

REPUBLIC OF NAMIBIA

POLICY BRIEF

POPULATION DYNAMICS

OFFICE OF THE
PRESIDENT

NATIONAL PLANNING
COMMISSION

NPC-02/2015

July 2015

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THE LINK BETWEEN POPULATION DYNAMICS AND DEVELOPMENT

The link between population dynamics, size, growth, age-sex composition and distribution, and development, particularly economic growth and poverty reduction, has been the subject of considerable scientific inquiry. However, the nature and significance of the effects remain difficult to quantify and may possibly depend upon the prevailing context. It is therefore essential that development planning takes into account the aforementioned links and the manner in which both factors react to and directly or indirectly influence population dynamics.

Population dynamics is defined as population density, and how it changes over time as a function of birth rates, death rates, and migration rates. The relationship between population dynamics and economic development has widely been investigated by economists and social theorists. While development is all inclusive and must be sustainable, its economic interface is crucial. Much of the projected growth in population for the coming decades is likely to take place in developing and least developed countries, where it is likely to exacerbate poverty and put pressure on the economy, basic health and social services provision and the environment.

For Namibia, a developing country that aspires to be an industrialised nation, developed by its human resources, it is of vital importance to analyse its population dynamics in order to understand the trends and changes in population growth, migration, urbanisation, population density, the age structures of its human resources, and how these relate to development.

It is believed that the economic outcomes of a country point to economic policies and are reflections of the general quality of life of the population. This link requires closer scrutiny at policy level in order to reveal some of the possible actions that governments can take to maximise benefits from population structures, and define the level at which the country considers population dynamics in its development planning process.

In order to meet the needs of current and future generations, information is required on how many people are living in the country and how many will be added to the population register in future, how old these people are, how the age distribution will change in future, where people are living today and where they are likely to be living in coming years. The systematic consideration of population dynamics is essential for the formulation of sustainable development strategies, goals, targets, policies and programmes.

OBJECTIVE

This policy brief is aimed at discussing the relationship between population dynamics and development in Namibia by addressing the following research questions:

- How do changes in population influence economic and social well-being in Namibia?
- Does population growth enhance or diminish economic growth?
- How does population impact on development?
- How can Namibia benefit from its demographic dividends?

METHODS

This brief is informed by secondary data, mainly the population and housing census data, the Namibia Labour Force Survey, and the Namibian Demographic and Health Survey data. The brief adopted a qualitative approach by discussing social demographic statistics as a measure of development. It focused on social indices such as population growth rate, percentage of urban population and fertility rate (fecundity).

NAMIBIA'S POPULATION GROWTH RATE

Birth and death rates are the most important determinants of population growth and often, net migration. Namibia's population has increased from 1 409 920 in 1991 to 2 113 077 in 2011, as shown in figure 1. With an average growth rate of 1.4 % per year, Namibia's population is projected to be 2.2 million people in 2015. Between 2015 and 2030 the population is expected to grow from 2.3 million to 3 million, an increase of 30 percent. This means that during the next 15 years the Namibian population is expected to increase with 700 000 people.

Even though the growth rate has declined from 3.1 in 1991 to 1.4 in 2011, the increase in population is attributed to the high number of young people in the Namibian population which in turn led to an increase in population density from 1.7 to 2.6 people per sq. km in 1991 and 2011 respectively. Namibia has a youthful population; 35% of the population are below the age of 15 years.

The growth rate and size of the population significantly affects the country's potential to reach its development goals. A large population with a low dependency ratio can positively contribute to the economic growth of a country. Dependency ratio is a measure of the portion of a population which is composed of dependents (people who are too young or too old to work, aged 0-14 and 65+). It is used to measure the pressure on the productive population. Namibia was characterised as having a high dependency ratio of 77% in 2011, meaning that for every 100 working people, 77 people depend on them, and this situation is not good for the country, because it negatively affects economic growth due to decreased investment.

A decline in the number of dependents will enable households to increase investments particularly in the human capital of their children. Similarly, a rise in the number of working-age people has the potential to expand a country's productive output.

