

Kenya's ageing population: Current and future prospects

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Abstract

Introduction: By 2050, 1 in 6 people in the world will be aged over 65 while in 2019 seventeen countries globally reported that a fifth of their populations was geriatric. It is estimated that by 2030, Europe will be home to 24 percent of the world's ageing population. Meantime, Japan has continued to take lead with the highest proportion of elderly persons. However, by 2050, Korea will surpass Japan. Geriatric population in developing countries is on a trajectory outpacing the developed countries. To confirm this trajectory, sub Saharan Africa is home to the youngest populations where Niger - with a median age of only 15.4 - leads among 17 countries globally.

Study Objectives: This study aims to analyse Kenya's population ageing with a view to presenting its growth since 1999 and projecting its future up to 2050.

Study Data and Methods: The study uses data from the Kenya Population and Housing Censuses of 1999, 2009 and 2019. Multiple demographic analyses softwares are used, namely: US Census Bureau's Population Analysis System (PAS); United Nations Population Division's Software Package for Mortality Measurement (Mortpak) and Spectrum.

Findings: Kenya's population has grown by almost 20 million in the past two decades from 28.7 million in 1999 to 47.6 million in 2019. During the same period, the elderly population has grown from 3.3 percent to 3.94 percent. After stagnating between 1998 and 2008-09, Kenya's fertility dropped rapidly from 4.6 births per woman in 2008-09 to 3.4 births per woman a decade later. The transition from youthful to aging population and therefore a shift in the population structure is expected as median age rises from 20 years in 2020 to 28 years by 2050 while total dependency ratio will drop from 75 percent to 48 percent during the same period. Rapid growth is projected in the aging population which is set to more than double from 1.87 million in 2019 to 4.77 million by 2050. Life expectancy will be higher among female geriatric population. By 2050, Kenya's ageing population (60 and over) will be higher than that of children under five - 9.77 percent compared to 8.44 percent, respectively.

Conclusion: Due to population momentum, Kenya's population is set to grow by almost one million people annually between 2019 and 2050 while the elderly population is set to more than double during the same period. It is critical that considerations are made on expanding retirement age bands to allow the geriatric population to remain labour productive and contribute positively to economic growth. Meantime, the elderly population is important for enhancing social skills and cultural knowledge transfers at community level.

Keywords: Population; Ageing; Age composition; Kenya; Population projections; Censuses; Ageing population

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1. Introduction

The global population is ageing. In a recent working paper, the International Labour Organization predicts that by 2035, the number of people aged 55 and over will be higher than that of children 0 to 14 years [1]. By 2050, 1 in 6 people in the world will be aged 65+, up from 1 in 11 in 2019[2]. According to the United Nations Department of Economic and Social Affairs (UNDESA), older people formed a fifth of the population in 17 countries in 2019[3]. By 2030, Europe will lead the world in hosting 24 percent of the ageing population [4]. While Japan has continued to bear the world's highest proportion (39.2%) of elderly persons, this will change by 2050, when, according to a 2020 International Labour Organization working paper [1] Korea's geriatric population will rise to 38.07 percent compared to Japan's 37.69 percent. The 2022 UNDESA World Population Prospects report notes that women comprise 55.7 percent of geriatric population today. The report projects that by 2050 older persons aged 65 and above will be more than twice the number of children below five years and almost the same as those aged below 12 globally.[2]. This year, the world population will host its 8th billionth human and the elderly population will contribute 9.7 percent of it [2].

Population ageing can be defined as an increasing median age of a population or an alteration in the age structure of a population, so that elderly persons are increasingly represented within a country's overall age structure.[5] It is a demographic dynamic characterized by falling mortality and fertility leading to increased life expectancy with a shrinking working age population. It is a time when countries experience increased population of people living beyond 65 years. Conventionally, "elderly" is defined as a chronological age of 65 or older [6]. According to the World Health Organization, this demographic phenomenon calls for preparedness in terms of dealing with chronic illnesses, provision of age friendly healthcare services as well as ensuring conducive environments. [7] Similar recommendations were made in a study in Free State Province, South Africa whose geriatric population accounted for almost 10 percent of the province's total population in 2017[8].

The geriatric population has been growing rapidly. Globally, the number of people aged 65 or older is projected to grow from an estimated 524 million in 2010 to nearly 1.5 billion in 2050, with most of the increase happening in developing countries [3] [4] [9] [10] [11]. Developing countries are now the epicentre of the aging population whose proportion is set to grow from 60 percent to 80 percent between 2005 and 2050 (Boggatz & Dassen, 2005) in [11]. Despite having the highest population on the African continent, Eastern Africa's ageing population (60+) was estimated at 20.1 million (2020) compared to Western Africa's 20.4 million. However, in terms of proportions, Eastern Africa has the lowest population ageing (4.8%) compared to almost one in 10 in the Southern region [12].

A 2017 State of Africa's population by the African Union (AU) noted that Northern and Southern Africa had five percent each of populations aged 65 and above while the rest of Africa had three percent per region by 2016 [13]. According to the United Nations World population estimates, 2019, Eastern and Southern Asia hold the highest ageing population (37%) while sub-Saharan Africa has only 4 percent. Despite the small proportion of ageing population currently seen in Africa, the scenario is bound to change between 2020 and 2050. According to a US Bureau of Statistics report (2020), by this time, Africa's ageing population is projected to have tripled to 235.1 million from 74.4 million, thereby outpacing those of other world regions [12].

Kenya's population has witnessed steady and rapid growth over the years. In 1989, the country's population crossed the 21 million mark rising from 15.3 million in 1979. By 1999, the population was 1.3 million shy of hitting 30 million [14]. Since then, the population growth has been rapid, increasing by approximately one million annually. The population is expected to reach 57 million by 2030 and 63.9 million by 2040[15]. The geriatric population in Kenya has equally been rising. In 1999, the elderly population (65+) was reported at 3.27 percent of the total population. The 2009 population census recorded 3.45 percent of the total population was geriatric. By 2019, Kenya's elderly people (65+) accounted for 3.94 percent of the population with a sex ratio of 0.75 male(s)/female [16].

