

AGEING POPULATION: TREND IN KWARA STATE, NIGERIA

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ABSTRACT

The knowledge of a population's age profile is essential and indeed a major determinant of service requirements, labour supply, consumer demand, and potential for future natural increases. Data on the distribution of the aged population from the census figures of 1991 and 2006 provided the data used for this study. A multi-stage sampling technique was employed to sample, from six of the 16 LGAs across the study area. Trend Analysis was used to examine the pattern of the aged population over time of 1991 to 2025. The trend analytical technique revealed a gradual increase in the aged population over the years, with Ifelodun (23,556) and Ilorin West (14,634) the most populous aged L.G.As in 1991. However, by 2006, Ilorin West (21,037) and East LGAs (11,148) were the most populous. The study concluded that aging of population has been on the increase in Kwara State. The trend line equations for future forecast of the aged population for the respective LGAs indicates a continuous rise in the absolute number of those joining the senior's group, while the aged population also varied in space from one L.G.A to the other.

Key words: Ageing Population; Trend; Census; 60+ Population; Kwara State

Introduction

Notable increases in the proportion of population in the elderly age groups have been noticed in many countries. This has been attributed to declining fertility and increasing life expectancy levels (De Silva and Samarasekara, 1999). A situation leading to a scenario known as 'ageing population' which occurs when the median age of a country or region rises (Population Reference Bureau, 2004). However, current levels and pace of population ageing vary widely between, and within geographic regions. For instance, while

the percentage of world population aged 60 and above increased from 5.2% in 1950 to 6.9% in 2000, the proportion was about 12% to 14.7% for Europe in the same year (Kinsella and Velkoff, 2001; UN, 2005; 2013). The United Nations in 2005 projected the elderly population (60+) in Africa and West Africa to be 5.2% (47.4 million) and 4.7% (12 million), respectively. Nigeria with a population of about 140 million and a growth rate of 2.8%, has about 7 million (5.0%) of its population aged 60+ (NPC, 2006). Kwara State located in

north-central Nigeria with a growth rate of 2.8%, also has about 5% of its population age 60 and above in 2005 (NPC, 2006). This change in total population is also reflected in the proportion of people aged 60 years and above in the state (Table 1). Incidentally, Kwara State, regarded as a 'civil service state'

because of her low internally generated revenue (IGR) and national revenue allocation has experienced a high level of youth emigration towards the cities of Abuja and Lagos in search of greater economic opportunities (NPC, 1992).

Table 1 Numerical and Percentage Distribution of Population Age 60 and Above

Year	Nigeria ^{Million (%)}	Kwara State ^{Thousand (%)}
1963	1.9 ■■	*
1991	4.6 (5.2)	107,462 (6.9)
2005	7.0 (5.0)	116,099 (5.0)
2025	11.5 (6.0)	181,114 (5.0)•
2050	25.5 (9.9)	307,894 (5.0)•

* Not Available. • Author's 2006 Census Projected Figures. Source: Compiled from NPC, 2006; UN, 1997, 1999, 2002.

■■ Culled from Asiyabola, 2005

The present economic realities coupled with the harsh government reform policies, material deprivation and the neglect of the older people have created an army of beggars (See Plate 1) abandoned to fend for themselves daily on streets, and around homes/offices of political office holders and bank premises in the State (Ajomale, 2007). This has created an increasingly visible social and public health problem, and by extension an additional strain on the economically active population in the State. It also has a direct bearing on intra and intergenerational equity and solidarity that forms the foundation of any

society. These intergenerational support systems according to Cliquet and Nizamuddin (1999) are crucial to the well-being of both the younger and older generations. It is a known fact that the problem of ageing is global phenomenon and indeed a critical policy issue receiving some recognition not only from developed nations, but by the authorities of developing countries. This is the more reason why research on population aging becomes apt at this time. As a matter of fact the government of Kwara State needs to brace up and face the reality of evolving programmes or projects targeting the aged.



Plate 1. A group of migrant elderly beggars in Ilorin

Old peoples' homes, specialized geriatric care, and social welfare schemes, currently lacking in the State should of necessity be addressed. The lack of social safety net programmes or pension to reduce old age poverty and support households, especially for those who cannot earn an income and are not covered by the contributory pension scheme have left many aged at the mercy of the vagaries of society (Asagba, 2005; Abiodun, *et al*, 2011).

The Study Area

Kwara State the study area is located between Latitude 8° and 10° North and Longitude 3° and 6° East of Greenwich Meridian (Oyebanji, 2000). The State occupies $36,825\text{km}^2$ of land and shares its boundaries with Niger State in the North, Kogi and Ekiti States in the East, Osun and Oyo States in the South and an International boundary with the Republic of Benin in the West (Figure 1). Ilorin, the State capital is 306km from Lagos and 500km from Abuja (Kwara State Diary, 2004).

