BUILDING THE FOUNDATIONS

An investment case for **Early Childhood Development** in Mainland Tanzania

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Foreword

Our nation's progress is intrinsically linked to the well-being and potential of our youngest citizens. As we chart a course towards sustainable development and prosperity, we must recognize that investing in the early years is not merely a choice, but a strategic imperative.

Tanzania's National Five-Year Development Plan (FYDP) 2021–2026 has the objective of transforming the country's economic, demographic, and social structures. This chosen development trajectory should lead to strong, sustainable, resilient, inclusive development that generates decent jobs for all and facilitates improved social well-being. The FYDP 2021–2026 is aligned with the Sustainable Development Goals as well as the African Union's Agenda 2063 and focuses on human capital development as one of the drivers of transformation of Tanzania's economy.

Early childhood development sets the foundation for a lifetime of learning, health, and productivity. It is during these crucial years that a child's brain develops at an astonishing pace, shaping their cognitive, emotional, and social capacities. The benefits of prioritizing early childhood development are both immediate and far-reaching, impacting not only the individual child but our entire society.

Tanzania currently has a population about 62 million, and this number could increase to 130 million by 2050. Young children (0-8 years of old) make up more than a quarter of this, numbering 16.7 million. This represents a huge portion of the Tanzanian people in favour of whom public policies, strategies and financing need to be mobilized.

Investing in early childhood development yields remarkable returns on investment. For every dollar wisely spent in these early years, the evidence suggests a significant reduction in healthcare costs, improved educational outcomes, and enhanced workforce productivity in the future. By nurturing our children's potential from the very beginning, we are sowing the seeds of a stronger, more resilient nation.

The benefits of such an investment extend beyond economics. By ensuring that every child, regardless of their background, has access to quality early childhood development opportunities, we are fostering social cohesion and breaking down barriers to equitable progress. We are sending a resounding message that every child's potential matters, regardless of their circumstances.

Tanzania has made impressive strides in various sectors, and now, we stand at a pivotal juncture. As we design our fiscal strategies, we must acknowledge that investing in early childhood development is not just an expenditure, but a commitment to securing our future. It requires a collaborative effort from various sectors – health, education, social welfare, and more – to create an ecosystem where every child thrives.

In light of this, I call upon our government, our private sector partners, civil society organizations, and the international community to join hands in this endeavour. Let us allocate resources that reflect the priority we place on our children's future. Let us design innovative solutions that ensure even the most vulnerable among us have access to quality nutrition, healthcare, education, and a nurturing environment.

As we consider the investment case for early childhood development, let us remember that we are not only investing in our children's potential but also in a brighter, more prosperous Tanzania for generations to come. The decisions we make today will shape the trajectory of our nation's progress, and it is our responsibility to choose wisely.

The Ministry of Community Development, Gender, Women, and Special Groups of the United Republic of Tanzania presents the Early Childhood Development Investment Case in Tanzania with a great importance, which enables the identification of packages of interventions, as well as the costs and benefits of these, to allow Tanzania to make full use of the window of opportunity that this stage in the life-course of all human beings offers, and to reach milestones in realizing the country's vision for development.

This study was coordinated by the National ECD Secretariat with support from UNICEF, which includes representatives of various agencies, including the Ministry of Community Development, Gender, Women, and Special Groups, Ministry of Health, Ministry of Education, Science and Technology, Ministry of Agriculture, and President's Office of Regional and Local Governments.

The Ministry of Community Development, Gender, Women, and Special Groups owes a debt of gratitude to all those who contributed, directly or indirectly, to the realization and success of this investment case.

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Abbreviations

ACTs	Artemisinin compounds for treatment of malaria
AG	Auditor General
BCG	Bacille Calmette-Guerin vaccine
BCR	benefit–cost ratio
CBA	cost–benefit analysis
CBHP	community-based health programme
CEA	cost-effectiveness analysis
CHE	current health expenditure
CHF	Community Health Fund
CHW	community health worker
COI	cost of inaction
CRC	Convention on the Rights of the Child
CSO	civil society organization
CwD	children with disabilities
DAH	development assistance for health
DALY	disability-adjusted life year
DHS	Demographic and Health Survey
DPT	diphtheria, pertussis and tetanus vaccine
ECD	early childhood development
ECE	early childhood education
ESA	East and southern Africa
ETP	education and training policy
FGM	female genital mutilation
FY	financial year
FYDP	National Five-Year Development Plan
GDP	gross domestic product
GEE	government education expenditure
GER	gross enrolment ratio
GGE	general government expenditure
GGHE-D	general government health expenditure – domestic
GHE	government health expenditure

GoT	government of Tanzania
HBF	health basket fund
HCI	Human Capital Index
HDI	Human Development Index
HIC	high-income country
HSSP	Health Sector Strategic Plan
IBCR	incremental benefit–cost ratio
ICER	incremental cost-effectiveness ratio
IF	innovative financing
IHME	Institute for Health Metrics and Evaluation
ILO	International Labour Organization
IMF	International Monetary Fund
IRS	intermittent residual spray
ITN	insecticide-treated nets
LAY	learning-adjusted year
LGA	local government authority
LiST	Lives Saved Tool
LIC	low-income country
LMIC	lower-middle income country
MAM	moderate acute malnutrition
MCSP	Maternal and Child Survival Program
MDA	ministry, department, agency
MICS	multiple indicator cluster survey
MoEST	Ministry of Education, Science and Technology
MoFP	Ministry of Finance and Planning
MoHA	Ministry of Home Affairs
MoHSW	Ministry of Health and Social Welfare
MoW	Ministry of Water
MTEF	medium term expenditure framework
NCfECD	nurturing care for early childhood development
NER	net enrolment rate
NGO	non-governmental organization
NHE	nutrition health expenditure
NHIF	National Health Insurance Fund
NHP	National Health Policy
NM-ECDP	National Multisectoral Early Childhood Development Programme

NMNAP	National Multisectoral Nutrition Action Plan
NPA-VAWC	National Plan of Action to End Violence Against Women and Children
NPV	net present value
ODA	Overseas Development Assistance
OHT	One Health Tool
OOP	out-of-pocket
OOS	out-of-school
ORS	oral rehydration solution
PBB	programme- (or performance-) based budgeting
PER	public expenditure review
PF4C	public finance for children
PFM	public financial management
PHC	primary health care
PMO	Prime Minister's Office
PO-RALG	President's Office of Regional Affairs and Local Governance
PQTR	pupil to qualified teacher ratio
PSSN	productive social safety net
RUWASA	Rural Water Supply and Sanitation Agency
SAM	severe acute malnutrition
SDGs	Sustainable Development Goals
SDR	social discounting rate
TASAF	Tanzania Social Action Fund
TCPD	teacher continuous professional development
TDV	Tanzanian Development Vision
TFNC	Tanzania Food and Nutrition Centre
TFNP	Tanzania Good and Nutrition Policy
THE	total health expenditure
TZS	Tanzanian shillings
UHC	universal health coverage
USD	United States dollar
VAT	value-added tax
VaWC	violence against women and children
WASH	water, sanitation and hygiene
WHO	World Health Organization
YLD	years of life with disability
YLL	years of life lost

Executive summary

Context

Early childhood is a phase in the life course from conception to the age of eight. During this period, a young child will undergo rapid development, acquiring physical, cognitive, motor, psychoemotional and social skills. To reach their full potential, young children need a range of interconnected and diverse support. The *Nurturing Care Framework* is internationally recognized, conceptualizing the approach required for children to survive and thrive and transform health and human potential in young children. Investing in early childhood development (ECD) interventions within the *Nurturing Care Framework* has been found to have a range of positive impacts – from improving health and learning outcomes, to reducing inequality and to increasing lifelong earnings.[1]

> Investing in ECD interventions within the Nurturing Care Framework has been found to have diverse impacts – from improving health and learning outcomes, reducing inequality, and increasing lifelong earnings.

Tanzania is one of the fastest growing and youngest countries in the world. A massive 43 per cent of the population is under the age of 14, 37 per cent of which are under the age of five.[2] In the coming years, Tanzania is expected to experience a 'youth bulge' and has the opportunity to present a 'demographic dividend' provided sound policies and strategic investments in areas such as education, health, infrastructure and more broadly social development are in place. Capitalizing on this demographic dividend could be critical to stimulating long-term, inclusive economic growth, in line with *Tanzania's National Vision 2025.* Investing in ECD will be vital for the realization of this demographic dividend, maximizing the future productivity and contribution of today's young children.

Currently, however, outcomes in early childhood in Tanzania are suboptimal. While significant progress has been made across all domains of the *Nurturing Care Framework,* gaps still remain. Tanzania continues to rank among the 10 countries with the highest number of newborn deaths, while childhood stunting affects almost one-third of children.[3] The net enrolment rate at the pre-primary level is just 34 per cent and only one-quarter of households have access to safely managed sanitation services.[4]

Research overview

The purpose of this research is to advocate for better investments in ECD with the ultimate objective of improving outcomes for young children in Tanzania. **The methodology for the Investment Case was developed in line with best practice research in the global literature**. The (public) financing trend analysis was based on a study of budget and expenditure in the social sectors relevant to ECD.

1 Addo, O.Y., A.D. Stein, C.H.D. Fall et al., 'Parental Childhood Growth and Offspring Birthweight: Pooled analyses from four birth cohorts in low- and middle-income countries', *American Journal of Human Biology*, vol. 27, 2015, pp. 99–105; Walker, S.P., S.M. Chang, A. Wright, C. Osmond, and S.M. Grantham-McGregor. 'Early Childhood Stunting Is Associated with Lower Developmental Levels in the Subsequent Generation of Children', *Journal of Nutrition,* vol. 145, 2015, pp. 823–828.

2 United Nations Department of Economic and Social Affairs – Population Division. *2022 Revision of World Population Prospects 2022,* 2022, <https://population.un.org/wpp/>.

3 World Health Organization, 'Newborns: improving survival and well-being', *World Health Organization,* 2020, <https://www.who.int/news-room/fact-sheets/detail/newborns-reducing-mortality>, accessed 3 November 2022; Ministry of Health, National Bureau of Statistics, Office of the Government Statistician and ICF. *Tanzania Demographic and Health Survey and Malaria Indicators Survey 2022 Key Indicators Report,* 2023, Government of the United Republic of Tanzania, Dodoma, Tanzania.

4 Ministry of Education, Science and Technology, *Basic Education Statistics in Tanzania (BEST) Regional Final Data,* 2021, Government of the United Republic of Tanzania: Dodoma, Tanzania;. UN Water, 'United Republic of Tanzania', SDG 6 Data, 2023, <https://www.sdg6data.org/en/country-or-area/United%20Republic%20of%20Tanzania>. Data as of 2020. Estimates from WHO and UNICEF Joint Monitoring Programme.

Data on public (and, where possible, private) budgets and expenditure on these social sectors was analysed between 2017 and 2022, capturing the trends. Comparisons with international benchmarks and regional comparator countries are reported. Where adequate data were available, analysis was conducted to highlight what proportion of budgets and expenditure within these social sectors was being allocated to services predominantly benefiting young children. Further, an assessment of the current public financial management architecture was undertaken on the basis of a review of the secondary literature. It highlighted the potential bottlenecks to reliable and efficient public financing for ECD. The economic evaluation of ECD was then developed using cost–benefit and cost-of-inaction analysis. A package of 69 ECD-specific and-sensitive interventions was created. The baseline coverage rates of these interventions were sourced. A model was developed to estimate the benefits and costs associated with scaling up the coverage of these interventions from their baseline rate to a target coverage rate. Benefits and costs were analysed across different time horizons and were discounted at a rate of 10 per cent. The monetized benefits and costs were subsequently compared and are expressed in terms of (incremental) benefit–cost ratios and a cost-of-inaction. This modelling was accomplished using a number of tools, including One Health Tool by Avenir Health, ECE Accelerator of UNICEF and advanced Excel.

The purpose of this research is to advocate for better investments in ECD with the ultimate objective of improving outcomes for young children in Tanzania. Strategic dissemination of this Investment Case will be required to maximize its success. Evidence generated in this study is expected to benefit the stakeholders in the Government of Tanzania (GoT) (alongside its partners) to support their decision-making in the use of scarce resources. The arguments put forward within the report are on the foundational role that ECD will play in the socioeconomic development of the country. ECD should be positioned as pivotal to the realization of basic child rights, equality, national development goals, as well as economic transformation. Child-focused stakeholders can use this information to highlight the comparatively high returns on investment for ECD, in contrast to those in other sectors (such as infrastructure or trade) and highlight how investments in ECD can increase the efficiency of other expenditure (as nurturing children from the earliest ages obviates the need for more costly, remedial interventions later on). Stakeholders must consider the best opportunities for the dissemination of this report. They should consider linking dissemination events to public announcements (such as pre-election manifestos) or to significant events to increase attention. Finally, this study should be used to cultivate closer collaboration and coherence in the ECD space. Workshops, bilateral meetings and networks of stakeholders who believe in the underlying messages of this Investment Case should be organized. These dissemination events should engage a wide number of stakeholders, including government officials (managerial and political), development partners, faith-based organizations, civil society organizations, academia, the media and, importantly, those from the private sector.

> ECD is pivotal to the realisation of basic child rights, national development goals, as well as economic transformation.

Key findings

This study's analysis of public budgeting and expenditure in the social sectors relevant to ECD found that, while progress has been made, prioritizing more financial resources towards young children would be beneficial in the long run for Tanzania. Widely recognized expenditure benchmarks in the social sectors relevant to ECD are not being met. In the last five years, for example, the government has spent just 5 per cent, on average, of its total expenditure on health – this is far

below the Abuja Declaration target of 15 per cent.[5] Similarly, just US$0.5 per child under the age of five is spent on nutrition, a figure 17 times lower than the World Bank recommendation.[6] Further, sizeable gaps in the allocation of funds to the social sectors is observed, which contributes to inequities in access to services for young children. In the water, sanitation and hygiene (WASH) sector, budget allocations vary significantly by region, and there is a direct correlation between regions with lower budget allocations and WASH-related outcomes.[7] The study also found that ECD services should be further prioritized within sectoral budgets and expenditure, as limited funding is being allocated to services for young children in comparison with older groups. Notwithstanding the limited fiscal space, GoT could better prioritize ECD services within current budgets, which could in turn have powerful impacts on per capita spending on and, hopefully, outcomes in, human development.

Further, bottlenecks in the public financial management systems were detected, which hamper optimal spending on young children. In particular, this study found that there are structural challenges that inhibit effective and efficient ECD financing. Within education, for example, the allocation of public education resources to pre-primary level is not reported. Instead, financing for pre-primary education is subsumed into the budget line with primary education. Such systems of public financial management make it infeasible to accurately or precisely measure how much is being spent on ECD services. Therefore, it becomes impractical to suggest how more public funds can be channelled towards critical services for these groups or how to improve the efficiency, effectiveness or equity of this expenditure. The government and its partners could realize outcomes as indicated in this study if they could better manage the accountabilities for public allocation of funding to ECD by monitoring performance.

Positively, the results of the economic evaluation showed that scaling-up quality ECD services could generate significant social returns and support the realization of basic rights. Two scale-up scenarios were applied in the cost-benefit analysis: A fast scale-up (targets hit by 2030): Scenario A (fast) and a slow scale-up (targets hit by 2050): Scenario B (slow). Both scenarios cover the same time period: 2023–2050. Scaling up ECD interventions could lead to a drastic reduction in maternal and child morbidity and mortality. Compared to the baseline scenario, in the fastest scale-up, an additional 3.1 million child deaths could be averted by 2050 in Tanzania, and over 750 million additional disability-life years lost (DALYs) could be averted in children and mothers over the same time horizon. By 2030 alone, over an additional 400,000 child lives could be saved – each one being given the opportunity to survive, thrive and reach their full potential.

Table 1 » Health benefits accrued (2023–2050)

	Scale-up Scenario A (Fast)	Scale-up Scenario B (slow)
Additional child deaths averted	3,072,983	1,962,562
Stunting cases averted	62,664,194	38,189,299
Additional disability-adjusted life years (DALYs) lost averted	753,063,389	461,483,608

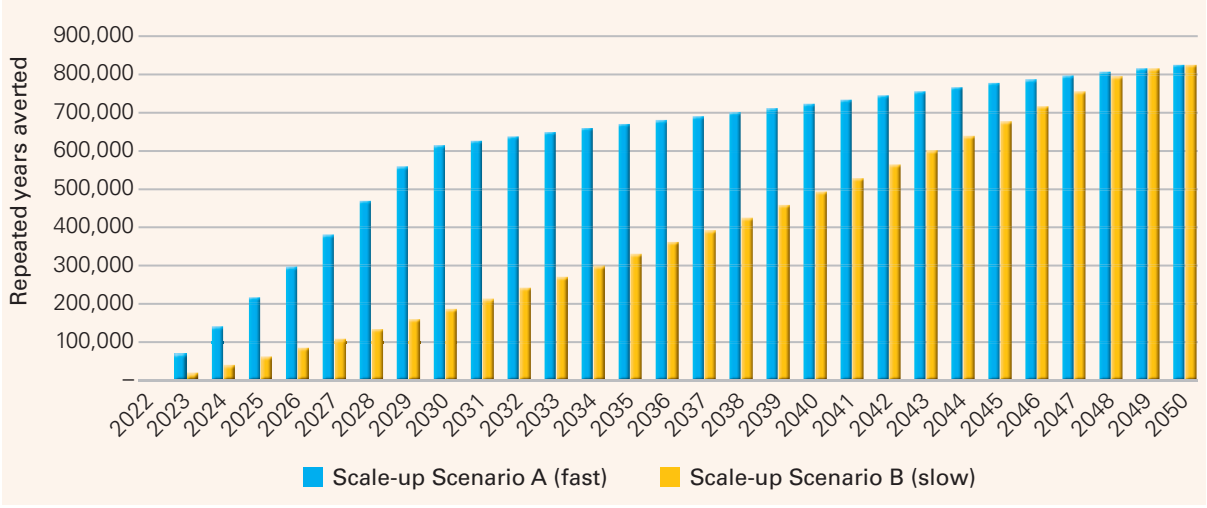
[5] The United Republic of Tanzania Ministry of Finance and Planning, 2016/17 to 2022/23, Data from United Republic of Tanzania Citizens' Budgets.

[6] UNICEF, *Nutrition Public Expenditure Review: Tanzania*, UNICEF: Dar es Salaam, Tanzania, 2018.

[7] Ibid.

Benefits that can be realized from improving access to early childhood education (ECE) services were equally impressive. Scaling-up ECE services in Tanzania would have a dramatic impact on the primary school repetition rate and number of years of primary school which children would repeat. Compared to the Baseline Scenario, nearly 17 million repeated years of primary school could be averted in Scale-up Scenario A (fast). For Scale-up Scenario B (slow), this is lower but still significant, at nearly 11 million (Figure 1).

Figure 1 » **Repeated years of primary school averted**[8]



Scaling up ECE could result in a notable increase in the expected years of schooling in Tanzania. While under the Baseline Scenario, the expected years of schooling would remain at 7.2 years per child, this could rise to 8.2 years by 2050. Under faster Scale-up Scenario (A), this additional one year of schooling would be achieved by 2030 and then maintained. Meanwhile, under the slower Scale-up Scenario (B), this increase would happen more gradually.

The provision of ECE services frees up time for caregivers (usually women). Studies show that 'freed up' time can be significant for women and caregivers, which could be spent in income-generating activities. Across the study time horizon, it is expected that an additional 6 billion hours of time would be saved for caregivers in Scale-up Scenario A (fast), compared to 3.7 billion hours in Scale-up Scenario B (slow). Analysis of time-use studies in Tanzania found that women undertake nearly four times more unpaid care work each day.[9] For this reason, women stand to benefit disproportionately from improved access to ECE services, including in improving their ability to participate in income-generating activities.

Incremental costs associated with scaling up this ECD package were modelled. While extensive, there are viable pathways for mobilizing sufficient financing. Until 2030, the additional costs would amount to 9.7 trillion TZS (Scale-up Scenario A [fast]) or 3.3 trillion TZS (Scale-up Scenario B [slow]). These costs would be spread across different social sectors. While they are significant, a comparison of these costs with the anticipated growth in the GoT's fiscal space shows that these costs could be met just by an increased priority for ECD services in public budgets. Other forms of financing (private, external) can also be mobilized to plug the anticipated funding gap.

[8] The impact of the intervention was counted in the year the intervention was implemented, rather than the prospective year it would be realized.

[9] Charmes, J., *Unpaid Care Work and the Labour Market: An analysis of time use data based on the latest World Compilation of Time-use Surveys*, ILO, Geneva, 2019.

There would be a significant opportunity cost if ECD interventions are not scaled up. The Cost-of-Inaction (COI) is calculated by determining the total additional economic benefit of the scale-up scenario (in comparison to the baseline), less the costs of the scale-up. Table 2 displays the COI for the different subsector interventions. Over the next 30 years, it could cost the Tanzanian economy nearly two quadrillion TZS if the suggested scale-up of ECD interventions are not implemented.

Table 2 » Economic benefits, costs, and the cost-of-inaction (in trillion TZS), discounted at a rate of 10 per cent

	Scale-up Scenario A (fast)	Scale-up Scenario B (slow)
Additional economic benefits	1,901	818
Additional costs	33	20
Cost-of-inaction	1,868	799

The projected benefits of scaling up interventions are expected to far outweigh costs. An incremental benefit–cost ratio (IBCR) was calculated for each of the packages over different time horizons. The BCR is a calculation of the sum of all the benefits (monetized) from an investment divided by the costs. For **every 1 TZS invested in this ECD package, 57 TZS would be returned in socioeconomic benefits** (Scale-up Scenario A [fast]). This aligns with findings in the global literature, which stress that investing in young children is highly cost-effective and is expected to catalyse progress towards the Sustainable Development Goals (SDGs), as well as aid in ensuring that basic child rights are realized.

Conclusion and recommendations

The evidence supporting investments in early childhood development is resounding and unequivocal. Interventions targeting children under the age of eight are among the most effective of any available avenue in human capital development, and its impacts are felt across the life course. As foundational years in a child's life, investments here will obviate the need for more costly expenditure in the long term and promote sustainable economic growth and development.

