

Population Growth and its Effect on Family Standard of Living in Warri Metropolis, Nigeria

Mogborukor Joseph Oghenero^[1], Arisabor Lucky^[2], Okoh Emmanuel^[3],
^[1]Department of Geography, Taraba State University, Jalingo, Nigeria
^[2]Department of Metrology and Climate Change,
Nigeria Maritime University, Okerenkoko, Nigeria
^[3]Department of Geography, University of Delta, Agbor, Nigeria

Abstract. The study examined population growth in Warri Metropolis and its effect on the family standard of living. Data used was generated from primary and secondary sources. The primary data was acquired through the use of administered questionnaires, while secondary sources were obtained from a projected population of the metropolis in order to capture the rate of growth in population. The study area was stratified into six (6) zones based on land-use types to ensure adequate spread. In all, a total of fourteen (14) neighbourhoods were selected at random. Actual and projected population data of the metropolis from the year 1970–2015 was obtained from the National Population Commission. The findings revealed that population growth significantly affects the standard of living within the metropolis, which is influenced by natural and human factors. Therefore, it is recommended that there be a need for intervention programmes to help reduce the population growth rate and stimulate socio-economic development.

Keywords: Population growth, Standard of living, Warri Metropolis, Socio-economic development

Introduction

Population is a fundamental feature of a state, and the others are territory, sovereignty and government. Population plays an important role in the global as well as local politics, economic, ecology of a nation and its attribute as a resource for economic development must be given priority. The population is the totality of persons living in a place or an area, and it is very dynamic in nature as it increases or decreases over a period of time.

Warri metropolis has been experiencing rapid growth of population as a result of migration and increase in the birth rate after the colonial era. According to the 1952 census, the territory presently inhabited by Delta State in the defunct Midwest state had a population of 883,651, with only Sapele (33,639) being classed as an urban centre. The state's population had climbed to 1,456,541 at the time of the 1963 census. Sapele (61,007) and Warri (61,007) have now been designated as urban centres (55,254). According to Onokerhoraye (1980), there was a considerable movement of population within the state between 1952 and 1963; as a result, the growth rate of Warri rose to 6.71% and by 1991 National population census, when Delta state rose in population figure to 2,570,181; the population of Warri Metropolis rose to 363,382 (i.e. Warri town (217,584), Effurun (123,610), Ovwian (22,188)). The population of Warri town (excluding the towns of Ekpan, Aladja and Ovwian) is 303,417. The rapid urban growth which the metropolis has experienced stemmed from its position as the headquarter to Warri South LGA and the zonal headquarter of Federal parastatals as well as the oil and gas industries, which as in no doubt contributed to the rapid population growth as well as urbanization process (Gobo, Amangabara & Agobie, 2014).

Problems and issues emanating from rapid population growth and urbanization abound and are therefore enormous as alarming. This has recently called for a periodic re-examination of the effects of population growth on the standard of living in Nigerian cities, towns, and villages. The growth rate of the population needs to be studied, monitored and

appropriately managed with conscious efforts as it can militate against all the efforts of the government to fulfil its commitment to improving the quality of life and standard of living of the people of the country. It is against this background that there is a need to study the ever-increasing contribution of population growth to the standard of living. Therefore, this work aims to examine population growth in the metropolis as it affects the family standard of living.

Methodology

Study Area

Warri, which grew into a major city in the late 1800s as a centre for the palm oil trade and other major items like rubber, palm products, cocoa, groundnut, and hides, is located on the northern bank of the Warri River, about 30 miles (48 kilometres) upstream from the port of Forcados on the Benin Bight. Warri, Effurun to the north, Ekpan to the west, Aladja to the east, and the Bight of Benin to the southwest are all part of the conurbation. It has a 160-kilometre coastline near the Benin bight. It occupies an area of about 499.81km² and is located between longitude 50 41' 39.58"E to longitude 50 46' 11.42"E and latitude 50 31'12.37' to latitude 50 48' 25.35"N (see Figure 1).

