POLICY BRIEF

Accelerating human capital development

to optimise Zambia's chances of harnessing the demographic dividend

May 2015

A well-educated, highly skilled and healthy labour force is essential to propel Zambia to a thriving, industrialised and services-based economy that is envisioned in Vision 2030. Central to Vision 2030's goal of transforming Zambia into a prosperous middle income country are investments in human capital development to improve the education and skills level of its people and ensure they are healthy. Despite laudable efforts to improve human capital development, majority of Zambians are unable to progress beyond primary school, and there is a marked gap between the skills level of workers and the labour market needs. In addition, the workforce is also affected by the double burden of prevalent communicable diseases such as malaria and HIV/AIDS, and the fast rising incidence of non-communicable diseases (NCDs).

Zambia's youthful age structure has a high concentration of young people who are yet to enter their childbearing ages. This guarantees that the country's population will continue growing for many decades to come even if fertility declines to the replacement level of about two births per woman. For example, if Zambia attained its replacement fertility level by 2020, its population would continue to grow and stabilise at around 29 million in 2100[1]. If replacement level fertility is attained by 2060, however, the population will stabilise at 56 million around 2120.

If Zambia's fertility declines rapidly, its youthful age structure will change to one dominated by working-age adults, presenting a window of opportunity for the country to enhance its economic productivity through the demographic dividend. This is the economic benefit that arises from a significant increase in the ratio of working-age adults relative to young dependents that results from rapid fertility decline, if this change is accompanied by sustained investments in education, skills development, health, job creation and improved governance *(Figure 1)*.

This policy brief highlights policy and programme options that Zambia can adopt in order to accelerate human capital development to optimise its chances of harnessing the demographic dividend.

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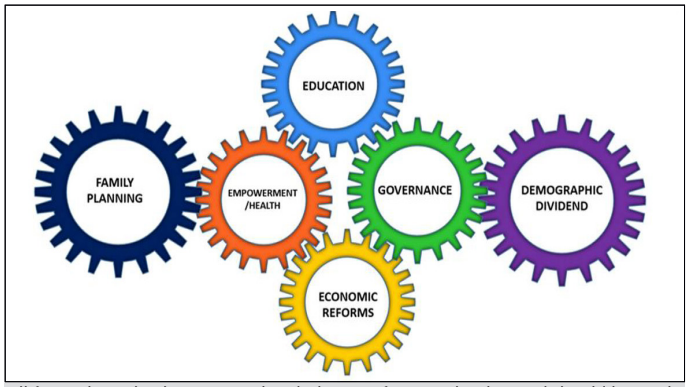
Figure 1: *Five policy wheels for creating and earning the Demographic Dividend*



All five policy wheels are interrelated; they reinforce each other and should be implemented concurrently to drive the country towards the economic prosperity that can accrue from the demographic dividend.

Source: Adapted from African Union Commission (2013)[2]

The magnitude of the economic growth is illustrated by the modelling carried out to assess the potential demographic dividend the country can harness over the next four decades using the DemDiv modelling tool[3,4]. If Zambia follows the Economic Emphasis Policy Scenario that maximises the economic reforms and investments that would put it at par with the Asian economies but without increasing investments in education and family planning, its age structure will not be that different from the current one. Under this scenario, per capita GDP would increase from USD 1,839 in 2013 to USD 19,546 by 2053. However, if Zambia follows the Combined Scenario where it simultaneously prioritises economic reforms, family planning, education, health, and governance, its fertility would decline to 2 births per woman, its age structure will have low child dependency burden and have more workers, and its economy will grow impeccably, reaching a per capita GDP of USD 26,940 by 2053. This would translate to a demographic dividend of $7,393.

Investing in Education and Skills Development of Zambians

Investing in education would enable multiple pathways for Zambia to improve her chances of harnessing the demographic dividend and overall socioeconomic development prospects. Keeping girls in school is one of the key factors that delays early childbearing and ultimately reduces fertility. More educated women are also more likely to access health care services, including family planning, and work in formal employment than their less-educated counterparts. Formal and vocational schools are the main base for development of intellectual, social, economic, and productive skills that Zambia needs to have a globally competitive labour force. Enhancing priority investments in education will not only facilitate the fertility transition that the country needs to reduce the high child dependency burden, but also ensure that the relatively big labour force will be well-educated and equipped with the requisite skills to enhance the country's socioeconomic transformation. Though all levels of education are interdependent and should be addressed holistically, evidence shows that tertiary education provides a greater positive impact on economic growth than lower levels of education[5].