In the context of Tanzania, the impetus to invest is more urgent than ever. With a highly youthful population, the time for investment is now if the country wants to reap a demographic dividend from its highly youthful population structure. Investments in ECD offer the best hope for catalysing socioeconomic transformation and long-term development. Further, improving access to ECD services is also linked to basic human and child rights in the country, which, at present, are unfortunately not being realized.

Capitalizing on these opportunities will require intensive, coordinated efforts. A set of policy recommendations has been developed to guide efforts and maximize the potential for success.

Strengthen and streamline the institutional framework underpinning ECD. Progress has been made in passing supportive legislation for ECD; however, substantial gaps remain. Further, there are policies, plans and strategies that have not yet been fully implemented. Focus on ensuring adequate

resources (financial and other) by the GoT would aid in the implementation of these policies, while development partners and other stakeholders may be able to achieve their targets if they could work in tandem with the GoT and its relevant line ministries. Finally, strengthening and enhancing the National ECD Taskforce would prove to be highly beneficial.

Strengthen accountabilities for public allocation of funding to ECD and monitoring its performance.

To facilitate better financing for ECD, the GoT may resort to improved systems of budgeting and expenditure tracking. This includes:

- Amplifying visibility for ECE funding through elevating ECE spending to a specific budget line in the basic education budget;
- Undertaking an in-depth ECD expenditure monitoring exercise and then routinize data collection and monitoring for ECD spending and outcomes; and
- Strengthening programme-based or objective-based budgeting so that more granular and specific inputs and outputs by programme can be monitored.

Current public investments in early childhood need to be increased if development goals of the GoT are to be met. Achieving ambitious targets to scale-up ECD services will require existing progress to be sustained as well as an increase of investment from all stakeholders, especially the GoT. The study suggests an increase in the proportion of GoT budget being allocated to the social sectors (in line with international commitments) and the prioritization of expenditures on ECD services by line ministries. Evidence from this Investment Case can be used to advocate for increased financing envelopes for ECD.

Scaling up the coverage of package of high-quality multisectoral ECD interventions, as quickly as possible, is recommended. Financing for this scale-up necessitates exploration of all avenues for resource mobilization. This includes:

- Ensuring efficiency in expenditure
- Harnessing external financial resources for ECD
- Exploring innovative financing for ECD
- Prioritizing expenditure towards groups and interventions with the greatest potential for impact.

An operational plan involving all stakeholders to provide clear guidance towards progress in ECD is suggested. There are a variety of elements to creating a clear plan for ECD in Tanzania. It is, therefore, crucial to establish a clear, actionable road map to coordinate the multisectoral ECD strategy and interventions. This road map may include considerations on financing, staffing, infrastructure, data systems, service delivery and monitoring and evaluation.

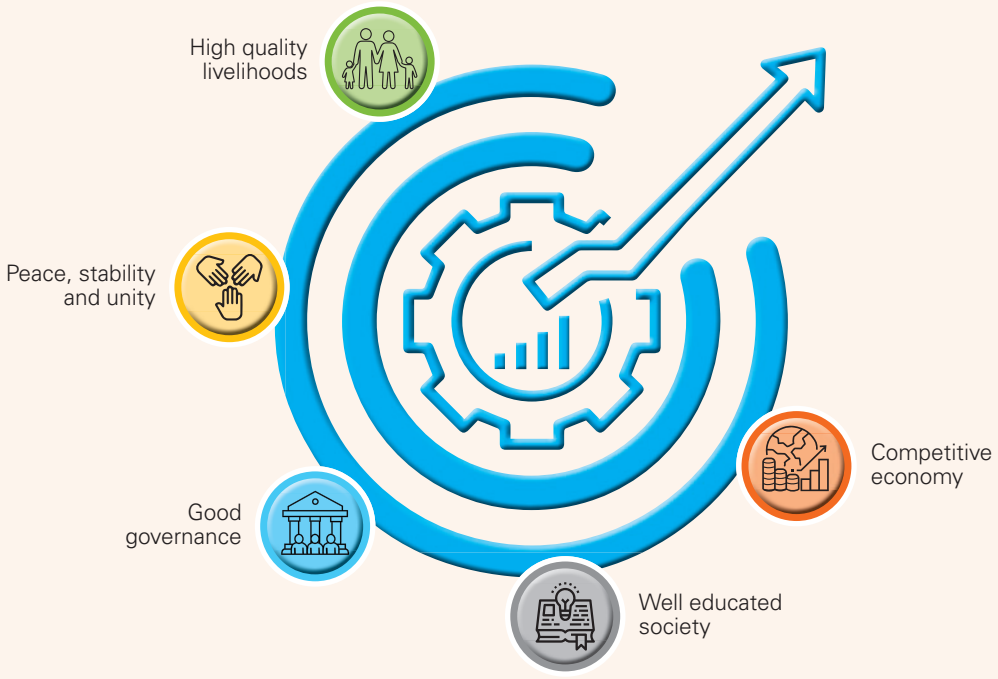
01

Introduction

1.1 Overview

As the period of Tanzania's *Vision 2025* is edging towards a close, the need to invest in early childhood as a catalytic force for its realization are now more important than ever. The *National Development Vision 2025 (Vision 2025)* has been a doctrine for development in Tanzania for over 20 years, guiding efforts towards five goals: (i) high-quality livelihoods; (ii) peace, stability and unity; (iii) good governance; (iv) a well-educated and learning society and (v) a competitive economy capable of producing sustainable growth and shared benefits.[10] Since its adoption at the turn of the twenty-first century, Five-Year Development Plans have steered efforts towards the realization of these ambitious goals. Much progress has been made; however, with only two years left, significant gaps remain. The greatest opportunity for Tanzania to drive momentum towards economic transformation and human development now rests on its youngest people, especially children in early childhood (which refers to children from conception until the age of eight). Investment in ECD interventions must be seen as synonymous with long-term development and the realization of the goals enshrined in *Vision 2025*. The rationale for this is threefold.

Goals of National Development Vision 2025 for development in Tanzania



Box 1 The demographic dividend

The demographic dividend refers to the accelerated economic growth initiated by a rapid decline in fertility and mortality, resulting in a shift in the age structure from one dominated by dependent children to one dominated by economically productive working adults.

[10] Planning Commission (1999). *The Tanzania Development Vision 2025*, (Government of the Republic of Tanzania: Dodoma, Tanzania).

Firstly, ECD is foundational to the realization of a sizeable demographic dividend. Tanzania is one of the fastest growing and youngest countries in the world.[11] A massive 43 per cent of the population is under the age of 14, 37 per cent of which are under the age of five.[12] Estimates suggest that by 2060, the population will have increased by 2.5 times.[13] However, high youth age dependency ratios (triggered by this density of young people) are expected to decline in the coming years. Fertility rates are projected to fall, and today's young children will grow up and join the labour force. If harnessed effectively, this could position Tanzania for realizing a significant demographic dividend originating from this youth bulge. Capitalizing on this demographic dividend could be critical to stimulating long-term, inclusive economic growth. In line with other sub-Saharan Africa countries also marching towards the prospect of this demographic dividend, the Government of Tanzania (GoT) has prioritized job creation for the youth; however, evidence suggests that these efforts will be undermined without preliminary and complementary investments in ECD.[14] Without foundational investments in a child's youngest years, they will not grow up to reach their full potential and their long-term productivity may be weakened. This limits a child's ability to take up skilled jobs upon entry to the workforce and inhibits their ability to drive a demographic dividend.

Without foundational investments in a child's youngest years, they will not grow up to reach their full potential and their long-term productivity may be weakened.

Secondly, investments in early childhood are among the most cost-effective of any human capital intervention. This period in the life course presents a unique window of opportunity, where the trajectory of a child's life can be determined. During early childhood, children undergo rapid development and acquire foundational physical, cognitive, motor, psychoemotional and social skills. In recent years, a vast body of empirical evidence has been developed to show the effectiveness of ECD interventions in promoting an individual's long-term health, well-being and productivity.[15] In a context of significant fiscal constraints, directing scarce resources towards areas of high impact for long-term development is important. ECD is, therefore, a good area for prioritization within public (and private) budgets, promising a sound and extensive return on investment.

Finally, ECD interventions are essential to human development and to ensure basic child rights. Tanzania's *Vision 2025* focuses not only on economic transformation but also human development, in particular stressing on high-quality livelihoods, peace, stability and unity, as well as a well-educated society. Tanzania's development efforts are motivated by the realization of basic child rights, having been a signatory to the Convention of the Rights of the Child (CRC) since 1991. Under the CRC, all

11 United Nations Department of Economic and Social Affairs – Population Division, *2022 Revision of World Population Prospects 2022*, 2022, <https://population.un.org/wpp/>.

12 World Bank staff estimates based on age/sex distributions of United Nations Population Division's *World Population Prospects: 2019 Revision.*

13 Ibid.

14 Cardona, C., J.C. Rusatira, Z. Cheng et al., 'Generating and Capitalizing on the Demographic Dividend Potential in Sub-Saharan Africa: A conceptual framework from a systematic literature review', *Gates Open Research,* vol. 4, 2020, p. 145.

15 Black, M.M., S.P. Walker, L.C.H. Fernald et al., 'Early Childhood Development Coming of Age: science Through the Life Course', *The Lancet: Advancing Early Childhood Development: From Science to Scale,* vol. 389, no. 10064, 2017, pp. 77–90; Muroga, A., H.T. Zaw, S. Mizunoya et al., *COVID-19: A Reason to Double Down on Investments in Pre-Primary Education,* UNICEF Innocenti Working Papers, 2020; Neuman, M.J., and A.E. Devercelli, 'What Matters Most for Early Childhood Development: A framework paper', *Systems Approach for Better Education Results (SABER) Working Paper Services,* No. 5, World Bank, Washington D.C., 2013.

children have the right to life, survival and development, to an adequate standard of living, to an education and to health and health services.[16] As ECD includes life-saving health interventions, learning opportunities, foundational cognitive development, protection from poverty and violence, it is vital if these basic rights are to be realized and upheld.

Under the CRC, all children have the right to:

- Life, survival, and development
- Adequate standard of living
- Education
- Health and health services

In spite of this compelling case for ECD and progress made over the past three decades, challenges remain. Child mortality rates remain at 43 per 1,000 live births, a rate significantly above that seen in neighbouring countries Rwanda and Kenya.[17] While the child mortality rate has decreased in recent years, Tanzania still falls short of its target set out in the National Plan for Reproductive, Maternal, Newborn, Child and Adolescent Health and Nutrition 2021/22–2025/26 (One Plan III) of 38 per 1,000 live births by 2025. Roughly, one-third of children under the age of five are stunted.[18] Many children are exposed to multidimensional poverty and deprivation, particularly with regard to sanitation, housing, protection and water.[19] Together, this means that many young children do not survive to adulthood, and even more do not get the opportunity to reach their full potential. Tanzania ranks 163rd out of 189 countries surveyed for the 2020 Human Capital Index (HCI)[20] and according to the HCI, a child born in Tanzania will be just 39 per cent as productive as they could have been with complete education and full health.[21]

Child mortality rate in Tanzania

43 per **1,000** live births

HCI ranking of Tanzania

163 out of **189** countries

Recognizing the importance of young children, the GoT has made significant strides in policy[22] and programming. Tanzania has recently launched a National Multisectoral Early Childhood Development Programme (NM-ECDP) 2021/22–2025/26. The NM-ECDP employs a multisectoral approach aimed at holistically addressing the needs of children aged 0–8 years. The NM-ECDP complements policies and laws that pertain to ECD. It is also strategically aligned with the most recent National Five-Year Development Plan (FYDP III) 2021/22–2025/26. Similarly, with the technical and financial support of the Boost Primary Student Learning (BOOST) programme of the World Bank, there is an ongoing effort of the Ministry of Education, Science and Technology (MoEST) to develop a Quality Early Learning Package, which includes a pillar of Supportive Learning Environment with a component of Integrated Early Childhood Development, covering concerns around health, nutrition, safety and security, as well as early learning.

16 Convention on the Rights of the Child, Treaty No. 27531, 1989, United Nations Treaty Series 1577.

17 Ministry of Health, National Bureau of Statistics, Office of the Government Statistician and ICF, *Tanzania Demographic and Health Survey and Malaria Indicators Survey 2022 Key Indicators Report,* 2023. Estimates developed by the UN Inter-agency Group for Child Mortality Estimation, UNICEF, WHO, World Bank, UN DESA Population Division, <www.childmortality.org>.

18 World Bank, 'Prevalence of Stunting, Height for Age (% of Children Under 5) – Tanzania', *World Bank Data,* 2022, <https://data.worldbank.org/indicator/SH.STA.STNT.ZS?locations=TZ>. UNICEF, WHO and World Bank, Joint child malnutrition estimates (JME). Aggregation is based on UNICEF, WHO, and the World Bank harmonized dataset (adjusted, comparable data) and methodology.

19 Ibid.

20 World Bank, 'Tanzania: October 2022', *Human Capital Country Brief,* 2022, <https://www.worldbank.org/en/publication/human-capital>.

21 Ibid.

22 Tanzania Generation Equality Programme 2021/22–2025/26, which prioritizes ECD Tanzania Country Office, Tanzania Generation Equality Programme NEW 2023 (1) (1) (1).pdf - All Documents (sharepoint.com)

1.2 The study

This Investment Case contributes to this existing momentum around ECD and aims to promote improved spending and service provision for young children in Tanzania. It is the result of a detailed study into the potential costs and benefits of investments into ECD services in the country, in line with the NM-ECDP. The objective of this report is to present a strong, empirical case for investment using findings from a cost–benefit and cost-of-inaction analysis of a multisectoral package of ECD interventions. It also includes a budget analysis, which investigates the current trends in spending for ECD services, which are used to compare with the cost–benefit and cost-of-inaction analyses. This study goes beyond the mapping of ECD investment and cost–benefit analysis, with additional effort to unpack the public financial management (PFM) architecture to understand its compatibility with effective ECD investment.

Ultimately, this Investment Case serves to guide strategies and approaches and implementation of strategies to deliver better ECD services. These include the GoT, development partners and non-governmental organization counterparts, with the overarching goal of supporting and strengthening ECD in Tanzania. The specific objectives of this Investment Case are as follows:

- Model the short-, medium- and long-term costs and socioeconomic gains associated with scaling up a multisectoral package of ECD interventions;
- Demonstrate the high rate of return on investment resulting from delivery of high-impact interventions for young children;
- Review the current level of investment in ECD, across relevant sectors and within relevant line ministry budgets, as well as assess the existing PFM architecture whether it acts as a safeguard for all ECD-related funding;
- Develop practical, actionable and implementable policy recommendations to expand ECD services;
- Influence decisions and catalyse transformative change within the ECD sector.

1.3 Structure of the report

The rest of this Investment Case is structured as follows:

Section 2 will explore the value of ECD and trends in investment within the sector, given seminal findings in the global and regional literature. It then examines the current status of ECD in Tanzania with a focus on outcomes.

Section 3 builds on analysis by considering the current status of investments. In addition to examining the quantity and quality of investments in social sectors which pertain to ECD, it focuses on unpacking the PFM architecture to understand its compatibility with an effective ECD investment.

Section 4 lays out the case for investment in ECD, briefly exploring the methodology for the cost–benefit and cost-of-inaction analyses before reporting on the findings related to benefits, costs, cost-effectiveness, cost-of-inaction and benefit–cost ratio.

Section 5 synthesizes the evidence by presenting the high-level conclusions of this Investment Case, as well as suggesting policy recommendations which have emerged as a result of these findings.

Annex I provides a high-level institutional framework of the ECD sector in Tanzania, exploring the legislation guiding activities in each subsector relevant to ECD and how these fit together at an institutional level.

Annex II reports on a high-level fiscal space analysis carried out to supplement our understanding of the feasibility of these investments.

Annex III explores the methodology for the cost–benefit and cost-of-inaction analyses.

Annex IV presents the results of the cost–benefit and cost-of-inaction analyses related to an alternative social protection intervention – a Universal Child Benefit.

Annex V provides detailed tables of the costs associated with the scale-ups modelled in the cost–benefit and cost-of-inaction analyses.

Annex VI presents the results of the cost-effectiveness analysis, showing the cost per child death or disability-adjusted life years (DALY) lost averted.

02

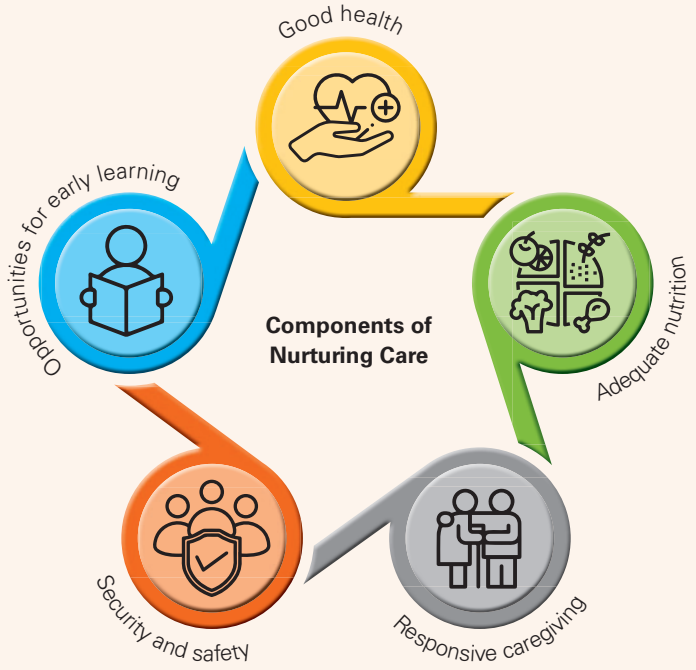
Early childhood development

2.1 What is ECD?

Early childhood refers to the most important years for a child's survival, growth and development, from conception through to the age of eight. This is the most rapid and sensitive period of brain development when the brain is being wired for children to learn new things and to explore their environment. It sets out the pathways for future health, growth, learning and behaviours. Indeed, this is a critical period in a child's life during which there is ordered emergence of interdependent skills of sensory-motor, cognitive-language and social-emotional functioning. The development of these skills depends on, and is interlinked with, the child's good nutrition, health and the essential role of parent/caregiver interactions. The environment in which a child grows up literally sculpts the brain. For every second of early childhood, millions of neural connections are made. By the age of two, the brain is 80 per cent of its adult size, and by the age of five, brain development reaches 90 per cent.[23]

To reach their full potential, young children need a range of interconnected and diverse support. This is critical because there are a number of risks that hinder children's healthy growth, especially for their development. ECD is both an outcome defining a child's status (i.e., being physically healthy, mentally alert, emotionally sound, socially competent and ready to learn) and also a process (i.e., comprehensive and intertwined interventions achieving the outcome). The *Nurturing Care Framework*

Figure 2 » **The Nurturing Care Framework**



[23] First Things First, 'Why Early Childhood Matters: Brain development', 2022, <https://www.firstthingsfirst.org/early-childhood-matters/brain-development/>, accessed 3 February 2022.

is internationally recognized, conceptualizing the approach to helping children to survive and thrive and transform health and human potential in young children (Figure 2).[24] It is posited that to maximize ECD for young children, there is an urgent need to increase multisectoral coverage of quality programming that incorporates interventions across five components: good health, adequate nutrition, safety and security, early learning opportunities and responsive caregiving.

2.2 Why invest in ECD?

Early childhood provides an important window of opportunity to define the course of a child's development and form a foundation for their future. Interventions in early childhood would play a critical role in children's development and increase the likelihood of their long-term well-being, productivity, and prosperity (not only at an individual but also at the societal level). Long-term follow-up studies of children from birth show that growth failure in the first two years of life has harmful effects on adult health and human capital, including chronic disease, lower educational attainment and reduced lifetime earnings and productivity.[25]

> Interventions in early childhood can support development and increase the likelihood of long-term wellbeing, productivity, and prosperity (both at an individual and societal level).

Deficits and disadvantages can persist into the subsequent generation, producing a vicious intergenerational cycle of lost human capital and perpetuation of poverty.[26] Evidence shows us that we can predict an individual's likelihood of success by the age of eight. Of children entering the first grade of elementary school with trouble reading words or understanding their meaning, 88 per cent will still have the trouble persisting in the fourth grade.[27] Exposure to toxic stress (exposure to strong, frequent and/or prolonged adversity)[28] and multidimensional poverty have been found to damage brain architecture, lower future academic achievement and contribute to poorer health outcomes across the life course (including an increased risk of degenerative diseases, such as diabetes), thus entrenching a cycle of multigenerational poverty, disadvantage and inequity.[29] Strikingly, meaningful differences in outcomes between advantaged and disadvantaged children are apparent as early as nine months.[30]

Investing in these periods of early childhood, therefore, makes sense. It is the moment in the life course where opportunities for human development are highest. A vast body of evidence has emerged

24 Nurturing Care, *Nurturing Care for Early Childhood Development, 2021*, <https://nurturing-care.org/>, accessed 19 August 2021.

25 Addo, O.Y., A.D. Stein, C.H.D. Fall et al., 'Parental Childhood Growth and Offspring Birthweight: Pooled analyses from four birth cohorts in low- and middle-income countries', *American Journal of Human Biology*, vol. 27, 2015, pp. 99–105; Walker, S.P., S.M. Chang, A. Wright et al., 'Early Childhood Stunting is Associated with Lower Developmental Levels in the Subsequent Generation of Children', *Journal of Nutrition*, vol. 145, 2015, pp. 823–828.

26 Ibid.

27 GEEARS (unknown), *Why Does Investment in Early Childhood Education Pay Off?, Georgia Early Education Alliance for Ready Students*, <http://geears.org/wp-content/uploads/2011/05/GEEARSFactSheet.pdf>, accessed 3 February 2022.