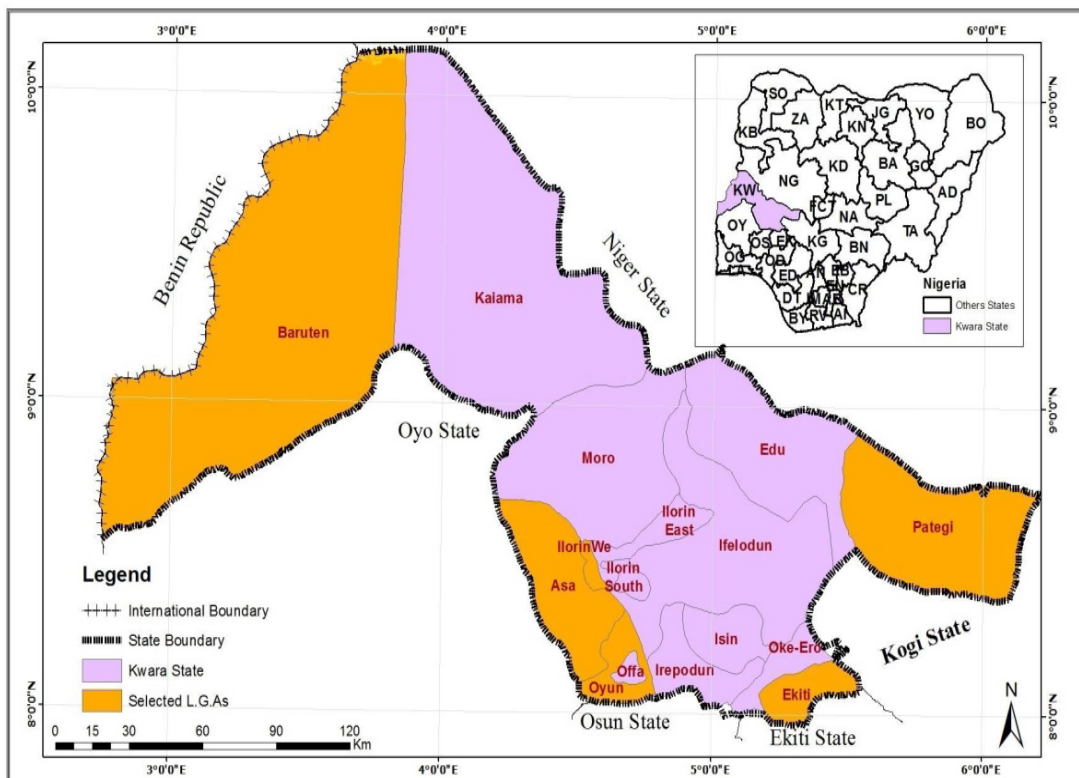


Figure 1. Kwara State Showing the Selected Local Government Areas
Source: Adapted from Kwara State Ministry of Lands and Housing, 2015

There are sixteen Local Government Areas that constitute the State. Situated in the middle-belt of Nigeria, Kwara State is a 'gateway' between the North and the South and in fact a "melting point" for the northern and southern cultures (Oyebanji, 2000) with different dispositions to ageing. This strategic location provides opportunities for rapid socio-economic exchange (Oyebanji, 2002), and understanding the diverse cultural norms on ageing in this area. This is important to demographers, population geographers and policy makers on geriatric issues and welfare.

Materials and Methods

Secondary data derived from the published documents of the 1991 and 2006 censuses, provided the data for the study. A multi-stage sampling technique was used to select

sampled L.G.As. Firstly, the state was divided into the three senatorial districts of north, central and south, respectively. Then L.G.As in each senatorial district were serially numbered alphabetically, and the first and last L.G.A in each zone were selected which gave a total of six (6) L.G.As. Hence, the total annual aged population; annual increases in the population; average annual change were sourced and calculated from the 1991 and 2006 census figures for the state (See Tables 2, 3 & 4). Time Series analysis was utilized to determine the trend line equations derived from the 1991 & 2006 censal figures and also plot a 35 years (1991-2025) estimated trend in the population of the elderly in the 6 selected L.G.As of Kwara State.

Results and Discussion

The Spatio-Temporal Change in Population Aged 60 (Years) and Above

The situation of aging population in Kwara State using the 1991 and 2006 census figures of the population of 60+ years was extracted from the official NPC document (Table 2). This was used to produce the population aging map of the state as represented in Figures 2a and 2b. In the year 1991, Ifelodun (23,656) and Ilorin West (14,634) were the most populous of aged people, but by 2006, Ifelodun dropped to the third position, while

Ilorin (West 21,037) and East 11,148) became the local government with the most aged in the State.

Furthermore, the least aged populated areas in 1991 as shown in Table 2 and Figure 2a are Isin (1,794) and Ekiti (1,930), while by 2006 census it was Oke Ero (2,878), Ekiti (3,000) and Isin (3,012) LGAs (Figure 2b). The observed pattern can be linked to the migratory pattern in the State, because the state experiences a high level of youth movement towards Ilorin the state capital and other urbanized cities of Nigeria.

Table 2. Proportion of the Aged in relation to Total Population from the 1991 and 2006 Census Figures for Kwara State

Local Government Areas	1991		2006		Difference	
	No	%	No	%	No	± %
Asa	4,092	4.2	6,926	6.0	2834	1.8
Baruten	5,753	6.0	8,868	7.6	3115	1.6
Edu	4,847	5.0	8,379	7.2	3532	2.2
Ekiti	1,930	2.0	3,000	2.6	1070	0.6
Ifelodun	23,656	24.4	10,020	8.6	-13636	-15.8
Ilorin East	7,358	7.6	11,148	9.6	3790	2.0
Ilorin South	7,983	8.2	9,261	8.0	1278	0.2
Ilorin West	14,634	15.1	21,037	18.1	6403	3.0
Irepodun	5,643	5.8	7,673	6.6	2030	0.8
Isin	1,794	1.8	3,012	2.6	1218	0.8
Kaiama	3,793	4.0	4,285	3.7	492	-0.3
Moro	4,519	4.7	6,228	5.4	1709	0.7
Offa	3,896	4.0	4,200	3.6	304	-0.4
Oke-Ero	1,998	2.1	2,878	2.5	880	0.4
Oyun	2,660	2.7	4,724	4.1	2064	1.4
Patigi	2,370	2.4	4,460	3.8	2090	1.4
State Total	96,926	100.0	116,099	100.0	19,173	19.8

Source: Computation from 1991 and 2006 Census Figures

The need for better care and the satisfaction of filial obligations, made the elderly to reside permanently or partially with their offspring and kins, thus leaving their place of origin sparsely populated.

