

The Census of Population and Housing objective is to determine the size of the population, its composition and distribution, levels and trends of fertility, mortality, information on housing, economic activity, and migration in a well-defined area. This essay seeks to look back in the history of census taking in Zambia paying due attention to changes that have occurred between the first census and subsequent censuses in terms of methods and coverage of socio-economic data.

The essay will first define the key terms so as to familiarize what will be talked about. It will later talk about the history of census undertaking in Zambia and the methods as well as the coverage in each of them. The essay will also analyze the most recent 2010 census and deduce some usefulness of census data for social and economic planning and policy making in Zambia. Thereafter a conclusion will be made on the findings.

According to the United Nations (UN), a population census is the total process of collecting, compiling, evaluating, analysing and publishing or otherwise disseminating demographic, economic and social data pertaining, at a specified time, to all persons in a country or in a well delimited part of a country. A housing census is the total process of collecting, compiling, evaluating, analysing and publishing or otherwise disseminating statistical data pertaining, at a specified time, to all living quarters and occupants thereof in a country or in a well delimited part of a country (UN, 2008).

Demographic is the study of a population with regards to changes in its size, growth rates, and composition (Preston, et al, 2001). Socioeconomic examines the social and economic factors to better understand how the combination of both influences something (Businessdictionary.com, 2018).

Censuses have been held regularly in Zambia since 1911. These Censuses were held in a decennially type thus they were held every after 10 years. It was not until the war years which started in the early 1940s that these decennially censuses were interrupted. However after the post war, censuses continued to take place in Zambia starting with 1946 and were held at five-yearly intervals until 1961 (Mulenga, 1986).

These censuses from 1911 all the way to 1961 were enumerated on a de facto basis and they only covered Europeans living in Zambia. Forms were completed by the head of household on a given census date for all persons including visitors who had spent a night at the house. After 1951 the figures for Europe were based on details of births, deaths, immigration and estimated emigration, corrected in the light of census results. Population estimates for Zambians were made by taking aggregates of figures collected for each village when last visited by the District Commissioner. These were usually obtained by calling all the people together in a central gathering and then conducting a count (ibid).

However the first attempt to count Africans in Zambia was through a Demographic Sample Survey on a large vital statistics which was conducted in 1950. In this survey, information was collected on both de facto and de jure population basis. Nine main towns of Chingola, Chipata, Livingstone, Luanshya, Lusaka, Mufulira, Kitwe, Labwe and Ndola (CSO, 1950). Just before Independence, there was need for a complete Census thus the first Census which included Africans was during May and June 1963. This census, unlike the earlier demographic survey, covered only the de facto African population. The census revealed a much larger Zambian population of 3,490,540 than was revealed by the Demographic sample survey of 1950.

The population of Zambia has continued to grow and since independence five Censuses have been conducted so far from 1969, 1980, 1990, 2000 and the just ended 2010. The first comprehensive population and housing census in Zambia was conducted during 1969 though it was planned to be held in 1970, but was moved to 1969 to obtain data for the formulation of the second National development plan. There was a pilot census held in July 1968 in order to test the questionnaires and administrative procedures for the conduct of a census as well as to test the system for the processing of information collected. The pilot census covered Lusaka, Namwala and Kasama districts (CSO, 1970).

The census enumeration took place on a de facto population basis on 22<sup>nd</sup> to 30<sup>th</sup> August 1969, except some isolated areas where it was extended by two days. The personnel which were mainly used for the field enumeration include teachers in primary and secondary schools as well as senior secondary school students. The coding was done mainly by secondary school students during the December/January school holiday. The enumerators collected information from any 10 houses out of a total 100 houses. The procedures of demarcating areas for census purposes had to be based on the available district maps. In connection with the earlier elections which were held, various polling districts and the parliamentary constituencies within the given districts was available.

Two schedules were used and covered different areas of interest with the use of single form to collect data. The second schedule consisted basic questions on characteristics including relationship to the head of the house, sex, age, ethnic group, language, place of birth, citizenship, marital status, education level and school attendance. In addition to the characteristics contained in the second schedule, the first schedule contained questions on individual personal characteristics as well as some household information including, place of residence 12 months prior to the census date, disability, economic activity, employment status, industry, number of children born alive, date of birth of last child, the questions on housing, the number of deaths in a household. The 1969 census revealed that the population was 4,056,995 showing that a population was growing at the rate of 2.5 percent per year.