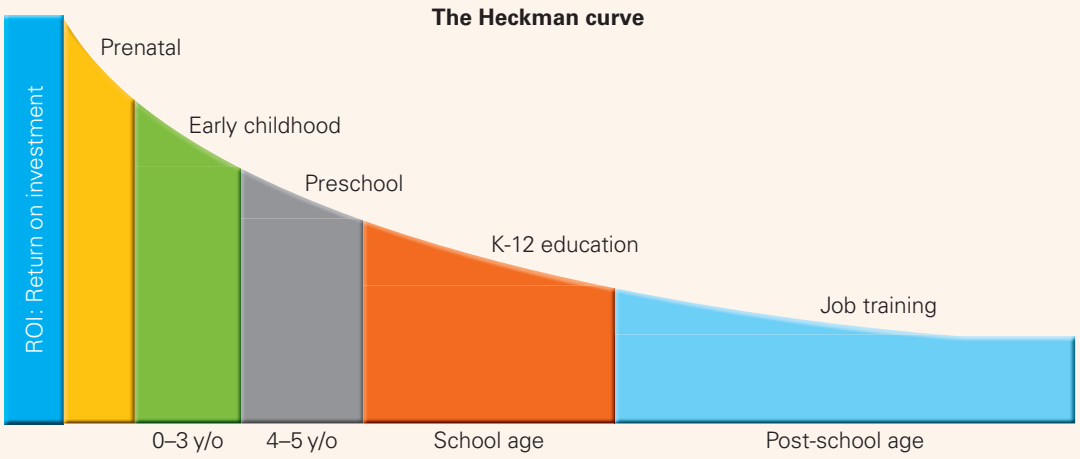
28 Toxic stress refers to a child being exposed to strong, frequent and/or prolonged adversity. This includes physical or emotional abuse, neglect, caregiver illness, exposure to violence and/or the accumulated burdens of family economic hardship.

29 Morgan, B., 'Biological Embedding of Early Childhood Adversity: Toxic stress and the vicious cycle of poverty in South Africa', *Ilifa Labantwana: Research and Policy Brief Series*, 2013, <https://ilifalabantwana.co.za/wp-content/uploads/2017/06/Toxic-stress-and-the-vicious-cycle-of-poverty-in-South-Africa.pdf>.

30 Ibid.

in recent years arguing that investments in early childhood have the greatest return compared to any human capital intervention (*see Figure 3*). Longitudinal studies from a wide range of case studies show that children who participate in quality early childhood programmes experience multiple benefits, including improved test scores, graduation rates, decreased crime and delinquency rates and improved long-term income.[31] When these benefits are monetized, the returns on investments can be enormous – with a much-cited estimate suggesting investments in nurturing care interventions can return up to 17 times the initial amount invested.[32] Further, high-quality ECD programmes have been found to reduce multidimensional poverty and inequality. A seminal study carried out in Jamaica found that children who were part of an ECD study programme (which worked with stunted children between the ages of 9 and 24 months in a two-year randomized controlled trial) earned 25 per cent more as adults than the disadvantaged children in the control group (who received no intervention) – and they earned as much as their non-stunted peers.[33]

Figure 3 » **The Heckman Curve – return on Investment: Economic impact of investing in early childhood[34]**



Importantly, investment in ECD can also drive progress towards the accomplishment of the SDGs and realization of basic child rights. Within the framework of the SDGs, achieving strong ECD is seen as a prerequisite, particularly in the fight against poverty, inequality, social exclusion and the promotion of peace and security. As the early years are the building blocks for later life, they determine later academic success, economic productivity, responsible citizenship, lifelong health, strong communities and the success

> The early years are the building blocks for later life, dictating later academic success, economic productivity, responsible citizenship, lifelong health, strong communities, and the success of the next generation of parents.

[31] Engle, P., et al., 'Strategies for Reducing Inequalities and Improving Developmental Outcomes for Young Children in Low-income and Middle-income Countries', The Lancet, vol. 378, no. 9799, 2011, pp. 1339–1353.

[32] Ibid.

[33] Gertler, P., J. Heckman, R. Pinto et al., 'Labour Market Returns to an Early Stimulation Intervention in Jamaica', *Science*, vol. 344, no. 6187, 2014, pp. 998–1001.

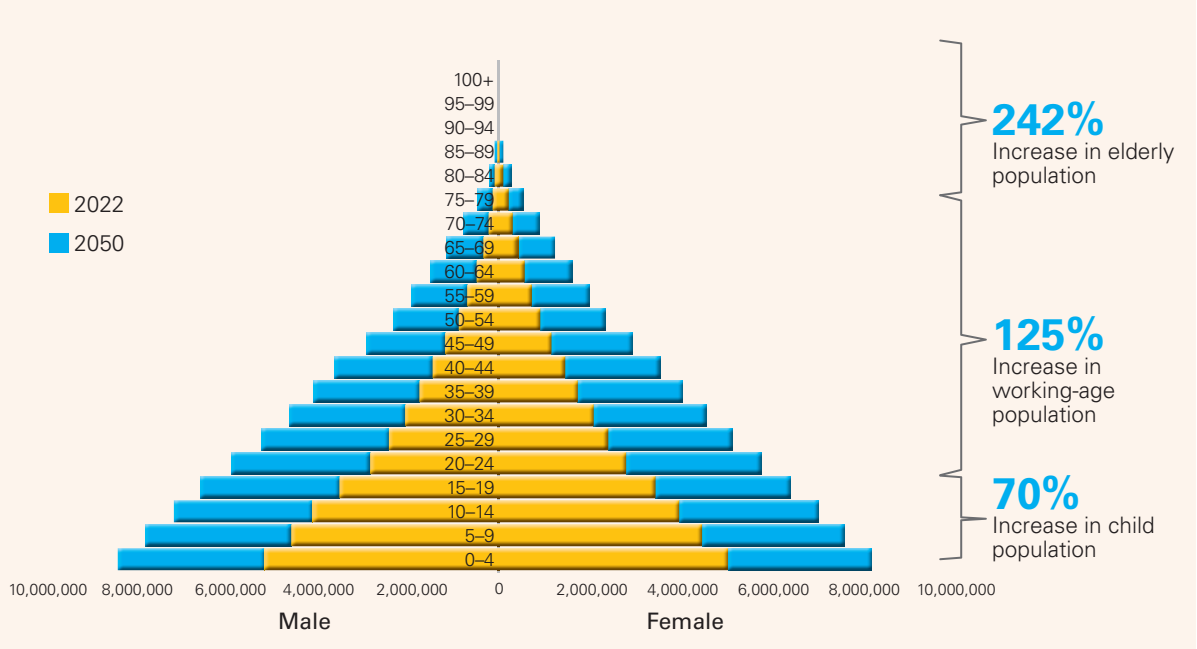
[34] Heckman Equation, *The Heckman Curve*, 2021, <https://heckmanequation.org/resource/the-heckman-curve/>, accessed 19 August 2021.

of the next generation of parents.[35] An investment in early childhood thus lays a strong foundation for development, increases the effectiveness of the education and health systems, improves the chances of economic productivity and growth and contributes to more equitable societies.

2.3 Why is ECD important in Tanzania?

Tanzania is one of the youngest countries in the world, with a steadily growing child population.[36] The population of the mainland of Tanzania has increased about five times since 1967, reaching 62 million in 2022.[37] The average annual growth rate remains high, at 3.2 per cent since 2012.[38] Children (defined here as those under the age of 18) represent almost half of the population, and the size of this child population is forecasted to double by 2050.[39] When further disaggregated by age cohorts, young children constitute a significant proportion of this child population – those aged 0–4 years and 5–9 years represent 17 per cent and 14 per cent of the total Tanzanian population, respectively.[40] This highly youthful demographic structure is largely the result of a consistently high fertility rate (at 4.8 births per woman).[41] Concurrently, mortality rates in the country have been rapidly declining, resulting in a rise in life expectancy (and infant and child mortality), which is expected to continue rising. This means that while all age groups are expected to grow, the working age population (18–64 years) is rising at a faster rate. Therefore, in coming years, the child and youth population (age 18–24) years will constitute a smaller share of the total population, thereby decreasing the overall dependency ratio.[42]

Figure 4 » **Population pyramid, Tanzania, 2022 and 2050 (with percentage change between 2022 and 2050 marked for child, working-age and elderly population)[43]**



These statistics present both a challenge and an opportunity for the country. As the current child population grows older and enters the workforce, they will become instrumental in shaping Tanzania's development trajectory. It is estimated that the working-age population in Tanzania will increase by 80 per cent between 2012 and 2030 owing to its growing child population.[44] Therefore,

increased investment and in sectors relevant to ECD and display of political will for those investments, as well as creating a favourable job environment, are of utmost importance to Tanzania's future. Failure to adequately invest in ECD and thereby capitalize on the opportunities presented by its young population could mean that Tanzania's economic growth could falter in the coming decades, resulting in a poverty trap.[45]

Promisingly, since 2000, Tanzania has witnessed an annual gross domestic product (GDP) growth rate of about 7 per cent, making it one of the fastest growing African economies.[46] GDP per capita has also steadily increased – it is higher compared to neighbouring countries Uganda and Rwanda, but remains below the sub-Saharan African average (Figure 5). In July 2020, the country reached a significant economic milestone when it achieved lower-middle income status. Tanzania was able to reach this milestone five years earlier than the timeline set out in *Vision 2025*.[47] However, there is much more to be done to achieve the goals set out in *Vision 2025*. Nearly half of Tanzanians live below the international extreme poverty line of $1.90 per day.[48] Persistent poverty is a particular issue in rural regions – growth in labour-intensive sectors like agriculture, which employs 77 per cent of the working-age population, has been slow.[49] In the past decade, the agricultural sector has grown by only 4 per cent and renumeration remains poor, meaning that a large proportion of the population has not benefited from the country's economic growth.[50]

Ultimately, it is recommended that the GoT prioritize investing in ECD as part of its developmental priorities. Tanzania's demographic structure, coupled with strong empirical evidence from the global literature on the cost-effectiveness of ECD interventions, make a compelling case for

35 Anindita Nugroho, M. Delgado, B. Baghdasaryan, S. Vindrola, D. Lata, and G. Mehmood Syed, G., *Tackling Gender Inequality from the Early Years: Strategies for building a gender-transformative pre-primary education system.* UNICEF Innocenti – Global Office of Research and Foresight, 2022.

36 United Nations Department of Economic and Social Affairs – Population Division, 2022 *Revision of World Population Prospects 2022,* 2022, <https://population.un.org/wpp/>.

37 Ministry of Finance and Planning, National Statistics Office – Tanzania and Office of President – Finance and Planning, Office of the Chief Statistician of the Government of Zanzibar. Population and Housing Census, 2022: *Preliminary Results,* Government of Tanzania: Dodoma, Tanzania, 2022.

38 National Bureau of Statistics, *Tanzania in Figures,* Government of Tanzania: Dodoma, Tanzania, 2021, <https://www.nbs.go.tz/index.php/en/tanzania-in-figures/784-tanzania-in-figures-2021>.

39 UNICEF, The Journey of a Child in the United Republic of Tanzania, 2021.

40 World Population Review, *Tanzania Population 2022 (Live),* 2022, <https://www.nbs.go.tz/nbs/takwimu/references/2020_Tanzania_in_Figure_English.pdf>, accessed 1 November 2022; National Bureau of Statistics, Population Projection Report 2013–2035, 2022, <https://www.nbs.go.tz/index.php/en/census-surveys/population-and-housing-census/180-population-projections-for-the-period-of-2013-to-2035-at-national-level>, accessed 30 June 2022.

41 World Population Review, *Tanzania Population 2022 (Live),* 2022, <https://www.nbs.go.tz/nbs/takwimu/references/2020_Tanzania_in_Figure_English.pdf>, accessed 1 November 2022.

42 UNICEF (draft), *Socio-economic Implications of the Demographic Transition in Mainland Tanzania: From childhood to adulthood,* UNICEF: Dar es Salaam, Tanzania.

43 Data from Population Pyramids of the World, 'Tanzania', 2022, <www.populationpyramids.net>.

44 Open data for Africa, *Tanzania – Population by age groups, 2022,* <https://dataportal.opendataforafrica.org/rtufdnc/social>, accessed 30 June 2022.

45 UNICEF, *The Journey of a Child in the United Republic of Tanzania,* UNICEF, Dar es Salaam, Tanzania, 2021.

46 USAID, Tanzania: Economic growth and trade, 2022, <https://www.usaid.gov/tanzania/economic-growth-and-trade>, accessed 2 November 2022.

47 World Bank Blogs, *What Does Tanzania's Move to Lower-middle Income Status Mean?*, 2022, <https://blogs.worldbank.org/africacan/what-does-tanzanias-move-lower-middle-income-status-mean#:~:text=Yes%20and%20no.,for%20lower%2Dmiddle%20income%20status>, accessed 1 November 2022.

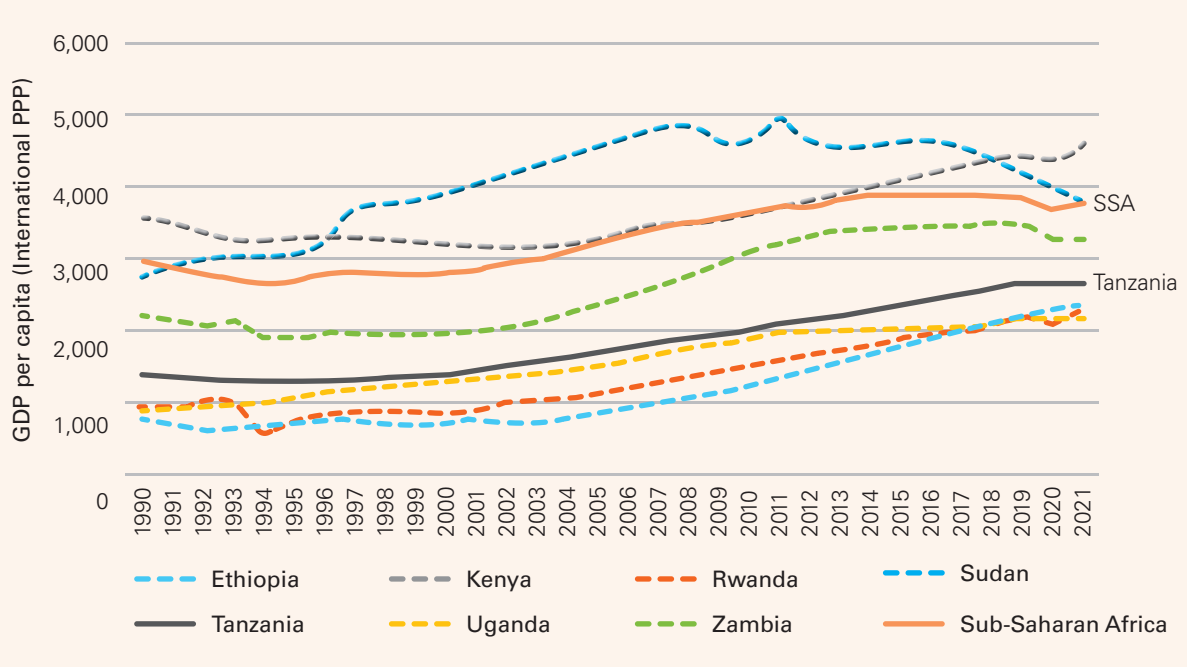
48 USAID, *Tanzania: Economic growth and trade,* 2022, <https://www.usaid.gov/tanzania/economic-growth-and-trade>, accessed 2 November 2022.

49 Ibid.

50 Ibid.

putting young children at the centre of the country's development plans. Young children present the greatest opportunity for Tanzania to capitalize on its youth bulge, reaping a generous demographic dividend and translating this into growth and structural transformation of the economy. Further, these is in important moral argument for prioritizing ECD. Interventions aimed at young children critically help in the realization of basic child rights equality, and achievement of the SDGs.

Figure 5 » **GDP per capita (international purchasing power parity (PPP)) 1990–2021 in selected eastern and southern African countries, with Tanzania and the sub-Saharan African average highlighted**[51]



2.4 What is the status of ECD in Tanzania?

Tanzania has made notable progress in human development in recent years. This is evidenced by the gains made across various sectors relevant to ECD. Enrolment in basic education has increased owing to various reforms in the education sector, and substantial improvements have been observed in children's survival outcomes. However, not all children have been able to reap the benefits of these successes. Poverty and inequality continue to deny many children the opportunity to survive and thrive. While child poverty rates have declined in the last decade, almost half of all children in the country experience multidimensional poverty and/or monetary poverty (Figure 6).[52]

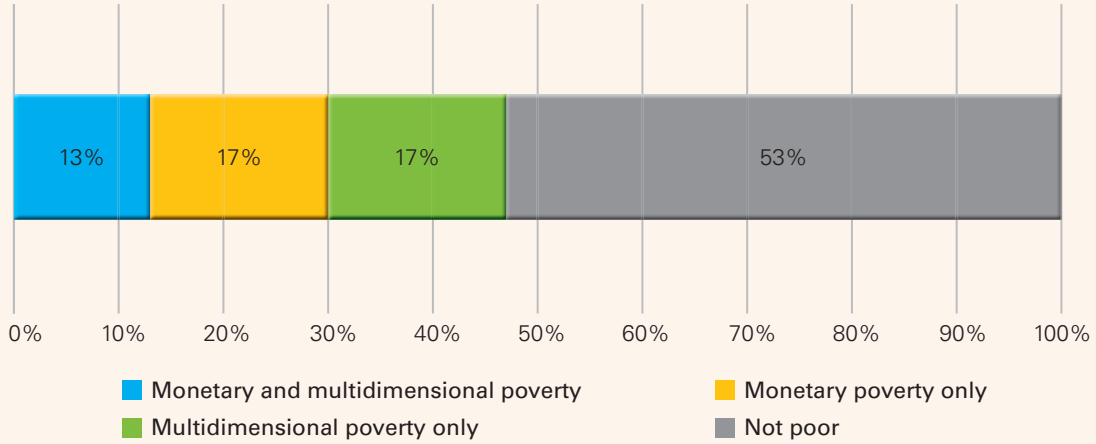
> Though child poverty rates have declined in the last decade, still half of all children in the country experience multidimensional/monetary poverty.

[51] Data from World Bank Data, *International Comparison Programme*, World Bank | World Development Indicators database, World Bank | Eurostat-OECD PPP Programme, 2022.

[52] Cardiff University, University of Oxford and UNICEF, *The State of Tanzania Mainland's Children: Evidence from the Mainland Household Budget Survey (2007–2018)*, n.d.

Moreover, coverage of social protection programmes is poor, leaving many unprotected from the effects of poverty and socioeconomic shocks.[53] Other factors such as food insecurity, family stress, child neglect and abuse compound the effects of poverty and inequality and prevent children from reaching their full developmental potential.[54]

Figure 6 » **Proportion of children experiencing monetary and/or multidimensional poverty[55]**



If young children are to survive, thrive and drive long-term economic transformation, they are served well by receiving *Nurturing Care*. While the case for prioritizing children in Tanzania is clear, outcomes in early childhood remain suboptimal. Poor development is a risk for a huge 66 per cent of the child population in the country, with children from rural areas disproportionately at risk.[56] This high-risk profile is a result of poor outcomes in the five *Nurturing Care* components – good health, adequate nutrition, safety and security, opportunities for early learning and responsive caregiving – each examined in turn below.

2.4.1 Good health

In recent years, substantial improvements in young children's health outcomes have been realized. Since 2010, neonatal mortality has fallen by 8 per cent, now standing at 24 deaths per 1,000 live births.[57] Similar progress has also been achieved in rates of under-five mortality, which is now 43 per 1,000 live births – a 47 per cent decrease from 2010.[58] A reduction in maternal mortality has also

53 UNICEF, *The Journey of a Child,* 2021.

54 Ministry of Health, Community Development, Gender, Elderly and Children, National Multisectoral Early Childhood Development Programme (NM-ECDP) 2021/22 to 2025/26, 2021.

55 Reproduced from Cardiff University, University of Oxford and UNICEF, *The State of Tanzania Mainland's Children: Evidence from the Mainland Household Budget Survey (2007–2018),* n.d.

56 Ibid.

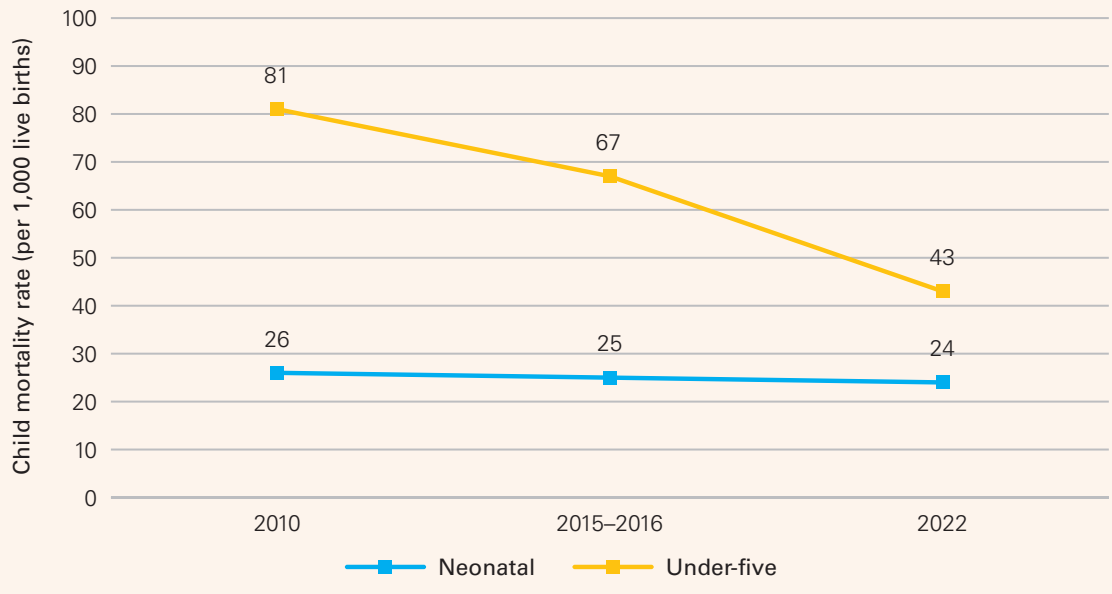
57 Ministry of Health, National Bureau of Statistics, Office of the Government Statistician and ICF, *Tanzania Demographic and Health Survey and Malaria Indicators Survey 2022 Key Indicators Report,* 2023.