1.1. Importance of Study

Geriatric population has been rising steadily during the period under review. This has been occasioned by increasing life expectancy both at birth and at older ages [3], rising median age[10] and reduced fertility and mortality rates. Improved nutrition, sanitation, lifestyle and health status have generally led to an increase in life expectancy. As population ageing becomes a global phenomenon, most countries need to develop and/or strengthen socio-economic systems to deal with the phenomenon. As noted by AU [13], old age dependency in Africa's Central, Western and Eastern regions is high. However, the world may witness a different trend with Africa's ageing population. According to a recent report, [12]: *"Older Africans play critical economic, family, and community roles. Researchers found that a majority of adults aged 60 to 64 and around half of those aged 65 and older in Africa remain in the labourforce. Many older Africans, particularly women, contribute substantial levels of unpaid home and care work"*. This position was confirmed in Kenya

where the 2019 Population and Housing Census indicated that about 83 percent of the older population 60+ was working while approximately 4 percent were looking for work [17].

Kenya still nurses a youthful population with a median age of 20 years (2019) [16]. Persons aged below 35 constitute three-quarters of the population while those aged 15-34 years constitute 36 percent of the total population [6]. Elderly dependency was estimated at 4.6 percent compared to that of youth at 73.7 percent (2015). Kenya's total population life expectancy at birth was estimated at 63.6 years - male: 60.6 years and female: 66.5 years, respectively in 2019 [18].

Addressing geriatric population factors is critical in the achievement of some Sustainable Development Goals (SDGs) such as ending hunger and poverty, improving healthcare, education and promoting gender equality, among others [3]. Over and above, this population segment requires adequate planning in terms of healthcare and social protection [11]. Although Harper (2014) estimated that by 2050, 41 percent of the global population will be geriatric - a proportion similar to that of children under 5 years [19], the latest projections by UNDESA, 2022 indicate that elderly population will be more than double that of children below 5 years by 2050 [2].

1.2. Study Problem

While population aging is a good indicator of improved quality of life leading to increased life expectancy, it is not such good news for dependency as it increases old age dependency, especially in developing countries where social protection is rarely institutionalized. It also draws considerable government and individual resources in pensions, healthcare and social services for the elderly. Less developed countries have been slower in adopting population ageing policies despite the rapid growth of the population aged 65 and over [3]. In addition, most developing countries lack the systems and structures to cater for this demographic phenomenon thereby threatening the meaningful support, care and decency of the elderly population. Due to weakened family and social structures in most countries, ageing populations have been consigned to a life of poverty, destitution and ill health [20]. In some instances, the geriatric population faces an extra burden of caring for grandchildren mainly orphaned by HIV and AIDS.

There is inadequate data available to governments to institute proper planning and develop structures and systems that adequately respond to the ageing phenomenon in Africa and Kenya in particular. Moreover, analysing population ageing trends and projecting future patterns is critical in this regard. It is also critical to analyse potential challenges and opportunities provided by ageing populations in terms of the economy, social welfare, skills and cultural knowledge transfers, healthcare and labour force, which can in the long run support meaningful policies and programmes.

Kenya enacted a policy on older persons and ageing in 2009. Given the aspirations of the 2010 Constitution of Kenya and specifically the Bill of Rights, the policy on ageing population was revised in 2014 with the goal of providing *"an environment that recognizes, empowers, and facilitates Older Persons to participate in the society and enjoy their rights, freedoms and live in dignity"* [21]. However, as observed by a UNDESA[10] assessment report on Kenya, most sub Saharan Africa countries are rich in policy that lack implementation and that in Kenya, the older persons programming lacks strong evidence backing.

This study endeavours to provide such evidence that is critical for programming for the elderly in Kenya.

Objectives

The main objective of this study is to analyse Kenya's population ageing with a view to presenting its growth since 1999 and projecting its future into 2050. Specifically, the study aims to show population trends and age structure transformation between 1999 and 2019; show Kenya's fertility transition drawing on assumptions on fertility and life expectancy; and finally, determine trends in ageing population and projecting its growth to 2050. The study also provides total population and fertility projections up to 2050 using 2019 census data as the base.

1.3. Data Source

This study depends on the National Population and Housing census data collected during the three most recent successive censuses of 1999, 2009 and 2019 to draw trends. For population ageing projections, the study will use 2019 National Population and Housing census data to project trends up to 2050.

2. Literature Review

In 1982 the United Nations General Assembly endorsed an action plan on population ageing developed during the 1982 World Assembly on the matter in Vienna, Austria. The Vienna International Plan of Action on Ageing was the first

international instrument on ageing. It provided a basis for the formulation of policies and programmes on the subject. A subsequent forum was held in Madrid, Spain, in 2002 where participating countries adopted two key documents, namely, a Political Declaration and the Madrid International Plan of Action on Ageing, 2002. Both documents highlighted commitments by governments to formulate and implement actions to address population ageing challenges[22]. Kenya's aging policy is grounded on the Madrid International Plan of Action on Ageing.

A 2007 global perspective of population aging prepared by the United States Department of State, National Institutes of Health and the National Institute on Aging indicates that the world is experiencing a spectacular demographic phenomenon in which population trends point towards a growing aging population and rapidly shrinking births. This will essentially lead to a situation where aging population overtakes the population of children under five. The report highlights some impacts and opportunities of population aging. For example, it notes changes in family structures, labourforce where exits into retirement will be higher than new entrants leading to unprecedented pension pay-outs, issues of high medical care costs and increased disease burden. The report points out that the population aging phenomenon is being experienced across the globe and will be more prominent by 2050 and beyond thus urging developing countries to use lessons from developed nations to build social and economic structures beforehand[23].