The 1980 census of population and housing was held from 25<sup>th</sup> August to 7<sup>th</sup> September. The main objective for this census undertaking was to update information on the size sex and age structure and other characteristics of Zambian population as well as ascertaining any specific changes in the demographic parameters that might have taken place since the conduct of the 1969 census. Single form was also used for 1980 census similar to that of 1969 with a few changes on characteristics such as fertility, economic activity and housing collected from all urban areas and some selected rural areas. This census used primary and secondary school teacher as well as secondary school students in form IV and V (CSO, 1981).

Estimates based on the 1969 census, Zambian's population was 5,661, 539 indicating a natural increase in growth of 3.0 percent per annum, a difference between crude birth rate of 49 and 50 and a crude death rate of between 19 and 20 per thousand population. The crude death had fallen to about 18.9 in 1974 and the 1980 estimates put it at 16.7. Infant mortality was 97 deaths per 1000 live births, life expectancies at birth for males and females in 1969 were at 44.6 years and 47.8 years respectively. In 1980 the life expectancies for males and females increased to 50.4 years and 52.5 years respectively. In 1960, 69.5 percent of males

and 86.0 of female aged 15 years and above had been married. The corresponding figures in 1980 were 63.5 and 79.4 percent respectively. In 1980 54.1 percent of the population aged 12 and above was economically active with corresponding figures of rural and urban areas being 54.3 and 53.7 percent respectively, with 72.1 percent males as compared to only 37.3 percent females reported economically active. Out of the working population, 33.2 percent never attended school, 43.5 completed primary school education, 21.4 percent attended secondary school and only 0.4 had attended university. The total number of household increased from 856,156 in 1969, in 1980 there was an increase of 31.8 percent from the 1969 households. The number of female headed households also increased by 53.3 percent compared to 25.0 percent managed by males.

The 1990 census population, housing and agriculture were conducted from 20<sup>th</sup> August to 5<sup>th</sup> September, with a one week addition to remote rural areas. This was the third since Zambia's census after independence. A single form was used in this, but had an Agriculture module attached which was used to create a frame for the subsequent agriculture census. Both de facto and de jure population were counted in addition census operations were carried out by primary and secondary school teachers, and grade 12 as well as grade 11 in some cases (CSO, 1995).

The population of Zambia by 1990 was 7,383,097 of which 3,617,577 were males and 3,765,520 females. 4,477,814 which is 60.6 percent lived in rural areas and 2,905,283 which is 39.4 percent were living in the urban parts of the country. The median age was 16.8 percent and 45.3 percent were less than 15 years. The population growth rate between 1969 and 1990 was 2.7 percent. Almost 30 percent of the entire population used Bemba as a mode of communication; other languages widely used were Tonga and Nyanja by 11 percent and 7.8 percent respectively. English was the official language but only 1.1 percent used it as a means of communication.

Literacy levels were at 56 percent by 1990 of which 63 percent were males and 50 percent females. Those who were attending school were 39 percent with 29 percent attending school in rural areas as compared to urban areas with 58 percent. The overall attendance rate was 45 percent for males and 34.2 percent females. The working age population thus 12 years and above, was 4,640,427 with 2,255,686 males and 2,384,747 females. Of the total working population, 2,791,707 lived in rural areas and 1,848,720 in the urban areas. The working age population increased by 39.8, while the labour force increased by 23.7 percent between 1980 and 1990.

The employment population makes up 87.6 percent of the labour force and the unemployment population was 71.9 for females and 33.1 percent males between 1980 and 1990. The unemployment rate declined from 42.2 percent in 1980 to 12.4 in 1990. Zambia's overall dependency ratio as of 1990 was 92.1 with child dependency and aged dependency at 87.2 and 5.0 respectively. The marital status was 96.7 percent of males and 97.2 percent of female fell under ever-married at the age group 45-49 years. The total fertility rate (TFR) declined from 7.2 in 1980 to 6.7 children in 1990 with TFR for rural areas being 7.0 and 6.3 children for women in urban areas. The mortality levels for 1990 were high as compared to 1980 with crude death rate (CDR) rising from 13.9 in 1980 to 18.3 death per 1,000 persons in 1990. Infant mortality rate (IMR)

was 123.3 deaths per 1,000 live births. IMR for males was 127.0 for males and 119.7 deaths per 1,000 live births for females. The life expectancy was 46.1 years for males and 47.6 years for females.