58 Ibid.

been witnessed; however, this has occurred at a slower rate than for neonates and children under five. Between 2010 and 2020, maternal mortality fell by 19 per cent, dropping to a rate of 524 deaths per 100,000 live births.[59] These achievements have been supported by the provision of free health services to pregnant women and children below the age of five.[60] There has also been significant progress in immunization against vaccine preventable diseases. The number of unvaccinated children fell between 2014 and 2017 from 47,000 to 31,000.[61]

Despite this progress, the rates of neonatal, child and maternal mortality remain stark. Tanzania ranks among the 10 countries with the highest number of newborn deaths.[62] These 10 countries collectively account for half of all newborn deaths in the world.[63] Importantly, these rates of neonatal mortality differ significantly across Tanzania, suggesting high inequity in outcomes. Progress in reducing maternal deaths has also been disappointing. At 524 deaths per 100,000 live births, Tanzania's rate of maternal mortality is significantly higher than neighbours, Uganda (375 per 100,000 live births), Kenya (342 per 100,000 live births) and Rwanda (248 deaths per 100,000 live births).[64] Further, while the prevalence of HIV has declined in recent decades – from 7 per cent in 2000 to 5 per cent in 2021 among adults aged 15–49 years – as with the rest of sub-Saharan Africa, HIV/AIDS remains a public health concern in Tanzania.[65] This is especially the case among adolescent girls and young women (aged 15–24 years) who carry the highest burden of HIV/AIDS and are 3.5 times more likely than their male counterparts to be living with HIV.[66] Many of these girls and women will become mothers in the future, underscoring the importance of prevention of mother-to-child transmission (PMTCT).[67]

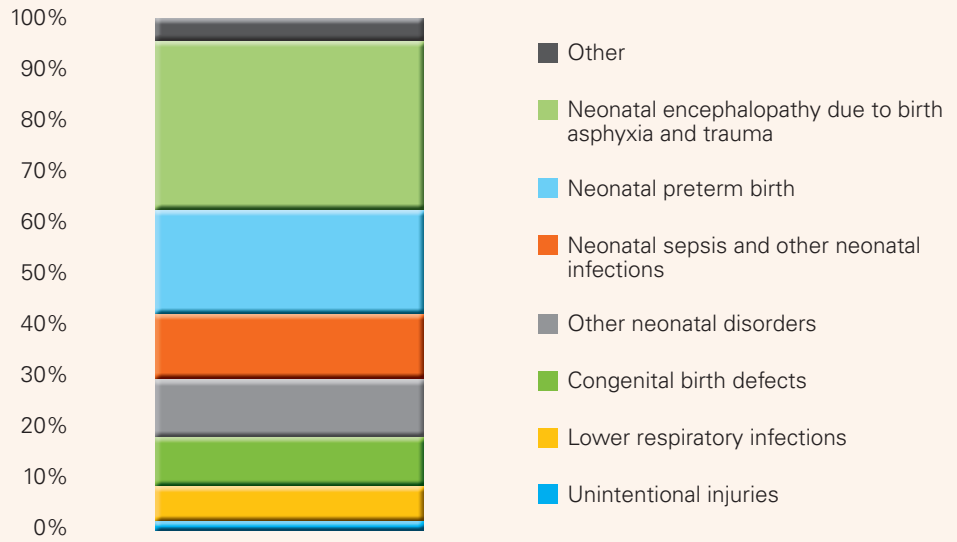
Figure 7 » **Child survival outcomes in Tanzania 2010, 2015–16, 2022[68]**



Examining the drivers of neonatal and child mortality reveals high incidence of preventable disease. For neonates, neonatal encephalopathy, preterm birth, sepsis and intrapartum-related complications are dominant causes (Figure 8).[69] Meanwhile, for children, communicable diseases, such as diarrhoea, malaria and pneumonia, are the main drivers of mortality and morbidity (Figure 9).[70]

The majority of morbidity and mortality in young children, therefore, stems from causes which could be prevented by basic, essential health care services, such as quality antenatal care coverage, delivery in clean health facilities with assistance from trained birth attendants, as well as access to preventative measures, such as insecticide-treated bednets (ITNs) for malaria, or treatments, such as oral rehydration solution (ORS) for diarrhoea.

Figure 8 » **Proportion of DALYs in neonates (under 1 month of age) by disease burden area, Tanzania (2019)[71]**



59 World Bank, 'Maternal Mortality Rate (modelled estimate, per 100,000 live births)', *World Bank Data,* 2023, <https://data.worldbank.org/indicator/SH.STA.MMRT?locations=TZ>; Estimates from WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division, *Trends in Maternal Mortality: 2000 to 2017,* World Health Organization, Geneva, 2019.

60 UNICEF, *The Journey of a Child*, 2021.

61 Ibid.

62 WHO, *Newborns: Improving survival and well-being,* 2020, <https://www.who.int/news-room/fact-sheets/detail/newborns-reducing-mortality>, accessed 3 November 2022.

63 UNICEF, *The Journey of a Child,* 2021.

64 World Bank, *Maternal Mortality Ratio (modelled estimate, per 100,00 live births) – Tanzania, Uganda, Kenya, Rwanda,* 2022, <https://data.worldbank.org/indicator/SH.STA.MMRT?locations=TZ-UG-KE-RW>. Estimates from WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. *Trends in Maternal Mortality: 2000 to 2017,* World Health Organization, Geneva; World Bank, *Prevalence of HIV, Total (% of population aged 15–49) – Tanzania, 2022,* <https://data.worldbank.org/indicator/SH.DYN.AIDS.ZS?locations=TZ>

65 World Bank, *Prevalence of HIV, Total (% of population aged 15–49) – Tanzania,* 2022, <https://data.worldbank.org/indicator/SH.DYN.AIDS.ZS?locations=TZ>

66 UNICEF, *The Journey of a Child,* 2021.

67 Ibid.

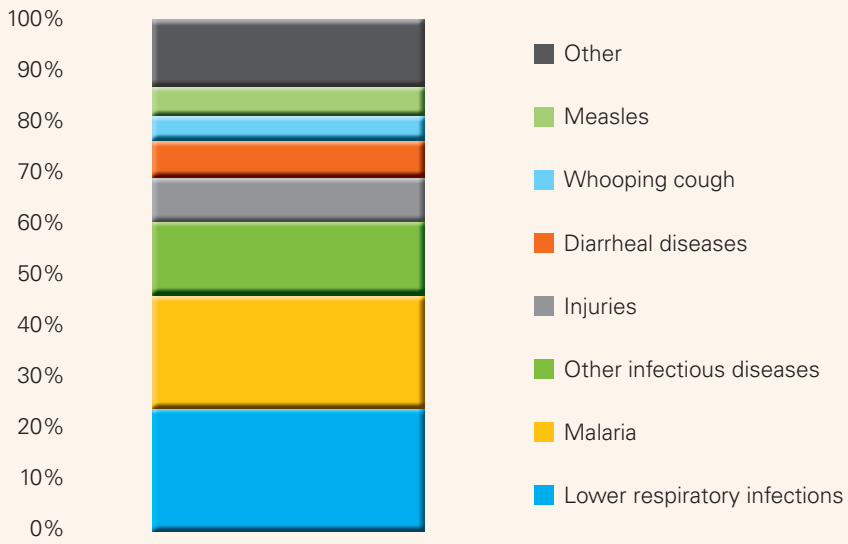
68 Data from National Bureau of Statistics, *Tanzania DHS, 2010: Final report,* 2011, <https://dhsprogram.com/publications/publication-fr243-dhs-final-reports.cfm>; National Bureau of Statistics, *Tanzania: Standard Demographic and Health Survey 2015–16,* 2016, <https://dhsprogram.com/methodology/survey/survey-display-485.cfm>; Ministry of Health, National Bureau of Statistics, Office of the Government Statistician, and ICF, *Tanzania Demographic and Health Survey and Malaria Indicators Survey 2022 Key Indicators Report,* 2023.

69 WHO, Newborns: Improving survival and well-being, 2020, <https://www.who.int/news-room/fact-sheets/detail/newborns-reducing-mortality>, accessed 3 November 2022.

70 Ibid.

71 Data from Institute of Health Metrics and Evaluation, *Global Burden of Disease*, 2019, <https://www.healthdata.org/gbd/2019>.

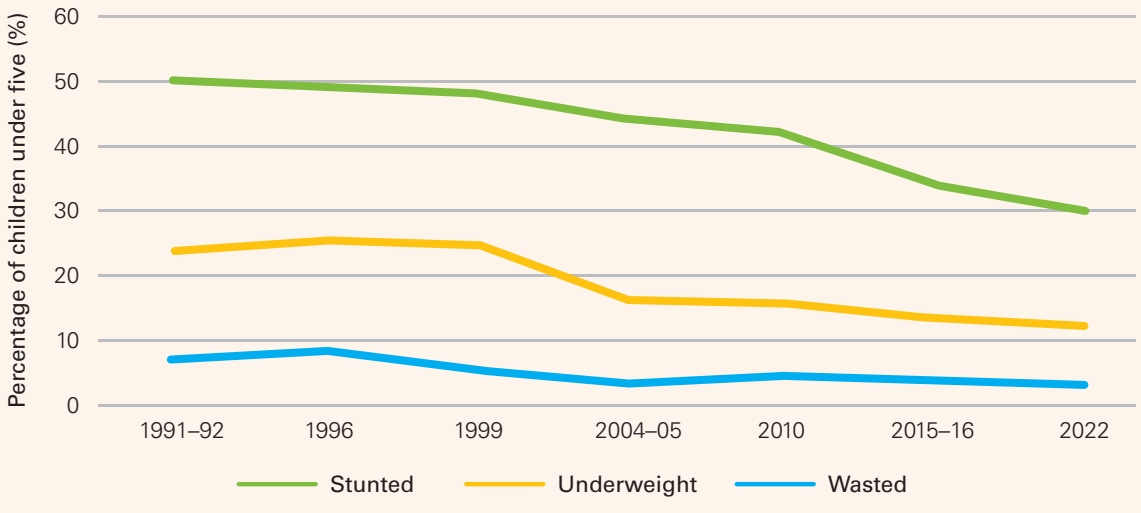
Figure 9 » **Proportion of DALYs in children (1 month to 9 years of age) by disease burden area, Tanzania (2019)[72]**



2.4.2 Adequate nutrition

Tanzania has made notable progress in previous decades in nutrition outcomes for mothers and young children. Key nutrition metrics have steadily improved (Figure 10). Stunting has decreased from 50 per cent in the early 1990s to 30 per cent in 2022 (a reduction of 20 percentage points) and the prevalence of wasting has also declined by 57 per cent over the same period, dropping to 3 per cent in 2022.[73] Further, the prevalence of children under five who are underweight has declined by 50 per cent between 1991/92 and 2022.[74] In some cases, progress has been so rapid that targets set in policies have been surpassed before their deadline. The proportion of children receiving a minimum acceptable diet rose to 30 per cent in 2018, for example, exceeding the target of 25 per cent set out in the National Multisectoral Nutrition Action Plan 2016–2021 (NMNAP I).[75]

Figure 10 » **Trends in nutritional status of children under the age of five in Tanzania (1991–2022)[76]**



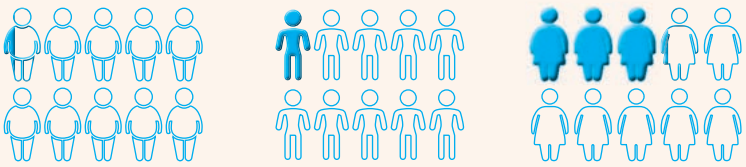
Despite these achievements, challenges to ensuring adequate nutrition for young children remain. Income poverty leaves many families unable to afford a high-quality diet, which puts children at risk of various forms of malnutrition.[77] Three-fifths of Tanzanian households cannot afford a nutritious diet, and only two-fifths of children in Tanzania are receiving minimum meal frequency.[78] This is below the average in the sub-Saharan African region and the average for a lower-middle income country.[79] Early childbearing is also a barrier to improved nutrition outcomes. Early childbearing is associated with poor malnutrition among children in Tanzania, which is significant given that 57 per cent of girls in the country have begun childbearing by the age of 19.[80] Maternal malnutrition is prevalent in Tanzania (57 per cent of pregnant women in the country have anaemia) and there has been no significant decline in the indicator between 2005 and 2015, when adjusting for individual, household, reproductive and child characteristics.[81] Further, regional disparities in chronic malnutrition remain apparent. The observed prevalence of stunting is much higher in regions such as Iringa and Njombe (57 per cent and 50 per cent of children under five are stunted, respectively), compared to regions, such as Mjini Magharibi and Kusini Unguja (13 per cent and 17 per cent, respectively).[82]

Box 2 Double burden of malnutrition – Definition

The double burden of malnutrition is the coexistence of both undernutrition (stunting and wasting) and over-nutrition (overweight and obesity) in the same population across the life course.

Like most developing countries, Tanzania is undergoing a nutrition transition, which has implications for the mortality and morbidity of women and children.[83] The prevalence of overweight/obesity is on the rise, while undernutrition persists.[84] Child overweight/obesity is a growing public health concern in Tanzania. According to the latest Demographic and Health Survey, 3.5 per cent of children under five were overweight.[85] Moreover, Tanzania is among the countries classified as

Double burden of malnutrition in Tanzania



3.5% Children under 5 – overweight

10% Women of reproductive age – underweight

32% Women of reproductive age – overweight

72 Ibid.

73 Ministry of Health, National Bureau of Statistics, Office of the Government Statistician and ICF, *Tanzania Demographic and Health Survey and Malaria Indicators Survey 2022 Key Indicators Report*, 2023.

74 Ibid.

75 Ibid.

76 The 2022 Tanzania Demographic and Health Survey and Malaria Indicator Survey (2022 TDHS-MIS)

77 UNICEF, *The Journey of a Child*, 2021.

78 Ibid.

79 Human Capital Project, *Human Capital Country Brief: Tanzania*, The World Bank Group, Washington D.C., 2022.

80 United States Agency for International Development, Tanzania: Nutrition profile, 2018, <https://2017-2020.usaid.gov/sites/default/files/documents/1864/Tanzania-Nutrition-Profile-Mar2018.pdf>

81 Sunguya, B.F., Y. Ge, L. Mlunde et al., 'High Burden of Anaemia Among Pregnant Women in Tanzania: A call to address its determinants', *Nutrition Journal*, vol. 20, no. 1, 2021, pp. 1–11.

82 Ministry of Health, National Bureau of Statistics, Office of the Government Statistician and ICF, *Tanzania Demographic and Health Survey and Malaria Indicators Survey 2022 Key Indicators Report*, 2023.

83 Raschk, V., and B. Cheema, Colonization, the New World Order, and the eradication of traditional food habits in East Africa: Historical perspective on the nutrition transition', *Public Health Nutrition*, vol. 11, no. 7, 2008, pp. 662–674.

84 UNICEF, WHO and World Bank Group, *Levels and Trends in Child Malnutrition: Key findings of the 2021 Edition of the Joint Child Malnutrition Estimates*, United Nations Children's Fund, New York, 2021.

85 Ministry of Health, National Bureau of Statistics, Office of the Government Statistician and ICF, *Tanzania Demographic and Health Survey and Malaria Indicators Survey 2022 Key Indicators Report*, 2023.

'off-track/worsening' with regards to improving child overweight/obesity outcomes.[86] Maternal malnutrition is one of the drivers of maternal mortality in Tanzania – 10 per cent of women of reproductive age (15–49 years) are underweight, while 32 per cent are overweight or obese.[87] This double burden of malnutrition increases the risk of adverse outcomes for both the mother and the baby.[88] These risks include prolonged labour and pregnancy complications. Moreover, maternal nutrition affects the health of children across the life course. Children born to obese mothers are at a greater risk of developing non-communicable diseases, like diabetes and heart disease in adulthood.[89]

2.4.3 Safety and security

Young children in Tanzania are too frequently being exposed to unsafe and insecure environments. This includes exposure to physical dangers, emotional stress, environmental risks and poor access to food and water. One of the most important contributing factors to this exposure are persistently high rates of poverty and inequality. In recent years, Tanzania's rapid population growth has resulted in an increase in the number of people living below the poverty line.[90] An additional 1.3 million people were categorized as poor between 2011/12 and 2017/18, and the health and economic crisis triggered by the COVID-19 pandemic has only exacerbated this situation.[91] Child poverty in Tanzania is rife, which is contributing to toxic stress, food insecurity and increasing risks of child abuse and neglect.[92] Data from the forthcoming child poverty report suggests that 30 per cent of Tanzanian children (0–17 years) are categorized as multidimensionally poor.[93] While this is a significant decline from 79 per cent in 2007, 94 per cent of children still experience poverty across at least one dimension of well-being (Figure 11). The dimensions across which most children experience deprivation are housing, and water and sanitation (both 83 per cent).[94] The rate of deprivation across other dimensions of well-being stands at 20 per cent (communication), 19 per cent (education), and 3 per cent (health).[95] A pattern of decline has also been observed with respect to monetary poverty, as 30 per cent of children experienced monetary poverty in 2018, compared to 37 per cent in 2007 and 32 per cent in 2012.[96] While both multidimensional and monetary poverty have declined over the years, 13 per cent of children experience both forms of poverty.[97] Household income and poverty are associated with all domains of child development. Low income and poverty are correlated with poor ECD outcomes, such as low academic performance and poor physical and mental health, to name a few.[98] However, as the coverage rates of social protection programmes are low, it leaves many unprotected from the effects of poverty and socioeconomic shocks.[99]

86 UNICEF, WHO, World Bank Group. *Levels and Trends in Child Malnutrition: Key Findings of the 2021 Edition of the Joint Child Malnutrition Estimates.* United Nations Children's Fund, New York, 2021.

87 UNICEF, *The Journey of a Child,* 2021.

88 The coexistence of opposite forms of malnutrition – underweight and overweight.

89 Ibid.

90 UNICEF, *The Journey of a Child,* 2021.

91 Ibid.

92 Ministry of Health, Community Development, Gender, Elderly and Children, *National Multisectoral Early Childhood Development Programme (NM-ECDP) 2021/22- 2025/26,* Government of Tanzania, Dodoma, Tanzania, 2021.

93 Cardiff University, University of Oxford and UNICEF, *The State of Tanzania Mainland's Children: Evidence from the Mainland Household Budget Survey (2007–2018),* n.d.

94 Ibid.

95 Ibid.

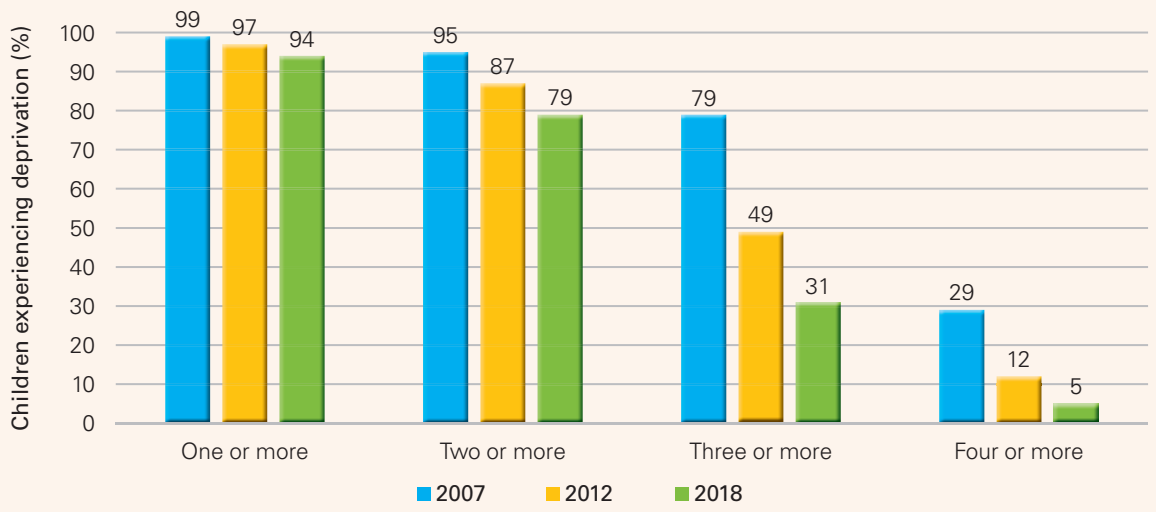
96 Ibid.

97 Ibid.

98 McLoyd, V., R.S. Mistry and C.R. Hardaway, 'Poverty and Children's Development', in *Societal Contexts of Child Development: Pathways of influence and implications for practice and policy,* edited by E.T. Gershoff, R.S. Mistry and D.A. Crosby, Oxford University Press: Oxford, 2014.

99 UNICEF, *The Journey of a Child,* 2021.

Figure 11 » **Trends in the percentage of children experiencing deprivation in one or more dimensions in Mainland Tanzania in 2007, 2012 and 2018[100]**



Box 3 Multidimensional poverty and monetary poverty – Definitions[101]

Multidimensional poverty *is an index that captures the percentage of individuals/households experiencing deprivation in at least three of the five dimensions of well-being namely, health, education, communication, housing and water and sanitation.*

Monetary poverty *is an indicator of basic needs poverty – it measures the percentage of individuals/households falling below the poverty line. The official food poverty line (TSH 33,784 per adult per month in 2018) was used and is based on the cost of a food basket that delivers 2,000 calories per day per adult.*

Many children also lack access to basic WASH services. Households' access to safely managed drinking water stands at just 61 per cent, with huge disparities existing across geographies (only 45 per cent of rural households have access to at least basic safely managed drinking water services, while the corresponding statistic for urban households is 89 per cent).[102] With regards to sanitation, only around a quarter of households have access to safely managed sanitation services, with 11 per cent of households practising open defecation.[103] Further, just 3 per cent of households reported using soap for handwashing in at least two critical handwashing times.[104] Lack of access and poor WASH practices increase the risk of diseases like diarrhoea, which is believed to be responsible for half of all child malnutrition, and is, therefore, a significant hindrance to children's development.[105] Girls, children with disabilities (CwDs) and those living in rural areas are most affected. This further heightens inequities and uneven opportunities for development.

[100] Produced from Cardiff University, University of Oxford and UNICEF, *The State of Tanzania Mainland's Children: Evidence from the Mainland Household Budget Survey (2007–2018)*, n.d.

