

IMPACT OF RAPID URBANIZATION ON ENVIRONMENTAL QUALITY IN YENAGOA METROPOLIS, BAYELSA STATE-NIGERIA

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Abstract

In the event of the creation of Bayelsa State with Yenagoa as capital in 1996, there has been a significant surge of population into the capital territory of the State which is the only location where employment opportunities are available. The rate of rural-urban migration seems to outpace the rate at which planned development is going on. The rate of rapid urbanization taking place in the metropolis of the state capital has led to the emergence of several unplanned structures, haphazard disposition of refuse, lack of drainages, inadequate housing facilities, among others have culminated to poor environmental quality. The goal of this study is to determine the relationship between the impact of rapid urbanization and environmental quality of Yenagoa and its metropolis. In order to achieve the goal of this study, the following hypotheses were formulated for validation as follows: that there is no significant relationship between rapid urbanization and environmental quality in Yenagoa metropolis. The second hypothesis states that; there are no significant differences on the environmental quality at the various locations in Yenagoa metropolis. Five zones were randomly selected for the study. These were namely; the traditional Yenagoa, Onopa, Kpansia, Biogbolo and Agudama-Epie which are areas known for high population concentration as a result of rapid urbanization. Both secondary and primary data including interviews were collected/conducted and analyzed. Results of the findings show that there are serious abuses and contraventions on the environment which result to poor environmental quality. However, recommendations are proffered to mitigate the identified problems.

Keywords: Impact, Rapid Urbanization, Yenagoa metropolis, Environmental Quality

Introduction

Background of the Study:

The rapid growth of our population, particularly the urban population as a result of in-migration and the growing level of industrial activities present significant challenge as well as timely opportunity for the application of environmental conservation management practices in Nigeria. This is particularly true as the growth in the urban habitat is accompanied by a growth in the production of various categories of municipal wastes. The magnitude of waste from human settlements has been in varying proportion. Developed countries have effective systems for removal of waste from their settlements. Although, ultimate and final disposal often poses problems in terms of monetary cost as well as environmental and resources management. The variables which the above phenomenon (rapid urbanization) has impacted significantly on the environment include but not limited to; inadequate drainage system, lack of physical development planning, lack of modern waste disposal facilities, inadequate housing especially among the low income group etc.

Also it is important to re-inform the general public and in particular, the target audience in the study area that the imminent danger facing the Nigerian environment generally and in particular those of the core Niger Delta region e.g. Bayelsa, Delta, Rivers, Akwa-Ibom, Cross River and Ondo states is worrisome. The recent case of ‘Tsunami Disaster’ in Asia, on 26, December 2004, should serve as a warning. Although scientific baseline data is difficult to come by on the natural state of the Niger Delta environment, the opening up of the rest of Nigeria following the discovery of oil in Oloibiri, Ogbia local government area of Bayelsa State, the activities of man and the activities of industrialization generate domestic/industrial wastes. The development of the rest of Nigeria, in terms of industrialization generates waste that are carried along the main river systems of the Niger and Benue and eventually deposited in the “Wastes Sinks” located within the Niger Delta environment. The fragile but stable Niger Delta ecosystem has become so stressed and the situation we have today is a system that is approaching its elastic limit.

Certain clues point to this fact. Flooding event has become more rampant. The rainfall has become more acidic in quality thus polluting both the ground water regime and the river waters. Life threatening bank erosion has been reported in several locations. The air quality has reduced and this has led to respiratory and other associated ailments. The fish catch from the rivers has decreased tremendously. I have here mentioned just a few of the indices that determine the **quality of the environment**. There are social implications as well. Men and women, who hitherto survived on their farms, now find out that the yields from the farms are greatly reduced because

wastes generated elsewhere have had devastating effects on their farmland. Farming no longer sustains. The same scenario can be related with fishing activities. This may account for one of the factors that have led to the increasing incidence of youth restiveness within the Niger Delta region.

For years, Nigeria's colonial and post-colonial public economic policy focused mainly on urban areas as growth centers. Little attention was paid to the rural areas, which over the years began to house only retired, old people and school-age pupils. This age-long practice by successive governments led to rural-urban migration and disproportionately large urban population concentration. This in turn resulted in urban congestion, acute unemployment, housing problem, high crime rate and general contraventions in physical development measures by prospective developers **hence the poor 'Environmental Quality'**. Movement of people from one place to another is not a recent phenomenon. This occurs most times as a result of search for better living condition. Movement from place to place could be made by a group or individual. In pre-historic times people had been involved in short distance movement in search of better hunting ground and new grazing fields outside their immediate environment. This movement was however restricted in volume and distance then, as against what is obtained presently.