Usually, when the emigrated youths becomes aged, most of them never return, but decide to stay 'abroad'. In a case, they would rather remain abroad where they are known,

rather than return to an unknown or a less familiar country home as the case may be. This situation is common in most communities in the State especially in L.G.As like Ifelodun, Ekiti, Irepodun where the Igbomina people (known for their high immigrant population in the cities of Lagos, Abeokuta, Ilorin, Ibadan, Cotonou among others) are predominant. Figure 2c depicts the rate of increment

between the two censal periods. It is remarkable that only Ifelodun has its elderly population in the 1991 census year higher than that of 2006. The other areas experience divergent, but higher increases in their 2006 figures than their 1991 figures. These can also be seen in Table 2. It is worthy of note to emphasize that Kwara State, has experienced successive boundary adjustment exercises

after its creation in 1967. Indeed, it has lost considerable land area as well as human and material resources to the present day Kogi and Niger States. For instance, the State has a land area of about 60,388 km² and a population of over 4.0 million as at 26 August, 1991, but was reduced to its present 32,500 km² and 1.55 million people.

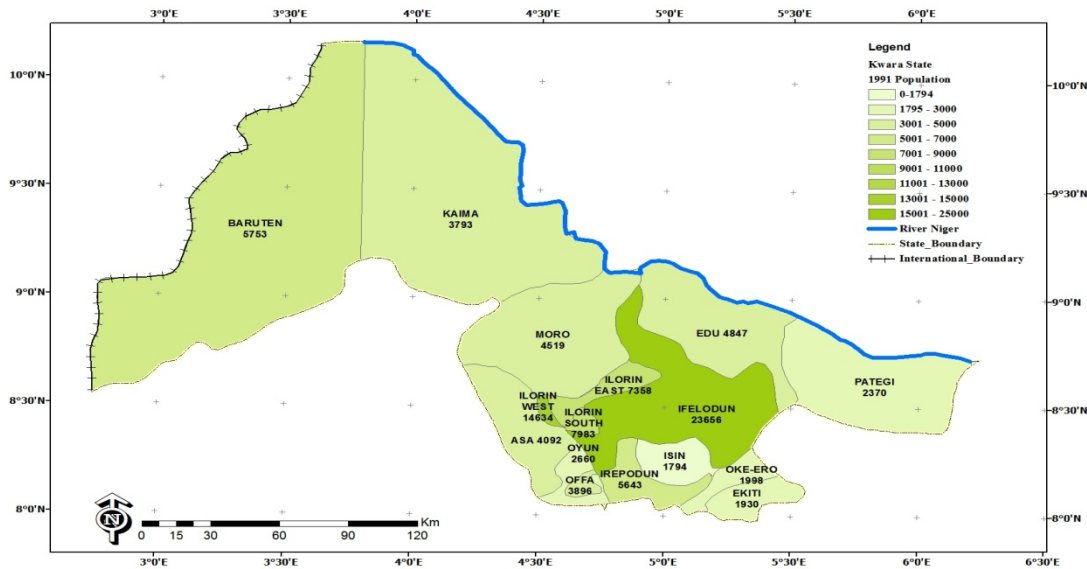


Figure 2a. *The 1991 Aged Population Map of Kwara State*
Source: *Field Survey, 2014*

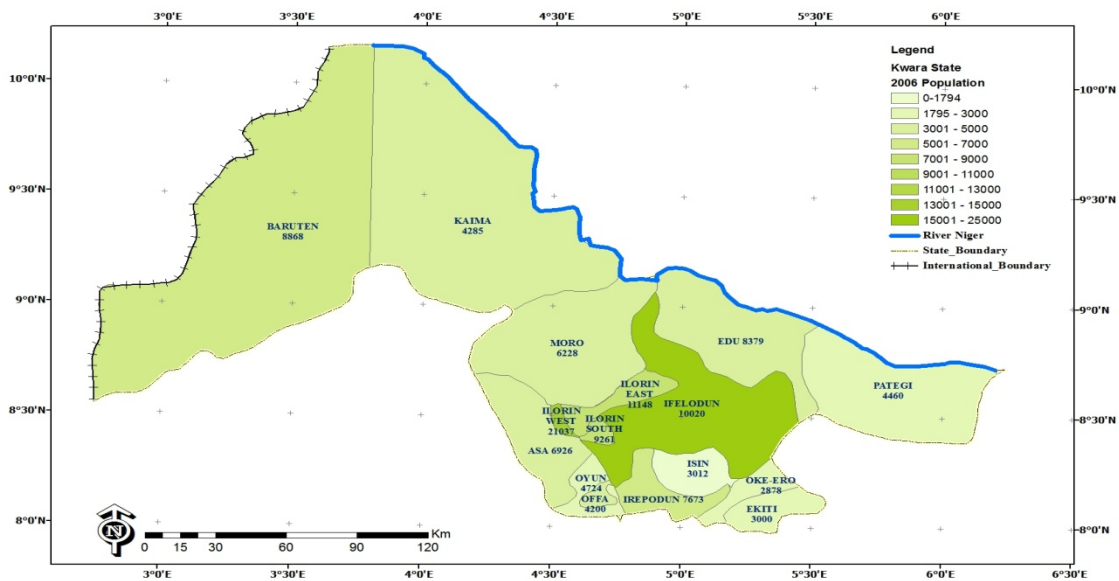


Figure 2b. The 2006 Aged Population Map of Kwara State
Source: Field Survey, 2014