[101] Ministry of Finance and Planning – Poverty Eradication Division (MoFP-PED) [Mainland Tanzania], National Bureau of Statistics (NBS) and World Bank, *2020 Tanzania Mainland Household Budget Survey 2017/18: Final Report,* Government of Tanzania, Dodoma, Tanzania, 2020.

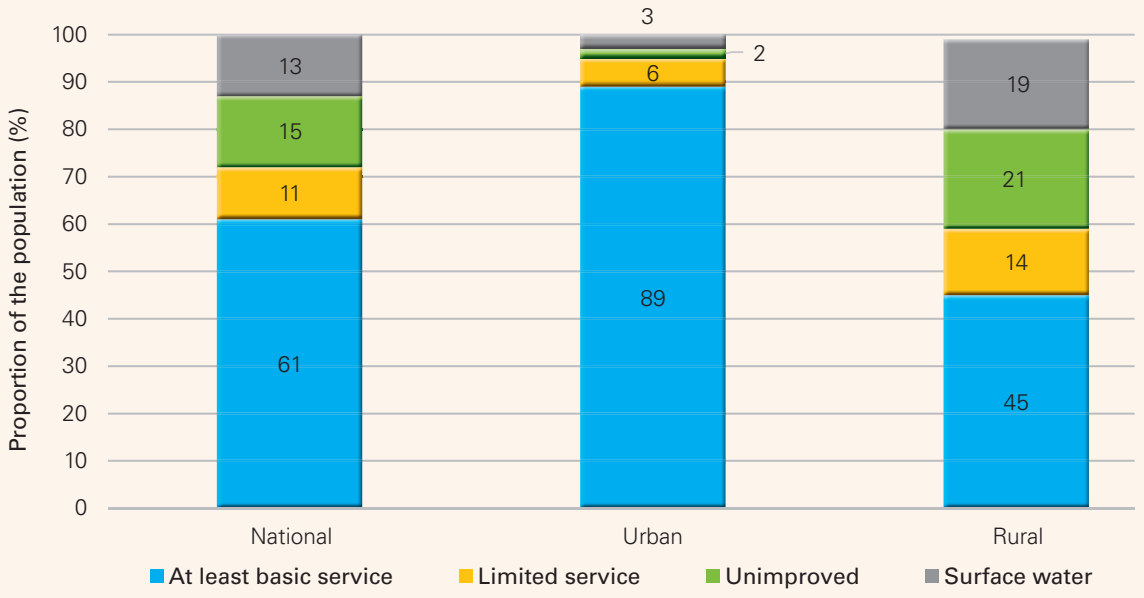
[102] UN Water, 'United Republic of Tanzania', *SDG 6 Data*, 2023, <https://www.sdg6data.org/en/country-or-area/United%20Republic%20of%20Tanzania>. Data as of 2020. Estimates from WHO and UNICEF Joint Monitoring Programme.

[103] Ibid.

[104] National Bureau of Statistics (2016) *Standard DHS 2015/16.*

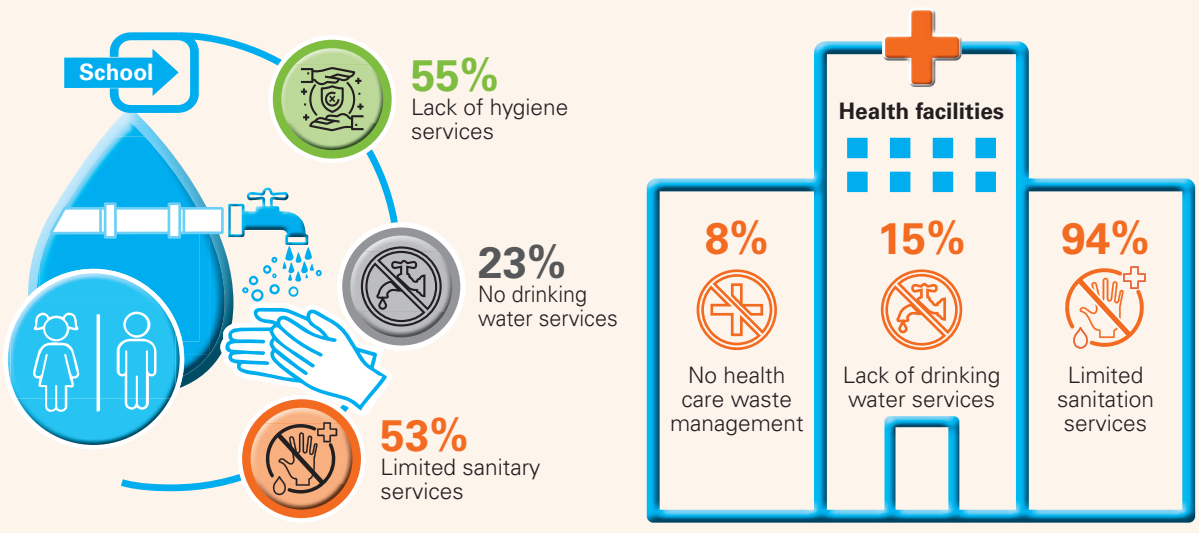
[105] MoHCDGEC, *National Multisectoral Early Childhood Development Programme*, 2021.

Figure 12 » **Proportion of population using safely managed drinking water services by service level and location (2020)[106]**



A lack of access to adequate WASH services is a problem beyond the home (Figure 13). Schools and health centres are seriously underserved by quality WASH facilities. Without adequate WASH facilities, schools and health centres become breeding grounds for diseases that kill children and threaten their ability to grow. Almost half of schools do not have a functioning water supply and 84 per cent of schools lack handwashing facilities.[107] The situation is even more concerning for CwDs, with only 4 per cent of schools having inclusive toilets.[108] Meanwhile, fewer than half of all health facilities in Tanzania have a functioning toilet, WASH facilities in delivery rooms and access to improved water sources.[109] Access to WASH facilities during childbirth can impact maternal and child survival, making this a significant issue, especially given the high levels of maternal morbidity and mortality in the country.[110] Basic hygiene and sanitation prevent the prevalence of neonatal sepsis, the transmission diseases between patients and health care workers, as well the transmission of infections associated with health care.[111] This is critical from the budgetary standpoint also, as it is estimated that approximately 70 per cent of the country's health budget is spent on preventable WASH-attributable diseases.[112]

Figure 13 » **Access to WASH in schools and health facilities in Tanzania[113]**



Furthermore, young children's safety and security is threatened by high rates of violence against women and children (VaWC). Data suggest that 60 per cent of women and 40 per cent of men believe a husband is justified in beating his wife in at least one of the following instances: burning food, refusing to have sex and leaving the house without her husband's permission.[114] VAWC is often perceived as private matter which should be dealt with internally, leaving victims/survivors to suffer in silence and preventing them from accessing the required services.[115] Corporal punishment in schools is also normalized, with half of all school children reporting having experienced violence at the hands of teachers.[116] Moreover, women and girls face the additional risk of female genital mutilation (FGM). FGM cannot be medically justified and is associated with poor health outcomes for girls and women across their life course.[117] FGM exposes women/girls to the threat of infections during, and after, the procedure, and it increases the risk of HIV transmission.[118] FGM has also been associated with complications during childbirth, threatening the survival of both the mother and newborn.[119] FGM was criminalized in Tanzania in 1998, yet the practice still continues, albeit at a much lower rate.[120] However, the prevalence of FGM remains high in some regions, such as Arusha, Dodoma, Manyara, Mara and Singida.[121]

A final barrier of note to childhood safety and security is low rates of birth and death registration in Tanzania. A lack of birth registration has been associated with poverty, gender inequality, increased risk to human rights violations, marginalization and exclusion from accessing services in health, education, social protection and other social sectors.[122] Further, accurate information on live births, still births and deaths is important for designing and tracking the impact of public health policies.[123] Although birth and death registration are mandatory under the Births and Deaths Registration Act (Chapter 108), the country has one of the lowest birth registration rates in Africa.[124] Just over a quarter of children under the age of five have had their births registered, compared

> Despite birth and death registration being mandatory by "The Births and Deaths Registration Act", the country has one of the lowest birth registration rates in Africa.

106 Reproduced from UN Water, 'United Republic of Tanzania', 2023.

107 UNICEF, *Tanzania WASH Factsheet,* UNICEF, Dar es Salaam, Tanzania, 2017.

108 Ibid.

109 WHO/UNICEF, *Joint Monitoring Programme,* 2022, <https://data.unicef.org/resources/data_explorer/unicef_f/>.

110 UNICEF, *Tanzania WASH Factsheet,* 2017.

111 WHO/UNICEF, *Joint Monitoring Programme,* 2022, <https://data.unicef.org/resources/data_explorer/unicef_f/>.

112 UNICEF Tanzania, *Water, Sanitation and Hygiene: Providing adequate water, sanitation and hygiene (WASH) services is critical to improving the survival, health and development of children,* 2022, <https://www.unicef.org/tanzania/what-we-do/wash>

113 Ibid.

114 UNICEF, *The Journey of a Child,* 2021.

115 Ibid.

116 Ibid.

117 USA for UNFPA, *Cut to the Core: The long-term effects of FGM,* n.d., <https://www.usaforunfpa.org/cut-to-the-core-the-long-term-effects-of-fgm/>, accessed 5 December 2022.

118 Ibid.

119 Ibid.

120 WHO Africa, *Rooting out Female Genital Mutilation in Tanzania,* 2021, <https://www.afro.who.int/news/rooting-out-female-genital-mutilation-tanzania>, accessed 3 November 2022.

121 Ibid.

122 UNICEF, *What Is Birth Registration and Why Does it Matter? Without legal proof of identity, children are left uncounted and invisible,* 2019, <https://www.unicef.org/stories/what-birth-registration-and-why-does-it-matter>, accessed 28 March 2023; Kasasa, S., D. Natukwatsa, E. Galiwango et al., 'Birth, Stillbirth and Death Registration Data Completeness, Quality and Utility in Population-based Surveys: EN-INDEPTH study', *Population Health Metrics,* vol. 19, no.1, 2021, pp. 1–15.

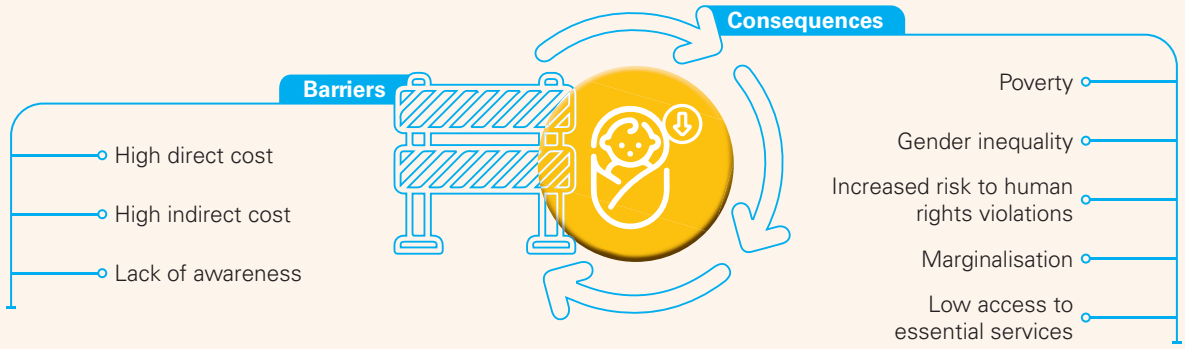
123 WHO, Civil Registration: *Why counting births and deaths is important,* 2014, <https://www.who.int/news-room/fact-sheets/detail/civil-registration-why-counting-births-and-deaths-is-important>, accessed 28 March 2023.

124 UNICEF, *The Journey of a Child,* 2021.

to an African average of just under half of all children.[125] The low rates of birth registration persist in spite of a simplified birth registration system adopted in 2011. Under the simplified system, the process of birth registration has been condensed into one step – allowing parents to register their children and receive birth certificates at one step. Further, registration agents are now trained at the ward level in local government offices, as well as in hospitals and clinics.[126] However, barriers to birth registration remain due to the following reasons:[127]

- **Direct cost:** A processing fee (3,500 TZS) is required to register newborns, which increases after 90 days and increases again when the child reaches 10 years of age.
- **Indirect cost:** The costs associated with travelling and opportunity costs.
- **Awareness:** Many parents are not aware or do not see the value of registering their children.

Barriers and consequences of low birth registration



As a result of these barriers, poor and rural children are less likely to be recorded on the registration system. The most recent data available show that half of all children in urban areas have their births registered, while the same is true for only 16 per cent of children in rural areas.[128] Similarly, 65 per cent of children from the wealthiest households have their births registered, compared to only 8 per cent of children from the poorest households.[129]

Moreover, reliable data on the completeness of death registration with cause-of-death in Tanzania is not publicly available. However, it can be theorized that in Tanzania (as in most countries), emphasis has been placed on birth registration and, therefore, progress in death registration has fallen behind.[130] Data on neonatal deaths is even more scarce. It is estimated that globally a death certificate was to be estimated to be received for less than 5 per cent of neonatal deaths.[131]

125 UNICEF, *The Journey of a Child,* 2021; UNICEF, *A Statistical Profile of Birth Registration in Africa,* 2020, <https://www.unicef.org/wca/media/5526/file/AU-Birth-Registration-Statistical-Brochure-Nov-2020.pdf>, accessed 20 January 2023.

126 Van der Straaten, J., *Scaling up Birth Registration in Tanzania: Proposal to the Department for Foreign Affairs, Trade and Development of Canada,* UNICEF, De es Salaam, Tanzania, 2014.

127 UNICEF, *Advancing the Birth Registration System in Tanzania,* 2016, <https://www.unicef.org/innovation/stories/advancing-birth-registration-system-tanzania>, accessed 3 November 2022.

128 UNICEF, *The Journey of a Child,* 2021.

129 bid.

130 Kasasa, S., D. Natukwatsa, E. Galiwango et al., 'Birth, Stillbirth and Death Registration Data Completeness, Quality and Utility in Population-based Surveys: EN-INDEPTH study'. *Population Health Metrics,* vol. 19, no. 1, 2021, pp. 1–15.

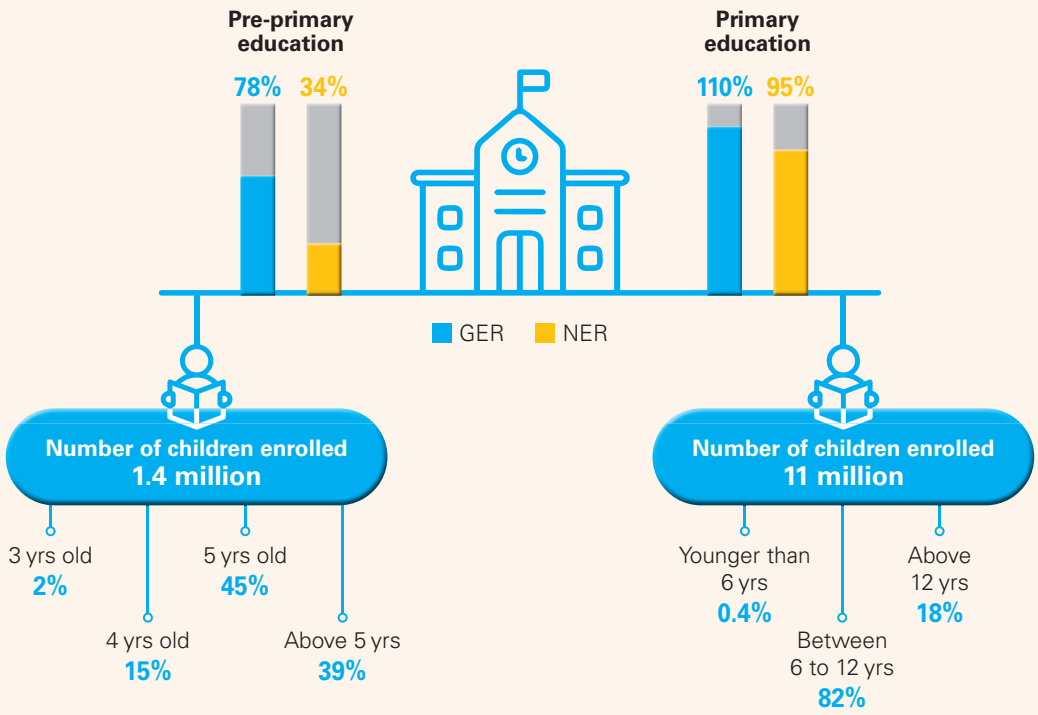
131 Ibid.

2.4.4 Opportunities for early learning

Significant improvements in access to opportunities for early learning have been witnessed in the past 10 years in Tanzania. This progress is largely an outcome of various reforms in the education sector. One of the most notable examples of this has been the introduction of fee-free basic education, which made pre-primary and primary education free.[132] This has led to an increase in the gross enrolment ratio (GER) and net enrolment ratio (NER) for pre-primary and primary education:

- In 2021, the GER and NER at the pre-primary level (5-year-olds) stood at 78 per cent and 34 per cent, respectively.[133] In 2021, about 1.4 million children were enrolled for pre-primary education. Of these children, 2 per cent were 3 years old, 15 per cent were 4 years old, 45 per cent were 5 years old and 39 per cent were over the age of 5.[134]
- At the primary level (ages 7–13 years), the GER and NER stood at 110 per cent and 95 per cent, respectively.[135] For primary education, 11 million children were enrolled in 2021, out of which 0.4 per cent were younger than 6 years, 82 per cent were between the ages of 6 and 12 years, and 18 per cent were older than 12 years.[136]

Enrolment in pre-primary and primary education in 2021



132 UNICEF, *Education for All: Free schooling spells increased enrollment*, 2019, <https://www.unicef.org/tanzania/stories/education-all>, Accessed 23 February 2022.

133 MoEST, *Basic Education Statistics in Tanzania (BEST) Regional Final Data*, 2021.

134 Ibid.

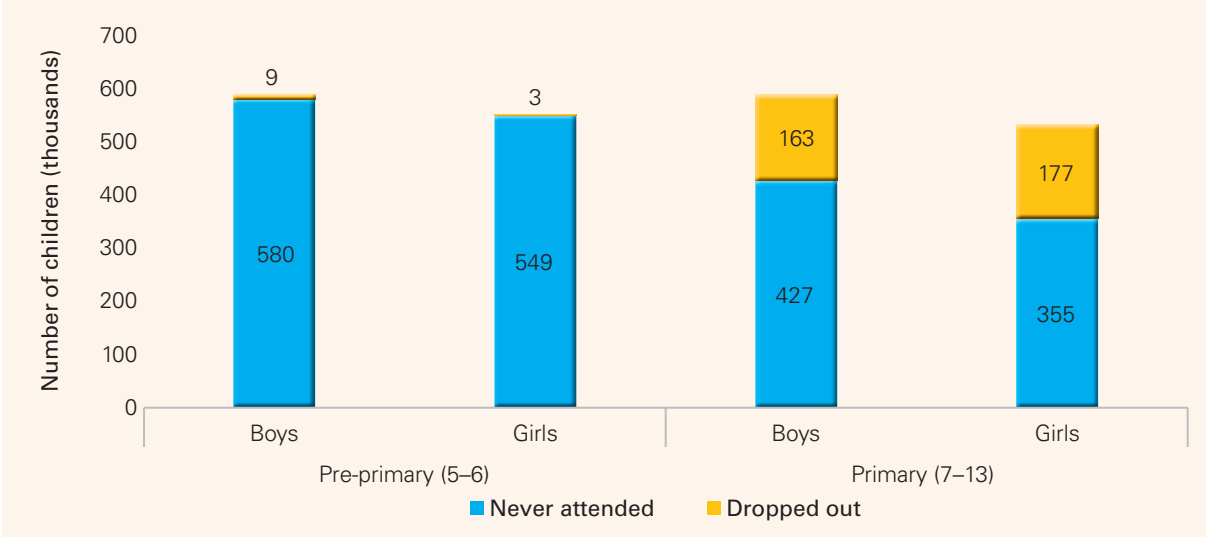
135 Ibid.

