

Fostering Human Capital in Tanzania's Rapidly Growing Population

Sebastian Acevedo

SIP/2025/099

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Fostering Human Capital in Tanzania's Rapidly Growing Population: Tanzania
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ABSTRACT: Tanzania's human capital development needs are staggering and need to be addressed urgently to reap the benefits of the ongoing demographic transition. Almost half of Tanzanians are under 18 years of age, and the population is projected to double to more than 130 million by 2050. Currently, Tanzania lags its peers in terms of the coverage and quality of education and health services. This paper (i) takes stock of recent changes since the launch of the ECF program, including improvements in priority social spending; (ii) highlights the challenges to close current gaps in health and education and improve service delivery, and (iii) provides some policy recommendations.

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Fostering Human Capital in Tanzania's Rapidly Growing Population

Tanzania

Prepared by Sebastian Acevedo



UNITED REPUBLIC OF TANZANIA

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Approved By
**The African
Department**

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FOSTERING HUMAN CAPITAL IN TANZANIA'S RAPIDLY GROWING POPULATION¹

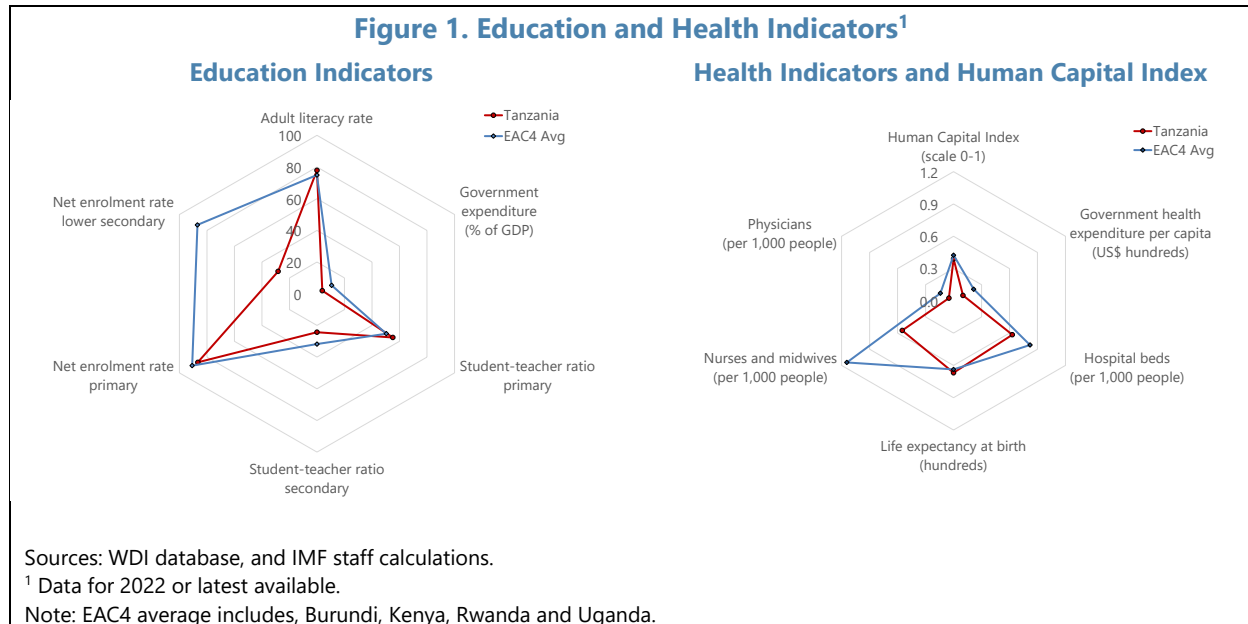
Tanzania's human capital development needs are staggering and need to be addressed urgently to reap the benefits of the ongoing demographic transition. Almost half of Tanzanians are under 18 years of age, and the population is projected to double to more than 130 million by 2050. Currently, Tanzania lags its peers in terms of the coverage and quality of education and health services; one-third of children under 5 years are stunted, placing the country among the 10 most affected in the world. In addition, schools are not adequately staffed, affecting education quality, with student-teacher ratios in pre-primary, primary, and lower-secondary schools at 163, 61, and 27 respectively. This paper (i) takes stock of recent changes since the launch of the ECF program, including improvements in priority social spending; (ii) highlights the challenges to close current gaps in health and education and improve service delivery, and (iii) provides some policy recommendations.