In a 2009 Bangladesh study to determine conditions of old people living in old homes[24], the study observed a rapidly growing population of the elderly above 60 years whose support cannot be sustained by the small family structures forcing some into destitution and poverty. The study estimated that by 2047 the global population of the aged will be higher than that of children. In Bangladesh, the population aged above 60 was estimated to rise to nine percent by 2025. Despite shrinking family structures in Bangladesh, religious and cultural values provide sustained social support for the elderly. However, due to changing socio-economic networks, migrations and urbanization, the tightly-knit communal family structure has taken a beating. For example, women are no longer providing the required care since some have joined the labourforce to supplement family incomes. There is also a shift towards support for nuclear families. On the other hand, the government provides elderly social security through pension, gratuity and allowances. Using descriptive statistics (ratios, percentage, mean, standard deviation, correlation and chi-square) to rate the feelings of the elderly living in old-age homes, the study found that three quarters (74%) of men and women living in old-age homes were comfortable with facilities provided (sample size = 96 persons). In terms of education level and communication with relatives, the study found that while no elderly people with above graduate reported lack of contact, 19 of those without an education had no contact with relatives. Similarly, those with no education had stayed longer at the old-age homes compared with those with above graduate level of education. The study concluded that the elderly were comfortable in old homes and this might be the best strategy to ensure healthy geriatric populations in future.

A study on population aging in Egypt by El-Shehaby, (2020, unpublished), noted that many African countries have high fertility thus display very low median ages. Median age divides a population into two – it is the average age of a population. According to the study, Mali, Niger and Uganda have median ages of 15-16 compared to Germany and Japan which have a median age of 47. Egypt reported a median age of 23.6 in 2017 which is projected to rise to 32.6 by 2047. Using information from Egypt's Central Agency for Public Mobilization and Statistics (CAPMAS) Statistical year books which identify aging population as those aged 60 and above, the study noted that Egypt's aging population is facing rapid growth. For instance, the aging population rose from 5.8 percent in 1996 to 6.7 percent in 2017 and is projected to increase to 17.9 percent by 2052 as aging life expectancy continues to improve. By 2027, the geriatric population in Egypt is projected to be higher than that of children. The study observed socio-economic challenges that countries have to grapple with as their populations age. Of utmost importance is the lack of family structures to support the aging phenomenon. Aging populations require social protection in terms of family support, good nutrition, shelter and healthcare. Healthcare is of utmost importance as countries face disease transitions from infectious to non-communicable ones including increased mental health challenges[25].

In a study entitled Africa Aging: 2020[12], the authors used data from surveys and censuses from 14 Sub Saharan African (SSA) countries to study trends, socio-economic, demographic and health characteristics of Africa's aging population. Some of the salient findings of the study indicate that half of geriatric population in SSA (those aged 65+) is still active in the labourforce. Most elderly population resides in rural areas, within multigenerational household settings with little mobility. However, one in 10 elderly persons live in solitude. Further, those in urban areas live better lives compared to those in rural settings. The study also observed that approximately half of aged population live in poor households while majority, especially women, lack formal education. In SSA, aging population reported some setbacks with regard to sensory activities, poor health and a rise in non-communicable disease burden. Further, the study noted extensive engagement of older persons in social networks such as participating in community leadership roles and caregiving support.

3. Study Methodology

The study used the descriptive analysis applied on data obtained from the three census' to map out the trends in population aging since 1999. In addition, the Model Life Tables (using Mortpak software) helped to track life expectancy in 2019 and determine survivorship at age 65 for both men and women in Kenya.

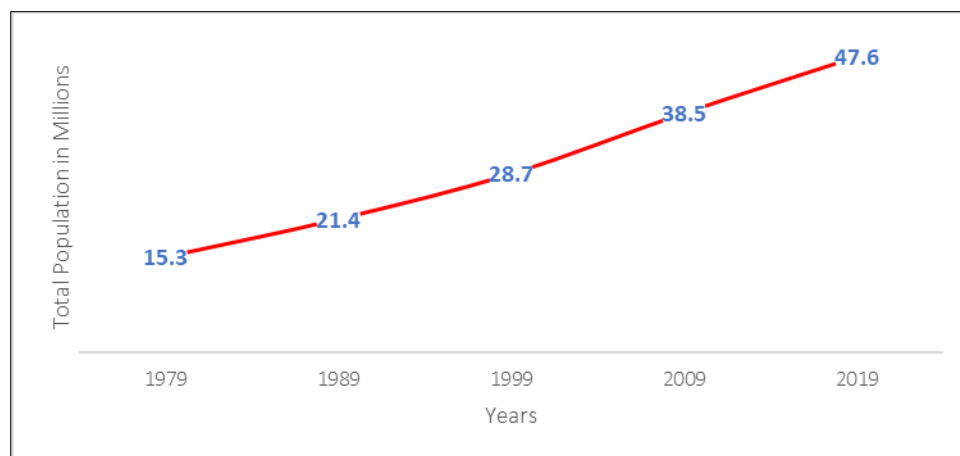
Using PAS and Spectrum softwares, the study endeavoured to develop Age Specific Fertility Rate (ASFR) models that have been used in population projections and presentation of population age structures for the Kenyan population from 1999 to 2050. Meantime, the study also analysed the measures of population aging which include median age, sex ratio and old dependency in the country during the study period.

Although the Vienna World Assembly on Population Ageing categorized the elderly as those above 60 years of age, this study will use the conventional age of 65. This is due to the consideration that working age population is internationally defined as those in the 15-64 age bracket meaning the 60-64 cohort is recognized as working age. Again, as noted by Yousif (2016), 65 is used as a reference age in developed countries for eligibility for social security benefits in old age.[11]

4. Results

4.1. Population Trends 1999 to 2019

Fig.1 shows that Kenya's population has experienced steady growth in the first decade (1979 to 1989). Thereafter, the population started growing rapidly.