136 Ibid.

Despite high enrolment rates, these early learning opportunities are fraught with issues related to poor quality. Since the Free Education Policy was introduced, the GER at pre-primary level has steadily declined owing to unmet expectations.[137] The indirect costs of education (such as uniforms, supplementary readers and writing materials) are still borne by caregivers, posing a barrier to access.[138] Furthermore, as a result of the increased number of students enrolled since the introduction of the policy, and no commensurate increase in staffing, schools are under-capacitated and understaffed. School infrastructure, learning resources and human resources are inadequate to accommodate the growing number of students.[139] The pupil-to-qualified-teacher ratio (PQTR) at the national level is 123 at the pre-primary level, and 57 at the primary level.[140] However, it reaches as high as 278 in Lindi (at the pre-primary level) and 88 in Katavi (at the primary level).[141] In a context of an already existing shortage of qualified pre-primary teachers, a high PQTR has negatively impacted the quality of education, as teachers are unable to support each child based on their individual needs.[142]

The Free Education Policy has not been able to benefit all children equally, leaving many vulnerable children behind. Around 1.1 million children of primary school age (7–13 years) are out of school – with 782,000 having never attended school and 341,000 having dropped out.[143] Vulnerable children (rural children, children from the poorest households, nomadic children and CwD) are over-represented among those out-of-school (OOS). Evidence suggests that children from the poorest 20 per cent of households make up 60 per cent of OOS children.[144] At the pre-primary level, 1.8 million children aged 5–6 were classified as OOS, with the majority (1.7 million) of them have never attended pre-primary school and 12,000 having dropped out.[145] Refugee status is another important determinant of access to education. The net enrolment rate among refugee children is 56 per cent.[146] Furthermore, refugee school children are subjected to conditions that are not conducive for learning – 63 per cent of refugee families report that children learn in buildings that are unsafe and 64 per cent report a shortage of learning materials.[147] Moreover, teacher–student ratios in refugee camps are a cause for concern. In the Mtendeli and Nyarugsu camps, the teacher–student ratios stood at 1:400 and 1:200, respectively.[148]

Figure 14 » **Out-of-school children, disaggregated by gender and age (in thousands of children)[149]**



2.4.5 Responsive caregiving

The manner in which children are nurtured, stimulated and protected by their parents/caregivers is the final important determinant of their development.[150] When parents and caregivers are attuned to the needs of their child and are consistent in their response to these needs, this enables the child to feel safe and supported in the company of that adult and helps the child's ability to develop healthy social and emotional skills.[151]

Box 4 Development subdomains[152]

Health subdomains: *gross motor development, fine motor development, and self-care*
Learning subdomains: *expressive language, literacy, numeracy, pre-writing, and exclusive functioning*
Psychosocial well-being subdomains: *emotional skills, numeracy, internalizing behaviour and externalizing behaviour*

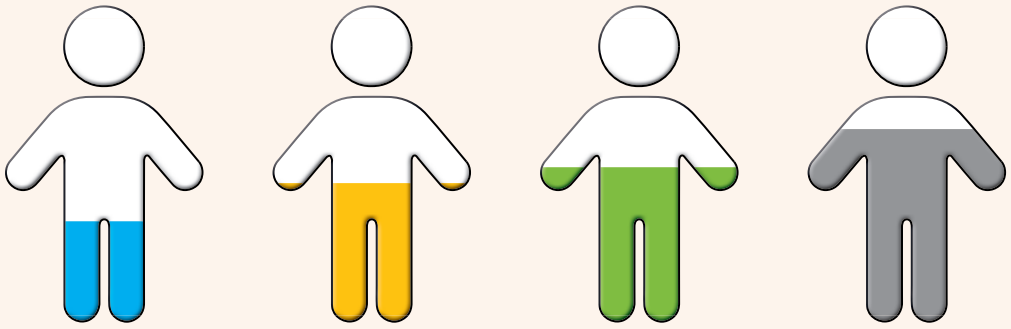
Resources, including time and financial resources, are needed to support responsive caregiving. However, research suggests that less than 3 per cent of children have more than one book at home, and only 9 per cent of caregivers narrated stories for young children.[153] The latest data indicates that less than half (47 per cent) of Tanzanian children aged 24–59 months who reside with their biological mothers are developmentally on track with respect to the three core development domains: health, learning and psychosocial well-being.[154] Moreover, socioeconomic and gender differentials are observed with reference to children's development. Boys are less likely to be developmentally on track when compared to girls (44 per cent versus 51 per cent), and the children's development is positively associated

> About 47 per cent of Tanzanian children aged 24–59 months who reside with their biological mothers are developmentally on track with respect to the three core development domains: health, learning, and psychosocial well-being.

137 UNICEF, *The Journey of a Child.* 2021.
138 Ibid.
139 UNICEF, *Education for All: Free schooling spells increased enrollment*, UNICEF, Dar es Salaam, Tanzania, 2019.
140 MoEST, *Basic Education Statistics in Tanzania (BEST) Regional Final Data,* Government of Tanzania, Dar es Salaam, Tanzania, 2021.
141 Ibid.
142 MoHCDGEC, *National Multisectoral Early Childhood Development Programme,* 2021.
143 MoEST, *Education Sector Analysis (ESA) for Tanzania Mainland, 2021 – Final Draft,* Government of Tanzania: Dar es Salaam, Tanzania, 2021.
144 UNICEF, *The Journey of a Child,* 2021.
145 MoEST, *Education Sector Analysis,* 2021.
146 MoEST and UNICEF, *Global Initiative on Out-of-School Children*, UNICEF, Dar es Salaam, Tanzania, 2018.
147 UNICEF, *The Journey of a Child,* 2021.
148 Ibid.
149 Data from MoEST, *Education Sector Analysis,* 2021.
150 UNICEF, *The Journey of a Child,* 2021.
151 Tanzania ECD Network, 'Responsive Caregiving', *Tanzania ECD Network,* 2023, <https://www.tecden.or.tz/index.php/programs/view/parenting-and-early-stimulation>
152 Ibid.
153 Ibid.
154 Ministry of Health, National Bureau of Statistics, Office of the Government Statistician, and ICF, *Tanzania Demographic and Health Survey and Malaria Indicators Survey 2022 Key Indicators Report,* 2023.

with wealth and their mother's educational attainment (i.e., children from wealthier households and children whose mothers are more educated are more likely to be developmentally on track).[155]

Figure 15 » **Percentage of children who are developmentally on track, disaggregated by mother's level of education[156]**



2.4.6 Conclusion

This comprehensive picture of ECD in Tanzania highlights the need for sustained progress. Across the five domains of *Nurturing Care,* there have been significant improvements for young children in recent years. However, gaps and challenges persist, particularly for more vulnerable children including those with disabilities, in rural areas, from impoverished households or who are refugees. Improved service provision is key to the alleviation of these challenges. This service provision, covering a multitude of sectors, requires financial investment, including from the GoT. The next section will address financing for ECD, considering the extent to which public financing for the sectors responsible for overseeing services for young children is adequate, effective or equitable.

[155] Ibid.

[156] Ministry of Health, National Bureau of Statistics, Office of the Government Statistician, and ICF (2023). Tanzania Demographic and Health Survey and Malaria Indicators Survey 2022 Key Indicators Report

03

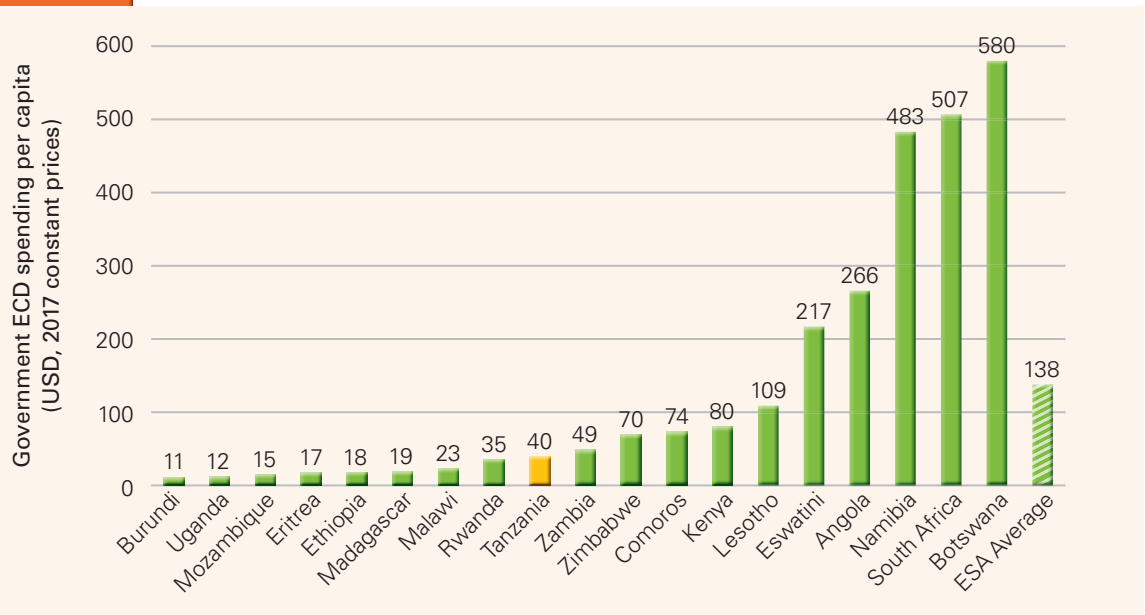
Financing for ECD

Financing is the backbone of social sector service provision, making it vital to improvements in ECD. This section will examine the current status of financing in ECD, helping to contextualize the subsequent cost–benefit analysis. Section 3.1 looks at the financing trends in ECD, with a focus on public financing, while Section 3.2 unpacks the PFM architecture and whether it acts as a safeguard for all ECD-related funding.

3.1 Financing trends

Financing of ECD is a challenge globally. A recent regional analysis across East and Southern Africa (ESA) found that government spending in ECD has steadily increased in the past two decades; however, it remains inadequate to finance quality ECD services for all children.[157] Concerningly, Tanzania remains at the lower range of ESA countries in terms of government expenditure on ECD, with a per capita expenditure of only US$ 40 per child.[158] This is almost three times below the regional average (Figure 16).

Figure 16 » Per capita government expenditure on ECD (0–6 years) in selected ESA countries, 2019 (in US$, 2017 constant prices)[159]



No country in the ESA region was found to follow the investment direction proposed by Heckman, including Tanzania. Interestingly, public spending in ECD in the region goes in the opposite direction of the Heckman curve, with public spending being lower among younger age groups. The average per capita spending ranged from US$ 524 for young people aged 18–22 years, US$ 411 for children aged 7–17 years, US$ 207 for children aged 0–2 years and US$ 88 for children aged 3–6 years (Figure 17).[160] This pattern of spending reflects an under-investment in children aged 0–6 years. This means that ESA countries will forgo the socioeconomic benefits associated with investing in the early childhood phase, which will hinder their ability to meet their short-term and long-term developmental goals.[161]

[157] UNICEF-ESARO, *Quantifying Heckman: Are governments in eastern and southern africa maximizing returns on investments in early childhood development,* UNICEF, Nairobi, Kenya, 2021.

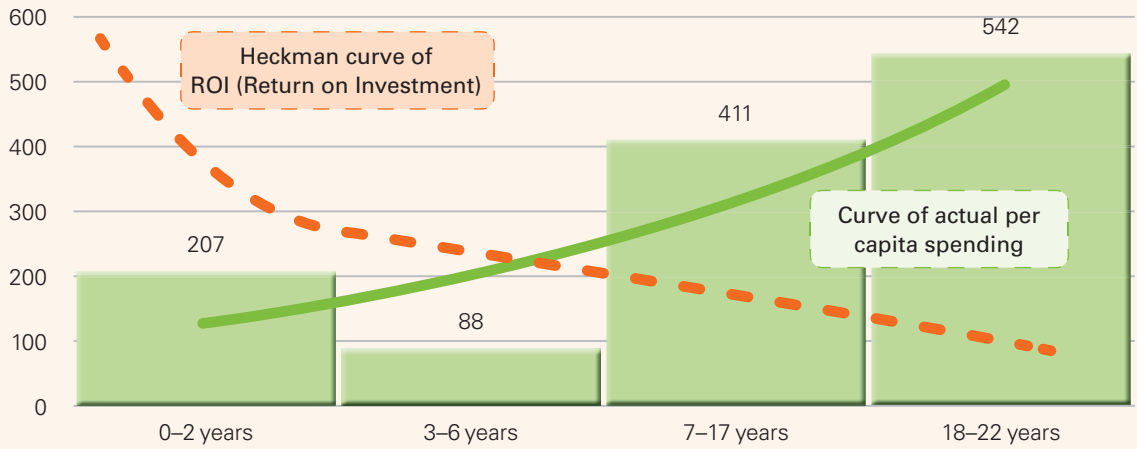
[158] Ibid.

[159] Reproduced from UNICEF-ESARO, *Quantifying Heckman,* 2021.

[160] Ibid.

[161] Ibid.

Figure 17 » **Average per capita government and donor spending on core human capital sectors by age group in ESA compared with the Heckman curve of returns on investment, 2019 (in US$, 2017 constant price)[162]**



This section builds on these regional findings and aims to provide a more focused analysis of public financing for ECD in Tanzania. It analyses public funding for the social sectors (both in terms of budgeting and spending) and considers how better financing for ECD might be achieved. It provides an analysis of relative and absolute expenditure, comparison with benchmarks and regional peers, as well as an examination of how this spending impacts outcomes is provided. Further, commentary is provided on budget execution rates, as well as the equity of expenditure across regions and subgroups of the population. While there is a paucity of sector-specific expenditure data disaggregated for children under the age of 8 years, we performed analyses, where possible, to estimate government expenditure across sectors on young children. We have drawn from the most recent high-quality data available to inform this analysis.

3.1.1 Health and nutrition

The current allocation of the GoT's budget to health remains below widely used spending targets. This indicates that the GoT should consider giving higher priority to health expenditure in order to enhance maternal and child outcomes. Tanzania has set a target to allocate at least of 12 per cent of the national budget to the health sector, as outlined in the Health Sector Strategic Plan V,[163] and is also a signatory of the Abuja Declaration, which sets a target allocation for health to be at least 15 per cent of the national budget.[164]

> Tanzania has set a target to allocate at least 12 per cent of the national budget to the health sector. But spending has still been consistently lower than the Abuja benchmark, and that of neighbouring countries.

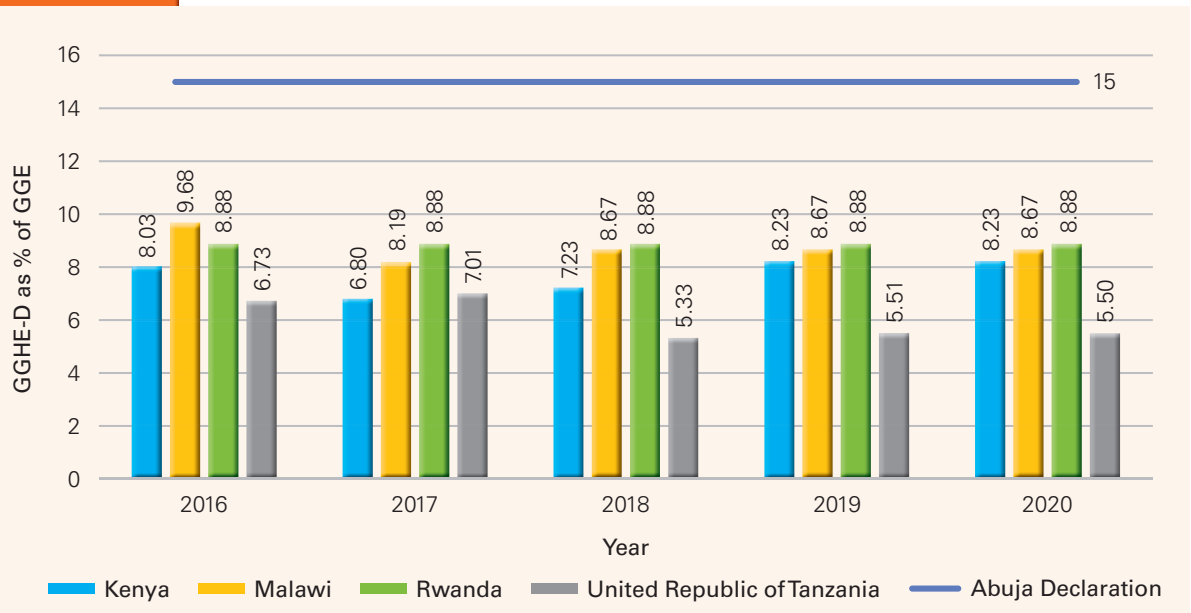
[162] Ibid.

[163] MoHCDGEC, *Health Sector Strategic Plan July 2021 – June 2026 (HSSP V)*, Government of the United Republic of Tanzania: Dodoma, Tanzania, 2021.

[164] UNICEF, *Health Budget Brief for Mainland Tanzania*, UNICEF: Dar es Salaam, Tanzania, 2020, <https://www.unicef.org/esa/media/8416/file/UNICEF-Tanzania-Mainland-2020-Health-Budget-Brief-revised.pdf>

Yet, over the last five years for which data are available, spending has been consistently lower than the Abuja benchmark and that of neighbouring countries (Figure 18).[165] Domestic government health expenditure (GGHE-D) has averaged just 5.4 per cent of total general government expenditure (GGE)[166] Compounding this issue, health expenditure as a share of GGE has dropped 2 percentage points since the 2016/17 financial year (FY).[167] This trend is expected to continue, with the budget for the 2022/23 FY spend on health care is forecasted to be TZS 2.1 trillion, just 5.1 per cent of total GGE. If executed as budgeted, it would be that the lowest health expenditure as a proportion of GGE since at least the 2016/17 FY.[168] Other indicators of public health expenditure reflect similar trends. In 2020, current health expenditure (CHE) as a proportion of GDP was just 3.8 per cent (Figure 19).[169] This is below international benchmarks and compares poorly to neighbouring countries including Kenya (4.3 per cent), Rwanda (7.3 per cent) and Malawi (5.4 per cent).[170]

Figure 18 » **GGHE-D as percentage of GGE (per cent) by year for regional comparators[171]**



This public resource allocation in Tanzania is reflected as a low per capita expenditure on health, especially for primary health care (PHC) (Figure 19). Spending on health in 2019 was estimated at just US$ 40 per capita.[172] This is less than half the estimated resource requirements to fund an essential universal health package of services (adjusted for 2019 prices).[173] This per capita

165 The United Republic of Tanzania Ministry of Finance and Planning (2016/17–2022/23). Data from United Republic of Tanzania Citizens' Budgets; WHO, Global Health Expenditure Database for Data on Regional Comparators, <apps.who.int/nha/database>, 2023; WHO, Abuja Declaration, 2001.

166 The United Republic of Tanzania Ministry of Finance and Planning (2016/17 to 2022/23), Data from United Republic of Tanzania Citizens' Budgets.

167 Ibid.

168 Ibid.

169 WHO, *Global Health Expenditure Database,* 2023, <apps.who.int/nha/database>

170 Ibid.

171 Data from Citizens' Budget from 2016–2022, United Republic of Tanzania; WHO, Global Health Expenditure Database for Data on Regional Comparators, 2023, <apps.who.int/nha/database>; WHO, Abuja Declaration, 2001.

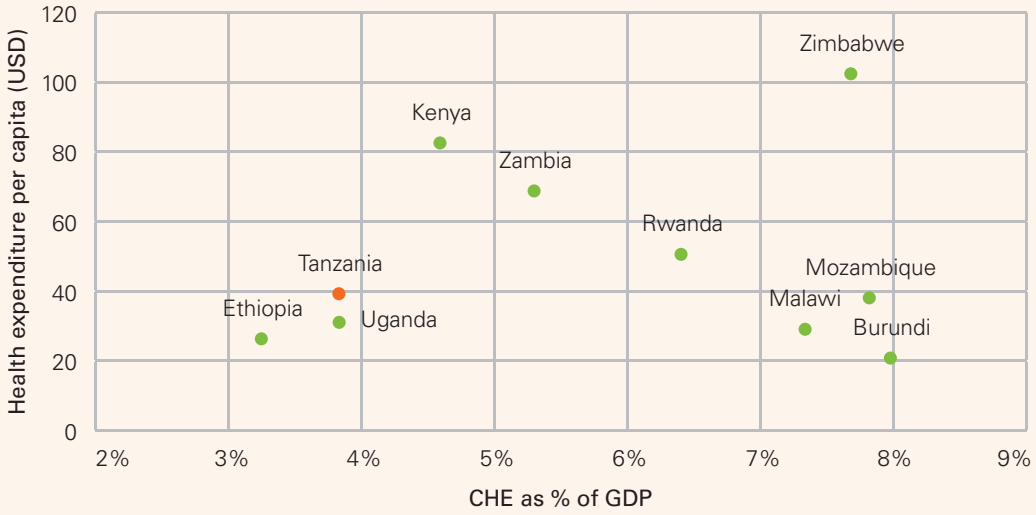
172 Ibid.

173 Jamison et al. (2021). Disease Control Priorities, Improving Health and Reducing Poverty, <https://openknowledge.worldbank.org/bitstream/handle/10986/28877/9781464805271.pdf?sequence=2>

spend on health (in US$) is ranked below regional comparators of Kenya and Rwanda, though above that of Malawi.[174] Of additional concern, only a small proportion of this per capita expenditure is being channelled towards PHC. PHC is critical for improving health outcomes, especially for pregnant women and young children. However, currently PHC receives an investment of just US$ 16 per capita in Tanzania, which is only 45 per cent of total health spending.[175] Notably, only 19 per cent of PHC expenditure comes from the government and the remaining 81 per cent from foreign donors and households.[176] This low level of spending seems to be directly correlated with the high disease burden for pregnant women and children, who are often the primary beneficiaries of PHC.

> The per capita spending on health in Tanzania is ranked below regional comparators of Kenya and Rwanda, though above that of Malawi.

Figure 19 » **Current health expenditure as a share of GDP compared to current health expenditure per capita, with regional comparators (2019)[177]**



The health sector relies on external donor support and out-of-pocket payments by households due to limited government spending. Indeed, government health expenditure (GHE) makes up less than half of CHE.[178] From 2015 to 2020, GHE comprised on average 41 per cent of CHE.[179] In comparison, Development Assistance for Health (DAH) accounts for over one-third of health spending in Tanzania.[180] This donor dependence is significantly higher than that of other low- and lower-middle income countries, in which, on average DAH makes up one-fifth of health spending

174 World Health Organization, *Global Health Expenditure Database,* 2022, <apps.who.int/nha/database>

175 World Health Organization, *Global Spending on Health: A world in transition,* 2019, <https://www.who.int/publications/i/item/WHO-HIS-HGF-HFWorkingPaper-19.4>

176 The World Bank, *Tanzania Health Sector Public Expenditure Review,* 2020, <https://documents1.worldbank.org/curated/en/601271602042236487/pdf/Tanzania-Health-Sector-Public-Expenditure-Review-2020.pdf>

177 WHO, *Global Health Expenditure Database,* 2023, <apps.who.int/nha/database>

178 The United Republic of Tanzania Ministry of Health, *National Health Accounts for Financial Years 2017/18, 2018/19 & 2019/20,* 2022, United Republic of Tanzania.

179 Ibid.

180 USAID and Health Policy Plus, *Costing of Tanzania's Health Sector Strategic Plan V 2020/21–2025/26,* 2022, <http://www.healthpolicyplus.com/ns/pubs/18550-18972_HSSPVCosting.pdf>

and thus poses a threat to the sustainability of health expenditure in Tanzania.[181] Further, 22 per cent of CHE continues to come from out-of-pocket (OOP) payments.[182] User fees are charged for all levels of care. This serves as a major barrier in access to health care, especially for the poor and vulnerable, many of whom are having to forgo health care altogether.[183] This persistence of OOP expenditure is suppressing overall health expenditure, as households have to spend on utilizing essential care services.