A. Background

- 1. Tanzania has seen important progress in access to education, but significant challenges remain.** In 2014, the government launched a policy guaranteeing free access to education up to lower-secondary (fee-free basic education program), which resulted in a large inflow of students into the education system. However, resource allocation did not keep pace with these policy goals: student-teacher ratios have soared, and significant infrastructure gaps and scarcity of trained teachers and textbooks have affected education quality and outcomes. An additional challenge is the attrition of students both within and between the three basic education cycles (preprimary, primary and secondary) (UNICEF, 2024).
- 2. On the health front, important improvements have also been made.** Maternal and under-five mortality rates have been substantially reduced, and the health sector workforce has continued growing, with new recruits deployed predominantly to rural areas. However, there remains significant shortages of health facilities and workers at all levels of health care, as well as of medical supplies, and laboratory equipment. For instance, addressing the gap in human resources of about 66 percent, particularly at the primary health care level, would require hiring some 200,000 health workers. Furthermore, high fertility rates continue to put pressure on the healthcare system, potentially hindering further progress in health outcomes.
- 3. Tanzania lags regional peers in both education and health spending and access to services.** The government of Tanzania spends less than its EAC peers (Figure 1) in health, resulting in less doctors, health workers, and hospital beds, although life expectancy is slightly higher. Similarly,

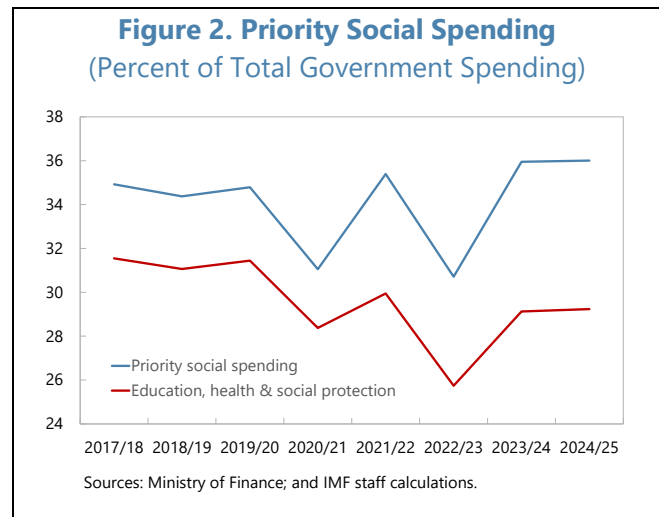
¹ Prepared by Sebastian Acevedo.

Tanzania has a lower education spending, lower enrollments in primary and lower secondary schools, and a high student-teacher ratio in primary schools.

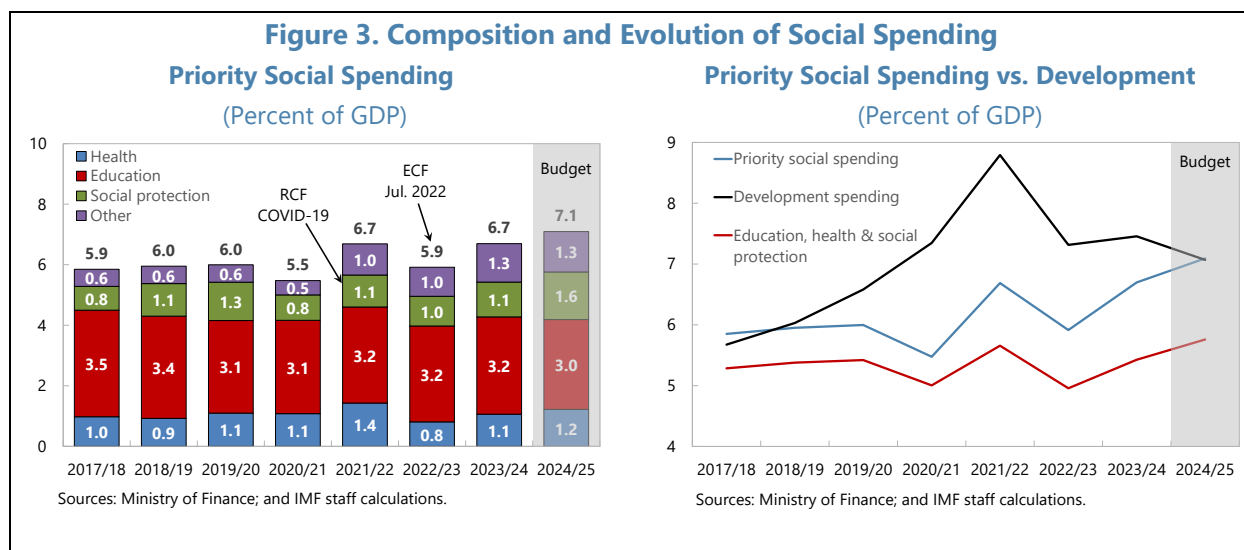


4. Under the current ECF program, a key objective has been to protect and increase spending on social sectors to support Tanzania's development objectives.