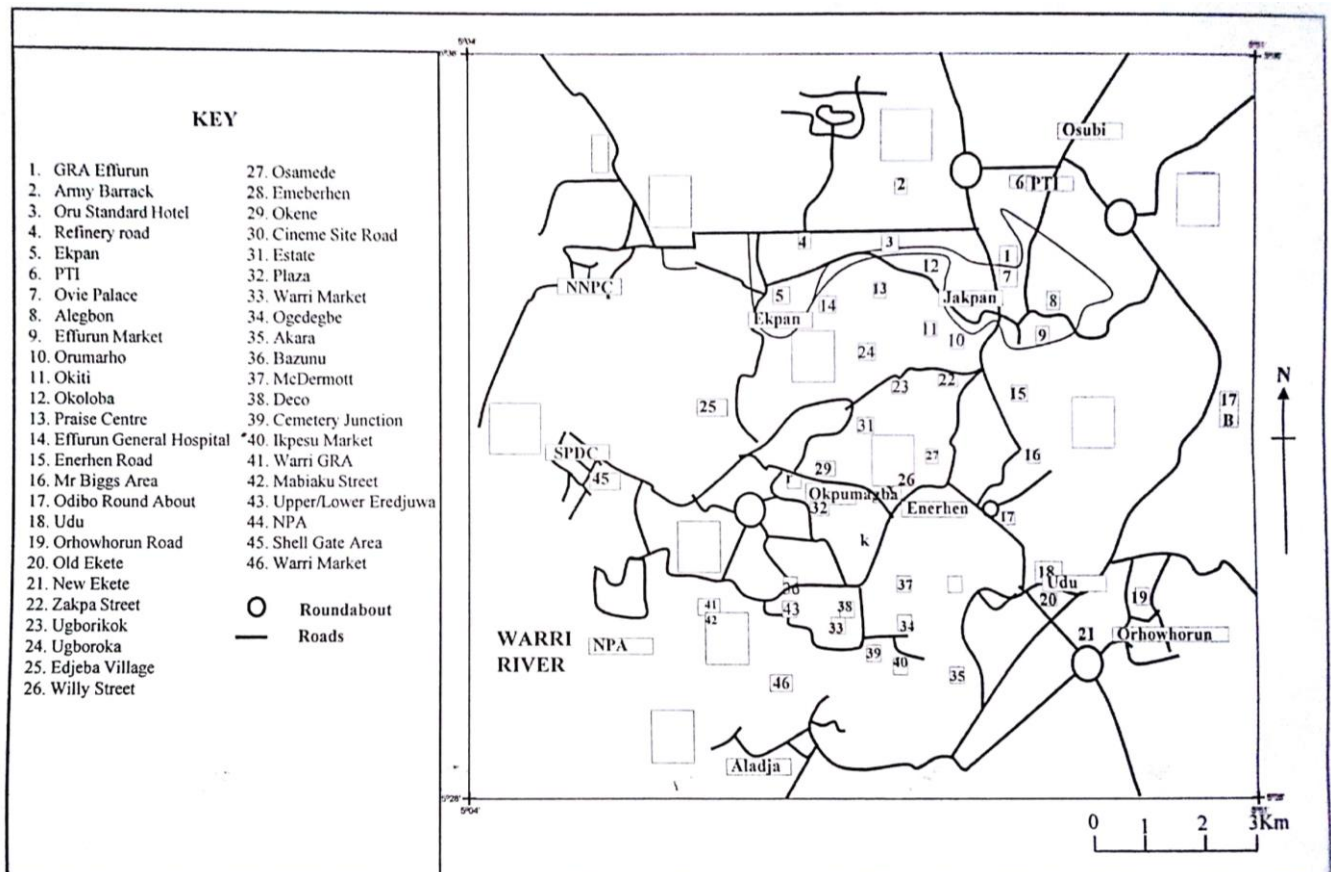


Figure 1. The Study Areas of Warri Metropolis

Source: Authors Field Work (2019)

The area is characterized by a tropical equatorial climate with a mean annual temperature of 32.8°C and an annual rainfall amount of 2673.8mm. The Rainfall period ranges from January to December, with a minimum value of 8.2 mm in January and over 536.6 mm in September. There are high temperatures of 36⁰C and 37⁰C in the heavily built

up and traffic-congested areas of Enerhen junction, Enerhen road area, Estate Okere road areas, Jakpa junction, Jakpa road areas, Hausa quarters and Igbudu market areas, respectively (Efe, 2002). The temperature has led to an increase in urban micro heat islands. There is a long rainy season and a short dry season in the area. The average annual rainfall is 2,716.89mm. The relative humidity fluctuates between 80 and 90%. For the majority of the year, there is a dense cloud cover. The average yearly temperature is around 270 degrees Celsius (Gobo *et al.*, 2014).