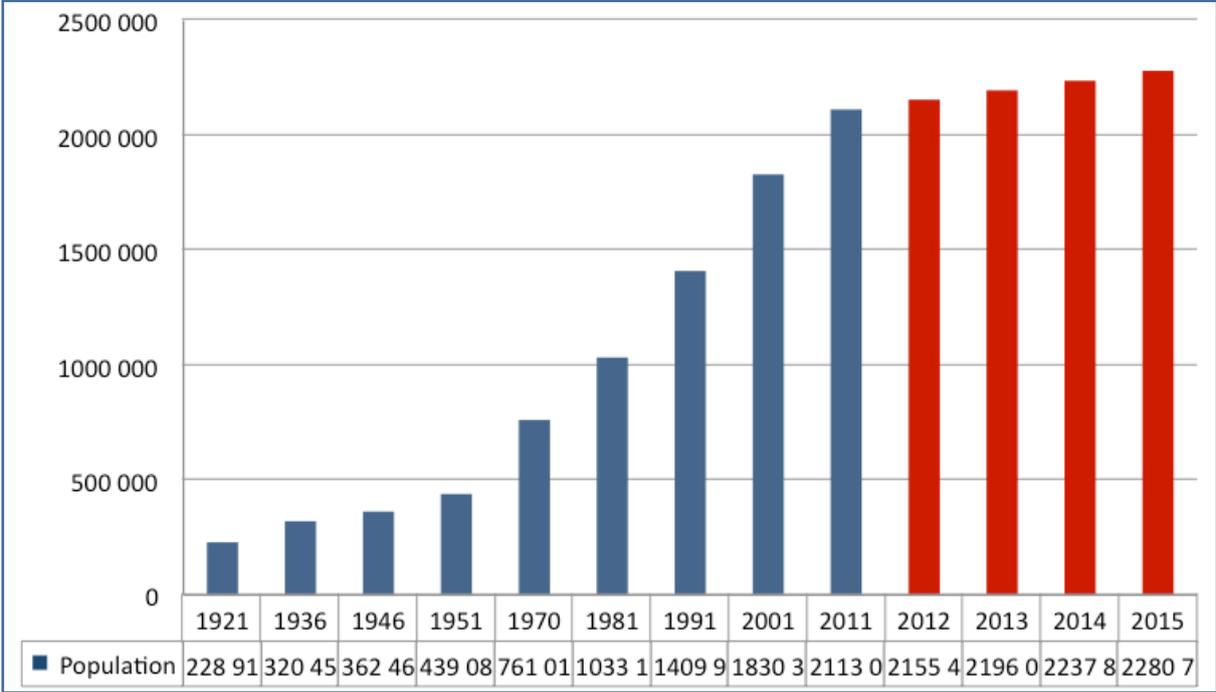
Namibia is one of the most rapidly urbanising countries in Africa. Between 2001 and 2011, Namibia's urban growth rate was estimated at 4.96 percent per annum, while the average urbanisation rate for Africa is 3.3 percent per year. Approximately 43 percent of Namibians live in urban areas, and it is projected that more than half of the population (60%) will live in urban areas by 2030. It is projected that by the year 2030 up to a third of the population will be residing in the Khomas and Erongo regions of the country. Urban population growth in Namibia is primarily characterised by rural-urban migration and a natural population increase in urban areas.

This type of demographic change may be expected to make an impact on the rate of economic growth. According to Callen et al, 2004, in a study conducted in 115 countries, they found out that per capita GDP growth positively correlates with changes in the relative size of the working-age population, and negatively correlates with changes in the size of the elderly. In addition to this, lower dependency ratios tend to increase saving which in turn helps finance more investment and boosts economic output. Other studies suggested that the impact of demography on growth is linked to the strength of the institutional and policy framework in place. For example, in the case of urbanisation, if properly managed, urbanisation can offer significant opportunities for economic and social development. However, the speed and scale of urbanisation in Namibia challenge the capacity of government to adequately plan and meet the needs of a growing number of urban

dwellers. As towns such as Windhoek, Walvis Bay and Swakopmund continue to grow, managing them becomes more complex as their populations increasingly become more diverse.

