

# Trends in Longevity in African countries: Examining Life expectancy Patterns for the period 1960-2015

*By: Muhwava, William and Rutaremwa, Gideon*

*Institution: United Nations Economic Commission for Africa - ECA*

## **Abstract**

**Objective:** We describe the trends and patterns in life expectancy at birth and disparities between the countries since 1960 on the African continent

**Methods and findings:** Life expectancy has improved on the continent. Life expectancy trends and disparities were examined using a number of relative disparity metrics. The number of years gained during the study period varies significantly from one country to another, but greater gains observed in Northern Africa compared to other regions. On the contrary Southern Africa experienced least life expectancy gains for the study period. Tunisia is singled out as one country that exhibited the highest net life-expectancy gains of 30 years since 1960.

**Conclusions:** Since 1960 life-expectancy in Africa has improved despite the ravages of epidemics including HIV/AIDS. Achieving the Future we want in Africa will require the implementation of policies that can enhance the health and wellbeing of the African population.

## **Introduction**

Life expectancy is a summary measure of health and standard of living in human populations. Invariably the aspiration of the “Future we want” and “Africa Agenda 2063” is for a just, prosperous and responsive world where everyone realizes their rights and lives with dignity and hope can only be realised if African countries invest in the health of their population, thereby improving longevity on the continent. This article focuses on life expectancy at birth as a basic health indicator adopted by a number of agencies including WHO (World Health Organization, 2012).

Within Africa, there were wide variations in life expectancy for the most recent period (2010-2015) as shown in Table 1, ranging from as high as 79 years in the East African Island of Reunion to the lowest of 49 years in Swaziland. Overall Northern Africa tends to exhibit the highest life expectancy at birth, followed by Eastern Africa. Middle Africa and Southern African countries had the least life expectancy on the continent. The situation in Southern Africa has variously been attributed to the high prevalence of

HIV/AIDS. Table 1 shows that life expectancy gains on the continent were highest in Northern Africa followed by Eastern Africa and Western Africa. The least gains were registered in the Southern Africa region and in Central Africa

## **Data and Methods**

The data for this manuscript are from the United Nations World Population Prospects: 2015 Revision (United Nations, 2015). These data include a number of country-level indicators including fertility, mortality, migration and other demographic summaries including life expectancy. The World Population Prospects – 2015 revision is the latest available data and utilizes various sources including censuses, Demographic and health surveys and surveillance systems among others. A number of measure of disparity will be utilized including the index of disparity; the between group variance and the symmetric Theil index. The rationale for selecting the three indices is that they are necessary in establishing equality in health of the population (Hambleton, 2015). Rather than choose an individual measure the analysis will present a number of life expectancy disparity indices encompassing both absolute and relative measures.

## **References**

Hambleton, I. R. et al. (2015). Trends in longevity in the Americas: Disparity in Life expectancy in women and men, 1965-2010. *PLoS ONE*, 10(6), 1–17.

United Nations. (2015). World Population Prospects: The 2015 Revision, DVD Edition. New York: United Nations, Department of Economic and Social Affairs, Population Division.

World Health Organization. (2012). *World Health Statistics 2012*. Geneva.

