Regional Analysis of Youth Demographics

KENYA

Key messages

- Kenya’s total population will increase from an estimated 47 million in 2015 to 115 million by 2065 according to the UN Medium variant projection for the country. The corresponding population of youth 15-24 years will increase from 9.5 million to 18 million.
- Decades of high fertility in Kenya have created a high dependency ratio of about 77 young and old-age dependents (0-14 years and 65+ years) for every 100 people of working age (15-64 years) thus putting pressure on public and household resources.
- The demand for basic services such as schooling, housing and healthcare will increase significantly by 2065. Demand for primary school places could increase by 50% to 15 million and for secondary school by 72% to 7.4 million unless there are significant efforts towards investing more in family planning and having fewer children.
- A “business-as-usual” approach will lead to more pressure on natural resources leading to environmental degradation, civil conflicts, increased migration, and rising poverty.
- For Kenya to benefit from its youthful population to reap a demographic dividend, it must intensify programmes to reduce child mortality, lower fertility levels, invest in developing its human capital and equitably generate and provide decent jobs to improve living standards.

Context

Vision 2030 is the national long-term development strategy that aims to transform Kenya into a newly industrialising, middle-income country providing a high quality of life to all its citizens by 2030. The vision identifies three key pillars to realise this goal: the economic pillar aims to achieve an average economic growth rate of 10% per annum and sustain the same until 2030; the social pillar seeks to engender just, cohesive and equitable social development in a clean and secure environment; and the political pillar aims to realise an issue-based, people-centred, result-oriented and accountable democratic system.

Emphasis in these priority areas resonates with actions needed for a country to harness the demographic dividend, which is a temporary economic benefit created by a significant increase in the ratio of working-age adults relative to young dependents. According to the Kenyan Constitution of 2010, youth are defined as people aged between 18-34; a revision from the 2007 National Youth Policy which had previously categorised youth as those aged 15-30.

However, the United Nations definition of youth is 15-24 years, and the East African Community (EAC) defines youth as those between 15 and 35 years. The proportion of the youth age 18-34 in Kenya constitutes 25%, and those below 15 years make up 43% of the total population. As a result, the population has an age structure with a large base (Figure 1).

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In absolute numbers, Kenya’s total population increased from 38.6 million in 2009 to an estimated 47 million in 2015 and UN projections using the Medium variant scenario predict that there will be about 115 million people by 2050 of which 18 million will be youth aged 15-24 and 35 million between 15-34 years.6

Kenya’s youthful population is a result of very high fertility, which over a 30-year period, reduced by only three children per woman to 3.9 by 2015. During the same period, under-five mortality declined from 90 to 52 deaths per live births, while the infant mortality rate declined from 61 to 39 deaths per live births. Determinants of high fertility include early onset of childbearing and marriage, low status of women, low levels of female education, poor access to contraception especially among rural women and youth, and cultural norms that favour high fertility. Kenya’s dependency ratio of 77 dependents (0-14 years and 65+ years) for every 100 people of working age (15-64 years)7 imposes an economic strain on the country’s scarce resources. Equally, households struggle to support large families and the long-term effects are a poverty trap as households are unable to save – an important factor that enables investments and capital accumulation and provides an impetus for economic growth.8 In contrast, South-East Asian countries (for example Malaysia, Thailand, South Korea) which have reaped a demographic dividend currently have an average dependency ratio of 46 dependents per 100 in the working ages.9 Despite the challenges posed by the youthful population, there is a window of opportunity for Kenya to accelerate its economic development if it makes the right investment choices to take advantage of the youth demographics.

This research briefing note summarises a review of literature and policies on regional youth demographics, and highlights implications from scenario modelling of the short-term, medium and long-term projections of the youth population in Kenya. Specifically, the briefing note highlights the demand for basic and social services against population projections.

From the literature review and participatory workshops in the EAC countries, we have identified major domains for youth development. These are: health including access to sexual and reproductive health services; education and skills development including information technology and communication; employment; as well as migration and urbanisation. We therefore focus on these domains, while acknowledging that there are other important domains in youth development that should be addressed.

