particulate matter(s) account for substantial proportion of air pollution in cities and suburban neighbourhoods, and seriously impacts on health and environment.

## **2. Methodology**

The scope of the study geographically covers all the surrounding communities which presently constitute the suburbs of Yenagoa main town. These are: Swali, Ovom, Onopa, Amarata, Ekeki, and Okaka. Subsequently, 30% of the identified local communities were randomly selected for sampling. The sampled settlements were Swali and Amarata. This was followed by identification, counting and sampling of roads, streets and any other form of access as found in the areas. Also, household counts were conducted on the sampled roads within the two sampled transitional communities. A total of 1500 households were identified while 10% representing 150 households were sampled for questionnaire administration targeting heads of household.

The study area is located within latitude  $4^{\circ}14''S$  and  $5^{\circ}23''N$ , and longitude  $5^{\circ}23''W$  and  $6^{\circ}45''E$  of the Greenwich Meridian. It is bounded to the West by the narrow Epie/Atisa Creek and to the East by Azikor community. Also, it is bounded to the North by Mbiama Town in Rivers State, and to the South by Ekoli creek in Bayelsa State.

The area enjoys the tropical climate, thus, it experiences wet and dry conditions as a result of the influence of the tropical maritime and tropical continental air masses. The wet season begins around March through little break (August break) to October, while the dry season begins around November and last till March the following year. The mean monthly

temperature of the area is within the ranges of 25C<sup>0</sup> to 31C<sup>0</sup>, hence there is high temperature and evaporation. The relative humidity is high – over 80% (Abam, 2004) due to the high evaporation mechanism. The vegetation of the study area is purely a rain forest, and found within the framework of the lower Niger Delta plain which is accepted to have been formed during the Holocene period by the accumulation of the sedimentary deposits.

The study area is characterized by deposits of sedimentary alluvium. The entire area is constituted by abandoned beach ridge and many tributaries of the river Niger. Considerable geological changes such as the grooves and channels are abounding (Digha and Onyesi, 2011). The major types of soil in the study area are young, shallow, poorly drained and acid sulphate soil. On physiological grounds, different soil types can be identified within the study area. These are as follow:

- The soil of the low-lying areas e.g. the moderately fine texture, red silt or clay-loamy soils.
- The silted river bed soils e.g. peat-clay water logged soils found mainly in the beds of dead creeks and streams.
- The swamp or basin soils, e.g. silty-clay-loamy or sandy-loaming soil which is undated by water for most part of the year. Due to the presence of such type of soil in large quantity, the area is nicknamed a difficult terrain.

Topographically, the study area is on a beach-ridge hence the settlements are linear in nature. However, it should be noted that the area is low-lying with some areas having depressions that store water throughout the year mostly characterized by swampy areas. Historical developments and the oil related activities have influenced the socio-economic activities in Bayelsa State and Yenagoa in particular. The traditional economy of the area is mainly subsistence fishing and farming as well as petty trading. The occupations of the people of the study area include; fishing, hunting, canoe carving, lumbering, and distillation of gin from wine which is obtained from raffia palm. Some of the agricultural products includes; plantain, cocoyam, cassava, palm fruit etc. (Otobotekere, 1997).

The study area has a rich tradition and culture. Sorgwe (1990) noted that, the art and culture are depicted in their masquerades, dancing, drumming, swimming, canoe racing and water displays. The masquerades vary from species of fish, reptiles of mermaids among others. Traditionally, the administration of the villages or towns is done by the chiefs who are heads of families (Sorgwe, 1990). They play vital role in the enforcement of law and order. The data for this study, were obtained from two sources: primary and secondary sources. The primary data were obtained through structured questionnaire, key informants and direct observation as well as measurements. On the other hand, the secondary data includes government records, maps and information from publications in journals and books.

All data obtained from the questionnaire interviews were manually collected, collated and finally analyzed. At the end of the data collection, descriptive method of data analysis was used to analyze the findings.

### 3. Results and Discussion

The contents of the administered questionnaire were presented in tabulated form, and critically analyzed and discussed as shown below.

**Table 1: Employment Status of the Respondents**

Employment Status	Number	Percent
Employed	42	28.00
Not employed	80	53.33
Retired	28	18.66
Total	150	100.00

**Source: Field Survey, 2015.**

Table 1 above reveals that, about 80 of the respondents signifying 53.33% were not engaged in any gainful employment. This is sparsely followed by 42 representing 28.00% who asserted that they were employed. The table maintains that only 28 of the total respondents representing 18.66% revealed that they were retirees. This manifests high rate of unemployment as found in all parts of Nigeria especially in recent time. It is significant to note that unemployment brings about poverty which has reversal effect on the physical and socio-economic environment.

**Table 2: Number of Households per Residential Building**

Household per House Status	Number	Percent
Single Household	25	16.66
2-3 Households	34	12.66
4-5 Households	23	15.33
6 & above Household	68	45.37
<b>Total</b>	<b>150</b>	<b>100.00</b>

**Source: Field Survey, 2015**

The above table shows number of households in each sampled buildings within the suburbs of Yenagoa. It asserts that 68 representing 45.37% of the respondents had about 6 and more households within their residential buildings. This is followed by 34 respondents who confirmed that only 2-3 households lived in their buildings. The table further disclosed that 25 respondents symbolizing 16.66% had single households in the sampled residential buildings. This implies that the human population is becoming more concentrated in the suburbs like that



of the nucleus of the city. It also shows increasing stress on the available facilities, high occupancy rate, and increasing demand on housing.

