

GLOBAL DEMOGRAPHIC TRENDS: DRIVERS AND IMPACTS

**Eric O. Udjo
Bureau of Market Research
University of South Africa
P. O. Box 392 UNISA 0003
South Africa**

INTRODUCTION

- Consideration of population factors essential in development planning.
- The size and structure of a population at a given point in time are determined by demographic processes.
- Thus, a starting point in understanding the drivers of global demographic trends is an understanding of the relationship between demographic processes and population change.
- This relationship best explained by the basic demographic equation.

The Basic Demographic Equation

- $P_{(t+n)} = P_t + B_{(t, t+n)} - D_{(t,t+n)} + I_{(t,t+n)} - E_{(t,t+n)} \dots\dots\dots (1)$

From (1), population increase during the period $t, t+n$ is obtained as:

- $P_{(t+n)} - P_t = [B_{(t, t+n)} - D_{(t,t+n)}] + [I_{(t,t+n)} - E_{(t,t+n)}] \dots\dots\dots (2)$

Equation 2 may be re-written as;

- $P_{(t+n)} - P_t = NI_{(t, t+n)} \pm NM_{(t,t+n)} \dots\dots\dots(3)$

- Thus the drivers of global demographic trends are natural increase and net migration. Relative importance varies from one population to the other.

Global Trends in Drivers of Population Trends

Fertility

REGION/COUNTRY	Total Fertility Rates			
	1950/55	2000/05	2005/10	2045/50
World	5.0	2.7	2.6	2.0
More developed regions	2.8	1.6	1.6	1.8
Less developed regions	6.2	2.9	2.8	2.1
Africa	6.8	5.0	4.7	2.5
China	6.2	1.7	1.7	1.9
Asia	5.9	2.5	2.3	1.9
India	5.9	3.1	2.8	1.9

Source: UN

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Fertility

- World wide, fertility has declined substantially since the 1950s.
- Fertility is below replacement level in the more developed regions of the world, but above replacement level in the less developed regions of the world.
- Africa had over twice the levels of total fertility in Europe (1.4) and North America (2.0) as of 2005.

Global Trends in Drivers of Population Trends

Mortality

REGION/COUNTRY	Life Expectancy at Birth (M&F)			
	1950/55	2000/05	2005/10	2045/50
World	46.4	66.0	67.2	75.4
More develop regions	66.1	75.6	76.5	82.4
Less developed regions	40.8	64.1	65.4	74.3
Africa	38.5	51.6	52.8	66.1
China	40.8	72.0	73.0	79.3
Asia	41.0	67.5	69.0	77.4
India	37.4	62.9	64.7	75.6

Source: UN

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Mortality

- Mortality as seen from the Life expectancies at birth has improved substantially worldwide compared to the levels in the 1950s.
- Africa's life expectancy at birth (52 years) was less than that in Europe (74 years) and Northern America (78 years) both sexes combined in 2000/05.
- AIDS has reduced life expectancy at birth (albeit exaggerated) in many parts of Africa in the recent years.

Global Trends in Drivers of Population Trends

Net Migration

REGION/COUNTRY	Net Migration (M&F, Thousands)			
	1950/55	2000/05	2005/10	2045/50
World				
More developed regions	-61	3290	2514	2272
Less developed regions	61	-3290	-2514	-2272
Africa	-113	-442	-389	-393
China	-40	-380	-350	-320
Asia	161	-1413	-1209	-1222
India	-1	-270	-250	-240

Source: UN

Net migration

- Unlike in the 1950s, there is a net loss of people from the less developed regions to the more developed regions of the world.