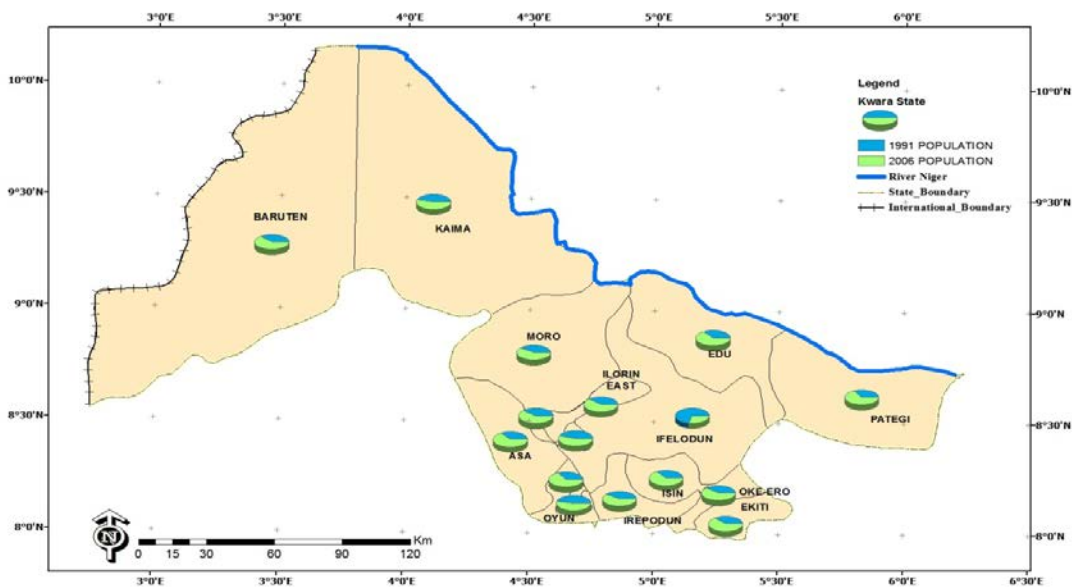


Figure 2c. The Rate of increment in Aged population between the 1991 and 2006 Census figures in Kwara State
Source: Field Survey, 2014

An attempt was made to establish the level of increase in the elderly population in the different local government areas of the state by using the 1991 and 2006 population census figures. These age-groups were projected using the recommended NPC growth rate of 2.8% for Kwara State

(Table 3). Table 4 presents thirty-five (35) years (1991-2025) projected annual population of the age group 60 years and over for the state and the studied local government areas of Baruten, Patigi, Asa, Ilorin West, Ekiti and Oyun.

Table 3. Population of the Aged (60 Years and Over) from 1991 – 2025 in Kwara State

Year	Baruten	Patigi	Asa	Ilorin West	Ekiti	Oyun	Growth Rate (%)
1991	5,753	2,370	4,092	14,634	1,930	2,660	2.80**
1992	5,914	2,436	4,207	15,044	1,984	2,734	"
1993	6,080	2,504	4,325	15,465	2,040	2,811	"
1994	6,250	2,574	4,446	15,898	2,097	2,890	"
1995	6,425	2,646	4,570	16,343	2,156	2,971	"
1996	6,605	2,720	4,698	16,801	2,216	3,054	"
1997	6,790	2,796	4,830	17,271	2,278	3,139	"
1998	6,980	2,874	4,965	17,755	2342	3,227	"
1999	7,175	2,954	5,104	18,252	2,408	3,317	"
2000	7,239	3,641	5,653	17,171	2,449	3,855	3.37*
2001	7,491	3,768	5,850	17,770	2,534	3,989	3.32*
2002	7,748	3,897	6,051	18,380	2,621	4,126	"
2003	8,014	4,031	6,259	19,011	2,711	4,268	"
2004	8,289	4,169	6474	19,664	2,804	4,415	"
2005	8,574	4,312	6,696	20,339	2,900	4,567	"
2006	8,868	4,460	6926	21,037	3,000	4,724	2.80**
2007	9,166	4,610	7,159	21,744	3,101	4,883	3.36*
2008	9,474	4,765	7,400	22,475	3,205	5,047	"
2009	9,792	4,925	7,649	23,230	3,313	5,217	"
2010	10,121	5,091	7,906	24,011	3,424	5,392	"
2011	10,464	5,264	8,174	24,825	3,540	5,575	3.39*
2012	10,819	5,442	8,451	25,667	3,660	5,764	"
2013	11,186	5,627	8,738	26,537	3,784	5,959	"
2014	11,565	5,818	9,034	27,437	3,912	6,161	"
2015	11,957	6,015	9,340	28,367	4,045	6,370	"
2016	12,361	6,218	9,656	29,326	4,182	6,585	3.38*
2017	12,779	6,428	9,982	30,317	4,323	6,808	"
2018	13,211	6,645	10,319	31,342	4,469	7,038	"
2019	13,658	6,870	10,668	32,401	4,620	7,276	"
2020	14,120	7,102	11,029	33,496	4,776	7,522	"
2021	14,582	7,334	11,390	34,591	4,932	7,768	3.27*
2022	15,059	7,574	11,762	35,722	5,093	8,022	"
2023	15,551	7,822	12,147	36,890	5,260	8,284	"
2024	16,060	8,078	12,544	38,096	5,432	8,555	"
2025	16,585	8,342	12,954	39,342	5,610	8,835	"

Source: Author's Computation from 1991 and 2006 Census Figures

* Projected Average Annual (Medium Variant) Growth Rates for Kwara State from 1991 Population Census.

** Average Annual Growth Rate for Kwara State from the 1991 and 2006 Censuses.

The total projected thirty-five (35) year addition to the elderly (60+ yrs) population for the studied locations are: Baruten (11,126), Patigi (6,120), Asa (8,911), Ilorin West (27,568), Ekiti (3,780) and Oyun (6,332).