**Table 3: Place of Origin of Respondents**

Type	Number	Percentage
Native	68	45.34
Non-native	82	54.66
<b>Total</b>	<b>150</b>	<b>100.00</b>

**Source: Filed Survey, 2015.**

It has generally been found that one of the characteristics of a rural settings is that majority of its population are indigenes. It is pertinent to note that this is not the case for these suburban communities covered by the study. It was identified that 68 (45.34%) were indigenes, while more than half, precisely 82 respondents represents 54.66% were non-indigenes. The foregoing implies that the populations in the suburban communities were heterogeneous in nature and shows greater movement of initial city dwellers and rural inhabitants to the suburbs of the city.

**Table 4: Disease Incidences Experienced by Households Members**

Types of Disease	Number	Percentage
Diarrhea	20	11.5
Dysentery	16	9.2
Measles	12	6.2
Whooping Cough	4	2.3
Typhoid	12	6.9
Malaria	48	27.6
Cholera	30	17.2
Chicken Pox	20	11.5
Skin Disease	10	5.7
STD's	2	1.9
<b>Total</b>	<b>150</b>	<b>100.00</b>

**Source: Field Survey, 2015.**

The above table shows details of annual incidences of various diseases experienced by member of the sampled households in the study area. The results indicated a higher frequency of malaria with about 48 cases accounting for 27.6%. In addition, air/water borne diseases had 20 cases accounting for 42.2% of the reported cases.

The analysis of data revealed that most of the disease incidences recorded might be attributed to the lack of basic facilities, and breakdown of existing ones due to the pressure put on them as the suburb settlements become more and more populated or urbanized. Responding to social issue relating to the most outstanding effects of urbanization in the area, 60 respondents representing 40% identified effects on customs and traditions as most prevailing, 15 respondents representing 19% identified effects on facilities, utilities services in the suburb as one of the adverse effects.

Furthermore, economic effects were ascertained as 38 respondents representing 25% identified distortion of agricultural land especially in term of land use conversion and/or hunting activities as the most adverse effects, and 23 respondents accounting for 15 percent identified effects on peripheral environment, while 14 respondents representing about 9.63% identified effects on healthy living as the most adverse effects of urbanization on the suburb neighbourhoods. Nevertheless, the suburb dwellers appreciated urbanization despite the current and potential problems.

**Table 5: Number of Household per Building and Place of Origin**

Place of origin	Number of household per building				
	Single	2-3 HH	4-5 HH	6 & above	Total
Native	14	16	11	27	68
Non-native	11	18	12	41	82
<b>Total</b>	<b>25</b>	<b>34</b>	<b>23</b>	<b>68</b>	<b>150</b>

Sources: Field Survey, 2015.

#### 4. Recommendations

- Many far-reaching steps must be taken if the environment of these urban peripheral communities is to be protected and conserved. First, there must be protective actions now rather than waiting and trying to repair the damages after they have occurred. This means many environmental abatement laws must be passed, and regional, state and local commitments for action should be enforced.
- The increased surge of human population in these suburbs communities is a matter of worry to planning profession. This is largely because it has led to the heavy spread of socio-economic degradation in the area. The concentration has partly made problems of environmental cleanliness and human comfort quite difficult to solve. In order to guide

against the foregoing, there is to embark on dispersal of human population in the suburbs by the provision of affordable housing units and proper physical planning by the Town Planning Authority.

- In Nigeria, the paucity of information regarding to environmental pollution has resulted in large scale ignorance about its consequences. Thus, the notion that, there are no environmental laws even though there are status designed to prohibit the pollution of water, air and land, and also to prescribe sanctions in the forms of fines, imprisonments etc. the problem has always been that of poor implementation of such policies and programs. We therefore recommend that such policies be adequately enforced against any erring individual and organization. The haphazard housing development in the metropolis and suburbs has called for more attention. Therefore, there is the need enforce development control tools such as zoning ordinances, subdivision as well as building laws in the suburbs, since they compliment the urban centres.
- From the research findings, there is a high level of unemployment in the study area, therefore we recommend that employment opportunities be created by the government, non-governmental organizations and private enterprises to alienate the suffering of the people. It is pertinent to note that, this policy recommendation will go a long way addressing the many problems of urbanization ravaging the suburban neighbourhoods.

The low ration of available health facilities which has also resulted in high disease occurrence was observed. Therefore, hospitals, clinics and dispensaries should be adequately provided in the sub-urban communities to save eminent loss of lives, and improve the living conditions of the suburban dwellers.

## **5. Conclusion**

The concept of urbanization is not a recent ideology in the field of urban planning and other related professions. Its consequences are observed to be two ways – the urban center and the surrounding rural settlements. This study concentrated on assessing the impacts of urbanization on the fringing rural settlements unveiled gross challenges of increasing population, solid waste generation, environmental degradation, land use conversion, infiltration into the traditional system of the people and stressing the available facilities.

Several recommendations are made for the various government agencies such and the urban planners to quickly address the identified problems through physical planning and the provision of basic facilities to cope with the growing population. This urgent step should not only be applicable in Yenagoa of Bayelsa state area but every other transitional communities in Nigeria.

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