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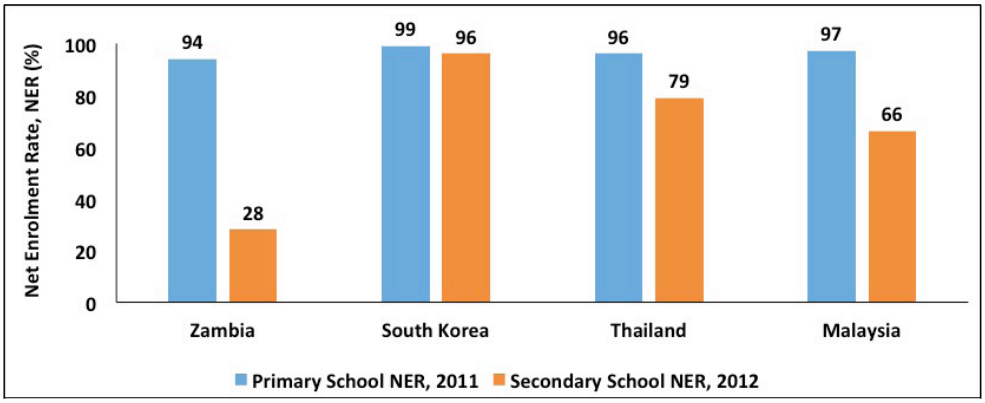
Few Zambians progress beyond primary school

The free primary education policy introduced in 2002 has greatly improved the primary school enrolment rates in the last decade and Zambia is on track to achieving universal primary education. However, few Zambians progress to secondary school, and tertiary level enrolments are very low. Low enrolment at higher levels of education puts Zambia at a disadvantage as its workers are not equipped with the high-level education and skills required to maximise productivity and allow the country to compete favourably with the fast-developing nations of the world.

Figure 2 reveals that Zambia compares well to the rapidly developing East Asian countries in primary school enrolment, but lags far behind in secondary enrolment. About 3 in 10 Zambians of secondary school-going ages were enrolled in 2012 (net enrolment rate of 28%) compared to almost universal enrolment for their South Korean counterparts. Almost 8 of 10 and 7 of 10 of the counterparts in Thailand and Malaysia respectively, were enrolled.

The main barrier to transitioning to secondary and tertiary education in Zambia is limited access due to inadequate schooling infrastructure and teaching personnel at these levels. Consequently, many children who pass their primary school exams do not make it to secondary schools because of shortage of schools. In addition, user fees at higher levels of education are unaffordable for many households. To illustrate the high attrition at higher grade levels, the Zambia Education Statistical Bulletin 2013 notes that only 62% of pupils transitioned from Grade 7 to Grade 8, and 43% from Grade 9 to Grade 10 in 2013.

Figure 2: *Comparing Zambia's primary and secondary school enrolment rates and those of select East Asian countries*



Source: Zambia Education Statistical Bulletin 2013 & UNESCO UIS

Poor quality education and a mismatch between skills learned and labour market needs persist

Zambia has an abundance of both renewable (agricultural products) and nonrenewable (minerals) natural resources. It must be able to optimise the management of its natural resources by investing in processing industries, that will provide increased value addition while at the same time reducing exports of raw materials. Zambia's current economic structure is primarily focused on agriculture and industries which extract and harvest natural resources, however, there are limited or non-existent industries which focus on products with added value. Zambia therefore needs a well-educated and skilled labour force to optimally exploit its resources and enhance economic development.

However, the poor quality of education attained at all levels that prevails in the country is a critical challenge that undermines the productivity of the Zambian labour force. This is because of a range of factors including inadequate school facilities, learning materials and teachers, and poor oversight in both the public and growing private education sector. For instance, in 2013 Zambia had an estimated pupil-teacher ratio of 56[6] compared to 12 in Malaysia and 19 in South Korea[7].