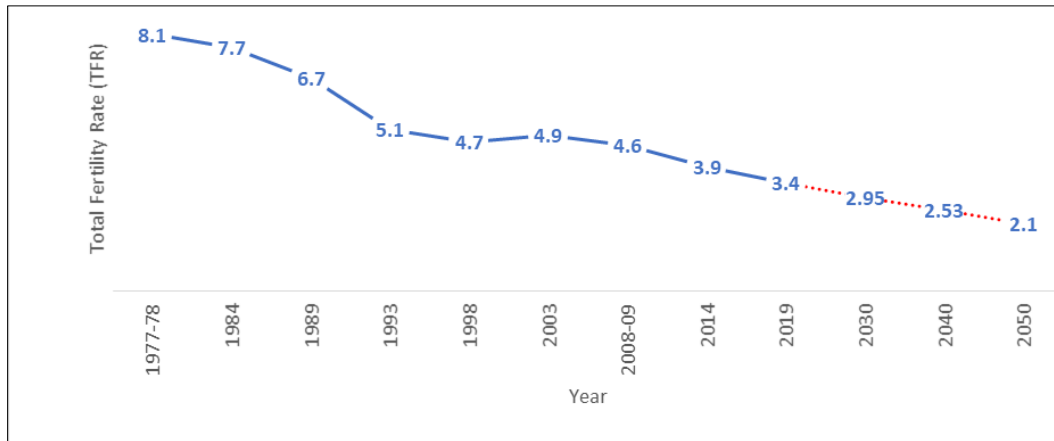


Source: Kenya National Population and Housing Censuses of 1979, 1989, 1999, 2009 and 2019

Figure 1 Kenya's population trends, 1979-2019

4.2. Kenya's Fertility Transition (1977 – 2019)

Kenya has made tremendous progress towards lowering its fertility in the past four decades. From an average of 8 births per woman of reproductive age in 1977, fertility dropped to 5.1 births per woman in 13 years. However, when the AIDS epidemic hit sub Saharan Africa, most resources meant for family planning programmes were diverted to respond to HIV and AIDS thus between 1998 and 2008 there was little progress in the fertility transition. This period was aptly referred to as the lost decade for the fertility transition. However, family planning was prioritized and repositioned thereafter, leading to a reduction in fertility by 1.2 births in a decade (2009 – 2019). The country is projected to reach replacement fertility by 2050 [26]. Fig.2 depicts the fertility transition.

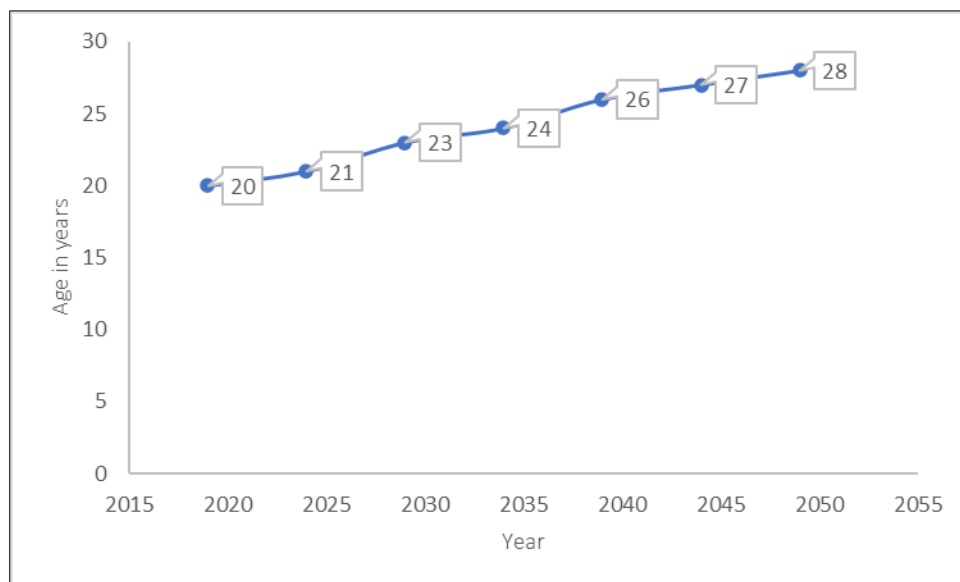


Source: NCPD, 2013: Kenya Population Situation Analysis and KNBS, 2019 Population Census, Projections

Figure 2 Kenya’s fertility transition, 1977/78 to 2019 projected to 2050

4.3. Median Age, Dependency Ratio and Life Expectancy

A shift in median age is a good manifestation of the aging phenomenon. In Kenya the median age rose by 3.1 years from 17 in 2009[27] to 20.1 by 2019[26]. Across the globe, some countries report higher average ages. For example, Japan’s median age was 37, South Korea and Singapore 39 [28]. According to data from the US Census Bureau, 2019, most African countries are still babysitting – nursing youthful populations. Uganda has an average age of 15.7 compared to Botswana’s 25.7 and Tunisia’s 32.7years[12]. According to Statista, in 2021, 21 countries in Africa presented the lowest average age globally. The youngest being Niger with a median age of 15.4. Within the East African Region, Uganda (15.8 years) has the lowest average age followed by Burundi (17), South Sudan (17.3) and Tanzania (17.7)[29] However, Kenya’s median age will maintain a steady rise from 20.1 in 2019 to 28 by 2050. Fig.3 presents the projected average age in Kenya for the time period 2019-2050.



Source: Generated by Author using 2019 census (Spectrum modelling)

Figure 3 Kenya Projected median age, 2019-2050

Kenya’s total dependency dropped from 86.8 percent to 75 percent during the intercensal period 2009 to 2019 and life expectancy improved from 57 to 66 [26]. Life expectancy at age 65 is estimated at 12.22 years and 13.89 years for males and females, respectively according to Mortpak modelling.

The demographic dependency ratio is anticipated to drop from 75 percent (2019) to below 50 percent (48%) by 2050. However, old age dependency will grow from 0.069 to 0.089 in the same period. Meantime, sex ratio will also fall to 96.5 males per 100 females from 98.06 during the same time interval. The sex ratio phenomenon follows a trend observed

in “emerging countries” as noted by ILO working paper [1]. Table 1 shows Kenya’s projected dependency and sex ratios for the time 2019-2050.