Table 4. Annual Changes (Increases) in Aging Population from 1991-2025 in Kwara State

Year	Baruten	Patigi	Asa	Ilorin West	Ekiti	Oyun	Growth Rate (%)
1991	161	66	115	410	54	74	2.8**
1992	166	68	118	421	56	77	"
1993	170	70	121	433	57	79	"
1994	175	72	124	445	59	81	"
1995	180	74	128	458	60	83	"
1996	185	76	132	470	62	85	"
1997	190	78	135	484	64	88	"
1998	195	80	139	497	66	90	"
1999	64	687	549	1081	41	538	"
2000	252	127	197	599	85	134	3.37*
2001	257	129	201	610	87	137	3.32*
2002	266	134	208	631	90	142	"
2003	275	138	215	653	93	147	"
2004	285	143	222	675	96	152	"
2005	294	148	230	698	100	157	"
2006	294	148	230	698	100	157	2.8**
2007	298	150	233	707	101	159	3.36*
2008	308	155	241	731	104	164	"
2009	318	160	249	755	108	170	"
2010	329	166	257	781	111	175	"
2011	343	173	268	814	116	183	3.39*
2012	355	178	277	842	120	189	"
2013	367	185	287	870	124	195	"
2014	379	191	296	900	128	202	"
2015	392	197	306	930	133	209	"
2016	404	203	316	959	137	215	3.38*
2017	418	210	326	991	141	223	"
2018	432	217	337	1025	146	230	"
2019	447	225	349	1059	151	238	"
2020	462	232	361	1095	156	246	"
2021	462	232	361	1095	156	246	3.27*
2022	477	240	372	1131	161	254	"
2023	492	248	385	1168	167	262	"
2024	509	256	397	1206	172	271	"
2025	525	264	410	1246	178	280	"
Total	11,126	6,120	8,911	2,7568	3,780	6,332	
Average Change	317.90	174.9	254.6	787.7	108.0	180.9	

Source: Author's Computation from 1991 and 2006 Census Figures

* Projected Average Annual (Medium Variant) Growth Rates for Kwara State from 1991 Population Census.

** Average Annual Growth Rate for Kwara State from the 1991 and 2006 Censuses.

Table 4 further indicates that a total of 126,206 aged inhabitants of the State are projected to be added during the same time period. The average thirty-five year change or increase for the respective locations was equally calculated. The average annual increases of 5,048.24 aged are expected to be added to the seniors' group. Thus, an average annual addition of 318.0 in Baruten, 175.0 in Patigi, 254.6 in Asa, 787.7 in Ilorin West, 108.0 in Ekiti and 180.9 individuals in Oyun are expected to attain or join the 60+ age groups in their respective local government areas (Table 4).

The projected population figures were subjected to time series analysis in order to determine the trend over a thirty-five year period. The trend line equations for future forecast of the aged population for the respective Local Government Areas are shown in Figures 3 to 8. Six different trend line equations and R^2 values generated were used to plot future population trends. This was done and the results presented as follows: Baruten LGA ($Y = 321.0X + 4586$ ($R^2 = 0.97$)); Patigi LGA ($Y = 180.1X + 1839$ ($R^2 = 0.99$)); Asa LGA ($Y = 265.0X + 3224$ ($R^2 = 0.98$)); Ilorin West LGA ($Y = 726.4X + 11758$ ($R^2 = 0.96$)); Ekiti LGA

($Y = 109.1X + 1537$ ($R^2 = 0.97$)) and Oyun LGA ($Y = 185.4X + 2082$ ($R^2 = 0.98$)).

Tables 3 and 4 and the plotted time series graphs in Figures 3 to 8 indicates a steady upward trend in growth of the aged (60 +) population. However, the rate of increase dropped in 1999 in certain areas such as Baruten, Ilorin west and Ekiti L.G.As while it increased in some areas such as Patigi, Asa and Oyun. The reasons for this may be as a result of the creation of new states and L.G.As that occurred just before the 1991 census and the ones created in 1996. Thus boundary changes could have affected the process of population distribution during such exercises (FGN, 2007). We may also recall that the 1991 and 2006 censuses were conducted in different months and seasons and the mobility of the population in terms of direction and quantum is uneven during the year. Thus, L.G.A populations could be influenced favourably or adversely by population movements which is seasonal. Other factors such as political, social, religious, ethnic, administrative and even international events may equally have affected population mobility.

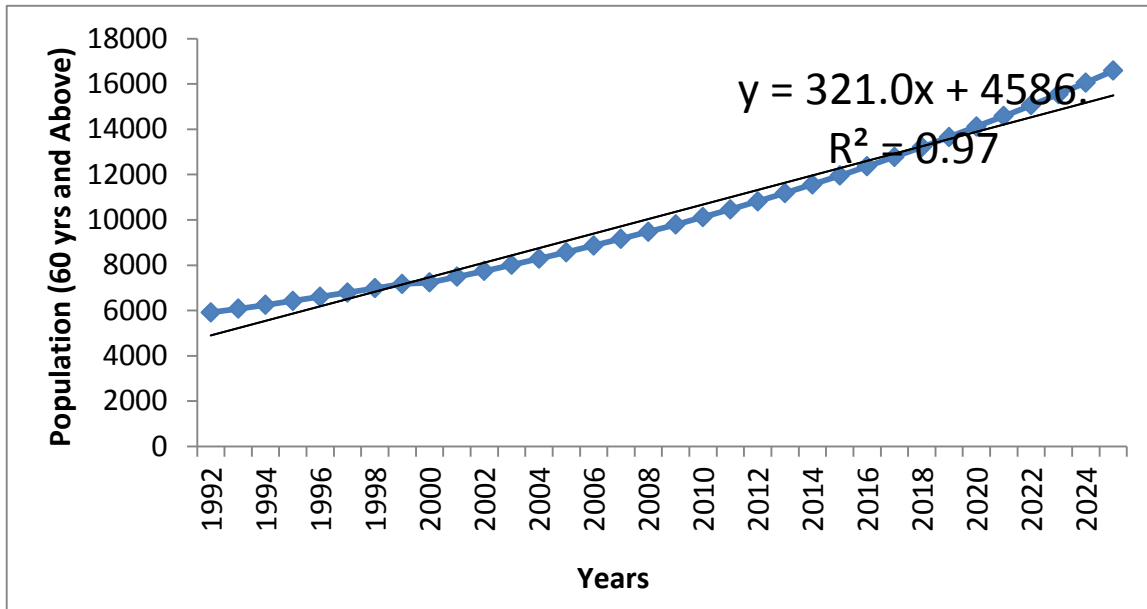


Figure 3: Trend of Ageing Population (60+ Years) in Baruten LGA
Source: Author's Computation from 1991 & 2006 Censuses