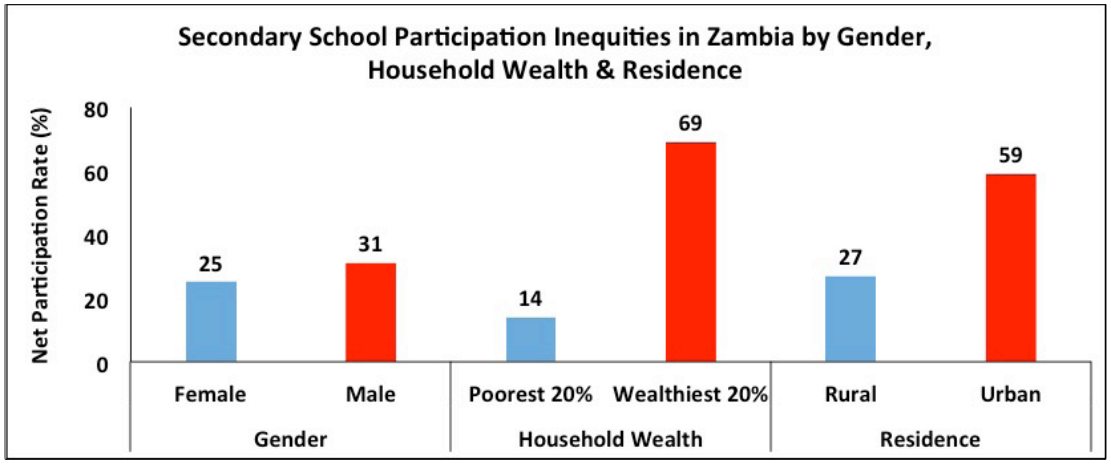
Even more pressing is the mismatch between skills imparted by the education system and the labour market needs. Consequently, many companies in Zambia are forced to hire foreign experts or invest considerable resources in staff training to cover the various skills gaps.

Education attainment marked by significant inequities by gender, income and residence

While the free primary education programme has greatly improved access to basic education, school participation at secondary level and higher is marked by significant inequalities by gender, income and residence *(Figure 3)*. In 2013, the secondary NER for females (25%) was 6% lower than that of males (31%)[8]. Household survey data further show that in 2013, the secondary Net Attendance Ratio (NAR) for children from the poorest households (14%) was 55% lower than their counterparts from the richest households, while the secondary NAR for urban children (59%) was more than twice as high as that of rural children (27%)[9].

The gender gap in school enrolment at higher levels of education can be attributed to higher dropout rates for girls who face unique obstacles to schooling compounded by factors such as early marriage and teenage pregnancies. According to 2013 data, half of Zambian girls were married by 18.7 years. Additionally, 28.5% of those aged 15-19 have had a child or are pregnant[9]. Rural-urban and regional differences can be accounted for by uneven socioeconomic development and socio-cultural practices that have disadvantaged many children in Zambia.

Figure 3: *Secondary school participation inequities in Zambia*



Source: Education Statistical Bulletin, 2013 & Zambia DHS 2013
NB: Net Enrolment Rate used for Gender, and Net Attendance Ratio used for Household Wealth and Residence comparisons

Need to provide many more quality vocational training centres for Zambia's youth

For many youth in Zambia, the most urgent need is to provide them with skills to earn a living and contribute positively to the economy. However, the quality of vocational training programmes and the number of institutions providing them are inadequate. The Revised 6th National Development Plan (R-SNDP) notes that the Technical Education, Vocational and Entrepreneurship Training (TEVET) system can only absorb about 5% of the 300,000 youth who leave school at grades 9 and 12 each year[11]. This situation contributes to the presence of many unemployed and underemployed young people without the required skills to earn a decent livelihood.

Few Early Childhood Education (ECE) centres presents a major challenge for education attainment

The existence of very few Early Childhood Education (ECE) centres in Zambia presents a critical obstacle to the foundational learning and development experience of children. Other challenges include inadequate infrastructure, human resource and teaching materials. In 2013, only 15.3% of children joining primary school had prior ECE experience. Most ECE schools in the country are privately owned and located in urban areas, a clear early disadvantage for children from poor families and rural areas for their eventual education attainment.

Policy Actions
to enhance the education and skills development of Zambians

Although past efforts have shown improvements in enrolment in schools, there are still major challenges to surmount for Zambia to have a highly educated and skilled workforce. To maximise the country's potential to harness the demographic dividend, the following policy actions should be urgently pursued and investments in ongoing programmes intensified to address these challenges.