There has been tremendous growth in the human population; it has grown from being a rural area to an urban area (Oriero, 1998; Efe, 2002). The area's rapid urban growth stemmed from its position as the headquarters of the Warri South Local Government Area and the Zonal headquarters of some Federal parastatals as well as the gas industry, including the Nigerian National Petroleum Company (NNPC), Shell Petroleum Development Company (SPDC), and many shipping and allied companies, all of which have provided employment opportunities. In addition, the establishment of Warri Refinery and Petrochemical Company and the Aladja Steel Complex and its associated companies has undoubtedly contributed to the rapid population growth and the urbanization process.

The data used for this research was from both primary and secondary sources. The primary data was acquired from the field generated through the use of questionnaires. The secondary data includes the projected population figure, which was used in order to appreciate the rate of population growth in the area.

The population of the metropolis is 700,300 (NPC 2006). The sample size for the study was determined using Taro Yemane's formula for the derivation of finite population and was used to obtain sample size.

The formula is

$$n = \frac{N}{1+Ne^2}$$

Where n=the sample size

N=the finite population (730,000)

E=limit of tolerable error (0.05)

l=unity (constant) using this formula, a sample size of 399.78 approximately 400 is obtained the study was stratified into six (6) zones based on the land use types to ensure adequate spread. Thus the study area was zoned using the alphabetical notation (A-F), with the sixth zone being a fringe zone (Osubi and Alaja)

- a. High-density residential area (Jakpa road, Airport road, Udu road etc.)
- b. Low-density residential areas (GRA at Warri and Effurun, PTI road)
- c. Industrial area (Ogonu and DBS express road etc.)
- d. Commercial zones (Igbudu and Warri main market).
- e. Traditional residential area (Edjeba).

The use of the letter A-E for the zone is based on convenience. The areas were also identified as land-use types and housing patterns.

In all, a total of 10 neighbourhoods were selected at random for the study. The rationale for using ten (10) neighbourhoods is to avoid neglecting neighbourhoods that satisfy the peculiarities of the six (6) urban strata and ensure adequate spread.

As part of the work, forty (40) questionnaires were administered to each of the ten (10) neighbourhoods making a total of four hundred (400) copies of questionnaires that were administered. To ensure the even distribution of the questionnaires, a systematic sampling technique was adopted using an interval of every five (5) houses in each street to one (1) respondent. In a situation where the respondent has not learned enough, an interpreter in the local language is employed to assist in the interpretation of such a questionnaire. In addition, questionnaires were administered to a resident from the ages of eighteen (18) years and above

per household to elicit information on the effect of population growth on the standard of living.

However, out of the four hundred (400) questionnaires, only three hundred and fifty (350) were correctly filled and retrieved from respondents.

Data generated were analyzed using descriptive statistics such as mean and percentages.

Results and Discussion

Effect of Population Growth on Family Standard of Living

Table 1. Types of Accommodation

Types	Frequency	Percentage (%)
Personal house	120	34
Rented house	138	39
Family house	63	18
Others	29	8
Total	350	100

Source: Fieldwork (2019)

Table 1 shows that 34% of the respondents live in their personal house (they own the house they live in), 39% dwell on rented apartments, 18% live in family houses, while 8% of the respondents live in other houses (government-owned apartments, company buildings, buildings owned by cooperate bodies, and private firms). This shows that the majority of the respondents are tenants who occupy low and middle-income residential neighbourhoods.

Table 2. Influx of migrants affects the population in the area

Response	Frequency	Percentage (%)
Yes	325	93
No	25	7
Total	350	100

Source: Fieldwork (2019)

Table 2 indicates that 93% of the respondents agreed that the influx of migrants affects the population in Warri Metropolis, while 7% disagreed. This implies that migration contributes a greater percentage to rapid population growth in Warri Metropolis.