Namibia will need to adjust to the process of managing urbanisation much faster in order for it to make a positive impact on economic growth. An increase in the number of people concentrated in urban areas will not only strain household level consumption but also increase the burden on resource allocation by the government in the education, housing and health. Regions such as Khomas and Erongo are already experiencing the effects of rural-urban migration especially in the education sector where most children struggle to find placement for the first grade. As school enrolments in urban areas increase government expenditure on education should increase, simultaneously. At local authority level, provision of services such as infrastructure can also pose a challenge due to an increase in the number of inhabitants.

Figure 1: Namibia’s population growth over years, with 2012-2015 projected at 1.4 growth rate



Data source: Namibia Statistic Agency 2012

MORTALITY RATE

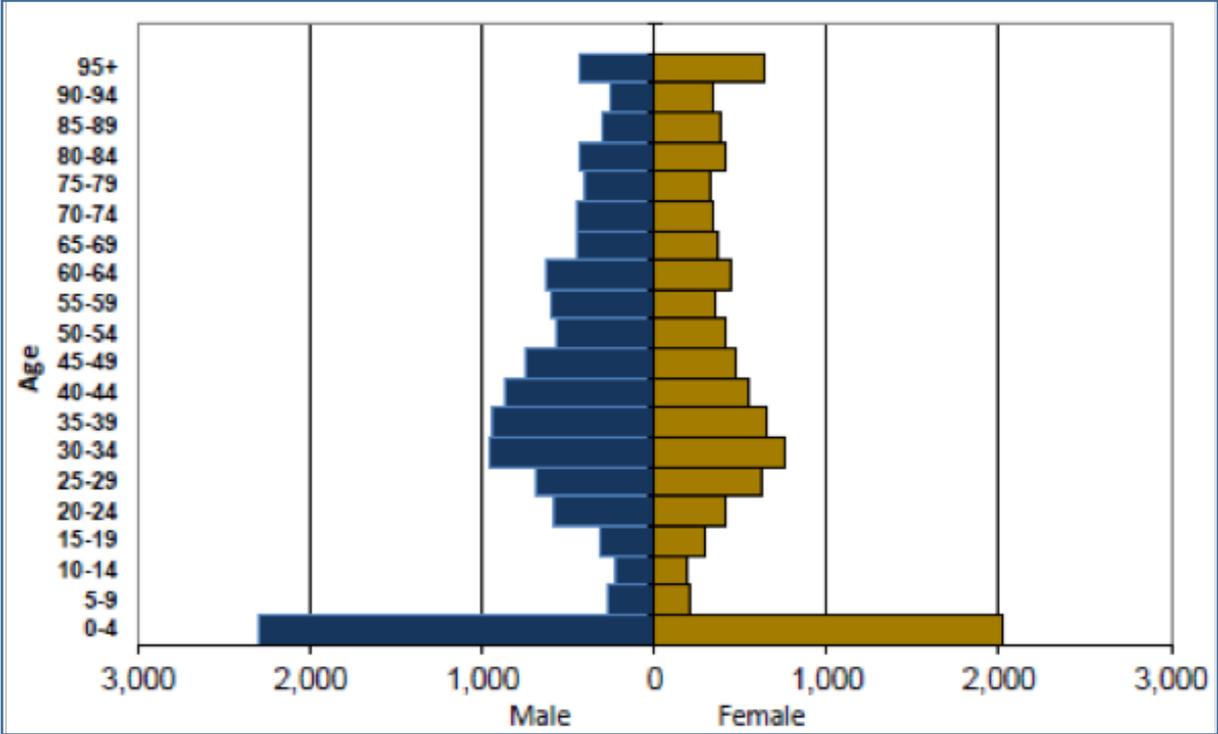
Mortality is a major factor determining changes in population size, distribution and structure. The effect of mortality on population structure is to reduce that component of the population in which the mortality occurs. The “death pyramid” is used to illustrate the number of deaths by age and sex in a country. The pyramid depicts the risk of death for each age group. See Figure 2 for the death pyramid of Namibia.