Trends in Population Size

REGION/COUNTRY	Population (Thousands)			
	1950	2005	2010	2050
World	2 535 093	6 514 751	6 906 558	9 191 287
More develop regions	813 561	1 215 636	1 232 457	1 245 247
Less developed regions	1 721 532	5 299 115	5 674 101	7 946 040
Africa	224 202	922 011	1 032 013	1 997 935
China	554 760	1 269 962	1 351 512	1 408 846
Asia	1 410 649	3 704 838	4 166 308	5 265 895
India	371 857	1 046 235	1 220 182	1 658 270

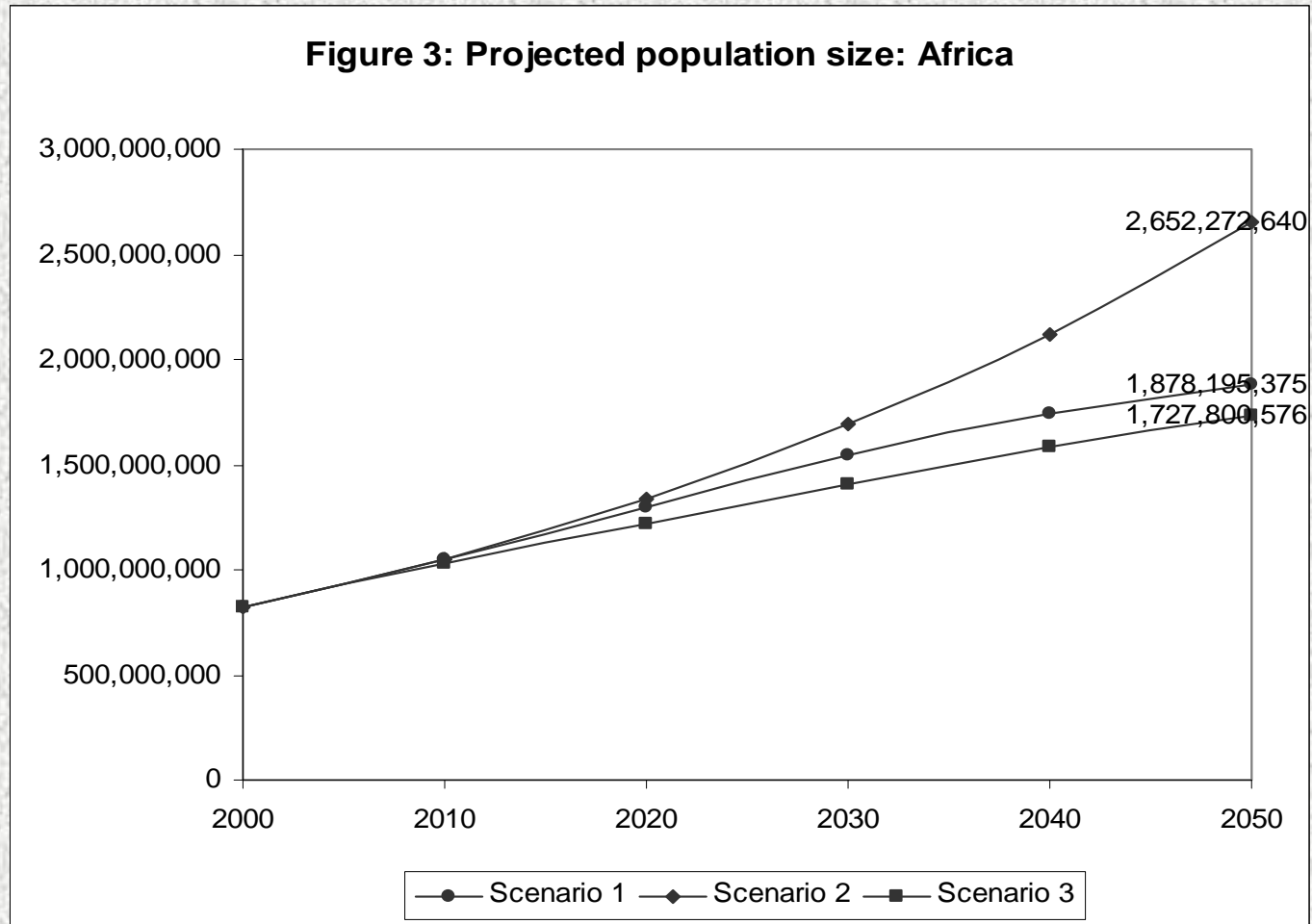
Source: UN (Medium variant)