Table 3. Major cause of population growth in the area

Causes	Frequency	Percentage (%)
Poor family planning	85	24
Poverty/ ignorance	84	24
Migration	92	26
Urbanization	89	25
Total	350	100

Source: Fieldwork (2019)

Table 3 shows that 24% of the respondents indicated that poor family planning is the major cause of population growth in Warri Metropolis over the years, 24% said poverty/ignorance, 26% said migration and 25% said urbanization. This implies that poor

family planning, lack of birth control measures, increased poverty, and ignorance on the part of the respondents on family planning methods, uncontrolled migration, and rapid urbanization are the major causes of population growth in the Warri metropolis.

Table 4. Factors influencing population increase of Warri Metropolis

Factors	Frequency	Percentage (%)
War/disaster	55	16
Job/ education	91	26
Polygamy/early marriage	125	36
Climate change	39	11
Inflation	40	11
Total	350	100

Source: Fieldwork (2019)

Table 4 reveals that 16% of the respondents indicated that war/disaster is the most influencing factor affecting the population pattern of Warri Metropolis, 26% said job/education, 36% said polygamy/early marriage, 11%, climate change 11% and other factors influencing population patterns of Warri Metropolis. This implies that the majority of the respondents in Warri move out of their various areas when there are crises (war/disaster), educational pursuits, job opportunities, polygamy, early marriage and climate change effects in the area.

Table 5. Effects of uncontrolled population growth on the family standard of living

Effects	Frequency	Percentage (%)
Poor education	39	11
Increase cost of living	98	28
Family stress & malnutrition	20	6
Health complication	86	25
Overcrowding	52	15
Increased crime rate	57	16
Total	350	100

Source: Fieldwork (2019)

Table 5 shows that 11% of the respondents indicated that poor education is the major effect of uncontrolled population growth on the family standard of living, 28% said the increased cost of living, 60 said family stress and malnutrition, 25% said health complications, 15% said overcrowding and 16% said increased crime rate indicating that rapid population growth affects the family standard of living.

Table 6. Level of satisfaction derived from the use of social amenities and infrastructure in the area

Items	Level					
	V.S	%	F.S	%	N.S	%
Electricity	103	29	187	53	60	17
Water	300	86	15	4	35	10
Road	24	7	30	9	296	85
Market	320	91	17	5	13	4
Housing	277	79	43	12	30	9
Transport	19	5	313	89	18	5
Education	317	91	22	6	11	3
Hospitals	340	97	4	1	6	2
Security	2	1	10	3	338	96

N.B: V.S: Very satisfactory; F.S: Fairly satisfactory; N.S: Not satisfactory
Source: Fieldwork (2019)

Table 6 reveals that the level of satisfaction derived from the use of social amenities and infrastructure in the area. It could be deduced that 53% of the respondents are fairly satisfied with the use of electricity (a major social amenities and infrastructure) provided in the area, 86% of the respondents are very satisfied with water supply, 85% are not satisfied with the road network provided in the area, 91% are very satisfied with the market facilities provided in the area, 79% are very satisfied with housing providers in the area, 89% are fairly satisfied with transport facilities provided in the area, 91% are very satisfied with educational facilities provided in the area, 97% are very satisfied with hospital/health care facilities provided in the area, and 96% of the respondents are not satisfied with the provision of security in the area.

The analysis above shows that Warri Metropolis is well provided with good electricity supply, water supply, educational facilities, and health care system while poor road network and security issues are the major problems Warri residents face on a daily basis.

Table 7. Possible ways to mitigate the problems of population growth in the area

Ways	Frequency	Percentage (%)
Rural development	32	9
Family planning	92	26
Refuse home creation	18	5
Mass campaign/education	53	15
Job creation	89	26
Equity in resources allocation	27	8
Encourages Agric. Practices	39	11
Total	350	100

Source: Fieldwork (2019)

Table 7 indicates that 9% of the respondents suggested rural development as the possible way to mitigate rapid population growth in the area, 26% suggested family planning, 5% suggested creation of refuse dump at home, 15% suggested that there should be mass campaign and public enlightenment education on the effect of population growth on the family standard of living, 26% suggested that jobs should be created, 8% suggested equality in resources allocation and 11% encouraged agricultural practices as the best measure to mitigate the problems of population growth in the area. It could be deduced that rural

development, family planning, refuses dump creation at homes, mass campaign/education, job creation, equity in resources allocation, and agricultural practices are the best possible ways to mitigate rapid population growth in the area.