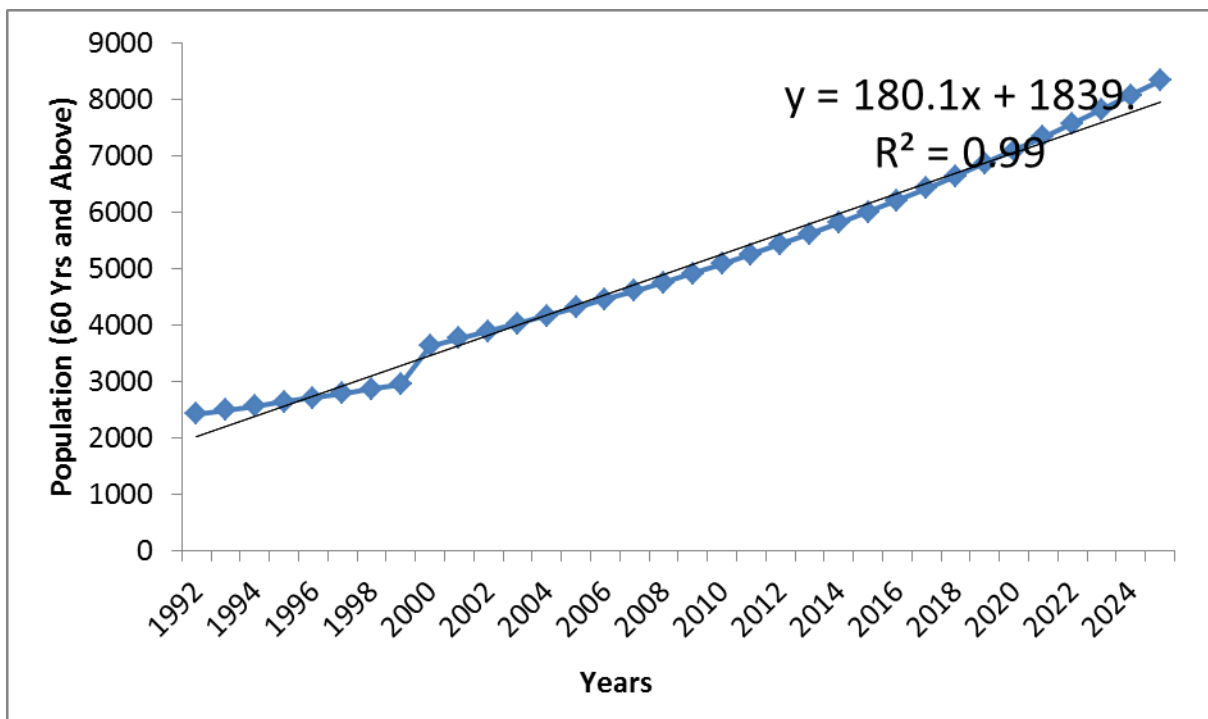


Figure 4: Trend of Ageing Population (60+ Years) in Patigi LGA
Source: Author's Computation from 1991 & 2006 Censuses

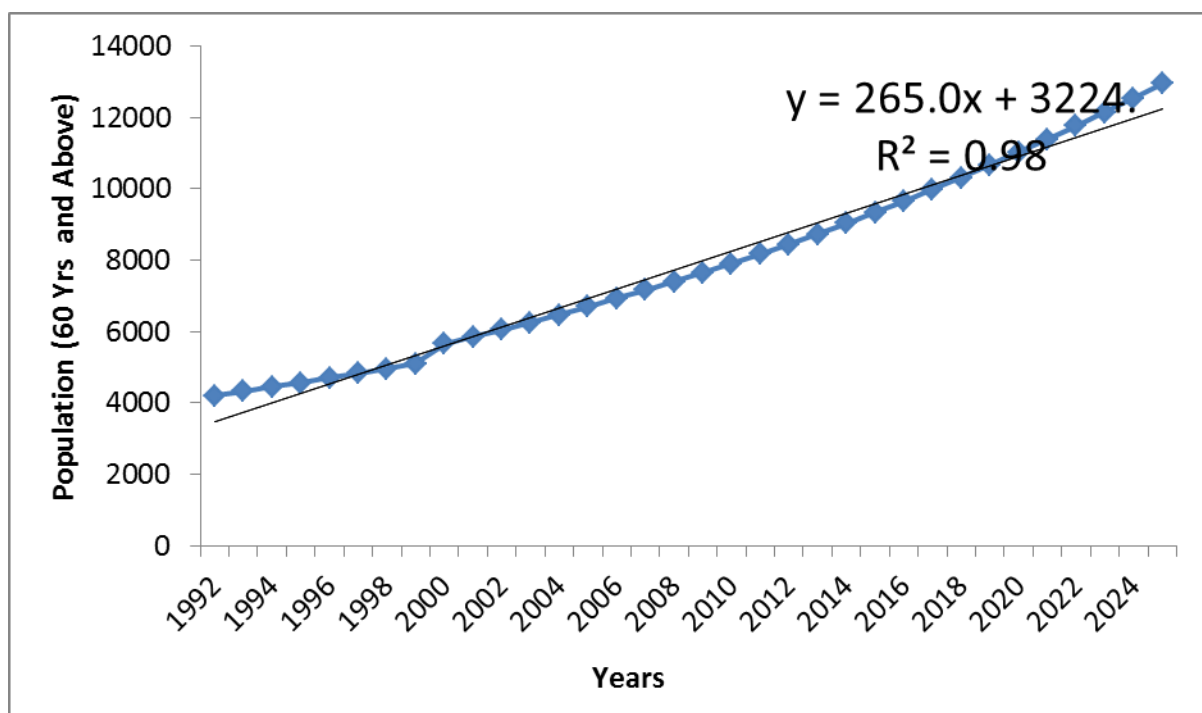


Figure 5: Trend of Ageing Population (60+ Years) in Asa LGA
Source: Author's Computation from 1991 & 2006 Censuses