A Zambian school boy. Photo: Liv Unni Sødem/Flickr

- Adopt a universal secondary school policy in order to improve progression rates to secondary and increase enrolment in tertiary institutions.
- Increase commitment and budgetary allocation to ensure adequate distribution of gender sensitive school facilities, well-trained and motivated teachers and quality learning materials at all levels of education. This will improve the quality of learning, reduce school dropout, and help achieve universal secondary education.
- Enhance implementation of the revised school curricula at all levels to match skills development in schools with the labour-market needs, including focus on important contemporary global market skill needs such as science and technology, innovation, entrepreneurship and strategic leadership training.
- Address factors responsible for the huge gender, income, rural-urban, and regional inequities in school participation and completion including social norms, cultural practices and economic factors.
- Improve the number of facilities, distribution and quality of vocational training to enhance entrepreneurship and productivity of out-of-school youth.
- Increase investments in Early Childhood Education (ECE) to adequately prepare children for formal education.

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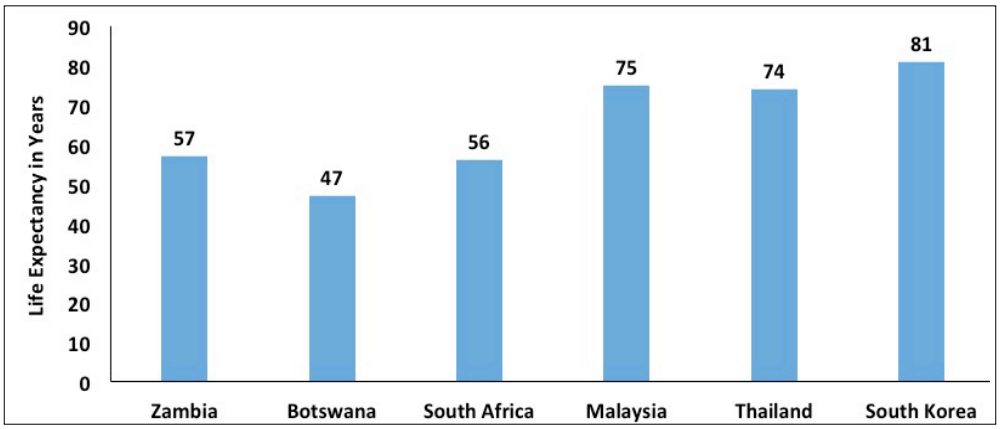
Accelerating Improvement in the Health of Zambia's Workers

Having a healthy workforce is critical to enhancing economic productivity and Zambia's chances of harnessing the demographic dividend. Zambia's Vision 2030 aspires to have equitable access to quality healthcare for all by 2030, and health policies put in place have generally seen an improvement in health indicators in recent years. However, the country still faces many challenges that need much more investments to improve the health of Zambia's workers.

Zambians' life expectancy at birth is much shorter than East Asians' but comparable to regional counterparts

Life expectancy at birth, an indicator of mortality conditions, and a good proxy of health conditions in a country, shows that Zambia compares favourably with some of the good economic performers in the region like South Africa and Botswana, but children born in the country expect a much shorter life than their counterparts in the East Asian Tigers *(Figure 4)*. A child born in Zambia in 2014 expects to live to 57 years of age, compared to 47 years in Botswana and 56 years in South Africa. The much better health conditions and consequent lower mortality rates in East Asia however mean that a child born in Malaysia, Thailand or South Korea is likely to live to a much more advanced age - 75, 74 and 81 years for the three countries respectively.

Figure 4: *Life expectancy at birth in Zambia and select African and East Asian Countries*



Source: World Bank WDI 2014

Zambians facing the double burden of communicable and non-communicable diseases

Zambia's labour force bears a high burden of disease mainly driven by HIV/AIDS and the related tuberculosis (TB), malaria, respiratory infections, malnutrition, maternal/reproductive morbidities, and the emerging life-style and non-communicable diseases such as hypertension, diabetes, cancer etc. HIV/AIDS and malaria are major contributors to both morbidity and mortality in the country. Sustained interventions have seen the number of new HIV infections halved between 1990 and 2011[10], but prevalence is still quite high: estimated at 13.3 % in 2013[9]. Malaria too persists as a leading cause of morbidity and mortality with an incidence rate of 385 per 1000 persons and more than a half a million cases reported in 2013[6].

Efforts to curb maternal deaths have resulted in a substantial decline in the maternal mortality ratio (MMR) from 729 deaths per 100,000 live births in 2002 to 398 deaths per 100,000 in 2013[9]. However, this number is still too high. Moreover, morbidity arising from complications during birth and pregnancy in Zambia drastically affects the quality of life and productivity of affected women.