Population Data of Warri Metropolis

Table 8. Population Changes in Warri Metropolis

Year	Population (in thousands)	Growth rate (%)
1998	98,332	1.6
1990	118,015	1.8
2000	382,843	2.0
2010 (estimated)	727,956	2.2
2018 (estimated)	939,432	2.6
2025 (projected)	1,378,864	3.3

Source: National Population Commission (2007), Annual Abstract of Statistics (2018)

Table 8 reveals that the population in the metropolis changed from 98,332 in 1980 with a growth rate of 1.6% to 939,432 in 2018 (estimated) with a growth rate of 2.6 and projected to be 1,378,864 million people by the years 2025 with a growth rate of 3.3 indicating that the metropolis is experiencing increased population due to uncontrolled migration and influx of migrants from far and near the neighbourhoods. It could be deduced that rapid population growth has a serious impact on the family standard of living.

Table 9. Distribution of Population by Age Group and Sex from 1970-2017

Age Group	Sex		
	Both Sex	Male	Female
4 – 0	46,490	23,425	23,065
5 – 9	48,908	25,458	23,450
10 – 14	52,733	27,366	25,367
20 – 24	50,803	23,324	27,479
25 – 29	48,534	23,367	25,167
30 – 34	42,365	21,082	21,283
35 – 39	39,045	19,422	19,623
40 – 44	37,684	18,942	17,188
45 – 49	34,784	17,596	17,188
50 – 54	34,252	18,124	16,128
55 -59	30,872	16,132	14,740
60-64	31,427	17,721	13,706
65-69	29,435	14,892	14,543
70-74	29,714	15,018	14,696
75-79	28,547	15,165	13,382
80-84	28,827	16,021	12,806
85+	28,758	17,097	11,661
Total	643,178	330,152	313,026

Source: National Population Commission (2006, Priority Tables)

Table 9 indicates that population distribution in the study area is not even. The variation between the different age groups and sex ratio (male and female) varies significantly in the area. It could be observed that age groups between 10-14years (52.733) and 20-24years

(50,803) recorded the highest population while age groups between 75-79years (28,547) and ages above 85years (28,758) recorded the lowest population. This indicates that the metropolis population comprises mostly of the dependent age group who rely on their parents (for children below 5years) and children (for the aged who are above 85years) for survival and livelihood. Therefore, it could be deduced that government spending in the study area is mainly channelled towards providing basic amenities, educational facilities, better standard of living and improved health care delivery for its timid population. In all the population figures, the male gender was seen to dominate the Warri population with only a small margin from the female population, indicating that rapid population growth has a serious effect on the family standard of living.

Table 10. Projected population figure (data) of the metropolis from 1963-2018

Year	Total	Sex	
		Male	Female
1963	55,256	28,618	26,638
1964	57,643	28,803	28,840
1965	59,532	30,142	29,389
1966	62,543	29,542	31,092
1967	62,543	32,102	30,441
1968	88,023	48,011	40,012
1969	91,868	46,143	45,725
1970	101,254	55,114	46,140
1971	125,213	59,080	66,133
1972	155,321	77,945	77,376
1973	180,000	92,181	87,819
1974	181,465	91,105	90,360
1975	183,933	93,514	90,419
1976	185,302	95,678	89,624
1977	187,011	94,354	92,657
1978	189,234	91,443	97,791
1979	190,212	26,368	93,844
1980	192,919	94,753	98,166
1981	194,222	97,406	96,816
1982	196,977	96,939	98,745
1983	198,008	98,668	98,216
1984	199,342	98,995	104,666
1985	200,092	99,438	102,883
1986	223,835	100,597	98,745
1987	231,432	101,876	104,666
1988	233,086	119,169	102,883
1989	235,750	128,549	115,362
1990	241,211	117,724	113,873
1991	261,873	121,877	118,679
1992	277,921	122,532	119,234
1993	297,125	142,639	139,916
1994	310,032	138,005	156,804
1995	297,125	140,321	166,268
1996	310,032	143,764	163,090
1997	329,046	165,956	162,884