**Table 1: Life expectancy at birth in Africa (both sexes combined) 1960-2015**

Country/Region	Period											Net-gain 1960-2015
	1960-1965	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000	2000-2005	2005-2010	2010-2015	
<b>Eastern Africa</b>												
Burundi	42.0	43.5	44.2	46.4	48.0	49.2	47.3	50.9	52.0	53.7	56.1	14.0
Comoros	42.5	44.5	46.8	49.1	52.3	55.3	57.8	59.3	59.6	60.9	62.8	20.4
Djibouti	45.2	47.3	50.9	52.6	54.7	56.1	57.0	57.0	57.3	59.1	61.6	16.4
Eritrea	38.0	39.6	41.4	42.9	44.0	46.5	50.3	54.5	57.4	59.9	63.1	25.1
Ethiopia	40.1	42.1	43.5	44.3	43.5	46.2	48.1	50.7	53.6	59.1	63.1	23.1
Kenya	48.0	50.7	53.7	56.3	59.0	59.4	57.3	51.9	51.3	56.5	60.6	12.6
Mauritius	61.2	63.0	63.5	65.7	68.1	68.5	70.3	70.4	72.1	72.8	74.1	12.9
Réunion	57.7	61.4	64.6	67.3	69.6	71.7	73.6	75.3	76.8	78.2	79.5	21.8
Rwanda	43.0	44.1	44.6	45.8	49.6	47.3	23.1	44.5	50.1	59.2	63.1	20.1
Seychelles	62.8	64.4	67.0	69.0	70.3	71.1	70.6	71.4	72.1	72.4	72.9	10.1
Somalia	38.0	40.0	41.9	43.8	45.5	46.4	45.0	49.8	51.5	53.2	54.9	16.9
South Sudan	32.7	34.8	36.7	38.7	39.5	41.8	45.3	48.2	50.2	52.3	55.1	22.4
Uganda	45.4	48.1	49.1	49.3	48.7	46.4	44.1	44.5	49.2	54.3	57.2	11.9
Tanzania	44.3	45.8	47.7	49.9	50.7	50.9	49.2	49.1	52.8	58.7	64.0	19.7
DR Congo	41.6	43.0	44.8	45.6	47.1	48.2	49.6	48.9	51.8	55.5	58.1	16.5
<b>Southern Africa</b>												
Madagascar	41.2	43.5	46.0	48.1	49.7	49.9	52.7	56.7	60.0	62.2	64.5	23.3
Malawi	38.4	39.5	41.8	43.8	45.4	44.5	43.4	44.0	45.2	52.5	61.0	22.5
Mozambique	36.2	38.1	40.4	42.2	41.5	42.5	44.3	47.7	49.6	51.9	54.6	18.5
Zambia	46.1	47.8	50.2	51.6	50.6	46.5	42.8	42.5	45.8	53.5	58.8	12.7
Zimbabwe	52.5	54.1	55.8	57.8	60.8	61.6	55.8	44.9	40.7	45.0	54.8	2.3
Botswana	51.6	53.4	56.1	59.3	61.7	62.8	61.0	51.7	49.0	61.1	64.1	12.5
Lesotho	47.8	48.5	49.8	52.2	55.3	57.3	60.0	52.2	43.7	45.6	49.5	1.7
Namibia	48.4	51.2	53.9	56.5	58.9	60.7	61.2	58.4	53.4	60.1	64.3	15.9
South Africa	50.0	51.9	53.7	55.5	58.4	61.0	62.3	59.3	52.8	52.2	57.1	7.2
Swaziland	45.0	46.7	49.6	52.6	56.0	58.5	59.0	52.8	45.8	47.4	49.2	4.1
<b>Middle Africa</b>												
Angola	34.0	36.0	38.0	39.8	40.4	41.1	41.4	43.3	47.2	49.6	51.7	17.7
Cameroon	42.7	44.9	47.4	50.1	52.2	53.3	53.6	52.7	51.6	52.7	54.9	12.2
Central African Republic	37.6	40.2	43.9	47.6	49.6	49.6	48.1	45.7	44.2	46.1	49.5	12.0
Chad	38.7	40.1	42.5	44.0	45.4	46.6	47.1	47.6	47.7	48.7	51.1	12.4
Congo	50.2	52.5	54.1	55.4	56.5	56.0	53.8	51.1	51.4	56.5	61.4	11.3
Equatorial Guinea	37.5	39.0	40.5	42.1	45.6	47.2	49.2	51.3	52.8	54.6	57.1	19.6
Gabon	40.5	44.6	48.8	52.9	57.0	60.7	61.2	60.3	58.9	60.8	63.7	23.2
Sao Tome and Principe	51.8	54.4	57.4	60.2	60.6	61.4	62.2	63.0	63.8	65.5	66.2	14.4