Kenya’s Youth Demographics and Prospects for a Demographic Dividend

Eminent scholars have defined the “youth bulge” as a temporary demographic phenomenon which occurs when child mortality declines and fertility falls rapidly such that the previous cohort of births is larger than subsequent cohorts.10 As the large cohorts of births move into the working ages, we get a bulge in the population age-structure and an increase in the ratio of working age population relative to young dependents. In theory, a country can benefit economically from the youth bulge since fewer dependents implies that resources that would have paid for education, health, and basic services for large numbers of children can be re-invested for longer-term economic growth and capital development.11 Kenya has a youthful population as portrayed in Figure 1, characterised by an ever-increasing cohort of new births. Such an age-structure, not to be confused with a youth bulge, has an unfavourable ratio of working-age population to dependents and the country is unlikely to reap a sizeable demographic dividend unless there is a significant reduction in total fertility towards 2.1, the replacement level fertility. However, UN projections show that the
country is unlikely to reach replacement fertility before 2065. Formulation of a “youth bulge” requires that both births and child mortality rates decline rapidly. The economic benefit from a youth bulge is also not automatic. Countries must invest in human capital, provide an enabling economic environment, and create adequate numbers of decent jobs equitably distributed for the youth and working age adults. Notable examples where countries have failed to maximise the demographic dividend include Tunisia in North Africa and South Africa.12

Demographers use the inverse of the dependency ratio as a proxy for the support ratio (ratio of effective producers to consumers), in effect assuming that everyone between 15-64 years (or 20-64 years) is contributing to household income and the rest are consumers rather than producers. The rate of change of the support ratio has been used to show the timing when the window of opportunity for harnessing the demographic dividend opens and closes. While the rate of change of the theoretical support ratio is positive, the window of opportunity to reap the demographic dividend is open. However, once the rate of change of the support turns negative, the dividend becomes negative, implying that the demographic change acts as a brake on economic growth rather than an impetus for economic growth.13 Figure 2 shows that the window of opportunity for Kenya, other countries in the EAC and sub-Saharan Africa is open from now until 2100, when the ratio of effective producers relative to consumers will become unfavourable. It should be emphasised that this window of opportunity can close without a country reaping a sizeable demographic dividend if the youth do not have the skills for the labour market or the country is unable to create enough jobs for the population of workers.

Kenya’s National Youth Policy (KNYP) (2007) demonstrates the government’s commitment to address current and anticipated development challenges faced by the youth as well as harnessing their potential to contribute to national development. According to the policy, the major challenges faced by young people include poverty, health related problems, increased school and college drop-out rates, unemployment and underemployment, abuse and exploitation, crime and deviant behaviour.14 Critics of the policy argue that although a National Youth Council was set up in 2009 to implement the policy, there is confusion over which agency/department has overall responsibility for certain functions (e.g. monitoring and evaluation of the KNYP). Also, there is a lack of alignment between KNYP and its parent Ministry’s strategic priorities especially in the areas of sports, media, ICT, crime, and community service.15 The policy has not been reviewed for more than a decade and therefore, it is out of touch with respect to youth’s use of technology and social media. Other key commitments to youths are entrenched in Vision 2030 and the Sustainable Development Goals (SDGs) roadmap tagged “leave no one behind”. Fulfilling these commitments could change the socio-economic trajectory of the country and place it on the right path towards harnessing the maximum demographic dividend.