Although, Nigeria is still predominantly a rural nation, its rate of urbanization is relatively one of the highest in the World. The rate of rural-urban migration has increased significantly over the years in spite of urban unemployment; this suggests that socio-economic conditions in the rural areas of the country have contributed significantly to the urbanization process in Nigeria. Migration could be primarily justified by the need to search for stable employment at levels of income which are perceived as being more available in towns and cities than in the rural area. It could be seen in the light of residential changes from one's home to another. This has resulted in regional imbalance in terms of physical, social and economic development in urban and rural areas. Migration can be said to be periodic, seasonal temporary or permanent. Periodic or seasonal migration is that movement which occurs during such periods as the planting and harvesting season by farmers and fishermen who are involved in seasonal farming and fishing respectively.

This research intends to dwell specifically on rapid urbanization and the consequences on the environment (environmental quality) in Yenagoa metropolis of Bayelsa State, Nigeria. In Bayelsa State, rural-urban migration became heightened at the instance of the creation of the State in 1996 when Yenagoa became its capital. This state creation exercise resulted in more job opportunities in the state as federal and State Ministries and parastatals, banks and other private establishments and enterprises offer a lot of employment to the teeming population, which hitherto were living in the

rural areas. This phenomenon unfortunately leads to rapid urban growth and emergence of shanties, ghettos, slums and general environmental abuse, including disorderly development. This is the main focus and concern this project intends to address. Due to the physical underdevelopment, there are several environmental problems that are prevalent in Yenagoa and its metropolis.

There has been an uncontrollable rate of rural – Yenagoa migration in Bayelsa State. This in turn has caused serious accommodation and environmental problems in Yenagoa. Before the pronouncement of Yenagoa as the capital of Bayelsa State, it was among the least developed local government headquarters in the old Rivers State. The influx of migrants far overstretched the available infrastructural facilities. This has posed imminent danger in terms of environmental quality. The majority of the migrants are youths of ages ranging from 18-30 years, as well as young school leavers who came to the city in search of greener pastures. Most of them end up jobless as the available jobs cannot go round everybody. The prolonged problem of youth restiveness in the Niger Delta region over the years is now common knowledge. As a result of idleness due to lack of jobs, youths gang up and vandalize oil installations as well as kidnap expatriate workers for a ransom. Over concentration of government functions, employment opportunities and the few available social infrastructures at the State Capital alone encourage rural-urban migration.

Five cluster zones were randomly selected for the research due to their rapid urbanization status as a result of their high concentration of migrants namely; traditional Yenagoa, Onopa, Kpansia, Biogbolo and Agudama-Epie. Residents of the various locations of the study area and some private and public agencies that are charged with the responsibility of town planning issues were interviewed and necessary data were obtained. The peculiar need and proper planning of a city with unique riverine outlook which permits easy growth in terms of functionality, aesthetics, economy and convenience were major factors considered in the course of this study. The study covers the period between 1996 and 2011. Specific shorter periods were however chosen within this time span for illustrative purposes where necessary.

Aim And Objectives Of The Study

The aim of this study is to determine the relationship between rapid urbanization and environmental quality in Yenagoa metropolis and the environmental control measures currently in place. In order to achieve the above aim, the following objectives are pertinent.

- i. To determine the urbanization pattern in Yenagoa metropolis in terms of population concentration at the various locations;

- ii. To determine the rate of contravention in physical development control measures currently in place such as building regulations, refuse disposal etc;
- iii. To determine the trend of rural-urban migration into the various locations in Yenagoa metropolis;
- iv. To make recommendations towards ensuring that rapid urbanization in Yenagoa metropolis does not adversely affect the physical development of the City in terms of its environmental quality in order to ensure healthy environment that will promote socio-economic development.

Research questions

- i. What is the urbanization pattern in Yenagoa metropolis in terms of population concentration at the various locations?
- ii. What is the rate of contravention in physical development control measures currently in place?
- iii. What is the trend of rural-urban migration into the various locations in Yenagoa metropolis?
- iv. What are the recommendations towards ensuring that rapid urbanization in Yenagoa metropolis does not adversely affect the physical development of the City?

Statement of hypotheses

In order to achieve the objectives of the study, the following null hypotheses were advanced for validation.

- i. There is no significant relationship between rapid urbanization and environmental quality in Yenagoa metropolis.
- ii. There are no significant differences on the environmental quality at the various locations in Yenagoa metropolis.