1998	331,111	168,227	166,326
1999	357,734	191,408	172,715
2000	382,843	200,128	182,715
2001	455,831	224,781	231,050
2002	522,752	268,633	254,119
2003	536,023	275,660	260,363
2004	544,319	272,414	271,905
2005	557,398	285,946	271,952
2006	643,178	339,343	303,835
2007	653,239	331,517	821,722
2008	657,398	337,232	320,166
2009	689,500	335,099	354,401
2010	727,956	369,217	358,739
2011	737,345	375,460	361,885
2012	745,033	379,632	365,401
2013	769,127	381,436	387,591
2014	806,326	409,074	397,252
2015	832,479	411,768	420,711
2016	885,700	452,098	433,602
2017	893,934	448,743	445,191
2018	939,432	489,218	450,214

Source: National Bureau of Statistics, Warri (2018)

Table 10 shows the actual and projected population figure of Warri Metropolis from 1903-2017. It could be observed that in 1963 the population of Warri was growing at a slow rate, 256) with a female population (28,618) slightly higher than the male population (26,638) as compared to 2017, which was growing at an alarming rate (939,432) with a male population (489,218) higher than the female population (450,214). This implies that the changes in the population of Warri Metropolis from 1963-2017 could be attributed to natural (war, disaster, extreme weather condition and flood hazard) and human factors (migration, education, job opportunities, health care, infrastructural development, and better standard of living) which in turn has resulted to rapid population growth. This has a serious effect on the family standard of living of Warri residents.

Demographic Characteristics of Warri Metropolis

Table 11. Socio-economic/demographic characteristics of Warri Metropolis (2005-2017)

Demographic Characteristics	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Gender/Sex													
Male	31	33	20	18	37	7	35	21	44	20	22	37	33
Female	29	27	40	42	23	53	25	39	16	40	38	23	27
Age													
Under 40yrs	21	18	20	13	17	31	26	29	22	26	37	40	21
40yrs < 60yrs	30	30	9	40	28	18	19	20	28	18	13	12	33
60yrs & above	9	12	31	7	15	11	15	11	10	16	10	8	6
Marital Status													

Married	37	38	41	22	53	47	44	18	36	27	38	14	28
Single	19	22	8	16	7	3	16	22	21	23	12	21	22
Divorced	4	-	8	14	-	2	-	9	2	7	6	12	7
Widowed	-	-	3	6	-	8	-	11	1	3	4	12	3
Occupation													
Farmers	8	-	4	14	27	7	2	13	8	3	9	2	-
Trading	13	19	17	11	12	3	3	15	5	5	1	4	18
Artisans	2	-	6	3	13	6	3	5	-	2	1	-	16
Civil savant	27	37	22	31	8	25	19	10	23	42	31	37	15
Comp. employee	10	4	11	1	-	19	32	17	24	8	18	17	15
Edu. Status													
No education	2	7	2	10	12	16	3	3	12	8	5	-	6
Primary school	17	10	8	10	13	11	7	8	8	15	9	11	15
Secondary Sch.	4	17	18	13	14	15	28	18	12	10	21	18	19
Tertiary school	37	26	38	27	21	18	22	31	28	27	25	31	20
Religion													
Christian	40	30	33	32	51	37	58	47	41	44	49	41	50
Tradition worshipers	8	19	6	15	2	12	2	8	7	6	5	16	10
Islamic	12	11	21	13	7	11	-	5	11	10	6	3	-

Source: National Bureau of Statistics, Federal Statistical Bulletin (2018)

Table 11 shows that the demographic characteristics of the residents in the study area. It could be observed that male residents dominated the area then female between the year (2005 – 2017) while the age group below 40 years, married couples, civil savant/ company workers, graduate and Christians were mainly seen in the metropolis between 2005 to 2017.

Causes of Rapid Population Growth

The analysis obtained in Table 3 revealed that poor family planning (24%), poverty/ignorance (26%), migration (26%) and urbanization (25%) are the major causes of population growth in Warri Metropolis over the years. This finding corroborates with the demographic transition theory as used by Taylor (2000). This is also in line with Tverbeg (2012) findings, who found that migration has important implications for development, both positive and negative.