Out of the 7,383,097 people enumerated in 1990, 69,073 were disabled comprising 36,892 males and 42,181 females with 70.9 of the disabled population living in rural areas living only 29.1 percent in urban areas. The 1990 utilized two methods to correct the omitting of some data characteristics for individuals such as age, sex, fertility, economic activity. Generally the two approaches are direct and indirect methods for quality data evaluation. The direct method employed post enumeration survey (PES), where a sample of households is revised after the census and data are again collected on a smaller scale, then the data is compared with the data collected during the census. The indirect method on the other hand involves comparison of data using both the internal and external consistency checks. There was a trend of digit preference in previous census, however in the 1990 census; the assessment of age preference was accomplished through the calculation of Myer's Index.

The fourth census of population and housing was carried out from 16<sup>th</sup> October to 15<sup>th</sup> November 2000, with the objective of determining the size of the population, its composition and distribution, levels and trends of fertility, mortality, information on housing, economic activity and migration. The census used primary school teachers and Grade 11 as supervisors and enumerators respectively (CSO, 2003).

Two forms were used for enumeration thus the household forms and the individual form. The census used Census used the OMR technology. The 2000 was 9,885,591 reflecting an increase of 33.9 percent change from the 7,383,097 in 1990. The 2000 population comprised of 6,458,729 residing in rural areas and 3,426,862 residing in urban areas. 4,946,298 of the population were males leaving 4,939,293 females. The 2000 census also saw Copperbelt having the highest number of population with 1,582,221 of the entire population followed by Lusaka and then Eastern provinces with 1,391,329 and 1,231,283 respectively. The average population density was 13.1 persons per square kilometer in 2000, an increase compared to 10.3 recorded in the 1990 census. 17 years was the median age. An overall unemployment rate was 13 percent showing a decline of 2 percent from the 15 percent in 1990.

However, unemployment drastically increased in urban areas from 16 percent in 1990 to 26 percent in 2000 compared to the rural areas where it dropped from 15 percent in 1990 to 7 percent in 2000. Overall unemployment rates were higher for males at 14 percent compared to females at 11 percent. The 2000 census also shows that 23 and 21 percent of the youths aged between 15 to 19 and 20 to 24, respectively, were unemployed.

There was an increase in the population attending school from 25.8 percent to 26.7 percent. The 2000 census gave a total of 1,884,741 households in Zambia of which 65 percent were in rural and 35 percent in urban areas with slight increase in the proportion of female-headed household from 17 percent in 1990 to 19 percent in 2000. The overall dependency ratio was 96.2 which is an increase from the 1990's 92.1. Child dependency and aged dependency ratios were 90.0 and 5.4 another increase from 1990's 87.2 and 5.0 respectively.

The 2010 census of population and housing was conducted between 16<sup>th</sup> October and 15<sup>th</sup> November though the complete enumeration in all parts of the country was achieved by 30<sup>th</sup> November 2010. This was the fifth and most recent census that Zambia has successfully conducted since independence in 1964. A single form was used to collect both the Household characteristics and information on the Individual. With reference to the 2000 census, the 2010 census included questions such as deaths of Household Members during the 12 months period prior to the census enumeration, as well as cause of death for all reported deaths. Maternal deaths to women aged 12-49 years during the reference period, 12 months prior to the Census. Albinism, Orphan hood and Foster hood (CSO, 2012)

To speed up the process of capturing the 2010 Census questionnaires, the Central Statistical Office (CSO) used Optical Mark Reading (OMR) and Intelligent Character Recognition (ICR). The field staff included about 25,000 school leavers who worked as census enumerators and about 8,400 census supervisors who were mostly teachers and other civil servants who worked as trainers. A comprehensive mapping exercise was conducted with the use of Geographical Information System (GIS) driven and involved the use Global Positioning System (GPS) and satellite imagery. The GPS was used to map rural areas while the urban areas were mapped using high resolution satellite imagery.