Health care provision is largely decentralized in Tanzania, contributing to geographical discrepancies in health spending per capita. At the central government level, the Ministry of Health and Social Welfare (MoHSW) oversees policy and strategies and determines the essential health care package.[184] The MoHSW is responsible for maintaining quality standards in the health sector, though the local government authorities (LGAs) are playing a larger role in the delivery of health services.[185] The provision of health services at local government level is overseen by the President's Office of Regional Affairs and Local Governance (PO-RALG) and 90 per cent of LGA budgets are funded by central government through intergovernmental fiscal transfers.[186] Significantly, in 2017, there was a fivefold difference in the per capita health financing between the high-spending and low-spending districts.[187] This is likely due to the vast differences in prioritization of health in the budget across regions and also an outdated budget allocation formula.[188] For example, health expenditure as a share of total regional spending was 19 per cent in the district of Njombe and only 4 per cent in Rukwa district.[189] Of concern, it is often the poorest regions, and those with the already poor health indicators, that also have low health and nutrition spending.[190] For example, in 2018, Rukwa had the highest level of stunting (56 per cent) in the country.[191]

Budget utilization for the health sector is compounding this already concerning situation. While budget allocations to the health sector are low, the financing envelope is also not being fully executed. The overall health sector budget execution rate was just 72 per cent in 2018/19, meaning over one-quarter of all available government health resources were not used in that year.[192] The main factors contributing to this low execution relates to late and low fund release from the Treasury, highlighting the need for closer collaboration between the MoHSW and the Ministry of Finance

> The late and low fund release from the Treasury contributes to the low execution of health sector budget, which calls for closer collaboration between MoHSW and MoFP.

[181] Development Initiatives, *Aid Spent on Health: ODA data on donors, sectors, recipients*, 2020, <https://reliefweb.int/report/world/aid-spent-health-oda-data-donors-sectors-recipients-factsheet-july-2020>

[182] WHO, *Global Health Expenditure Database,* 2023, <apps.who.int/nha/database>

[183] Ibid.

[184] Ibid.

[185] UNICEF, *Health Budget Brief for Mainland Tanzania,* 2020, <https://www.unicef.org/esa/media/8416/file/UNICEF-Tanzania-Mainland-2020-Health-Budget-Brief-revised.pdf>

[186] Ibid.

[187] World Bank, *Public Expenditure Review, Tanzania,* 2020.

[188] Ibid.

[189] Ibid.

[190] Ibid.

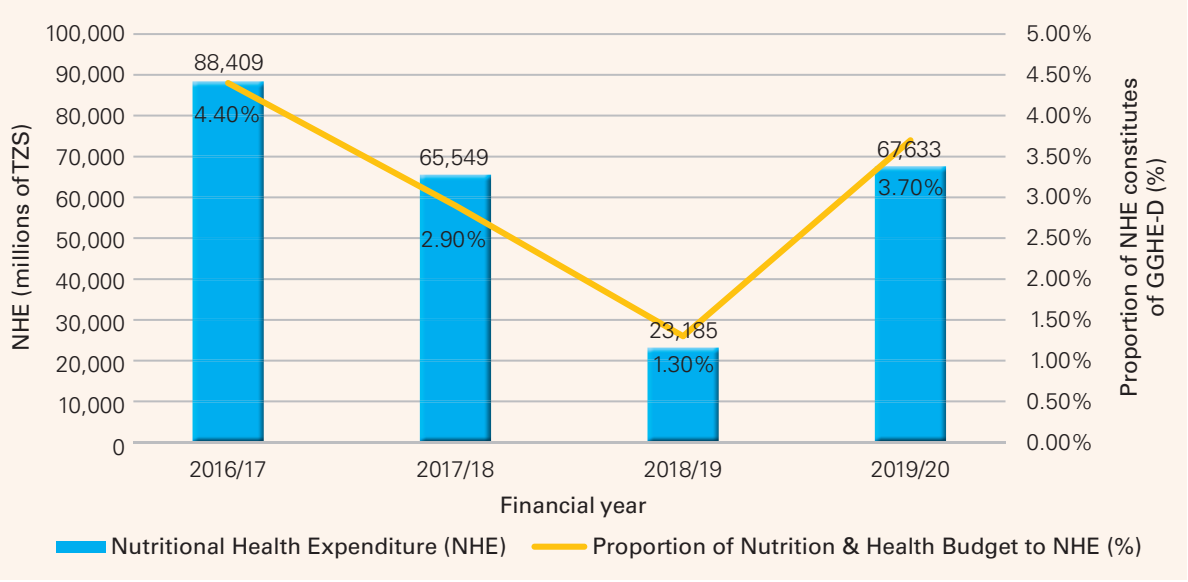
[191] Regional Administration and Local Government Authorities, Rukwa Region Multisectoral Nutrition Strategic Plan, 2018, <https://rukwa.go.tz/storage/app/uploads/public/5bc/44d/4bb/5bc44d4bbbf34531092541.pdf>

[192] UNICEF, *Health Budget Brief for Mainland Tanzania,* UNICEF: Dar es Salaam, Tanzania, 2020, <https://www.unicef.org/esa/media/8416/file/UNICEF-Tanzania-Mainland-2020-Health-Budget-Brief-revised.pdf>

and Planning (MoFP).[193] This poor execution negatively affects the efficiency of health expenditure and leads to an accumulation of arrears, causing supplier price increases of certain medical goods.[194] It should be noted, however, that in the most recent health public expenditure review (PER), it is estimated that the costs to implement the Health Sector Strategic Plan (HSSP) V are in line with the expected resource envelope.[195]

In nutrition, financing of services does not yet meet need. In recent years, the pattern of health expenditure on nutritional deficiencies has shown a great variation (Figure 20) which complicates programming and public financial management (PFM) efficiency.[196] This spending is the equivalent of just US$ 0.5 per child under five years of age, falling short of the advised US$ 8.50 set by the World Bank to reach the 2025 global stunting target.[197] Furthermore, nutrition is heavily financed by development partners (accounting for 38 per cent of nutrition related expenditure in 2015), rendering the sector susceptible to financing sustainability issues.[198]

Figure 20 » **Nutritional health expenditure (NHE) in Tanzania, and proportion that NHE constitutes of GGHE-D (per cent; 2016/17–2019/20)[199]**



3.1.2 WASH

Given the high burden of WASH-related morbidity in Tanzania, it is suggested that GoT ensures adequate expenditure to improve outcomes in the sector. An analysis of GoT budget suggests that public spending on WASH, as a proportion of GDP, is on par with the regional target; however, the public expenditure per capita on WASH and the public spending on WASH as a proportion of GGE are decreasing.[200] In 2015, the N'gor Declaration was adopted by all African governments,

193 World Bank, *Public Expenditure Review,* Tanzania, 2020.

194 Ibid.

195 Ibid.

196 National Health Accounts (NHA), The United Republic of Tanzania, *Total Health Expenditure by Disease*, 2022.

197 UNICEF, *Nutrition Public Expenditure Review: Tanzania,* UNICEF, Dar es Salaam, Tanzania, 2018.

198 Ibid.

199 Authors. Data from National Health Accounts (NHA), The United Republic of Tanzania, *Total Health Expenditure by Disease*, 2022.

200 The United Republic of Tanzania Ministry of Finance and Planning (2016/17–2022/23), Data from United Republic of Tanzania Citizens' Budgets.

which set the target on WASH spending at 0.5 per cent of GDP.[201] While Tanzania's budget for the entire WASH sector in 2016/17 accounted for only 0.3 per cent of GDP, it has subsequently reached the N'gor target of 0.5 per cent.[202] However, the public expenditure per capita for WASH has actually declined in the same period – falling from US$ 8.3 in 2016/17 to US$ 4.9 in 2022/23.[203] This trend is witnessed in the proportion of GGE to WASH also.[204] In 2016/17, the expenditure comprised 3.5 per cent of GGE; however, by 2021/22 this had fallen to 1.9 per cent, and is forecasted to make up an even smaller proportion of GGE in 2022/23 at 1.7 per cent.[205] The figure below highlights these trends and indicates a progressive deprioritization of WASH within government spending.

Per capita public expenditure for WASH

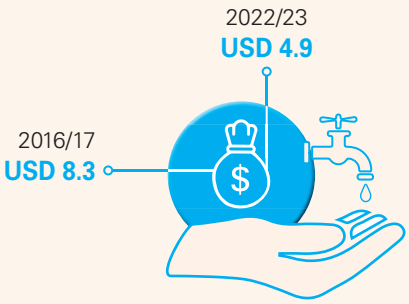
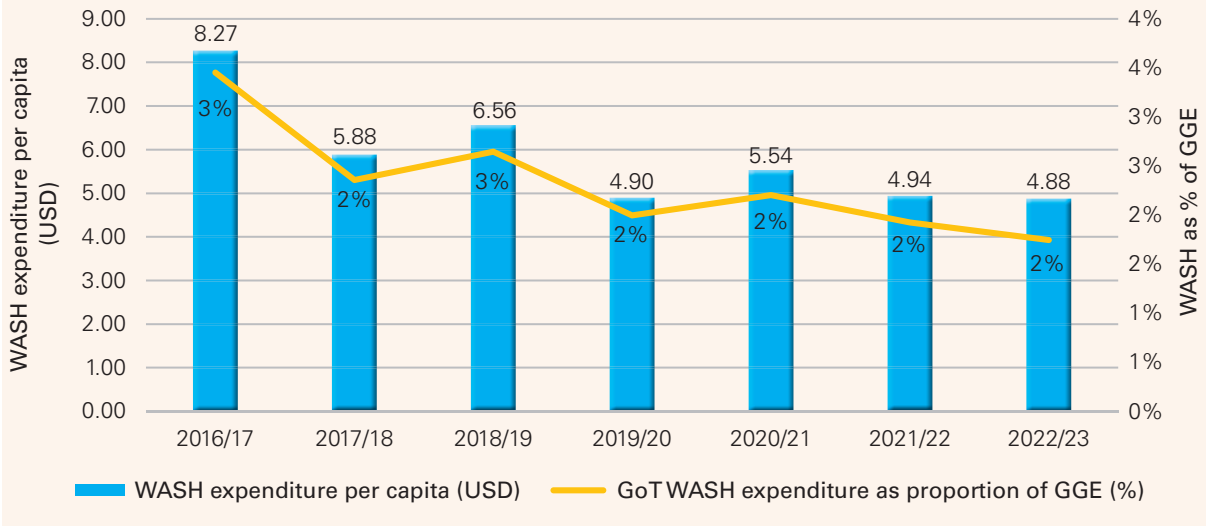


Figure 21 » **Public expenditure trends for WASH in Tanzania, annually (2016/17–2022/23)[206]**



The WASH budget is also not being distributed on the lines of equity. This may be contributing to poor and inequitable outcomes. There is great regional variation in WASH budget allocations. While the average per capita expenditure on water was TZS 3,657 in 2018/19 across Tanzania, it was only TZS 2,758 in the Kagera region, 25 per cent less than the average.[207] Significantly, in regions with lower budget allocations, WASH-related outcomes are poorer.[208] For example, the Kagera region has the lowest proportion of households with an improved drinking water source during the dry season.[209]

201 N'gor Declaration, 2015, <https://www.ircwash.org/sites/default/files/ngor_declaration_print_version.pdf>

202 UNICEF, *WASH Budget Brief, Mainland Tanzania,* 2022, <https://www.unicef.org/esa/media/8431/file/UNICEF-Tanzania-Mainland-2020-WASH-Budget-Brief-revised.pdf>

203 The United Republic of Tanzania Ministry of Finance and Planning (2016/17–2022/23), Data from United Republic of Tanzania Citizens' Budgets.

204 Ibid.

205 The United Republic of Tanzania Ministry of Finance and Planning (2016/17–2022/23), Data from United Republic of Tanzania Citizens' Budgets.

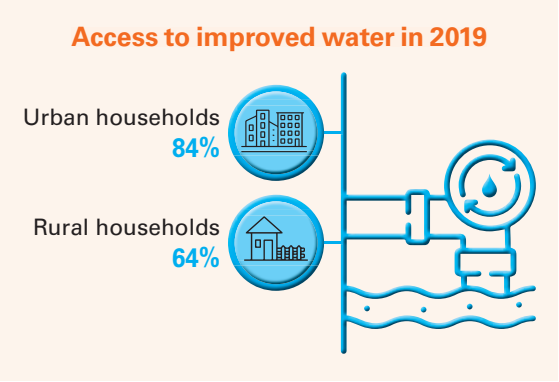
206 Ibid.

207 UNICEF, *WASH Budget Brief, Mainland Tanzania,* 2022, <https://www.unicef.org/esa/media/8431/file/UNICEF-Tanzania-Mainland-2020-WASH-Budget-Brief-revised.pdf>

208 Ibid.

209 Ibid.

Further, WASH-related outputs, such as access to improved drinking water, are worse in rural areas than in urban areas. In 2019, 84 per cent of urban households had access to improved drinking water, whereas this only held true for only 64 per cent of rural households.[210] While it is likely that part of the rural–urban inequities in WASH outcomes can be attributed to the regional variations in WASH budget allocations, analysis at this level has not been conducted. Since WASH outputs and outcomes do vary so greatly between rural and urban areas, an analysis of expenditure between rural and urban areas is highly recommended and would allow for an informed advocacy to enhance priority on spending on WASH in rural areas. Some action has already been taken in this regard. To improve the rural water supply, the Water Supply and Sanitation Act came into effect in July 2019, and the Rural Water Supply and Sanitation Agency (RUWASA) was established.[211] Given that more recent data were not readily available at the time of this analysis, it is difficult to determine the impact created by these changes to the policy and institutional environment.



Low execution of the Ministry of Water's (MoW's) budget contributes, in part, to the large funding gaps present in Tanzania's WASH sector. In 2018/19, only 58 per cent of the MoW's budget was spent.[212] It is difficult to provide a greater insight into this low budget utilization or whether this poor utilization has persisted in more recent years given the paucity of data. It would be advisable that a detailed analysis of public finance for WASH and bottlenecks in budget execution in the sector be conducted. According to the SDG WASH Costing Tool, it is estimated that an annual investment of US$ 1.1 billion is needed for WASH in Tanzania.[213] In 2019/20, the expenditure for WASH (from GoT and development partners) was US$ 273.8 million, leaving a US$ 826 million funding gap.[214] This is a significant challenge – access to safe drinking water, and good sanitation and hygiene facilities are crucial to human health and well-being. In addition to being crucial for health, WASH is also positively linked to school attendance, dignity and creating resilient and healthy environments.[215] On the contrary, the absence of good WASH practices and facilities impairs health and leads to illness.[216]

WASH is also positively linked to school attendance, dignity, and creating resilient and healthy environments. On the contrary, the absence of good WASH practices and facilities impairs health and leads to illness.

[210] *UNICEF & WHO (2020). Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. Available online at https://washdata.org/data/household#!/tza*

[211] UNICEF, *WASH Budget Brief, Mainland Tanzania,* 2022, <https://www.unicef.org/esa/media/8431/file/UNICEF-Tanzania-Mainland-2020-WASH-Budget-Brief-revised.pdf>

[212] Ibid.

[213] SWA Secretariat and UNICEF, <https://www.sanitationandwaterforall.org/priority-areas/political-prioritization/costing-tool>, 2022; The SDG WASH Costing Tool is a model developed by the SWA Secretariat and UNICEF to enable countries to calculate the investments needed to fulfil their WASH SDG targets; UNICEF, WASH Budget Brief, Mainland Tanzania, 2022, <https://www.unicef.org/esa/media/8431/file/UNICEF-Tanzania-Mainland-2020-WASH-Budget-Brief-revised.pdf>

[214] Ibid.

[215] WHO, WASH, 2022, <https://www.who.int/health-topics/water-sanitation-and-hygiene-wash#tab=tab_1>

[216] Ibid.

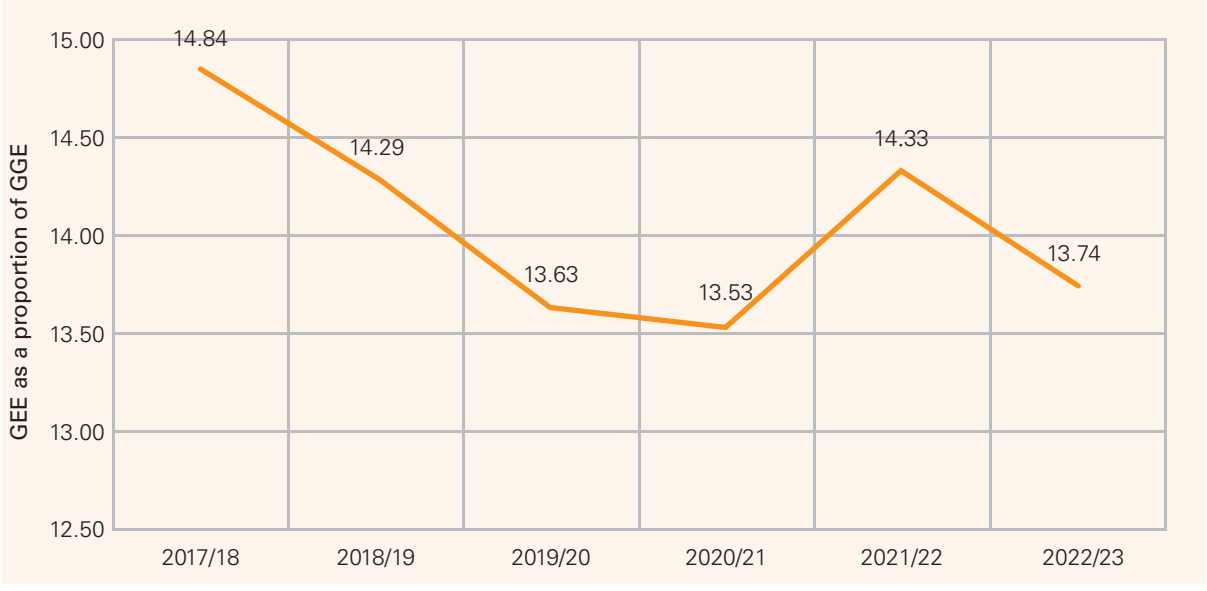
Clearly, major challenges in the WASH sector must be addressed. The funding gaps in the sector need to be plugged and funding for rural WASH programming especially must be prioritized. Furthermore, the next phase of the Water Sector Development Programme must be developed and implemented. Addressing these financing challenges will most affect Tanzania's youngest people, who carry a disproportionate disease burden of WASH-related illness.

3.1.3 Education

Historically, the GoT has strongly prioritized education expenditure; yet, in recent years, allocations to the sector have been decreasing. Recent data suggest that the proportion of GGE going to education has been decreasing year-on-year (with the exception of a slight increase from 2020/21 to 2021/22).[217] The government expenditure on education (GEE) is forecasted to be TZS 5.7 trillion in 2022/23, equivalent to 13.7 per cent of total GGE.[218] This is below the benchmark of education expenditure comprising 15–20 per cent of GGE, as outlined in the *Education 2030 Framework for Action*.[219] Notably, this benchmark is being met by neighbouring Kenya, where 18.5 per cent of GGE was spent on education in 2019.[220] Similarly, government spending on education as a proportion of GDP is also below regional targets and comparator countries (Figure 22). In 2021, education expenditure in Tanzania amounted to 3.3 per cent of the GDP.[221] This was lower than in neighbouring Kenya and Rwanda (where education expenditure as a share of GDP was 4.8 per cent and 3.8 per cent, respectively) and below a target allocation of 4–6 per cent of GDP. [222]

GEE as a proportion of GDP is below regional targets and comparator countries

Figure 22 » **Education expenditure as a proportion of GGE, by year[223]**



[217] The United Republic of Tanzania Ministry of Finance and Planning (2016/17–2022/23), Data from United Republic of Tanzania Citizens' Budgets.

[218] Ibid.

[219] UNESCO et al., *Education 2030, Incheon Declaration,* 2015, <https://unesdoc.unesco.org/ark:/48223/pf0000245656>

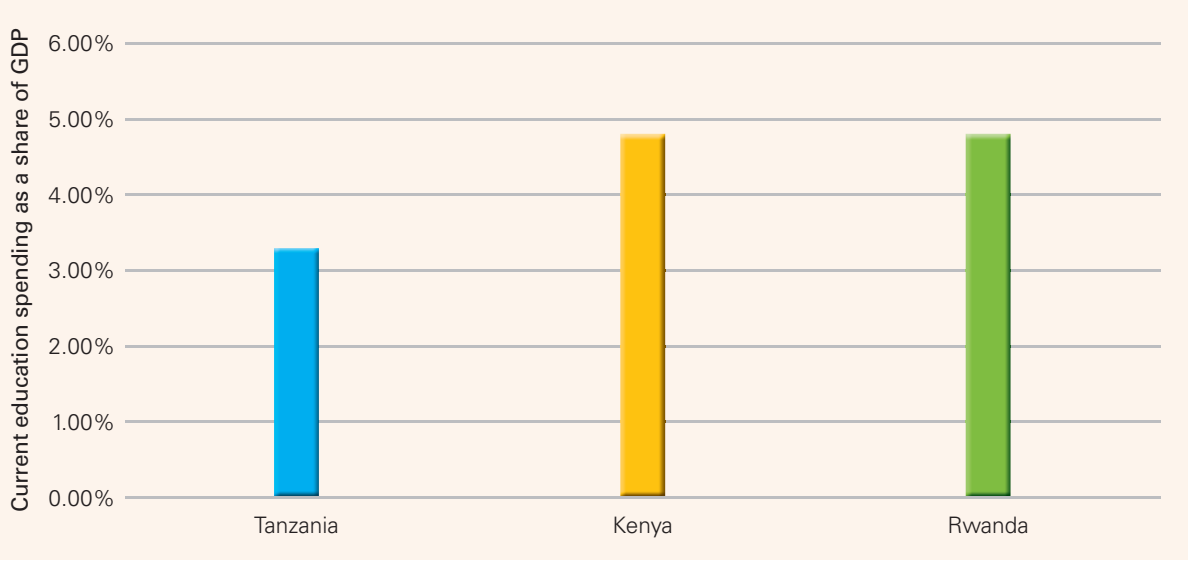
[220] World Bank, 'Government expenditure on education, total (% of government expenditure) – Kenya, Tanzania', *World Bank Data,* 2022, October 2022, <https://data.worldbank.org/indicator/SE.XPD.TOTL.GB.ZS?locations=KE-TZ>. Data from UNESCO Institute for Statistics (UIS). UIS.Stat Bulk Data Download Service.