According to the 2011 population census in Namibia, deaths are concentrated at younger ages of the population, meaning 0 – 4 years. Deaths are far less common among older children, yet more common among middle-aged adults with a notable hump among males, especially. Life expectancy at birth is lower for males (53.3 years) compared to 60.5 years for females. This is likely due to a high prevalence of HIV/AIDS in the sexually active group. In 2014, the HIV prevalence rate in Namibia was 16.9%, a slight reduction from 18.2% recorded in 2012.

Infant Mortality Rate (IMR) in Namibia is 44 deaths per 1,000 live births, which infers that for every 1,000 live births there are 44 deaths among children aged less than a year. A disparity in IMR can be observed between urban and rural areas at 37 and 48 deaths per 1,000 live births, respectively. This trend has been declining but its effect is significant when the population pyramid of Namibia is assessed.

Researchers have convincingly argued that high adult mortality reduces economic growth by shortening time horizons. It is a worrisome situation that there are more deaths in the economically active Namibian population which potentially increases the dependency ratio and negatively affects the country’s economy.

Figure 2: Distribution of reported deaths by age and sex, Namibia 2011



FERTILITY RATE

Total Fertility Rate (TFR) is the average total number of children that would be born to a woman by the time she ended child-bearing age, if she were to pass through all her child-bearing years. The fertility rate in Namibia decreased from an average of 6.1 children per woman in 1991 to just 3.6 in 2011. It is projected to further decline over the next 15 years between 2015 and 2030. The rate is relative to place of residence and regions. Women in rural areas have an average of 4.6 children, higher than the national average, while those in urban area have an average of 3.2 children, lower than the national average. This infers that on average women in rural areas have two children more than women in urban areas. “The difference in fertility rates between urban and rural women can be attributed to the differences in socio-economic characteristics of women; urban areas tend to have better educated and employed women, with better income and access to family-planning services” (Ministry of Health and Social Services, 2008).

The decreasing TFR (total fertility rate) is expected to cause a decline in the portion of the Namibian population below 15 years of age (from 36.4 to 33.7 percent) and a fixed proportion of elderly (aged 65+ years). On the contrary, the portion of the population of working age (15-64 years) is expected to increase.

This change in the population age structure is referred to as the demographic dividend (economic growth arising from increased numbers of working-age adults relative to young dependents). The demographic dividend is however not automatic. In 2014, 39.2% of youth (aged 15-34) that are part of the working age population were reported to be unemployed. This translates into 205,470 unemployed youths. Taking into consideration the dependency ratio of 77% in 2011, which is estimated to decline slightly to 75% in 2015, this group of unemployed youth, will form a large part of the dependents which in turn raises the dependency ratio of the country to 90%. If this trend continues, the country will not benefit at all from the demographic dividend but will rather have to suffer the consequences of having a high dependency ratio, such as low tax revenue and low productivity growth.

The demographic dividend can help produce a sustained period of economic growth within the right kind of policy environment. Such economic benefits are optimised when accompanied by investments in public health, family-planning, education and economic policies which promote labour-market flexibility, openness to trade and savings.

The decline in TFR (total fertility rate) is due in main part to more Namibians pursuing higher education and seeking career advancement thereby leading to delays in marriage, as well as smaller families.

According to the Namibia Labour force Survey (NLFS) of 2013, the number of employed persons with university qualifications increased from 5.4 percent in 2012 to 7.3 percent in 2013. This is an indication that economically active people are interested in career advancement. The Namibia Demographic and Health Survey (NDHS) of 2013 recorded a reduction in percentage for women’s ages at first marriage; 14 percent of women were married at the age of 20 compared to 17 percent in 2006/07. This shows that women are older when getting married during these years, 2006 and 2007, as compared to the previous years, and this in turn, will reduce their chances of having many children.