The findings also showed that rapid population growth often caused by natural and human factors contributes to the transmission of disease, the introduction of alien species and the loss of skilled personnel; it may also bring new economic opportunities. Although the loss of skilled people has negative impacts on the economy and other sectors, it also contributes to development through significant remittances and the enhancement of the capacity of those that have left, in terms of skills and experience, potentially building an important human resource for Africa. Internal transnational migration in Africa is significant - the profile of such migration has changed from being unidirectional and permanent to being increasingly temporary, seasonal and circular. Africa has the most mobile populations in the world: there are many reasons for migration; one important motivation is to cope with ecological and economic problems, as observed by Todaro and Smith (2006).

Population Growth Rate

The findings obtained in Table 9 showed that age groups between 10-14years (52,733) and 20-24years (50,803) recorded the highest population while age groups between 75-79years (28,547) and ages above 85years (28,758) recorded the lowest population indicating that changing demography and particularly the Changing age structure of the population, a high rate of urbanization, and a faster rate of population growth in relation to economic growth are major drivers of environmental change in Warri Metropolis, with significant impacts on the natural resource base.

The analysis obtained also showed (2%) Ogun (2.88%), Edjeba (2.82%), and Okere (2.43%) are significantly high dined also showed that the population growth rate of Jakpa (2.12%), Iyara (2.22% kere (2.43%) is significantly higher than that of Enerhen .81/0), Ekpan (1.56%). Agbassa (1.529%). Igbudu (1.81%), Okumugba Avenue .07 09% and Aladja (1.43% indicating that the population of Warri Metropolis is growing at an alarming rate as observed.

Factors that Influence Population Growth

The analysis obtained in Table 7 revealed that war/disaster (16%), job/education (26%), polygamy/early marriage (36%), climate change (11%), and inflation (11%) are the most influencing factor affecting population pattern of Warri Metropolis. Chudi-Oji (2013) observed that people in Nigeria are at the centre of sustainable development in rural and urban areas. Although still largely rural, the region has been experiencing a major transformation in terms of population composition and distribution, with positive and negative implications for the environment and development. The challenge is not to arrest development but to use the available resources in a more productive and enticement manner, ensuring better and more equitable returns to people while at the same time lessening pressure on the environment.

These findings are consistent with those of Anyanwu (1979), who discovered that environmental change drivers are diverse in origin and breadth but may be roughly categorized as demographic, economic, and social, science and technology, conflict, and governance. Poverty and health are two critical social factors. Although policy and institutions are frequently conceived of as a response to such change, they can also result in environmental change and have a direct impact on human vulnerability. Despite the fact that each driver is presented separately, there are connections between them—sometimes functioning in concert to maximize negative effects and other times promoting positive change. As Adediran (2012) points out, fast population increase and urbanization have resulted in environmental deterioration and resource depletion in the absence of alternative livelihood alternatives and effective environmental management. However, migration to cities is not always detrimental, and it does not always result in the establishment or expansion of dangerous and unhealthy slum areas. It's critical to acknowledge the vital role that urbanization may play in boosting the economy. Reversing the current trend and increasing the efficiency and value generated from natural resource utilization is the issue.

Effects of Population Growth on Family Standard of Living

The analysis obtained in Table 4 revealed that poor education (11%), increased cost of living (28%), family stress and malnutrition (6%), health complications (25%), overcrowding (15%) and increased crime rate (16%) are the major effect of uncontrolled population growth on the family standard of living. This is in line with the findings of Elis et al. (2015) that population growth presents a major challenge because of the patterns of production and consumption that shape the world and the problems of pervasive poverty. These findings also corroborate with that of Latimer et al. (2013) that population growth affects the natural

resource base in many ways. First, it raises demand for food, water, arable land, and other vital supplies like firewood across the board. Second, increased agricultural operations foster forest and woodland encroachment. When there are large levels of poverty, these impacts become more noticeable. Third, the degradation of the natural resource base has an impact on the livelihoods of all groups, but especially rural ones. In order to sustain household incomes, more small farmers are being compelled to work more, frequently on decreasing farms on marginal ground.