Furthermore, the workforce is increasingly faced with the fast-growing burden of non-communicable diseases (NCDs). Among other NCDs, various forms of cancer, diabetes, heart diseases, stroke and mental illness are noted to be on the rise[11]. These ailments are associated with changing lifestyles including adoption of unhealthy nutrition habits and physical inactivity. However, the inadequate capacity of the health care system to manage NCDs and provide quality preventive and curative care for these diseases exacerbates the burden.

Persistent child malnutrition undermines future productivity

Malnutrition has been a longstanding impediment to the healthy development of Zambia's children and consequently, future labour-pool. Malnutrition affects cognitive development and physical work capacity, and exposes individuals to several adulthood chronic diseases[12]. Recent preliminary survey data indicate that the country's children are still seriously affected by malnutrition. The 2013/2014 Zambia Demographic and Health Survey shows that 40% of children under five years old were stunted, while 6% and 15% of children aged 5 years and below were wasted and underweight, respectively. There are also marked variations by residence for these indicators. For instance, children residing in rural areas were more likely to be stunted than those in urban areas (42% compared to 36%). Lusaka Province had the lowest prevalence of stunting at 36%, compared to Northern Province that had the highest prevalence at 49%[9].

Inadequate numbers and unequal distribution of health workers and health facilities undermining healthcare provision

The unsatisfactory health status of Zambia's workforce is worsened by insufficient and skewed distribution of health workers and health facilities. The R-SNDP notes that in 2012, there were 35,015 health workers against the WHO recommended number of 59,998. Evidence also shows that the distribution of the health workers is not unequal within and between regions. The urban Lusaka Province, for example, had a doctor/population ratio of 1: 6,247 compared to the rural Northern Province where the ratio was 1: 65,736[13]. In a similar trend, there are critical shortages and skewed distribution of health facilities.

Policy Actions to Improve the Health of Zambia's Workforce

The heavy burden of disease coupled with the insufficient number and skewed distribution of health workers and facilities seriously undermine current and future optimal productivity of Zambia's work-force. These challenges are well articulated in the Vision 2030 and other policy documents. It is critical that the solutions spelled out in these documents are followed through. Among the key policy actions needed to improve the health of Zambia's workforce are to:

- Increase the budgetary allocation to the health sector, ensuring that recurrent expenditure does not take preference over service provision, and ensuring efficient budgetary distribution between curative and preventive care, in consideration of the returns on investments accruing to types of care, especially in terms of equitable health outcomes.
- Provide intensified health education to sensitize Zambians on various health issues and increase demand for preventive health care, including those that limit the emerging life-style diseases, while enhancing the capacity of the health system to manage NCDs.
- Improve quality training to increase the production capacity, equitable deployment and retention of health workers, with specific focus on providing incentives to retain the workers in the public sector and underserved regions.
- Informed by evidence, build and adequately equip health facilities to increase equal geographic access, particularly for rural communities.
- Ensure universal access to life saving health commodities and medicines, including ARVs for populations living with HIV/AIDS, essential commodities, modern contraceptives and maternal and child health medicines, to mention a few.
- Step up efforts to eradicate malaria, considering its high prevalence in the country and its effects on productivity of the workforce.
- Considering the high HIV prevalence in the country, prioritise HIV prevention, treatment and care.
- Urgently address malnutrition from childhood through adolescence to adulthood to secure the productivity of Zambia's workforce.
- Encourage and reinforce public-private partnerships in health care delivery, within an enhanced and coordinated accountability mechanism that leverages synergies and eliminates inefficiencies.

Conclusion

To enhance the chances of earning a substantial demographic dividend, Zambia has to plan and strategically invest in human capital development. Key policy actions to improve education attainment and skills development, as well as, assure improved health status of its population will ensure that Zambia has a productive and competitive workforce that gives it the edge required for rapid and sustainable socioeconomic development.

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The Ministry of Finance led the Core Technical Team (CTT), which comprised representatives from Central Statistical Office (CSO), Ministry of Education, Ministry of Health, Ministry of Justice, University of Zambia, Zambia Institute for Policy Analysis and Research (ZIPAR), and United Nations Population Fund (UNFPA) country office and East and Southern Africa Regional Office. The CTT provided technical oversight of the study and validated and approved the study report before submission to the Ministry of Finance. The Secretary to the Treasury and the Permanent Secretary provided overall policy oversight to the project. The report was presented to and benefitted from feedback and advice from a multisectoral stakeholder workshop involving representatives from government, development partners, University of Zambia, and civil society organizations held in December 2014.

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