The use of contraceptives also increased from 46.6 percent in 2006/07 to 50.2 percent in 2013 (NDHS). It is expected that due to these changes, the percentages of the labour force with secondary level and tertiary level education will increase, and that the country has the potential of benefitting from this demographic dividend in terms of opportunity for increased savings and investment in economic growth, provided youth unemployment is reduced. A high number of educated youth, who secure employment, will mean fewer children born due to delays in having children. The government will require fewer resources to invest in education (fewer young people) thereby reducing factors which add to the poverty burden.

A declining proportion of children and the simultaneous increase in the portion of youth and working-age adults reduces the dependency ratio and opens windows of opportunity for economic growth. A large workforce with fewer children to support has the potential to save money on health care and other social services, improve the quality of education, increase economic output because more people are working, invest more in technology and skills to strengthen the economy, and create the wealth required to cope with the ageing of the population.

Studies have documented evidence that declining fertility does indeed stimulate savings because private households with fewer children tend to increase their financial savings. A decline in the fertility rate may also indicate that a nation will in future possibly experience problems with an ageing population; meaning the majority of the population will be elderly and economically unproductive if the fertility rate continues to decline.

POPULATION AND DEVELOPMENT

Sustainable development is a process through which people can satisfy their needs and improve their quality of life in the present without compromising the ability of future generations to meet their own needs.

For most people, aspiring to a better quality of life means improving their standards of living as measured by income level, the use of resources and technology. However, sustainable development also requires equity. For example, economic and environmental goals will not be sustainable unless social goals such as universal access to education, health care and economic opportunity are also achieved.

Because the economic behaviour and needs of people vary at different stages of life, changes in a country's age structure and distribution can have significant effects on its economic development. Nations such as Namibia with a high number of children are likely to devote a large proportion of their resources to the welfare of children which tends to depress the pace of economic growth.

By contrast, if the majority of a nation's population falls within the working age bracket, the added productivity of this group can produce a "demographic dividend" of economic growth, assuming that favourable policies are in place. In fact, the combined effect of this large working-age population on health, family, labour, financial and human capital policies can have as part of its effect, a valuable cycle of wealth creation. Population dynamics determine the potential for poverty eradication, economic growth, health and education service provision, and for achieving sustainable economic and socially inclusive growth. Population dynamics therefore need to be integrated into the conceptualisation and design of our national development plans in Namibia.

In addition, services should be planned around population changes and therefore, population projections should be used to inform national development policies and programmes.

CONCLUSION

Namibia is projected to have a declining fertility rate, low population growth rate, a high dependency ratio, a high youth unemployment rate, high death rate among the working-age population, and a high educated work force. Ensuring for appropriate investments in young people in terms of their health and education, should be an essential component of the national development agenda in order to benefit from the population dividend in the near future. We need to consider adopting measurable targets regarding achieving better education, sustainable job creation and the removal of barriers to accessing reproductive health services for improving young people's opportunities and their well-being, and for maximizing their contributions to society. A strong education system and sound economic management can make it possible to absorb a large portion of young adults into the workforce and reduce the dependency ratio. Therefore we recommend that the country needs greater investment in human resource development (knowledge and skills): re-tooling persons to respond effectively to new and emerging challenges, and to be absorbed into the local economy and to bridge the gap. The country further needs to reduce regional imbalances (skewed development) associated with resource allocation to stem the flow of migrants from rural to urban or urban to urban areas, for example via the Regional Investment Policy (e.g. infrastructure) to address problems in lagging regions. Viable and attractive opportunities should be created in rural areas with the aim to redirect educational systems towards the requirements of development in rural areas.