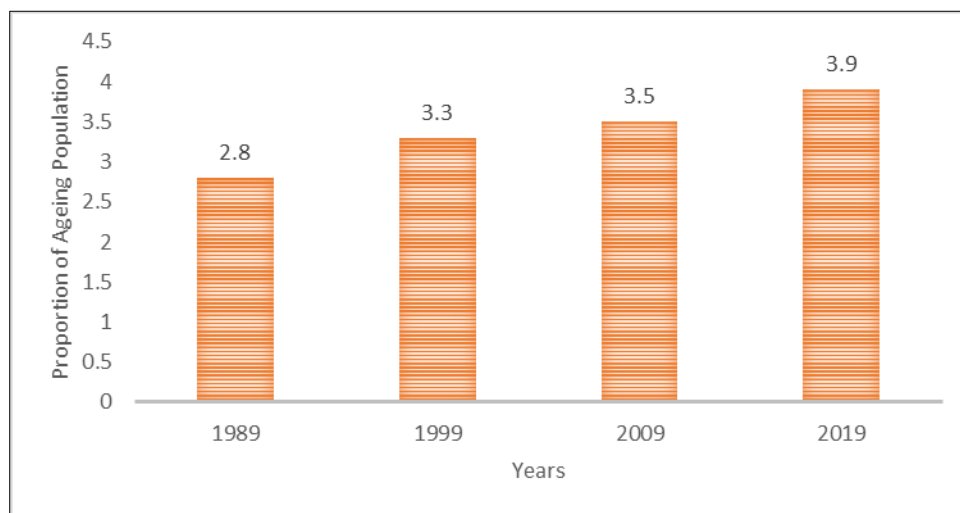
Table 1 Projected Dependency and Sex Ratios, 2019-2050

Dependency Ratio (Male+Female)			Sex Ratio - (Male+Female)	
Year	Total	Old age	Year	Sex Ratio (M/F)
2019	0.75	0.069	2019	98.06
2025	0.66	0.075	2025	97.54
2030	0.60	0.072	2030	97.23
2035	0.58	0.067	2035	97.09
2040	0.55	0.070	2040	96.97
2045	0.52	0.079	2045	96.75
2050	0.48	0.089	2050	96.49

Source: Generated by Author using 2019 census (Spectrum modelling)

4.4. Trends in the Proportion of Kenya’s Elderly Population, 1989 – 2019

The proportion of the elderly population has increased from 2.8 percent in 1989 to 3.9 percent in 2019 as presented in Fig.4.

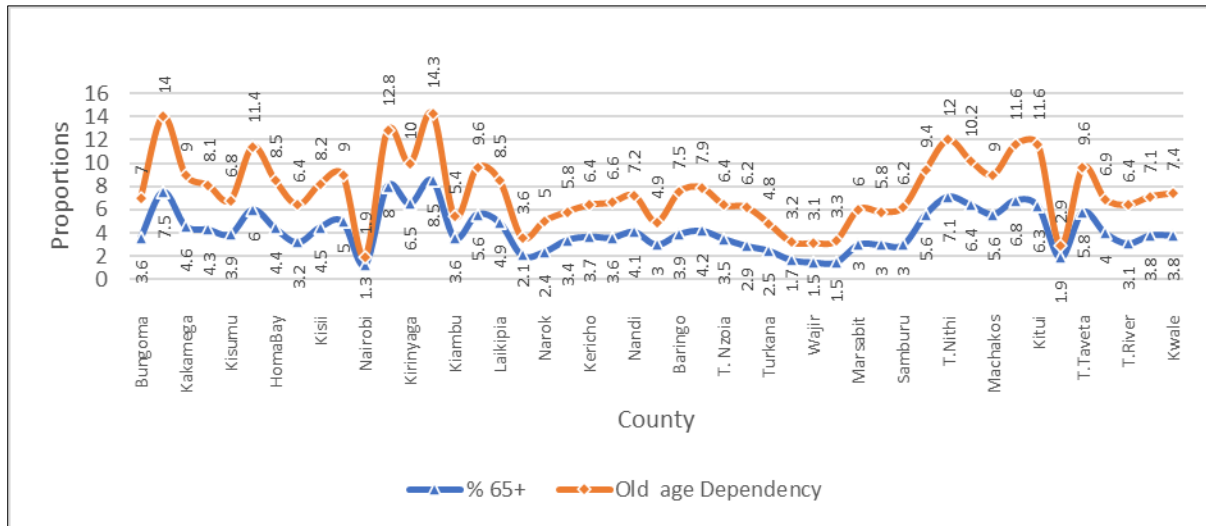


Source: National Population and Housing Census reports

Figure 4 Trends in proportion of elderly (65+) population, Kenya 1989-2019

The 2019 Kenya Population and Housing Census reported that of the 3.9 percent of population aged 65 and over, 3.35 percent reside in the rural areas while 0.56 percent form the urban population.

Fig. 5 presents the proportion of Kenya’s geriatric population and old age dependency by County. The figure shows that Muranga county holds the highest proportion of elderly persons in Kenya (8.5%) followed by Nyeri with 8 percent and Vihiga at 7.5 percent. Meanwhile, Nairobi reported the lowest proportion of the aged population (1.3%). In terms of old age dependency, Nairobi and Mombasa had the lowest with 1.3 and 1.9, respectively.



Source: Author-generated using 2019 Census data

Figure 5 Kenya Trends of proportion 65+ and old age dependency by county 2019

4.5. Mortality Patterns

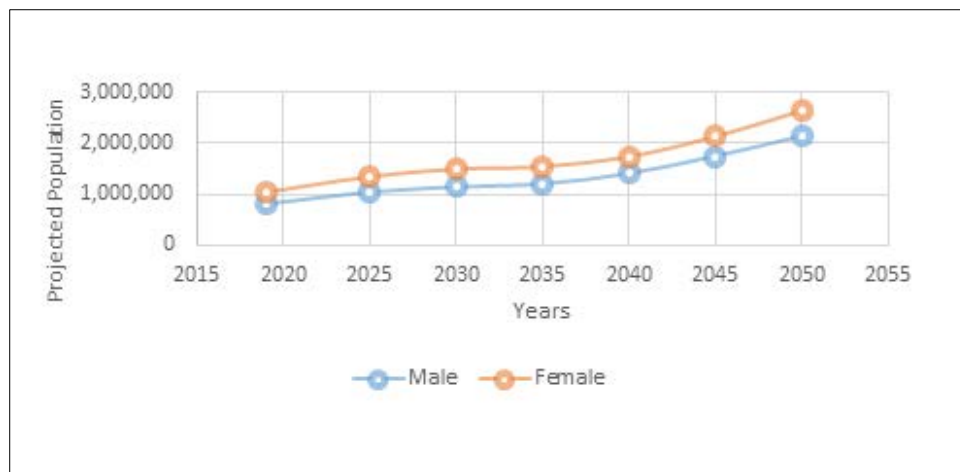
Model life tables have been used to trace mortality patterns. The hypothetical model life tables for male and female were generated from 2019 life expectancy estimates.