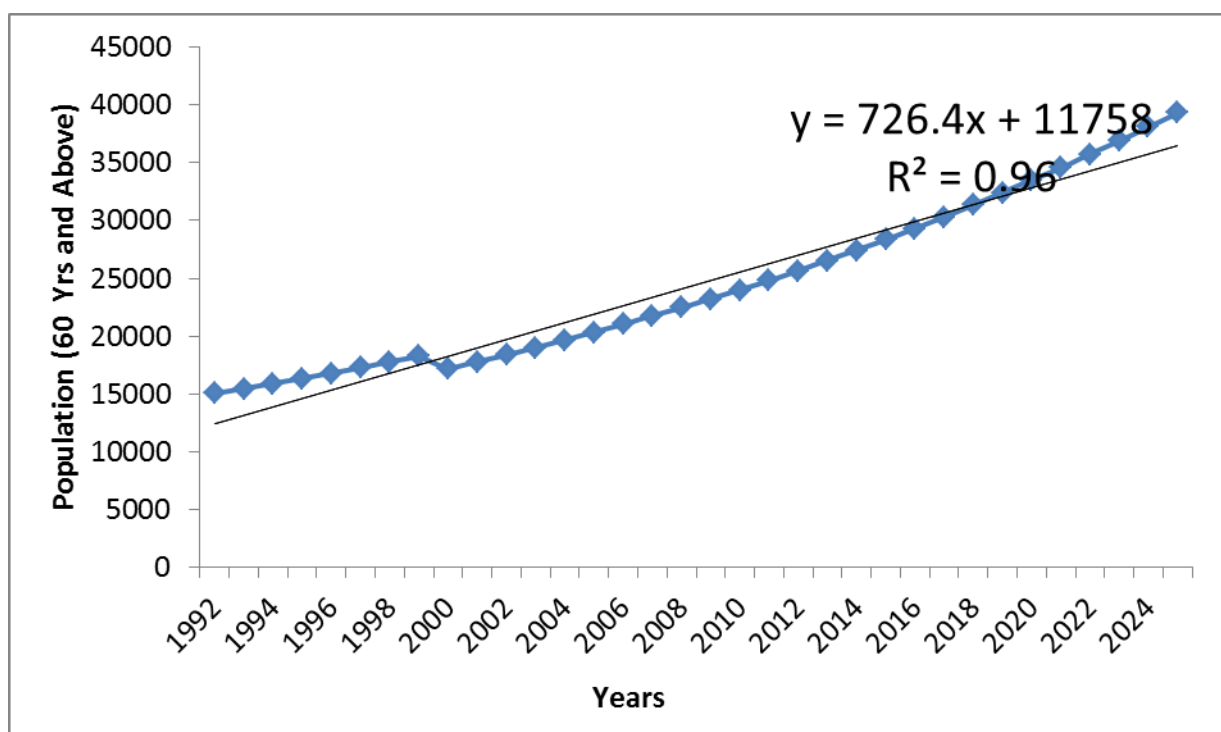


Figure 6: Trend of Ageing Population (60+ Years) in Ilorin West LGA
Source: Author's Computation from 1991 & 2006 Censuses