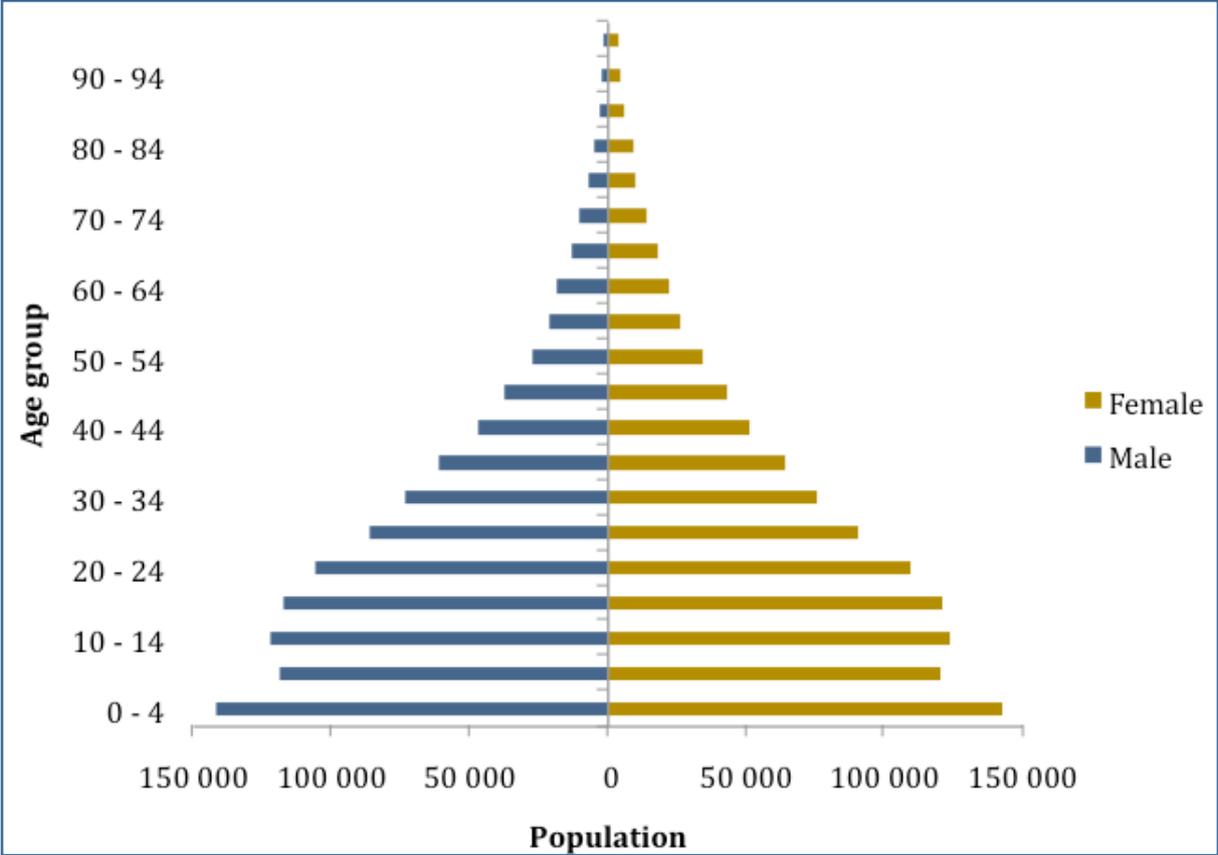
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Annexure 1: key socio-economic and development indicators

Selected key socio-economic and development indicators for Namibia (%)	
Percentage of population, urban, 2011	43
Literacy rate, male ≥ 15 years old, 2011	89
Literacy rate, female ≥ 15 years old, 2011	88
Literacy rate, total, 2011	85.3
Secondary school enrolment, school age male population, 2012	47
Secondary school enrolment, school age female population, 2012	53
Unemployment rate, 2013	29.6
Population living below poverty line, rural, 2010	37.4
Population living below poverty line, urban, 2010	14.6
Population living below poverty line, total, 2010	28.7

Annexure 2 (a): Namibia's Population Pyramid, 2011



Annexure 2 (b): Namibia's Projected Population Pyramid, 2030