This study used the Coale-Demeny Model for West classification as it applies to mortality patterns of most low to low mid income countries which Kenya is part of [30]. The survivorship at age 65 portrays higher longevity for females than for males.

4.6. Kenya's Projected Aging Population (2020-2050)

During projections, some key assumptions were made. First, that Kenya's fertility will reach replacement level (2.1births) by 2050. This is based on UNDESA, 2022 World Population Prospects report which projects the world population to reach replacement level by 2050 [2]. Second, lifetable model used Coale and Demeny West as the best fit for growing economies. Finally, it is assumed that life expectancy will increase to over 70 years by 2050.

Kenya's aging population is projected to grow to 4.6 million by 2050 as presented in Fig.6. More than half (54.2%) of the geriatric population will be female at that time.

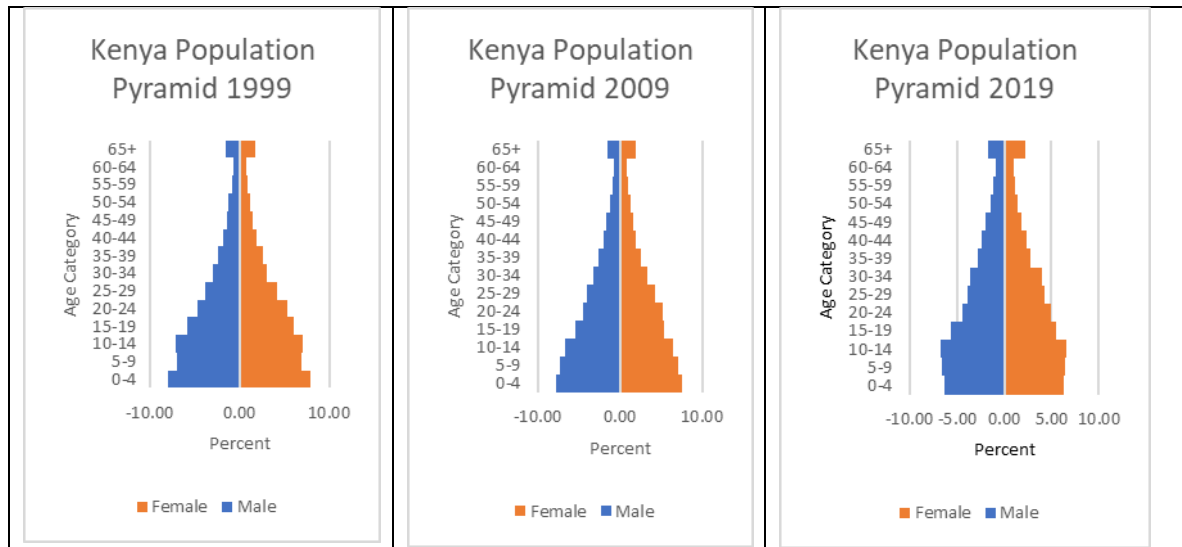


Source: Generated by Author using 2019 census (Spectrum modelling)

Figure 6 Projected Aging Population in Kenya, 2020 - 2050

4.7. Population Structure (1999 – 2019)

The population structures in Fig.7 present population by age and sex. From the figure, the age structure is slowly changing from bell-shape towards pear-shaped. It is clear that population ageing had already started building momentum in Kenya since 1999 with 3.27 percent of the population being above 65 years. By 2019, the population of the elderly people (65+) had increased to 3.94 percent. This growth is in line with postulations of several studies about Africa and indeed developing countries’ rapid growth of the geriatric population [11] [12] [25] [28].

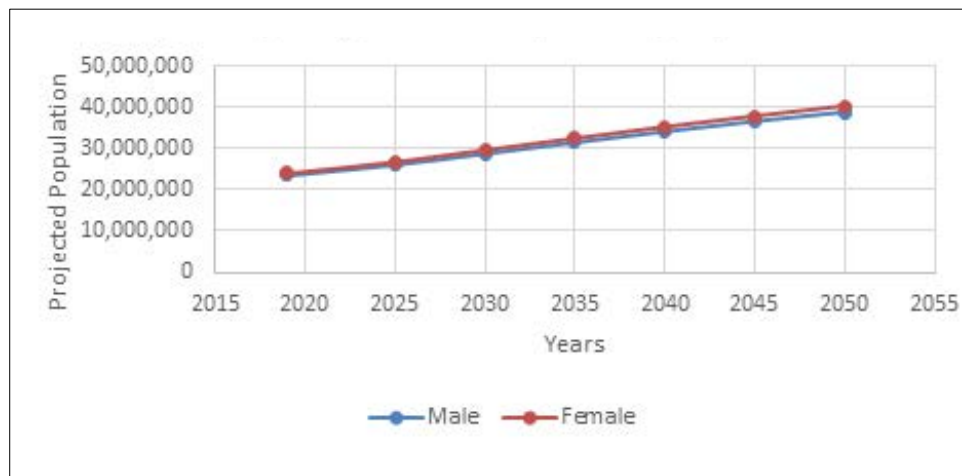


Source: author generated from 1999, 2009 and 2019 Kenya Population and Housing Census data