Conceptual/theoretical framework

This section attempts to review related literature on the above subject matter by other scholars. These relevant opinions are hereby presented for discussion. It is important to note here that there is not much literature that deals specifically on this particular research topic and the area concern. However, related topics with other case study areas are reviewed in relation to Yenagoa and its metropolis. Research on available literature reveals that ‘urbanization’ is a worldwide phenomenon but that its dynamics differ between the developed and developing nations. While the developed world experiences less emigrational trend due to their already highly urbanized status (about 70% and above of its population is urban), the developing world still have less than 50% of its population living in urban areas. In fact, the projected figure for 2000 was 45% and the migration trend from rural–

urban is very high. However, in terms of urban growth rate, the situation in developing world is several folds faster than that of the developed.

Regionally speaking, Africa is the most rapidly urbanizing continent with an average urban growth rate of 5% for the period of 1970-85. Some individual country's urban growth rates even double this average. Nigeria is witnessing one of the most rapid urban growth rates in the World. The national urban growth rate is put at 11% per annum with some individual cities, especially Lagos growing at a much higher rate than this average. Phrases such as "ballooning urbanization", "rapid urbanization", or fast growing cities have been used to describe the sort of urbanization being experienced in Nigeria, which, characteristically, is not supported by a commensurate level of industrialization and other (job-creating) economic activities. This eventually leads to general environmental abuse and other social crimes associated with city life by the migrants.

The factors responsible for urbanization in the country include conscious government/political decision/resource allocation policies, rural neglect, natural increase and rural-urban migration. Of these factors, the last-fueled by the first (two) is the most powerful. The consequences or problems range from social to economic to environmental to technical in varying degrees of seriousness. These in turn, have implications for urban land-use/environmental planning and management: urban services/infrastructure provision and maintenances, rural development etc. Urbanization is a global phenomenon whose elements, in terms of the proportion of urban to total population, the rate of urban growth and that of natural population increase, vary between the developed and the developing world, among regions and between individual countries.

Urban growth rates, in fact, vary even between cities in the same nation. These three variables are broadly elaborated as follows: between 1950 and 1990 the world urban population more than doubled from 730 million to 2.3 billion (Devas & Rakodi, 1993). Meanwhile the size of urban population of the developing world over took that of the developed in the early 1970s with figures, as at 1993, standing at 1.410 million and 900 million respectively. The 2.3 billion urban populations is likely to double again to over 4.6 billion between 1990 and 2020 of which 93% is to occur in the developing World. Another source puts the projected world urban population for 2025 at 5.2 billion out of which 77% will live in the less developed (UN, 1993). Moreover, by 1993, of the world population that lived in urban areas, some 75% lived in the developed and 34% in the developing world bearing in mind striking variations clouding such averages. Another source put the urban population in developing countries at 20% and 30% in 1950 and 1975 in that order, with a projected 45% by the year 2,000 (Linn, 1983; world bank, 1979a).

Globally the rate of urban growth was around 2.5% yearly during 1979-80 the developed, experiencing less than 1% while the developing world having 3.7% per annum. Within the developing world in the 1980s urban growth was thought to have exceeded 7% yearly (Devas & Rakodi, 1993). Then between 1985-90, the urban population in the more developed countries grew at the rate of 1% annually. While the figure for the less developed countries was almost four-fold higher (3.79%) (UN 1993). Africa is considered to be most rapidly urbanizing continent whose average rate of urban growth for the 1970-85 period as 5% per annum, yet her urban population forms a mere 31% of the continent's and just 15% of the global total population in that order. Variations in the growth between individual counties show that four countries had the fastest rate of urban growth during 1980-84, namely Tanzania, 11.6% per year, Mozambique, 10.4%, Swaziland, 9.0% and Botswana 8.2% (U.N, 1989). This average rate, if unchecked, will result in a three-fold increase in Africa's urban population by 2020.

Africa will have 6 urban agglomerations with 10 million residents each by 2010 (U.N 1993). The story is similar for sub-Saharan Africa. Though the least urbanized in 1965 with 14% of the total urban population for this area, this figure leap to 29% by 1980. Moreover, forecasts indicate that by 2020 more than 50% of this (sub) region's population will be urban residents of which a high proportion will live in metropolitan areas of over 1 million people. In fact, by 1990, 27 such millionaire metropolises already existed in the area (Mabogunje, 1996).