Health status and access to sexual and reproductive health services

Although life expectancy has increased between 1990 and the present from 63 to 69 years for females and 60 to 65 years for males, many people in Kenya still endure poor health outcomes. Diseases such as malaria, HIV/AIDS, tuberculosis and non-communicable diseases have seriously undermined the country’s economic potential.16 According to the Institute of Health Metrics and Evaluation (IHME), diarrheal diseases were the leading causes of death among Kenyans of all ages in 2016, closely followed by HIV and lower respiratory infections.17 Among youth, HIV/AIDS is the leading cause of death. According to the 2012 Kenya AIDS Indicator Survey, the prevalence of HIV among adults aged 15-64 years reduced from 7.2% to 5.6% between 2007 and 2012, though the prevalence in 2012 remained higher among females (6.8%) compared to males (4.2%).18 Young women aged 15-24 account for up to 21% of all new HIV infections and their risk of infection is between 4 and 6 times higher than males of the same age.19 Access to sexual and reproductive health (SRH) information and services is inadequate. According to the 2014 KDHS, about 31% of sexually active young unmarried women (15-24 years) had an unmet need for contraception (women with unmet need are those who are wanting to stop or delay childbearing but are not using any method of contraception) compared to 19% among unmarried women aged 25-34. Not surprisingly, about 18% of adolescent girls 15-19 years old had started childbearing, with 96 births for every 1,000 girls aged 15-19 in 2014. More than two in every five girls aged 20-24 years had given birth by the age of 20. Early childbearing undermines girls’ human capital development which leads to lower labour force and political participation rates. The country’s policies on youth, population, and adolescent sexual and reproductive health acknowledge the need to provide quality youth-friendly SRH services to ensure that young people are able to make informed decisions about their sexuality. Given that young Kenyans still face these challenges, it is a clear indication there is insufficient investment in youth’s SRH. At regional level, the EAC youth policy highlights the need for clear sexual and reproductive health and rights (SRHR) policies but falls short of requesting member countries to provide access to SRH services. An EAC SRHR bill was drafted in 2017, but it is yet to be discussed in the East African Legislative Assembly.

Education and skills development

The transition from education to employment for young people, is a fundamental step that lays the foundation for future earnings. The Kenyan Constitution obligates the government to take measures, including affirmative action programmes, to ensure that the youth access relevant education and training. The country has various policy responses, including making skills training and entrepreneurship development as one of the priority areas in the national youth policy. Data from the World Bank highlights a high literacy rate of 86% in 2015, among Kenyan youth aged 15-24 years,20 while the 2015/16 Kenya Integrated Household Budget Survey (KIHBS) shows a higher literacy rate among the youth of 94.4%.21 The net enrolment ratio in primary schools is high at 82.4%, but this drops down to slightly more than one third (37.5%) of secondary school age students actually enrolled in school.

Another challenge is gender inequality. Contrary to popular concerns that girls were disadvantaged over boys in school attainment, the 2015/16 KIHBS report revealed that proportionally more girls than boys of the expected school ages were attending school both in primary and secondary level (82% for boys and 83% for girls in primary and 35% for boys and 40% for girls at secondary level).22 At tertiary level however, female enrolment lags behind that of men at 5% and 3%, respectively.

Kenya’s labour market requires skilled and well-trained workers, but there is a concern in the country that the secondary and university school curricula are not aligned to the needs of the labour market and does not emphasise transferable skills.23

Employment and job creation

Kenya’s economic growth has been generally positive over the last decade. The annual Gross Domestic Product (GDP) growth was 5.6% in 2015 and 5.9% in 2016, and was estimated at 6.2% in 2017.\(^{26}\) This expansion has been the result of significant growth in some key sectors such as agriculture, construction, food services, housing, and finance. However, growth in other sectors decelerated during the same period leading to insufficient growth and unemployment.\(^{26}\) Based on the preliminary National Adolescents and Youth Survey (NAYS) report published in 2015, the recurrent issues hindering access of young people to employment and income opportunities were corruption, lack of capital and lack of knowledge and relevant skills. It is estimated that annually, over 750,000 Kenyan youth attempt to enter the labour market but only 15% are able to get formal jobs.\(^{26}\) Unemployment rates – driven by inequality and discrimination – vary based on age and sex. Specifically, about 23% of youth aged 15-24 years are unemployed (17% among males and 21% among females).\(^{26}\) Further, most of the young people who are employed are engaged in the vulnerable and low-paying informal Jua Kali sector. Concerns over the high youth unemployment have led the government to implement a series of programmes in recent years including the nationwide programme Kazi Kwa Vijana (KKV) that aimed at employing 100,000 youths annually in the rural and urban areas and the revamped National Youth Service programme. Fast-tracking the legislative approval of the 2014 draft National Employment Policy that among others targeted tackling youth unemployment will provide a legal backing to the need for urgently addressing the plight of young people in accessing employment.