Zambia's population in 2010 was 13,092,666. This shows an increase in average annual rate of 2.8 percent during the 2000-2010 inter-censal period. Of the total population in 2010, 60.5 percent were residing in rural areas while 39.5 percent were residing in urban areas. Lusaka Province had the largest population at 2,191,225 followed by Copperbelt Province with 1,972,317. Muchinga Province had the smallest population at 711,657. The census also saw 7,919,216 living in rural areas while 5,173,450 residing in urban areas a percentage change of 22.6 and 51.0 in 2000 and 2010 respectively. 6,454,647 representing 49.3 percent of the 2010 census where male with 3,906,636 of the male living in rural areas representing 49.3 percent and 49.2 percent which is 2,548,011 of the entire male population lived in urban areas. The female population in 2010 was 6,638,019 representing 50.7 percent with which 4,012,580, a 50.7 percent lived in rural areas and 50.8 percent representing 2,625,439 of the female population lived in urban areas. Zambia had a young population with 45.4 percent of persons aged below 15 years.

Between 2000 and 2010, the percent distribution of youths aged 15-35 years reduced from 34.5 percent to 33.3 percent in rural areas and increased from 41.4 percent to 41.9 percent in urban areas. The median age was 16.9 years. The median age was higher in urban areas at 18.7 years compared to 15.6 years in rural areas. The Overall Dependency Ratio was 92.5 persons aged 0-14 and 65 years and above per 100 persons aged between 15-64 years. Child Dependency Ratio was 87.4 while Aged Dependency Ratio was 5.1. The overall sex ratio was 97.2 males per 100 females, while the sex ratio at birth was 103 males per 100 females. The 2010 census recorded 6,756,049 persons aged 15 years and older. Of these 53.0 percent were married. Rural areas had 57.8 percent married compared to urban areas 46.9 percent. For the population aged 15 years and older, the median age at first marriage was 20.7 years while in rural areas it was at 20.3 years compared to urban areas at 21.9 years. Males had a higher median age at first marriage than females at 24.2

years and 18.8 years, respectively. In 2010, Zambia had 2,513,768 households with urban areas having 1,495,861 and rural 1,017,907.

The 2010 census saw a massive change in the population size, composition and structures compared to the first and subsequent censuses ever carried out in Zambia. Information on the size, distribution and characteristics of a country's population is essential to describing and assessing its economic, social and demographic circumstances and to developing sound policies and programmes aimed at fostering the welfare of a country and its population. The 2010 median age was 16.9 years. The Government can use this data in various ways to plan. Currently the seventh national development plan (7NDP) is being implemented, with the median age in play the Government will easily plan for employment, education and skills development which key youthful population to develop. Government spent K11.6 billion on education and skills development. To facilitate spending on, among others, infrastructure development, student loans, teacher recruitment and procurement of school requisites, Government also set aside K48.2 million under the ministry of youth and sports, 42.7 million under the Citizen economic empowerment commission to further benefit and empower a youth (Mutati, 2018).

Zambia had 2,513,768 households with urban areas having 1,495,861 and rural 1,017,907. The number, size and structure of households and changes in the rate of household formation are useful for planning and for developing special policies formulated for selected groups of the population, such as children, the elderly and persons with disabilities. The household data can also be connected with the 6,756,049 persons aged 15 years and older data recorded during the 2010 census. The age 15 implies an age of entering marriage as well as fertility age. With this Government will be able to plan for number of houses which will be needed as well maternity and children hospitals with the data of age 15 at hand. It can also help plan for sanitation and water supply in different households. A total of K816.3 million was spent housing and community amenities, K6.8 billion on health and to reduce vulnerability and inequalities among people of different households, K2.3 billion for social protection related expenditures (ibid)

Data on population and housing census as well as projections made based of the 2010 census has also helped the Government of Zambia to come up with various sustainable development plans including the Seventh National Development Plan (7NDP) which is a five pillar plan whose goals are accelerating development efforts without leaving anyone behind by 2021 (7NDP, 2017).

In conclusion, there has been change in the demographic and socioeconomic trends in Zambia as can be noticed from the first and subsequent censuses undertaken so far. It is therefore important to make available census data for easy planning as well as formulation of Government policies. The 2010 census and projections made using the later has helped the Government of Zambia plan ahead as far as 2063.