Location And Extent Of The Study Area

Yenagoa Local Government Area is located at the North-Eastern portion of Bayelsa State at the confluence of the Epie and Ekole creeks, the latter being a major tributary of Nun River. It is bounded on the North by Kolokuma/Opokuma Local Government Area, on the South by Southern-Ijaw Local Government Area, on the North-west by Sagbama Local Government Area and in the East by Ogbia Local Government Area. The settlement is between Longitude $6^{\circ} 15'$ East of the Greenwich Meridian and Latitude $4^{\circ} 55'$ North of the Equator which puts it firmly on the Equatorial climatic belt, characterized by high temperature, humidity and heavy rain fall.

Yenagoa and its proximate settlements (metropolis) together constitute a linear built-up area on both sides on the Ahoada/Mbiama-Yenagoa primary distributor road. These proximate settlements are drawn from parts of four Local Government Areas trapped within the capital territory namely; Kolokuma-Opokuma, Yenagoa, Ogbia and Southern-Ijaw. Yenagoa as it exists today is a linear settlement composed of many villages,

stretching along both sides of the Mbiama-Yenagoa primary distributor road as stated above. The built-up residential area accounts for 61 hectares; governmental areas constitute another 140 hectares approximately while the rest of the site comprises other uses (e.g. education, health and religion). There are private farms, forests and marshlands, especially to the North and South West of the area.

Climatic Condition

Yenagoa Capital Territory lies firmly in the equatorial climatic belt, characterized by high temperatures, high humidity and heavy rainfall. The prevailing winds are North-East trade winds. There is great uniformity of temperatures throughout the year. The main monthly temperature is between 26^{0c} to 28^{0c}. The daily high temperatures are moderated by regular land and sea breezes due to the influence of the Atlantic Ocean. Annual rainfalls are heavy, between 3,000mm to 3,500mm. It has a less distinct double main rainfall scheme. It has a little dry season between December and February. Rainfall is accompanied by lightening thunder and torrential showers. The relative humidity in the area is high throughout the year between 80% to 85%. This is due to the availability of water every where in the area and constant heating due to the high temperatures.

Topography and Vegetation

The area is crisis-crossed by several rivers and creeks (the main ones being the Nun River, Ekole and Epie creeks). There are therefore, flood plains and back swamps, supporting various kinds of flora and fauna. Water bodies already referred to lend a unique and emphatic character to the site. Depositional action along the Ekole creek has created an interesting geographical feature an 'Ox-bow Lake' close to Swali in the Southern portion of the site. The vegetation is the fresh water swamp forest type which houses one of the largest concentrations of timer, oil-palm and numerous forest products and non-fossil products like the finest qualities and varieties of ceramic clay, sand and gravel. It has a luxuriant type of dense forest vegetation as a result of high temperature and heavy precipitation which supports the continuous growth of vegetation throughout the year. There are also floating vegetation such as water hyacinths along the creeks and rivers.

Population and Settlement

Based on the 2006 census Bayelsa State has a population of about 1,704,515 people. Yenagoa in particular and its component settlements have an estimated population of about 266,008 people (NPC 2006). The people of Bayelsa were, and are very migratory in nature. This is itself, the result of a number of environmental, economic and historical factors and developments.

Starting from pre-historic times, it is possible to identify these factors and developments to include: human activities, intra-and-inter-communal hostilities, slave trade, government policies, the world war and the Nigerian civil war.

Human Activities/Occupation

This is perhaps the oldest factor that made Bayelsans to move beyond the boundaries of the State. today, Bayelsans are found either as temporary or permanent residents in several States of Nigeria and neighbouring African countries particularly Lagos, Ondo, Edo, Delta, Rivers, Akwa-Ibom and Cross River State in Nigeria; and Benin Republic, Togo, Sierra Leone, Ghana, Liberia, the Camerouns, and Equatorial Guinea. In recent times, especially from the colonial days, the desire to participate in the modern sectors of the economy has also served as a motivating force for emigration across both State and international boundaries.

Materials and methods of the study

The study required both quantitative and qualitative data to meet the designed objectives. The quantitative aspect of the study involved the determination of the following variables.

- The population of the study: sex, marital status, education qualification, photographs, and interviews;
- The status of urbanization i.e. migration trend (rural-urban migration) and;
- Environmental contravention measures i.e building setbacks, approval and deviations;
- Refuse disposal/waste management techniques currently in place in the study area.