Migration and Urbanisation

The rapid increase in Africa’s urban population has largely been driven by natural increase (i.e., the difference between births and deaths) within urban populations, which accounts for about 75% of the urban growth in Africa with rural-to-urban migration contributing the rest. In contrast, natural increase accounts for only 50% of urban growth in Asia.\(^{26}\) Kenya is urbanising very rapidly with an annual urban growth rate of 4.3% in 2014, and although only 26% lived in urban areas in 2015, the urban population is projected to increase to 44% by 2050.\(^{26}\) Urbanisation offers important opportunities for economic and social development, but challenges still exist. In particular, cities and urban centres are struggling to provide infrastructure and an enabling environment for innovation, due to rapid urbanisation. As such, about 56% of urban dwellers in Kenya live in slum areas in abject poverty where they do not have access to basic social services, lack stable livelihoods and have high unemployment rates.\(^{26}\)

Future Implications of Youth Demographics in Kenya

Fertility is the most influential determinant of population change in Kenya. Policies and programmes to reduce the high fertility will have implications for future youth demographics in decades to come. The large youthful population has created population momentum, implying that the population will continue to grow for several decades even if the country were to achieve replacement fertility of 2.1 in the next 30 - 50 years. To assess the future demand for schools, family planning services, and jobs, we used the United Nations population scenarios to generate population projections for 2030, 2050, and 2065, starting from 2015 as the baseline year. The UN Medium variant scenario assumes that increases in contraceptive use will result in fertility patterns similar to the experience of other countries that have gone through the demographic transition. The UN Low variant scenario, assumes that for most of the projection period, fertility is half a birth lower than the Medium variant. The UN model makes allowances for high mortality due to HIV/AIDS in high prevalence countries and migration in countries where there is significant people movement.\(^{26}\) We also analysed an Accelerated model, where it is assumed that Kenya’s total fertility would decline rapidly to replacement level by 2065. The Accelerated scenario and low variant models are almost identical in terms of the total population for most of the projection period. Projected populations of youth are shown in Figures 3 and 4.

Future demand for school places

The official primary school age range for Kenya is 6 - 13 years, while the official secondary school age range is 14 - 17 years. Figure 5 shows that under the UN Medium variant population projections, the primary school age population is expected to increase from...
an estimated 10 million children in 2015 to 15 million children by 2065.

The numbers will rise at a slower pace under the Accelerated model with the population of primary school age children increasing to 11.9 million and 12.2 million by 2030 and 2050 respectively. However, by 2065, as a result of the fertility decline, the number is expected to have reduced to 11.7 million (Figure 5).

The secondary school age population under the UN Medium variant projection is expected to increase from an estimated 4.3 million in 2015 to 7.3 million by 2065. On the other hand, under the Accelerated model, it is expected that this segment of the population will increase to 5.6 million and 6.2 million by 2030 and 2050 respectively, but will decline to 5.7 million by 2065 (Figure 6).

The implications of the expected significant increases in the school age population at both primary and secondary school level are that there is need to expand school infrastructure and teaching resources. It may also be necessary to explore online digital learning in order to accommodate the rising numbers expected in school. This is especially so for secondary schools where an estimated 38% of the population of secondary school-age were enrolled in secondary school in 2016 compared to 82% at primary school. If the enrolment rates are to increase to the current average levels of upper-middle-income countries, then the primary school net enrolment rates should be as high as 95% while the secondary school net enrolment should increase to 79%. The Government of Kenya is launched a Free Secondary Education policy in 2018 that should tremendously boost enrolment in secondary school as was the case when the Free Primary Education policy was launched in 2003.

Importantly, it also means that there is a need to have firm plans in place to expand opportunities for tertiary and vocational training that will absorb the young people who will graduate from the expanded secondary school stream. Planning should also take into account the possibility of a reduction in the demand for both primary and secondary school places in the long term if the country adopts the Accelerated model to reduce fertility seriously.