Figure 7 Kenya’s Population Age and Sex Composition (%), 1999-2019

4.8. Projected Population 2020 -2050

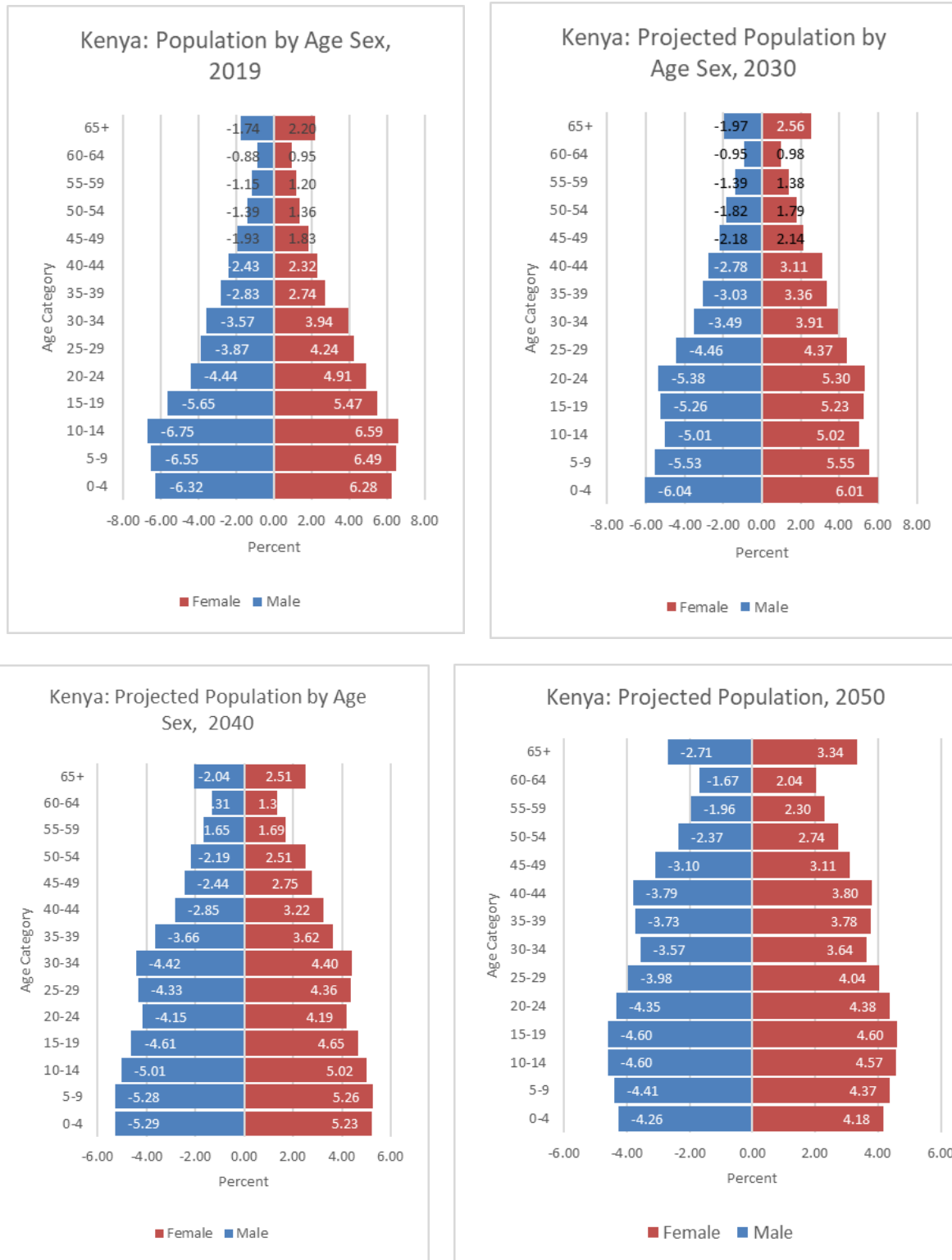
Kenya’s changing population age structure is a typical characteristic of decreasing fertility and mortality and a transition from a youthful population into ageing. As presented in Fig.8, Kenya’s population will experience gradual growth with slightly over a million births annually. The momentum created by earlier high fertility and a youthful population will majorly be responsible for the high births even as fertility slows down.



Source: Generated by Author using Spectrum models

Figure 8 Kenya Projected total population by sex, 2020-2050

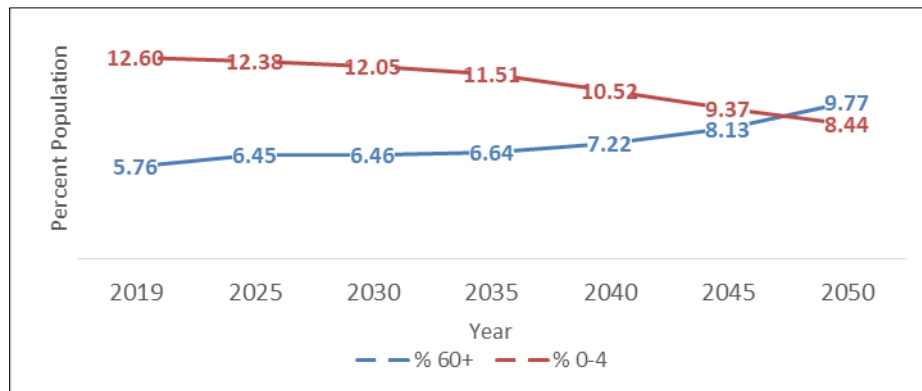
Fig. 9 presents the projected population for the period 2030 to 2050 using age sex composition (population structure). From the age structures in Fig.9, it is clear that by 2050, the country’s population structure will mimic slow or no growth while the ageing population (65+) will experience tremendous growth.



Source: Generated by Author using Spectrum models

Figure 9 Projected Population Age and Sex Composition (%), 2030-2050

Meantime, Fig.10 presents the phenomenon of fertility vis-à-vis longevity. By 2050, Kenya’s elderly population aged 60 and over is projected to outpace that of the under-fives.



Source: Generated by Author using Spectrum models

Figure 10 Kenya's Projected Population for Under 5 and 60+, 2019-2050

5. Conclusion and Recommendations

Given the population momentum, Kenya's population is projected to continue on a trajectory where males and females aged 65 have an expectation of life of more than 12.22 years and 13.89 years, respectively. As median age increases from 20 to 28 years by 2050, Kenya will experience a shift in age composition and structure transitioning to ageing. And by 2050, the geriatric population will be higher than the under-fives (9.77% compared to 8.44%). This year, the elderly population is set to contribute almost 10 percent of the 8 billion world population. This calls for strategic focus in terms of geriatric healthcare and social protection programming.

Recommendations

Among some of the objectives of the 2014 Kenya Policy on Ageing is a call to "Put in place measures that ensure older Persons continue to provide their expertise, talents, experience, and abilities to their families, and community by accessing and creating employment". In this regard, the government recognises the great potential of older persons and their contribution to sustainable development. As their numbers continue to rise, it is critical to ensure their active participation in wealth creation, employment and productivity and development activities including imparting culture and social learning. It is imperative that socio-cultural programmes consider greater involvement of the elderly cohort.