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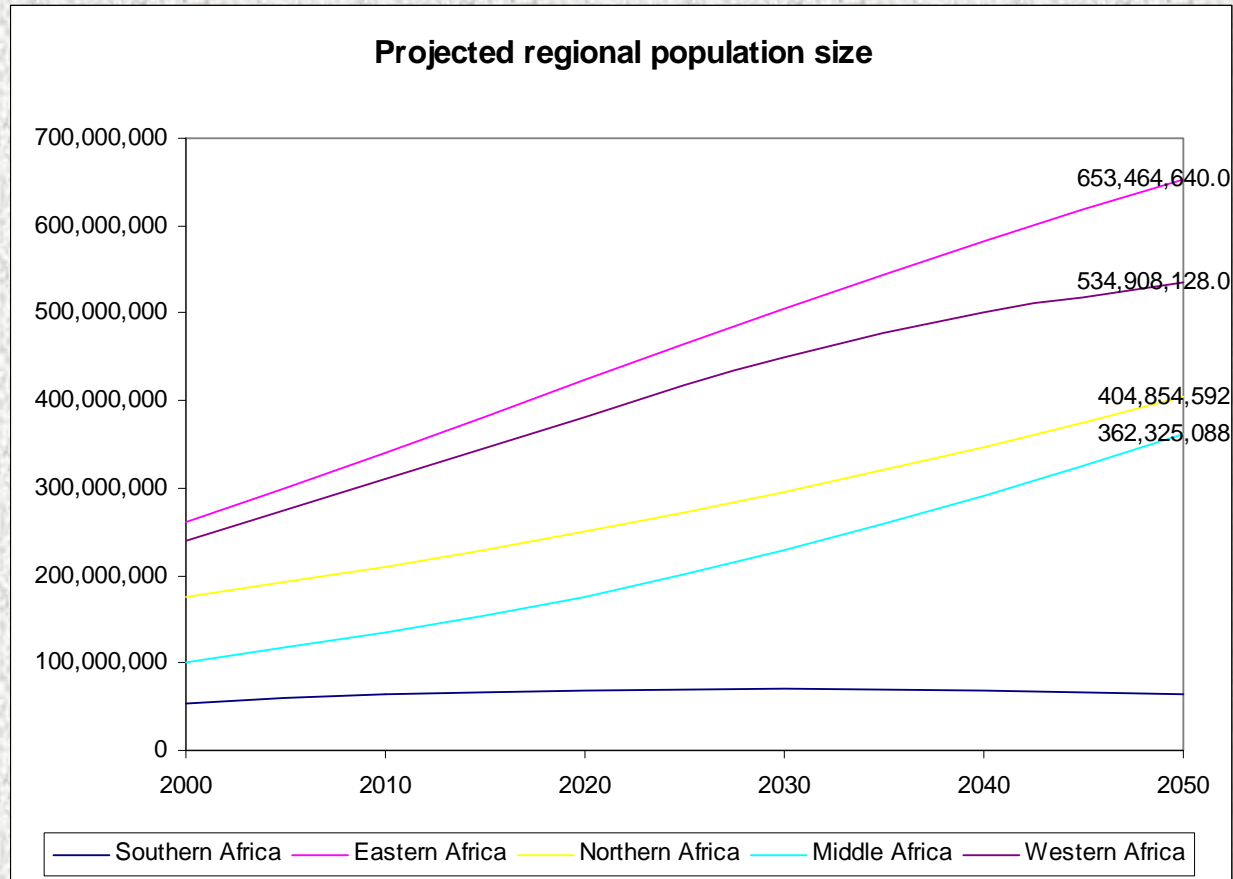
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Projected size of Africa's Population



Source: E. O. Udjo

Projected size of Africa's Population by Region



Source: E. O. Udjo

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Africa's Population Outlook

- According to these projections, by the year 2050, Africa would represent about 22% of the World's population.
- The size of Africa's population would be about 39% of Asia's population by 2050.
- However, Africa would exceed China's population by about 44% and that of India by about 24% by 2050.

Impact of Trends in Population Size on Environment

- *Energy Resources*
- *Forestry*
- *Solid Waste*

Which Components of Population Change Can Policy Intervention Focus on?

- Migration?
- Mortality?
- Fertility?