In FY20/21, Priority Social Spending (PSS)² had declined to 5.5 percent of GDP, as the government prioritized ramping up development spending (mainly infrastructure) at the onset of the pandemic (Figure 3). In FY21/22, with the support of the RCF facility, PSS rose temporarily to 6.7 percent of GDP to address the impact of COVID-19 and strengthen health and education services. When the ECF program was approved, in July 2022, a key objective was to enhance PSS over time by opening fiscal space through domestic revenue mobilization and rebalanced spending.



² The Tanzanian government's definition of PSS is comprised of spending on education, health, social protection, that is the traditional definition of social spending, plus spending on "Other PSS" which includes rural roads and electrification, water, and subsidized fertilizers for the agricultural sector.



5. Despite increases in PSS in recent years, its composition has not reflected relative priorities in education and health. PSS increased from 5.5 percent of GDP in FY20/21 to 6.7 percent of GDP in FY23/24. A further improvement to 7.1 percent of GDP is planned by end FY24/25, with the help of a supplementary budget that increased PSS spending by 0.2 percent of GDP. However, over the past three years the “Other” PSS category received most of the increase (0.8 pp of GDP), followed by social protection (0.3 pp), while no progress was made on health and only a marginal increase was observed in education spending (0.1 pp). In addition, while some rebalancing took place from development spending toward PSS, most of the increase in PSS was allocated to infrastructure spending on rural roads and electrification, with only modest improvement in what is traditionally defined as social spending on education, health, and social protection (Figure 2 and 3).

B. Authorities’ Strategy

6. The government is embarking on an ambitious reform of the education sector. The Ministry of Education is working towards increasing mandatory education from 6 to 10 years, which will include one year of pre-primary education, seven years of primary school, and two years of lower secondary school. The government is also revising its curriculum to align it with modern needs and global educational standards, focusing on science, technology, engineering, and mathematics (STEM), as well as life skills and vocational education through improved Technical and Vocational Education (TVET). The government is also working on improving teacher training and continuous professional development to raise the quality of education and ensure teachers can effectively implement the new curriculum.

7. In recent years, the government has also expanded access to health. The Universal Health Insurance (UHI) Act, passed in November 2023 established a framework for mandatory health insurance coverage and subsidized premiums for low-income citizens. The healthcare system transformation focuses on universal health coverage, quality reproductive and maternal health services, and human resource development, with community health workers playing a vital role (DPG

Tanzania, 2025). A new initiative also aims to train over a hundred thousand community health workers to serve in priority regions.

8. The forthcoming *Development Vision 2050* aims to transform Tanzania into a prosperous, inclusive, and self-reliant country by 2050. It focuses on economic growth, human development, and social justice, building on progress made under *Development Vision 2025*. The vision places human capital at its center and outlines ambitious goals for education and health to contribute to the nation's inclusive socio-economic growth and sustainable development. In education, the aim is to improve the quality, accessibility, and relevance of education, prioritizing investment in early childhood and lifelong learning to develop a highly skilled and competitive workforce. In health, the vision seeks to ensure universal healthcare coverage, reduce mortality rates, improve the quality of healthcare services, and ensure access to essential health services for all citizens, emphasizing the importance of prevention, maternal and child health, and addressing non-communicable diseases.

C. Challenges Ahead

9. Demographic pressures are particularly strong in Tanzania. The World Bank (WB, 2024) and UNICEF (UNICEF, 2023) have highlighted Tanzania's challenges in dealing with a young population that is expected to double by 2050. Over the past few decades, Tanzania has significantly reduced infant and child mortality rates, but fertility rates have remained high, contributing to a rapid population growth rate of 3 percent. A slow fertility transition is typical of African countries, but in Tanzania, women have an average of 4.8 children, almost double the 2.6 rate in lower middle-income countries, and higher than in Sub-Saharan Africa (4.3). Tanzania is currently a pre-dividend country given its high fertility levels and youthful age structure.³ To harness the demographic dividend, it is key to achieve a favorable age structure, which would benefit from scaling up affordable and high-quality family planning services, expanding girls' access to education, which is the main socioeconomic determinant of fertility, and promoting women's economic and social empowerment (Lee, 2023).