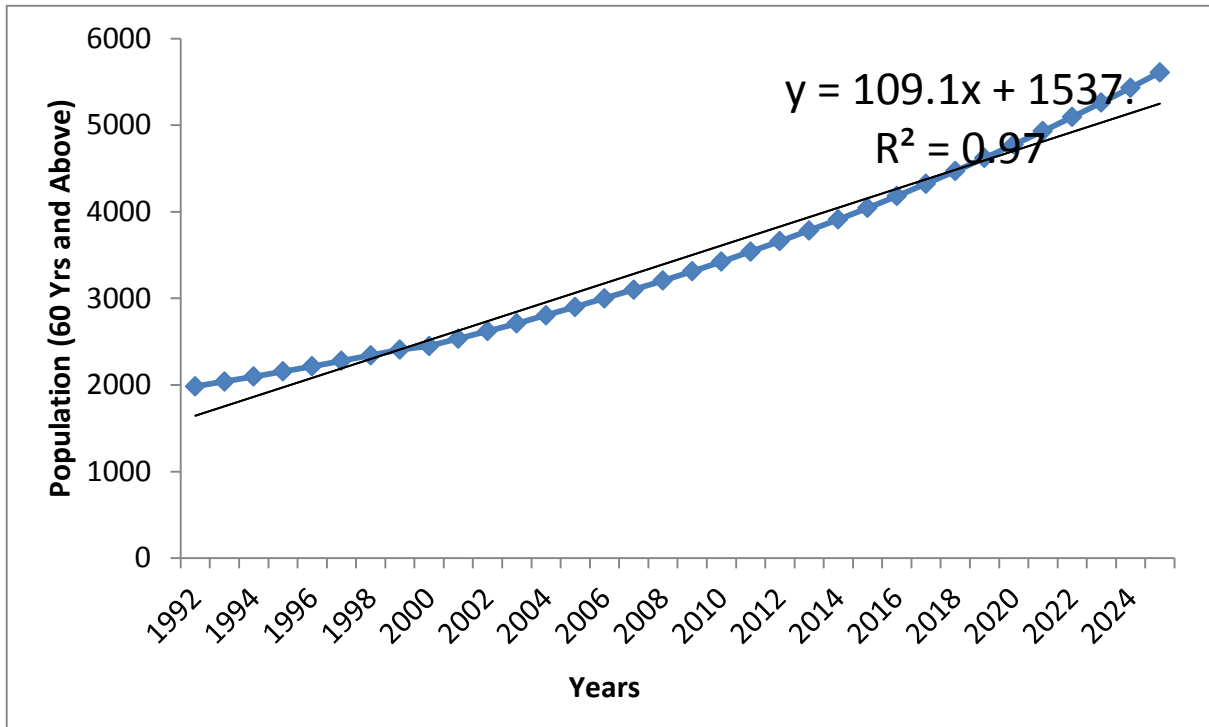


Figure 7: Trend of Ageing Population (60+ Years) in Ekiti LGA
Source: Author's Computation from 1991 & 2006 Censuses

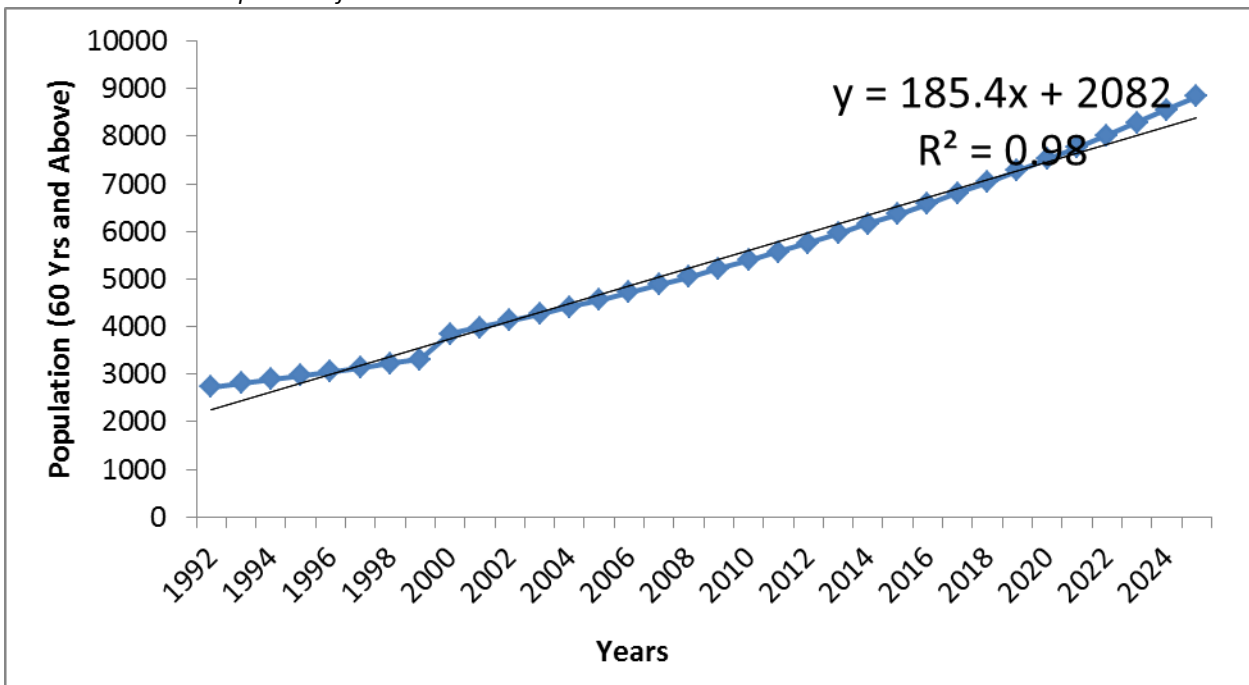


Figure 8: Trend of Ageing Population (60+ Years) in Oyun LGA
Source: Author's Computation from 1991 & 2006 Censuses

Conclusion

The implication of this trend connotes a continuous rise in the absolute number of those joining the seniors' group (note that, due to successive state creation and boundary adjustment exercises, sizable population area as well as material resources were lost to other states, especially after the 1991 census exercise). Arokiasamy *et al*, (2011) and Bloom, (2011) puts it as the 'shifts in the age structure of a population toward older ages' in our societies. The reasons for this, as earlier highlighted can be traced to the rising life expectancy, (aided by better nutrition, lifestyle changes, improvements in education and socioeconomic life as well as the family support systems (Solomom, 2001; Gibney, *et al*, 2005; Olayiwola, *et al*, 2013) and a declining birth rate prevailing in our respective societies. In addition, increase in longevity according to Anderson, (2011); and the United States Centres for Disease Control and Prevention (USCDC, 2013), has been traced to the effective health strategies and advances in medical treatment that contributed to the dramatic increase in the average life expectancy of Americans. Many of the diseases that claimed our ancestors –

including Tuberculosis (TB), Diarrhoea and Enteritis, and Syphilis – are no longer the threats they once were. Furthermore, the rise in the incidences of youthful mortality and among the working adults, means that children are likely to die before their parents. Thereby leaving more of the elderly people, but with reduced family support. A closer look at the trend of the aged population in Figures 3 to 8, indicates that the aged population declined below the trend line from the year 2006, while it is expected to rise above the trend lines in the year 2019 across the different local government councils studied. This according to the FGN, (2007) could be traced to political, ethnic and religious disturbances in certain areas and during the period of the past two censuses. Population movement caused by this disturbances are unknown in quantum and direction. Such movement could be short or long term and therefore could be reflected in population of the affected L.G.As or States. The similarities reported could also be a result of the constant population growth rates utilized in our projections.

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