To avoid the shocks in labourforce supply due to an aging population and decreases in fertility, studies propose favourable policies that allow aging labourforce (those aged 55 and above) to stay longer in the workforce. This way, retirement benefits and pensions can be invested longer to cushion the economy. Meantime, keeping older people in active labourforce could forestall the setting in of some functional disabilities as the old people earn and can better cater for their nutrition, hygiene, health and other basic needs. Again, active participation of the older population can cushion the economy and wealth creation as such persons can engage/employ younger people to run the enterprises while the older persons take up supervisory roles. Improved education and better nutrition has accorded populations better health and longevity thus improving labourforce productivity of geriatric population. Indeed, the ILO working paper recommends policies geared towards deliberate engagement and retention of older persons for labour productivity.

Given the fluid family structures and to avoid destitution of older persons, there should be geriatric-friendly programmes that cater for social needs of the elderly. Homes for elderly may not be tenable due to cultural norms of several communities in Kenya. However, implementing programmes such as population health – a multi-pronged approach to population wellbeing that ensures inclusivity and equity – is a sure way of caring and guaranteeing participation of older persons. This study recommends further research on socio-economic consequences and the impact of social protection measures set to cushion a rapidly growing ageing population in Kenya as an emerging population issue.

Compliance with ethical standards

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Disclosure of conflict of interest

The authors of this publication declare no conflict of interest in the work. The corresponding author has made open all correspondence with the Journal editor. Further, the authors declare that they did not receive any support from any organization for the submitted work.

References

- [1] Harasty, C., Ostermeier, M. 2020. POPULATION AGEING: Alternative measures of dependency and implications for the future of work: , ILO Working Paper 5 (Geneva, ILO)
- [2] United Nations Department of Economic and Social Affairs, Population Division (2022). World Population Prospects 2022: Summary of Results. UN DESA/POP/2022/TR/NO. 3. (accessed 17.08.2022)
- [3] United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Ageing 2019: Highlights (ST/ESA/SER.A/430)
- [4] Kabir, Russell & Kabir, Mohammad & Uddin, Mohammad & Ferdous, Nahida & Khan Chowdhury, Mohammad Rocky. (2016). Elderly Population Growth in Bangladesh: Preparedness in Public and Private Sectors. IOSR Journal of Humanities and Social Science. 21. 58-73. 10.9790/0837-2108025873.
- [5] Laura B. Shrestha. (2000). Population Aging in Developing Countries, Health Affairs Vol 19 No.3.
- [6] KNBS, 2020, Economic Survey 2020.
- [7] <https://www.who.int/news-room/q-a-detail/population-ageing> (accessed on 30.10.2020).
- [8] Benedict, M., & Adefuye, A. O. (2020). Profile of geriatric presentations at the emergency department of a rural district hospital in South Africa. The Pan African medical journal, 36, 245. <https://doi.org/10.11604/pamj.2020.36.245.22530>.
- [9] WHO, 2011. Global Health and Aging.
- [10] <https://www.un.org/development/desa/ageing/wp-content/uploads/sites/24/2019/06/Assesment-Report-Kenya.pdf> (accessed on 12.12.2020)
- [11] Yousif, M. T., 2016. Consequence of Demographic Changes on Aging Population in Egypt https://www.academia.edu/28126885/Consequence_of_Demographic_Changes_on_Aging_Population_in_Egypt_ (accessed on 01.01.2021)
- [12] Wan He, Isabella Aboderin, and Dzifa Adjaye-Gbewonyo U.S. Census Bureau, International Population Reports, P95/20-1 Africa Aging: 2020 U.S. Government Printing Office, Washington, DC, 2020.
- [13] AU, 2017. State of Africa's Population 2017: Keeping Rights of Girls, Adolescents and Young Women at the Centre of Africa's Demographic Dividend.
- [14] CBS, 2001. The 1999 Population and Housing Census, Vol 1.
- [15] KNBS, 2012. The 2009 Population and Housing Census Analytical Report on Population Projections Volume XIV
- [16] https://www.indexmundi.com/kenya/demographics_profile.html (accessed on 31.10.2020).
- [17] KNBS, 2022. 2019 Kenya Population and Housing Census: Analytical Report on the Older and Vulnerable Population, Volume XIII.
- [18] KNBS, 2022. 2019 Kenya Population and Housing Census: Analytical Report on Mortality, Volume VII.
- [19] Harper, S. (2014). Economic and social implications of aging societies. Science, 346(6209), 587-591.
- [20] Rahman, M. I., & Ali, A. M. (2007). Population aging and its implications in Bangladesh. Jahangirnagar Review Part II Social Science, 31.
- [21] Ministry of Labour, Social Security and Services, (2014). National Policy on Older Persons and Aging
- [22] <https://www.un.org/en/development/devagenda/ageing.shtml> (accessed on 30.10.2020)
- [23] National Institute on Aging, (2007). Why Population Aging Matters: A Global Perspective

- [24] Rahman, Masud Ibn and Ali, Amin Masud, Population Aging and Its Implications in Bangladesh (February 25, 2009). Jahangirnagar Review Part II Social Science, Vol. XXXI, 2007, Available at SSRN: <https://ssrn.com/abstract=1349447>
- [25] El-Shehaby, D, (2020). Demographic Status Quo for the Elderly in Egypt, 1996, 2006 and 2017 censuses and its Future Perspective for the Period (2027-2052) (unpublished)
- [26] KNBS, (2019). The 2019 Population and Housing Census, Vol III: Population Distribution by Age and Sex
- [27] KNBS, (2010). The 2009 Population and Housing Census, Vol III: Population Distribution by Age and Sex
- [28] Ince Yenilmez M. Economic and Social Consequences of Population Aging the Dilemmas and Opportunities in the Twenty-First Century. Applied Research Quality Life 10, 735-752 (2015). <https://doi.org/10.1007/s11482-014-9334-2>
- [29] <https://www.statista.com/statistics/1121264/median-age-in-africa-by-county/> (accessed 18.08.2022)
- [30] https://www.paho.org/english/dd/ais/be_v24n4-cover.htm (accessed 02.11.2020)