**Demand for contraception among female youth**

Using the Medium variant population projections for 2020-2065, we estimated the future total demand for contraception among sexually active female youth (married and unmarried) in Kenya. Total demand includes women using contraception and those who have an unmet need for contraception. For 2015, we used the 2014 Kenya DHS distribution of the total demand for contraception.

For 2030 projections, when Kenyan’s total fertility rate (TFR) will be about 3.3, we use the distribution of the demand for contraception.
based on the average for low and middle income countries that have a TFR of between 3.7 - 3.1, for 2050, when Kenya’s TFR is projected to be between 2.7 and 2.5, we use the distribution for countries with TFR of around 2.5-3.0; and for 2065 we use the distribution for countries with TFR of 2.2-2.4 since Kenya’s TFR is projected to be about 2.29. The results are shown in Figure 7.

The Guttmacher Institute, in their 2014 Adding It Up publication estimate that in low income countries, the cost of providing adequate contraception per women is around $10, and that each dollar invested in contraception reduces the cost of meeting the healthcare as a result of unintended pregnancies, unsafe abortion, HIV in pregnancy care, and unplanned births by $1.47. Assuming constant prices between 2015 and 2065, the cost and benefits of providing contraception to female youth is shown in Figure 8.

Youth population not in education, employment or training

The share of the young people not in education, employment or training (NEET) provides a broad measure of the untapped potential of young people who could contribute to national development through work. The International Labour Organisation (ILO) points out that this group is also important since they are neither improving their future employability through investments in skills nor gaining experience through employment. As a result, the group is particularly at risk of both labour market and social exclusion. The 2013 Kenya Steps Skills Survey showed that the 15-34 age group NEET was 29% and much higher for females (42%) than for males (14%). Making the assumption that these NEET rates remain constant over the next forty years, we find that the absolute number of the 15-34 years NEET is expected to rise alarmingly (see Table 1). From a baseline of 4.9 million in 2015, the numbers could rise to 7 million, 8.7 million and 8.6 million in 2030, 2050 and 2065 respectively under the Accelerated model. Alternatively, the number of NEETs in this age group could rise as high as 10 million by 2065 under the UN Medium variant scenario. Apart from these socially excluded young people being at a high risk of falling into the poverty trap, they are also a potential destabilising force that can cause civil disturbance and be a potential recruiting pool for radical forces (including rebel groups and terrorists). They also form a pool of desperate potential labour migrants.

Modelling the demographic dividend

In order to demonstrate the potential benefits of the demographic dividend and identify the multi-sectoral policies and investments required to achieve these benefits in Kenya, we used the
modelling tool DemDiv which was developed by the USAID supported Health Policy Project at the Futures Group.\(^1\) It is a scenario-based two-part model that projects demographic and economic changes up to 40 years to estimate employment, gross domestic product (GDP), and GDP per capita as well as several other indicators of human development (including Human Development Index (HDI)). The model allows users to design multiple scenarios showing how the combined power of policy investments in family planning (FP), education, and the economy can generate a demographic dividend. We report the results of the DemDiv modelling for Kenya from 2010 to 2050 under four scenarios: (i) Business as Usual, where slow progress in economic reforms, human capital development and decline in fertility rate persist till 2050; (ii) Economic emphasis, where investments are made to enhance economic competitiveness and education levels but not on family planning; and (iii) Combined Scenario, where optimal investments are made in family planning in addition to economic competitiveness and education. Malaysia was used as the benchmark country because it has attained economic development that Kenya aspires to meet or surpass by 2050. Full explanations of the rationales for these scenarios are reported in the country’s Demographic Dividend report.\(^2\)

The projections show that the Combined Scenario investment strategy would give the best possible results (Figure 9). Under this scenario, Kenya could graduate to Upper-Middle Income status with GDP per capita of $11,288 by 2050, up from $907 in 2010. The estimated demographic dividend the country could earn by 2050 is $4,595, which is the difference between GDP per capita under the Combined Scenario ($11,288) and GDP per capita under the Economic emphasis ($6,693) scenario in 2050. As a result of rapidly increasing population and slow economic growth, Kenya’s GDP per capita under Business as Usual in 2050 ($896) would have stagnated at about the 2010 levels, demonstrating the need for urgent investments in both economic and social sectors (including FP) if Kenya wants to realise its social and economic development potential.