The analysis obtained revealed that the youth are becoming increasingly important in natural resource management. First, the lack of employment and other livelihood opportunities and setbacks in education, health, and other capabilities may mean that this generation will have increased natural resource dependence and pose new threats to the sustainability of marine and terrestrial ecosystems. Degraded environments may spur further social and economic conflicts and hardships. Third, the option of migration to a new land is virtually closed. In most cases, the impacts vary for men and women depending on the gender relation within the social unit that regulates access to and control over resources and management responsibility. Fourth, global population growth and the increasing demand for fossil fuels and other resources also places new stress on Africa's environment.

Conclusion and Recommendations

The population data derived from the study shows a significant increase in the population of the metropolis from 1970 to the present time, and natural and human factors can account for this. However, this population growth has impinged on the standard of living within the metropolis.

The study recommended that:

- i. Nigeria needs to design intervention programs that will help in reducing the population growth rate and stimulate socio-economic development.
- ii. Government should create enabling environment that will facilitate savings, investment, Innovation, entrepreneurship and technical know-how.
- iii. Government should organize public awareness/enlightenment program to educate the inhabitants on the implication of rapid population increases and uncontrolled migration in the metropolis.
- iv. Government should implement policy, and the law should be enforced to curb the problems associated with the rapid increase in population as it affects the socio-economic activities of the inhabitants.
- v. The government should improve the welfare/standard of living of the urban and rural dwellers.
- vi. Improved mechanized farming, health care delivery, and comity services should be provided to the urban and rural dwellers. This will boost agricultural production in the area to sustain the growing population.

References

- Adediran, O.A. (2012). Effect of Population on Economic Development in Nigeria: Assessment. *International Journal of Physical and Social Sciences*, 2(5), 2246-5894.
- Anyanwu, A.C., Anyanwu, B.O., & Anyanwu, V.A. (1979). A textbook of Agriculture for school. United Nations Statistic Division (UNSD). <http://data.un.org/Explorer?d=PopDiv>
- Chudi-Oji, C. (2013). National Population Census – Ethnicity, Religion and Their Possible Impact on it by Double Gist Publisher: April 24th, 2013.

- Efe, S.I. (2002). Urban Warming in Nigeria Cities: The case of Warri Metropolis. *Africa Journal of Environmental Studies*, 3(1-2), 160–168.
- Eli, H.T., Mohammed, I.D., & Amade, P. (2015). Impact of Population Growth on Economic Growth in Nigeria (1980 – 2010). *Journal of Humanities and Social Sciences (IOSR - JHSS)*, 20(4), 115–123.
- Gobo, A.E., Amangabara, G.T., & Agobie, O.I. (2014). Impact of Urban use changes on flood events in Warri, Delta State Nigeria. *International Journal of Engineering Research and Application*, 4(9), 48-60.
- Latimer, A., & Kulkani, K. (2008). Population and Economic Development: A Comparative Analysis of Brazil and Mexico. Being a Paper Presentation from <http://www.tutor2u.net/economic/reference/economic-growth-in-brazil-and-Mexico>.
- Onokerhoraye, A.G. (1980). Perspective on public policy and social research in rural development in Nigeria. *Quarterly Journal of Administration*, 15(3), 183-192.
- Oriero, S.B. (1998). *The Spatial Pattern of Domestic Sewage Disposal in Warri Metropolis*. Unpublished PhD Thesis Department of Geography and Regional Planning University of Benin-City, pp. 37-39.
- NPC. (2006). Population Census of the Federal Republic of Nigeria: Analytical report at the National Level, Abuja: National Population Commission.
- Taylor, R.W (2000). *Urban Development Policies in Nigeria: Planning, Housing and Land policy*. New Jersey: Centre for Economic Research in Africa, Montclair State University.
- Todaro M., & Smith, S. (2006). *Economic Development* (9th ed.). U.S.A Pearson publishing Company.
- Tverberg, G. (2012). Did Malthus Get It Right After All? Retrieved January 3, 2013, from <http://www.economywatch.com/economy-business-and-finance-news/didmalthus-get-it-right-after-all.27-12.html>.