10. Securing a demographic dividend will require major efforts to address the above gaps in education and health. There is a risk that current demographic pressures may outpace the economy's capacity to provide essential services and opportunities, such as education, healthcare, and employment. To accrue the economic benefits of the demographic dividend, the labor force should be well educated, and the private sector should be able to provide sufficient jobs. Thus, the need to allocate more resources to ensure access to quality education and health services, as noted above, is all the more critical in light of the rapidly growing young population, to ensure a smooth

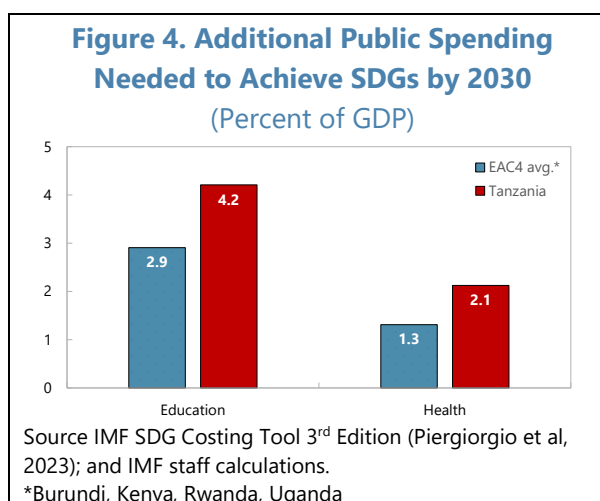
³ The World Bank defines the demographic dividend as "the economic benefit that can take place when a country undergoes a rapid decline in mortality, followed by a rapid decline in fertility, thus producing smaller, healthier families and a youth cohort that can be educated and empowered to enter the labor market with the appropriate skills" (WB, 2024).

transition into the labor market. Additionally, an enabling environment for a thriving private sector and job creation are also needed to ensure economic opportunities (see chapter I).

D. Investing in Human Capital

11. To reach the Sustainable Development Goals (SDGs) on education (SDG4) and health (SDG3) by 2030, Tanzania would need to increase spending on these sectors by an additional 6.3 percent of GDP over the next five years. The Fiscal Affairs Department of the IMF developed

tools to assess the additional spending needs to achieve the SDGs by 2030 (Piergiorgio et al, 2023). Each country is benchmarked against the best performing peers in their income group to estimate the spending needs to improve their SDG rating to that level. In the case of Tanzania, public spending in education would need to increase by 4.2 percent of GDP by 2030 to reach the top performers among Low Income Countries (LICs) in terms of their student-teacher ratio, enrollment levels, and other spending, and achieve an SGD4 index above 87.⁴ That is, in 2030 Tanzania's public education spending



would need to be about 7.5 percent of GDP. In the health sector, Tanzania would need to increase its spending by 2.1 percent of GDP over the next five years, to achieve a similar level of coverage and quality of service as the top performing countries among LICs, reaching an SDG3 index of at least 75.⁵ The additional effort required for Tanzania to reach the SDGs on health and education is more than 2 percent of GDP above the average for other EAC member countries at a similar level of development (see chart), highlighting both the increasing demand for public services of a rapidly growing population, and the existing gap in coverage and quality. Although the amount to reach the SDGs are daunting, and achieving them by 2030 could be out of reach, the costing exercise is useful to understand orders of magnitudes of needed spending for continued progress toward these goals.

12. The fertility level and pace of population growth are key determinants of these public investment needs. The World Bank estimates that under current high-fertility levels, the school age population in Tanzania would reach 65.5 million by 2061, while under a low fertility scenario (2.5

⁴ The benchmark for education assumes a target of universal enrollment for primary and secondary levels and 50 percent for preprimary and tertiary education, which is akin to 2 years each of preprimary and tertiary education and 12 years of combined primary and secondary education. It also assumes reducing the student-teacher ratio from 46 to 18 and keeping wage growth in the sector below nominal GDP growth. The benchmarking exercise also assumes that the private sector participation in Tanzania's education sector will increase 14 pp to 46 percent, alleviating some of the spending pressure on the government.