What is the risk of “business as usual”? The projected growth of the youth population in Kenya will place significant strain on the country since these youths will have to be educated, housed, and be provided with healthcare. As

### Table 1: Estimated number of young people Not in Education, Employment or Training [NEET], Kenya (in thousands)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2015 Baseline (UN Medium Variant)</th>
<th>2015 Accelerated</th>
<th>2030 UN Medium Variant</th>
<th>2030 Accelerated</th>
<th>2050 UN Medium Variant</th>
<th>2050 Accelerated</th>
<th>2065 UN Medium Variant</th>
<th>2065 Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>1,203</td>
<td>1,595</td>
<td>1,596</td>
<td>1,812</td>
<td>2,000</td>
<td>1,639</td>
<td>2,144</td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td>1,360</td>
<td>2,035</td>
<td>2,033</td>
<td>2,421</td>
<td>2,550</td>
<td>2,335</td>
<td>2,816</td>
<td></td>
</tr>
<tr>
<td>25-29</td>
<td>1,311</td>
<td>1,856</td>
<td>1,851</td>
<td>2,419</td>
<td>2,462</td>
<td>2,482</td>
<td>2,827</td>
<td></td>
</tr>
<tr>
<td>30-34</td>
<td>824</td>
<td>1,166</td>
<td>1,161</td>
<td>1,664</td>
<td>1,662</td>
<td>1,799</td>
<td>1,969</td>
<td></td>
</tr>
<tr>
<td>15-34</td>
<td>4,939</td>
<td>6,958</td>
<td>6,946</td>
<td>8,702</td>
<td>9,091</td>
<td>8,632</td>
<td>10,222</td>
<td></td>
</tr>
</tbody>
</table>


the population grows in rural areas and land for growing food becomes scarce, there is likely to be increased migration from rural to urban areas in search of livelihoods. International migration is also likely to increase as young people seek livelihood opportunities in neighbouring countries and beyond. Estimates from the United Nations migration statistics suggest that roughly 2.5 million inhabitants from Kenya, Tanzania, Rwanda, and Uganda emigrated in 2015 alone and about 35% were youth between 15-34 years. Men and women were equally likely to migrate. Finally, inactivity in addressing youth demographics may threaten the country’s security since unemployed and disenchanted youth can cause civil unrest.

**Recommendations**

The government can take advantage of the youthful population to realise a demographic dividend by adopting the following:

- **Creating an enabling environment for foreign and domestic investments.** This can be done by increasing the ease of doing business, improving economic infrastructure including electricity, transport and communication systems. This will bring in investors and new industries which would increase the number and quality of jobs.

- **Improving quality of education and skills training.** Ensure equitable access to quality education at all levels, with specific focus on skills development both for those in school and out of school youth to increase their employability, and scaling up internship, mentorship and apprenticeship programmes.

- **Improving governance and accountability:** Create trust in public bodies and the private sector to encourage investments and economic growth by promoting rule of law, effectiveness in delivery of services and openness in government services.

- **Empower women and girls:** Address gender disparities in access to education and labour employment and remove barriers that limit women’s participation in all spheres.

- **Universal access to contraception and other sexual health services:** Fulfil commitments made through the Maputo Plan of Action, FP2020 and SDGs by making SRH services and modern methods of contraception available to all including sexually active young people.

**Development partners** can support the government in the formulation and implementation of policies that emphasise:

- Fertility and child mortality declines to enable the country to achieve a favourable support ratio.

- Fund programmes that develop young people human capital development through high-quality basic and tertiary education and technical and vocational training.

- Fund innovation hubs for inventions, manufacturing, and development of young entrepreneurs.

- Promote an evidence-based culture in policymaking and encourage the development of robust monitoring and accountability frameworks.

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