On the other hand, the technique used to generate qualitative information involved interview and observatory method. Interview questions covered such areas as: occupation, age structure, sex, ethnicity inter-alia. The researcher and his assistants observed the general characteristics of the region/environment and its socio-economic structure vis-à-vis rural-urban migration (into) the study area.

Sources And Types Of Data

The data acquisition for this research work was sourced from two major sources namely secondary and primary. In terms of secondary data, it was through published literature on the study area which includes textbooks, journals, maps, newspapers, magazines etc. The sources of secondary data were the state Ministry of Land and Housing (MLH), the State Library Board, the State Environmental Sanitation Authority, Niger Delta University

(NDU) Library, Niger Delta Development Commission (NDDC) State Office and the Surveyor General's Office, Yenagoa. The key variables collected from secondary data among others include: population of the study area map showing the features of the study area, and published literature of the study area. The key variables involved in primary data collection were personal data of respondents such as sex, marital status, education qualification, photographs, and interviews. Waste disposal methods, access way encroachment, plot set back, plot coverage, non-registration of development type and other nuisance factors such as noise, odour etc.

Secondary data were obtained purely from published literature on the study and abstractions from published statistics of which details of findings were subjected to simple statistical analysis. Assessment of the environment as well as the impact of sprawl resulting from immigration the study area was evaluated with appropriate statistical tools. The contravention rates of the development control measures were obtained from relevant ministries for the study. The key variables involved in the secondary data collection were the population of the study area, maps showing the features of the study area and published literature on the study area. Others include the migration trend, building/plot setbacks, registration of development type and deviations from approved plans by relevant authors.

In terms of primary data, some field reconnaissance survey was carried out on several occasions with a view to getting acquainted with the state of affairs in the study area. Personal observation and weighting of some subjective criteria or indices of measure were meticulously carried out. At times a type of windscreen survey was carried out with a combination of questionnaire administration. The key variables involved were personal data of respondents such as sex, marital status, educational qualification, photographs and interviews were conducted.

Sample Frame

The population that constitutes the focus of this research project amongst others includes residents of the various locations of the case study area i.e. traditional Yenagoa, Onopa, Kpansia, Biogbolo and Agudama-Epie and some private and public agencies and organizations operating within the case study area. Questionnaire were prepared and administered on residents of the study area. A total of one thousand questionnaires were administered randomly on a population of 29,478 people.

Table 1: Cluster Zones (sample locations) selected for the study

S/N	1991 POPULATION CENSUS				1996 Proj.	2001 Proj.	2002 Proj.	No of H/h 5.4per H/h
	Locality	Males	Females	Both Sexes				
1.	YENAGOA	4633	4090	8723	10323	12233	12585	2331
2.	ONOPA	1744	1627	3371	3989	4727	4863	900
3.	KPANSIA	1991	1723	3714	4395	5208	5358	992
4.	BIOGBOLO	932	690	1622	1920	2275	2341	434
5.	AGUDAMA	1593	1409	3002	3553	4211	4331	802
	TOTAL:	10893	9539	20432	24180	28654	29478	5459

Source: Compiled from NPC Office, Yenagoa

Due to some constraints stated in the earlier sections of this research project, it is not possible to survey every subject, object or observation making up (the above components of) the entire population of the study area, only part(s) or proportion(s) i.e. sample(s) that will provide results similar to those that would have been obtained if the entire population had been studied were actually studied. For the sample(s) to truly 'look something like' the population, appropriate sample size(s) actual proportions/number of subjects to be used or who will actually participate in the study was meticulously identified.

Table 2: Sample locations, Pop. and No of Questionnaire administered

S/N	Sample location (Cluster zone)	Est. Pop. (2002 Proj.)	No of estimated Households	No of questionnaire administered	Percentage (%)
1.	Traditional Yenagoa	12,585	2,331	250	40
2.	Onopa	4,863	900	200	16
3.	Kpansia	5,358	992	200	20
4.	Bigbolo	4,341	434	150	10
5.	Agudama-Epie	4,331	802	200	14
	TOTAL:	29,478	5,459	1000	100

Source: Field Work (2015)

Results/Discussions

The first null hypothesis which states that; there is no Significant Relationship between rapid urbanization and environmental quality in Yenagoa metropolis was rejected. The R^2 value was 0.985 and the value obtained for the F-ratio was 324.0 at 0.05 significant levels. In effect, there is significant relationship between rapid urbanization and environmental quality in Yenagoa metropolis. The second hypothesis which states that; there are no significant differences on the environmental quality at the various locations in Yenagoa metropolis was also rejected. The F-statistics value was 13.631 at 0.01 significant levels. This shows that the result is

statistically significant. The results agree with the real situation on ground despite the fact that the locations of study belong to same geographical region experiencing the same socio-economic and political conditions.