⁵ The benchmark for health assumes a 45-fold improvement in the number of doctors to 2.3 doctors per 1,000 people, and a 6-fold increase in other health workers to 6.4 per 1,000 population. It also assumes a reduction in other recurrent and capital spending on health to accommodate more spending on doctors and other health workers and keeping wage growth in the sector below nominal GDP growth. As in education, the exercise assumes an expansion of the private sector in health of 23 pp to 46 percent, alleviating some of the spending pressure on the government.

children per woman), it would only increase to 44.3 million (WB, 2024). Similarly, slower population growth could reduce by 1.2 percent of GDP the needed spending on public education. UNICEF (2023) estimates that under the current rapid population growth scenario, 285,250 children will enter the public education system each year, on average, over the next four decades. This would require hiring over 5,000 new teachers and building 4,500 classrooms per year, just to maintain the 2021 student-teacher ratio and accommodate the new students. Under a slower population scenario, the number of students would be reduced by almost a third, and so would the necessary resources (teachers, and classrooms) to maintain the status quo. Similarly, to be able to cover the population growth of about 1.9 million individuals per year, considerable investments in the health sector will be needed just to maintain the present level of services.

13. Improved spending efficiency would also help achieve better outcomes. Social spending is often not targeted to areas or populations where it is needed most. In education, there is a mismatch between the expansion of access and the outcomes in terms of student learning, due to teacher quality, school infrastructure and classroom resources. In health, more spending on preventive health services and community health workers could reduce the long-term burden on the healthcare system. Using digital tools for telemedicine and education, could help reduce service coverage in remote areas, particularly for medical specialties and specialized subjects such as science, math and English. The World Bank emphasizes the need for better public financial management in both sectors, including improving budget planning, monitoring, and execution to ensure spending is more effective and leads to better health and education outcomes (Box 1).

Box 1. World Bank Recommendations to Improve Spending Efficiency

The World Bank recommends better targeted policies to improve spending efficiency in the health and education sectors. On education, the WB recommends to i) steadily increase public spending over time, from its current level of about 3 percent of GDP to 4.2 percent, which is in line with peer countries as low spending levels are a key contributor to inefficiencies; ii) reallocate spending in favor of basic education, accompanied by improving management and oversight of service delivery to schools, and reducing subsidies for food and lodging in higher education and upper secondary education; and iii) strengthen access to both schools and teachers, by fostering smaller schools in rural areas and improving accessibility and teacher deployment to address severe imbalances across regions.

On health, the World Bank recommends improving primary health care service delivery, which is critical to increasing health system efficiency. Ensuring adequate financial resources for the sector is essential to improve healthcare infrastructure, guarantee availability of medical supplies, and hire and retain skilled healthcare professionals, especially for primary health care (PHC). Improving direct allocation of funds to PHC facilities will enhance infrastructure and medical supplies by using the *District Health Financing Facility* (DHFF) and *Facility Financial Accounting and Reporting System* (FAARS). Additionally, it is important to leverage UHI to expand health insurance coverage nationwide and ensure PHC coverage for all Tanzanians, with reduced out of pocket expenditures and equitable access. However, more resources are needed to support the enrolment and coverage of the low-income households. It is critical to invest in the training and continuous professional development of health workers, including community health workers (CHWs). Hiring more health workers to close the large gap, particularly at the PHC level, should also be a priority to ensure a PHC-driven service delivery, contain costs, and develop a more responsive health system. The government's plan to recruit and train 137,000 CHWs over the next 5 years is a step toward addressing the human resource gap, but it should be supported by adequate budget allocations and timely execution to ensure adequate distribution and expansion of coverage to targeted areas.

E. Policy Recommendations

14. Addressing Tanzania’s demographic challenges requires accelerated education and health improvements through more and better targeted investments. Achieving a demographic dividend, where a favorable age structure boosts economic growth, requires policies that better align the amount and quality of critical social services, especially on education and health, with population growth (WB, 2024; UNICEF, 2023). To achieve this it will be critical to: i) increase budgetary allocation for education and health in line with demographic needs and the goals under *Vision 2050*; ii) rebalance spending toward current spending to expand the education and health workforce, and adequately supply health and education facilities with required materials (textbooks, medicines, equipment, etc.); iii) enhance training for educators and health workers particularly in rural areas to address geographical imbalances; iv) make use of digital tools to enhance learning and healthcare service delivery; and, v) encourage private sector expansion into both sectors to alleviate pressures and support efficiency gains. It will also be important to improve accountability and transparency in public spending, to ensure that resources are used effectively.

15. A comprehensive analysis of the role of foreign development assistance would be useful, especially in the context of the new geopolitical environment. As Official Development Assistance (ODA) is currently declining rapidly, it will be important to fully understand the impact on all social sectors, particularly in health, where most of ODA has been targeted, both on and off budget. This analysis should aim to identify opportunities for more efficient use of available resources, motivate increased domestic resource mobilization, and pool donor financing.

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