The general objectives of this research is to examine the relationship between rapid urbanization and environmental quality, its impact on the environment with specific regard to Yenagoa and its metropolis of Bayelsa State. This is with a view to identifying the causes in order to proffer pragmatic solutions for sustainable development of the area. In the course of the study it was discovered that the average Bayelsans is migratory in nature; but this habit is only demonstrated mainly within a regional scale. Unlike other ethnic groups in the country especially the Ibos who have the courage to travel far and wide from their immediate environment, the average Bayelsan would rather restrict his migratory habit to just within his immediate geographical region. Hence the study showed among other things the over-concentration of rural dwellers of the State in Yenagoa, the capital which they see as the only nearest City that can offer most opportunities in life.

In addition, lack of road network connecting the State and the rural areas is also responsible for the mass exodus of migrants into the City and its metropolis which is fast urbanizing. Communication by road, water or air and even telecommunication is not available as required by the rural populace. In spite of the different programmes aimed at transforming the rural areas by successive governments over the years, our rural areas still appear neglected.

Conclusion And Recommendations

The rural economy should be refocused in order to reduce the trend of rural-urban migration. For the traditional economic system to be sustainable, emphasis should be on the following: Rehabilitating the fisherman, grouping and re-orienting the artisans and focusing on accessibility. Fishing and to an extent farming are the main basis of traditional economy. These economic systems have remained depressed and neglected. The rehabilitation and or refocusing can not be based on a return to the unattractive labour intensive methods; such methods can not provide a good basis for increased productivity. Paddle propelled canoes and rudimentary gears will not do. This will involve fishermen coming together to form cooperatives which can readily obtain grants and loans for deep sea fishing where need be such rehabilitation has to be facilitated by government and its agencies. There is much that could be learned from development initiatives in Ijaw land such as the “Community Development Foundation of Akassa.”

Grouping artisans through the same approach is also quite meaningful. All over Ijaw land in Bayelsa there are now several artisans. Many of them having no capital and management skill to perform their trade effectively. The artisan training schemes of Oil companies have produced many of these. In some villages it is common to find several welders, electricians, etc all largely under employed but unable to compete with more organized artisans in nearby cities. There is no doubt that bringing them together and encouraging oil and oil servicing companies to give such groups relevant contracts will improve the unemployment situation thereby reducing the rate and trend of rural-urban migration.

As earlier stated urbanization and migration cannot be completely eliminated in any country or society but can only be reduced to a bearable rate. However, in order to check or control the rate and trend of migration in Bayelsa, the following recommendations are pertinent.

❖ Government should as a matter of priority decentralize its development project and programmes by concentrating more in the rural areas. Cottage industries and other commercial ventures as well as some ministries and parastatals should be sited at the rural areas. This will check the rate of out-migration of the rural population to the urban areas.

❖ Government should vigorously and painstakingly embark on rural agricultural programme and extension services. This will boost the rural economy which may attract urban dwellers to the rural areas thereby reversing the present trend in the State to urban-rural migration.

❖ Provision of basic infrastructural facilities such as electricity, good roads, educational institutions, pipe borne water etc at the rural communities will drastically reduce the rate of rural-urban migration. The present trend and rate is so high due to non availability or the non functional state of the above facilities in almost all rural areas in the state.

❖ The ‘master plan’ of the State capital and its territory, which the researcher in the course of this project, discovered as having been completed, should be implemented without further delay. If this is done, it will guide and enhance the orderly development of the State capital. Furthermore, the establishment of the Urban and Regional Planning Board” which the researcher also discovered that has been passed into law by the State House of Assembly should be commissioned to perform its statutory function.

❖ It is a common fact that the terrain of Bayelsa State is marshy and difficult to develop. It is therefore imperative that the government, if possible, in partnership with establishments such as NDDC should embark on land reclamation. This should be done by the government and allocated to individual developers for acquisition. This measure will help in ensuring quality environment and also help in reducing the housing problems of the

State capital as well as encouraging private sector participation in housing delivery.

❖ The State capital, Yenagoa should be well planned to appear aesthetically pleasing, so as to look like a city with a unique riverine personality which will accommodate more water fronts and lagoons. That will create opportunities for water transportation options consistent with a riverine, location. It should also be planned to have a garden city character by having a lot of open space, lawns, greenbelt, parks and trees.

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