[221] Ibid.

[222] UNESCO Institute for Statistics, Government Expenditure on Education, Total (% of GDP). 2022, <uis.unesco.org>.

[223] UNESCO Institute for Statistics, <uis.unesco.org>, Data as of June 2022.

Figure 23 » **Government of Tanzania expenditure on education, as share of GDP, with regional comparator countries for which data are available (2021)[224]**



Analysing expenditure on pre-primary education specifically is not possible owing to data paucity. While government expenditure by level of education has been provided in the Economic Surveys, disaggregated data on preschool expenditure is absent. Currently, expenditure on pre-primary education is listed as equating to 0 TZS.[225] According to the target set by UNICEF in 2019, 10 per cent of a country's education budget should be devoted to pre-primary education.[226] However, any spending on pre-primary education in Tanzania is provisioned within the primary education budget line, making it impossible to disaggregate. Though primary education incurred the greatest expenditure in 2020 and 2021, the actual percentage varies quite significantly from 2020 to 2021 – in 2020, subsidiary expenditure made up a significantly larger proportion of education expenditure than in 2021. This may have been owing due to additional pandemic-necessitated subsidiary expenditure.

3.1.4 Social protection

In recent years, the GoT has strengthened social protection; however, challenges, including under-spending, remain. Social protection is vital for reducing poverty, inequality, supporting inclusive growth and safeguarding citizens. Yet low levels of coverage, as well as weak policies and sector coordination, are hindering its impact in Tanzania.[227] Globally, gaps in the coverage of social protection systems are most commonly associated with under-investment in this area.[228] This appears to be mirrored in Tanzania and poses a major challenge to economic and social development in the country.

[224] UNESCO Institute for Statistics, <uis.unesco.org>, Data as of June 2022. NB: Data not available on UIS database for the remaining EAC countries, i.e. Burundi, DRC, South Sudan and Uganda.

[225] Economic Surveys Data, Tanzania, 2020 and 2021.

[226] UNICEF, *A World Ready to Learn: Prioritizing quality early childhood education,* 2019 Global report available online at <https://www.unicef.org/media/57926/file/A-world-ready-to-learn-advocacy-brief-2019.pdf>

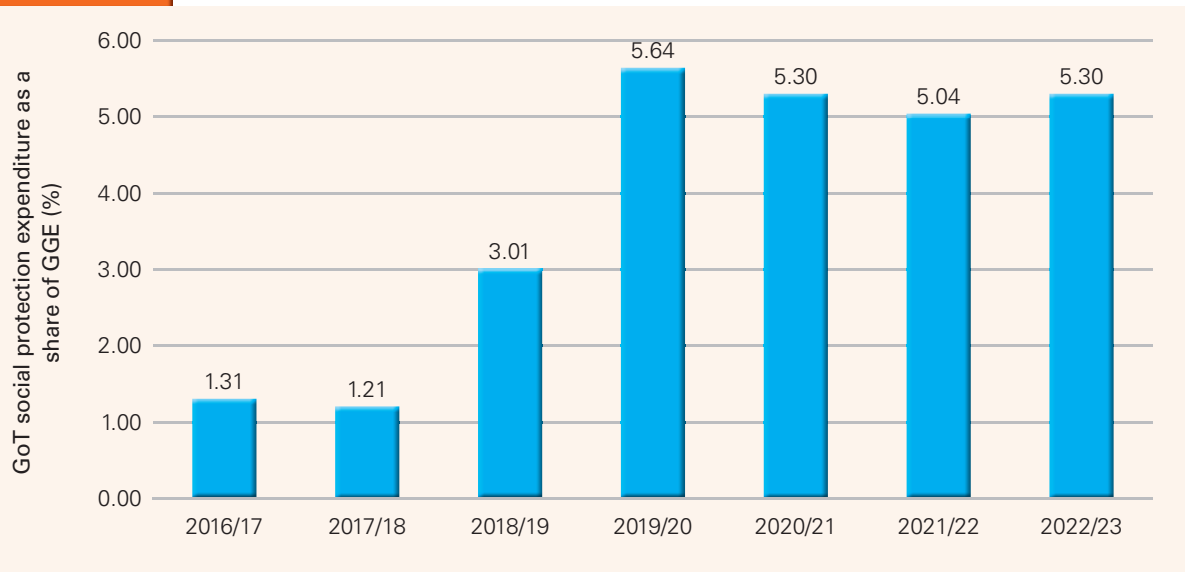
[227] ILO, *Social Protection in Tanzania, 2022,* <https://www.ilo.org/africa/countries-covered/tanzania/WCMS_549369/lang--en/index.htm>

[228] ILO, *World Social Protection Report 2020–2022,* 2020, <https://www.ilo.org/wcmsp5/groups/public/-ed_protect/-soc_sec/documents/publication/wcms_817574.pdf>

Spending on social protection as a proportion of GDP is lower in Tanzania than the average in other lower-middle income countries. The latest data shows that social protection spending in Tanzania represents 1.5 per cent of the GDP.[229] Although this is aligned with the current regional and economic group averages of 1.5 per cent in sub-Saharan Africa,[230] it is lower than the average of 2.5 per cent in other lower-middle income countries[231] and 12.9 per cent globally.[232]

Positively, the government expenditure on social protection as a share of GGE has increased since 2016/17. In 2022/23, spending on social protection is forecasted to be TZS 2.2 trillion, comprising a 5.3 per cent share of GGE, compared to TZS 387 billion in 2016/17, which was only a 1.3 per cent share of GGE.[233] This is in large part due to the expansion of the nationwide flagship social protection programme, the Productive Social Safety Net (PSSN), into its second phase (PSSN II) in 2020.[234] Still, it should be noted that the donor dependence for social and child protection is high, and on-budget donor support to social protection is a significant contributor to these trends.[235]

Figure 24 » **Government of Tanzania expenditure on social protection as a share of general government expenditure, annually (2016/17–2022/23)[236]**



These spending trends are a particular issue for children, who are disproportionately affected by poverty. Data from 2018 suggest that 74 per cent of children in Tanzania lived in multidimensional poverty.[237] In terms of the country's youngest children (up to the age of five years), the picture was no better – with 72 per cent of children from birth to five years living in deprivation in at least three

229 UNICEF, *Budget Issue Paper – Social Protection and Welfare,* 2022, <https://www.unicef.org/esa/media/11556/file/UNICEF%20Tanzania%20(Mainland)%20Social%20Protection%20Brief%202022.pdf>

230 UNICEF, 2021, <https://www.unicef.org/esa/media/10216/file/UNICEF-Zimbabwe-2021-Social-protection-Budget-Brief.pdf>

231 ILO, *World Social Protection Report 2020-2022,* 2020, <https://www.ilo.org/wcmsp5/groups/public/-ed_protect/-soc_sec/documents/publication/wcms_817574.pdf>

232 Ibid.

233 The United Republic of Tanzania Ministry of Finance and Planning (2016/17–2022/23), Data from United Republic of Tanzania Citizens' Budgets.

234 George, C., F. Myamba and M. S. Ulriksen, *Social Protection in Tanzania: Challenges in the shift of financing PSSN from external funding to government, REPOA Brief PB 5/2021,* 2021.

235 Ibid.

236 Ibid.

237 Cardiff University, University of Oxford and UNICEF, *The State of Tanzania Mainland's Children. Evidence from the Mainland Household Budget Surveys (2007–2018),* 2018.

dimensions.[238] As explored earlier, this is a real bottleneck to progress in ECD. Poverty is associated with toxic stress, inadequate nutrition and poor health, which can all hinder child development.

While the GoT has bought in social protection programmes, demographics that are most vulnerable are often not adequately covered. Groups which are most prone to malnutrition (i.e., pregnant women, lactating mothers, newborns and children), for example, do not have additional access to social protection programmes (as they do in other countries, such as Rwanda). Positively, conditional cash transfers are offered to households with children under five who comply with postnatal exams and child health check-ups.[239] This is part of the nationwide PSSN programme. Yet, there are concerns about the sustainability of the programme given that the funding of the programme has come predominantly from donors.[240] In a context of resource constraints and government scepticism towards cash transfers, it is unlikely that the government will play a larger role in the financing of PSSN going forward.[241]

> As a part of nation-wide PSSN programme, conditional cash transfers are offered to households with children under five who comply with post-natal exams and child health check-ups

3.1.5 Child protection

While the government has outlined clear frameworks to improve protection for children, it is unclear how much is being spent on child protection services. In 2016, the National Plan of Action to End Violence Against Women and Children was published. Furthermore, a comprehensive child protection system and regulatory framework exists across 51 local government authorities. Yet, the most recent data available on expenditure on child protection comes from a 2011 Public Expenditure Survey, at which time only 0.1 per cent of expenditure in key ministries was channelled towards child protection.[242] On average, across sub-Saharan Africa, the expenditure on social protection for children is very low (0.4 per cent of GDP).[243] This is despite the region having such a large share of children in the population and a great need for protection.[244]

> Only 0.1 per cent of expenditure in key ministries was channelled towards child protection.

238 Ibid.

239 George, C., F. Myamba and M. S. Ulriksen, *Social Protection in Tanzania: Challenges in the shift of financing PSSN from external funding to government, REPOA Brief PB 5/2021*, 2021.

240 Ibid.

241 Ibid.

242 UNICEF, *Child Protection: Many children in Tanzania experience violence, neglect and exploitation,* 2020, <https://www.unicef.org/tanzania/what-we-do/child-protection>

243 UNICEF, *Social Protection Budget Brief,* 2021, <https://www.unicef.org/esa/media/10216/file/UNICEF-Zimbabwe-2021-Social-protection-Budget-Brief.pdf>

244 ILO (2021). *World Social Protection Report 2020–22: Social Protection at the Crossroads – in Pursuit of a Better Future*. Available online at https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---soc_sec/documents/publication/wcms_817572.pdf.

While investment towards child protection is low, the costs of not addressing protection for vulnerable groups are high.[245] It is clear that enhanced funding and efforts are needed in order for Tanzanian children and adults alike to realize their right to protection. This might include ramping up social security to a greater proportion of the population, developing a solid national social and child protection strategy and increasing the quality and quantity of the child protection workforce.[246]

3.1.6 Summary

Every social sector contributing to ECD is facing the problem of public under-investment and budget allocations, which are not always adequately aligned with national priorities. The challenges that these sectors experience in funding their services on a large scale are contributing to poor ECD outcomes, which ultimately impact the lives of children. It is also affecting the ability of young women and men to grow up and reach their full potential and thus contribute to Tanzania's economic development.

To summarize

- **Poor health outcomes for pregnant women and young children seem closely connected with low budget allocation to the health sector.** This leads to low per capita expenditure on health, especially PHC. Low budget execution rates mean that resources are left unutilized each year and not being used to promote the health and well-being of young children.
- **The WASH sector is hindered by under-resourcing and faces a significant funding gap, which is a concern for young children who are disproportionately affected by WASH-related diseases.** While recent trends suggest that WASH expenditure as a proportion of GDP has been improving, other indicators of the quality of spending in the sector have been less promising. Estimates suggest that achieving the SDG targets in WASH would require an over US$ 800 million investment gap be plugged.[247]
- **There is a need to enhance the prioritization of pre-primary level education in order to avoid impeding the availability of high-quality early learning opportunities.** Disaggregating expenditure on pre-primary education is very difficult, but public under-investment seems directly correlated with poor quality and learning outcomes.
- **Social protection programmes have been improving in recent years, yet significant challenges remain in the sector, the most important being that it remains donor dependent.** Expenditure on social protection has been increasing in absolute terms, but in relative terms (including as a proportion of GDP), it remains below the regional and global targets.[248] Given high rates of poverty across the country (especially among children), domestic government spending on social protection must be increased.

(Continued)

[245] Ibid.

[246] ILO, *Social Protection in Tanzania*, 2022, <https://www.ilo.org/africa/countries-covered/tanzania/WCMS_549369/lang–en/index.htm>

[247] The United Republic of Tanzania Ministry of Finance and Planning (2016/17–2022/23), Data from United Republic of Tanzania Citizens' Budgets.

[248] Ibid.; Aspire Statistics, 2016, <https://www.worldbank.org/en/data/datatopics/aspire>, ILO, *World Social Protection Report* 2020-2022, 2020, <https://www.ilo.org/wcmsp5/groups/public/-ed_protect/-soc_sec/documents/publication/wcms_817574.pdf>

(Continued)

To summarize

- **Data unavailability on child protection expenditure is prominent.** This is a strong indication of weakness and under-development of the child protection sector, which is an important contributor to early childhood outcomes. Monitoring and analysis of child protection budgets in Tanzania have not been done since 2011.

The information provided above lays the foundation for the next section, which examines the financing issues in the context of the PFM system. Addressing these challenges by enhancing the existing PFM architecture can create a more favourable environment for increased investment in ECD. This, in turn, can lead to improved outcomes for young children in Tanzania.

3.2 Public finance management and ECD funding in Tanzania

The PFM system can be made a safeguard for all funding that is intended for ECD. Based on the analysis in the preceding chapter, this section explores how funding is channelled to ECD services in Tanzania, and the extent to which the PFM architecture acts as a safeguard for all ECD-related funding is assessed. The section is structured along three complementary pieces of analyses:

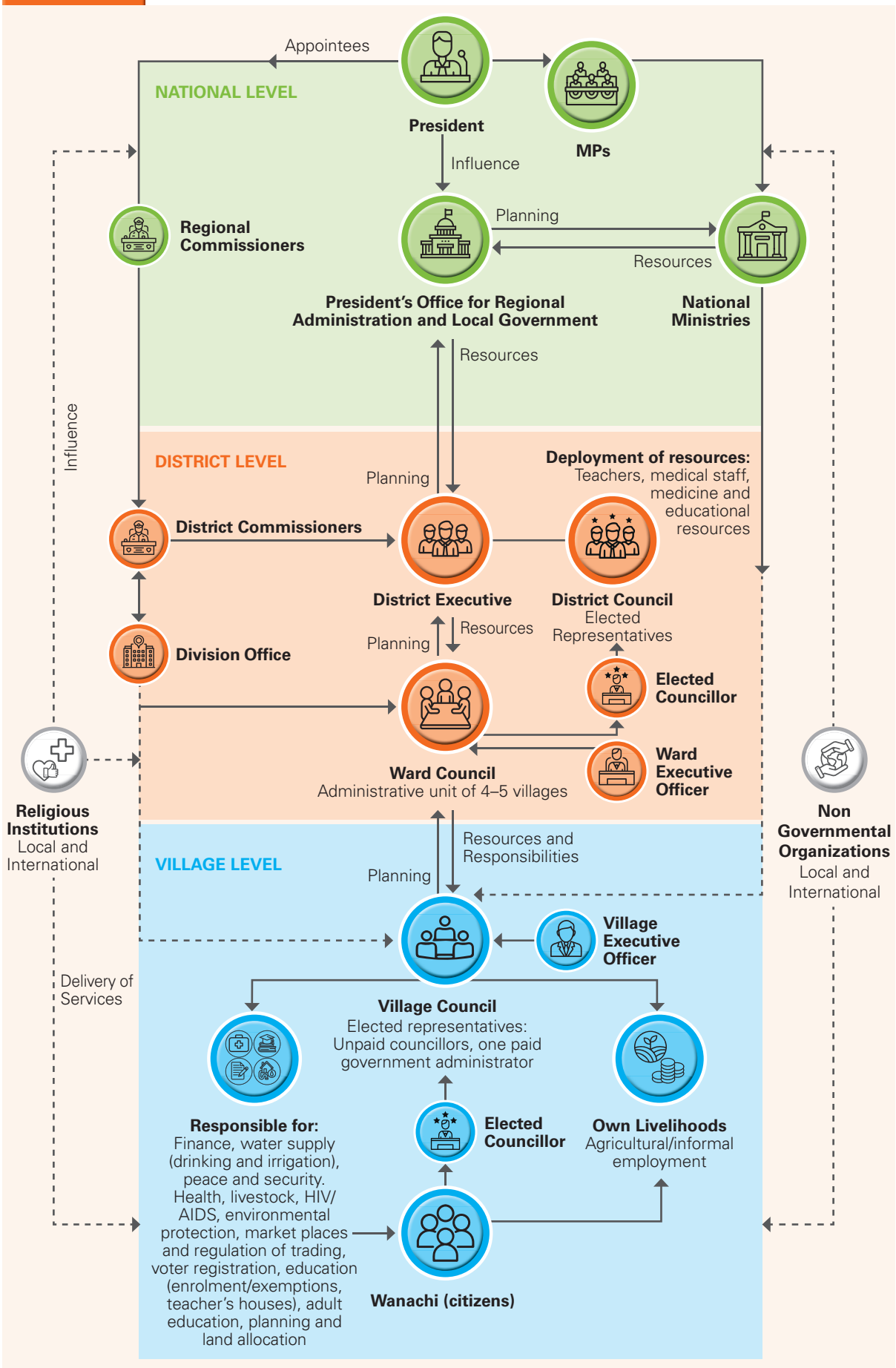
- An introduction and background section, describing the service delivery organization within which public services are delivered in Tanzania;
- PFM architecture/structural analysis, outlining some of the key structures, what may be missing and bottlenecks impeding ECD financing;
- Implementation effectiveness and efficiency (budget execution/credibility, effectiveness/efficiency, etc.).

3.2.1 Service delivery organization

The government services in Tanzania are organized around three levels of government – national, district and village level, and within this arrangement, the district level is responsible for service delivery. The district level, also referred to as local government, has the responsibility for social development and public service provision within their areas of jurisdiction and maintenance of law and order, in addition, promotion of local development through participatory processes. The structure and flow and resources and planning in Tanzania is illustrated in Figure 25.

Under the decentralized system in Tanzania, the national level devolves the responsibility for the delivery of services to the district and the village level. The national level also provides resources to the lower levels of government (both district and village level) through a range of instruments and arrangements. Funds towards ECD services in Tanzania are thus channelled through different avenues, such as direct mechanisms including budget line allocations, block grants, subsidies, matching funds, vouchers and conditional cash transfers. There are also indirect funding mechanisms, which include unconditional grants, parental and maternity leave allocations, and tax credits or refunds.

Figure 25 » **Governance and planning flows in Tanzania**[249]



The central government allocations serve as the primary source of funding for districts in Tanzania. The central government allocates funds to districts for the delivery of health services through two mechanisms, namely basket funding and block grants.[250] The Health Basket Fund (HBF) operates as a pooled funding mechanism, which comes entirely from donor contributions. The second source of central government allocations – block grants – encompass personnel emoluments, other charges and development grants.[251] The allocation of basket funds and block grants from central government to local government authorities (LGAs) follows a needs-based formula. This formula takes into account key factors such as population (70 per cent), poverty count (10 per cent), district medical vehicle (10 per cent) – which serves as a proxy indicator for the size of the areas covered – and mortality rate (10 per cent) – with the under-five mortality rate serving as a proxy indicator for this criterion.[252]

In addition to central government allocations, districts in Tanzania acquire funds from various other sources. LGAs have the authority to generate and use local sources of revenue over and above allocations from the central government. These sources include local taxes, cost sharing, Community Health Funds (CHF), National Health Insurance Funds (NHIF), user fees and off-budget donor support provided by donors who do not contribute to the HBF. The CHF, NHIF and user fees are the main sources of locally generated funds.[253] However, the revenue generated from these local sources constitutes less than 10 per cent of the funding for public service provisions at the district level. Consequently, local LGAs heavily rely on basket funds and block grants to finance the majority of their expenditures at the district level.[254]

In Tanzania, households are required to make payments to become members of the CHF. The districts have the authority to determine the annual payment fee and manage the funds collected from households. Once households make their annual contributions, they become eligible for a basic package of health services at the primary health care facility level. The funds collected from households are further supported by a 'match grant' provided by the central government, wherein the government doubles the funds collected by the districts. These match grants come from the general government revenue. Moreover, the NHIF is compulsory for public servants, while other formal sector employees have the option to join the scheme. Further, user fees in public lower-level health facilities typically range from TZS 1,000 to TZS 5,000 in public primary health facilities.[255]

Most publicly provided ECD services are funded through two mechanisms – budget line allocations and block grants. Budget line allocations are enacted via central planning from the

[249] Reproduced from Mdee and Mushi, 'Untangling Blame and Responsibility for Service Delivery and Local Governance Performance: Using a grounded social accountability approach in Tanzania', *Local Government Studies*. vol. 47, no. 6, 2020.

[250] Frumence, G., T. Nyamhanga, M. Mwangu and A. K. Hurtig, 'The Dependency on Central Government Funding of Decentralized Health Systems: Experiences of the challenges and coping strategies in the Kongwa District, Tanzania', *BMC Health Services Research,* vol. 14, no. 1, 2014, pp. 1–9.

[251] Kigume, R., S. Maluka and P. Kamuzora, 'Decentralization and Health Services Delivery in Tanzania: Analysis of decision space in planning, allocation, and use of financial resources', *The International Journal of Health Planning and Management,* vol. 33, no. 2, 2018, pp. e621–e635.

[252] Ibid.

[253] Kigume, R., S. Maluka and P. Kamuzora, 'Decentralization and Health Services Delivery in Tanzania: Analysis of decision space in planning, allocation, and use of financial resources', *The International Journal of Health Planning and Management,* vol. 33, no. 2, 2018, e621–e635.

[254] Frumence, G., T. Nyamhanga, M. Mwangu and A. K. Hurtig, 'The Dependency on Central Government Funding of Decentralized Health Systems: Experiences of the challenges and coping strategies in the Kongwa District, Tanzania', *BMC Health Services Research,* vol. 14, no. 1, 2014, pp. 1–9.

[255] Kigume, R., S. Maluka and P. Kamuzora, 'Decentralization and Health Services Delivery in Tanzania: Analysis of decision space in planning, allocation, and use of financial resources', *The International Journal of Health Planning and Management,* vol. 33, no. 2, 2018, e621–e635.

MoFP to relevant line ministries and the LGAs responsible for service delivery. Local governments may also then receive funding through a regional subvote as block transfers. As an example, in the education sector, the flow of funds is through two major channels: the Ministry of Education, Science and Technology (MoEST) vote (the main vote) and local governments through subsequent subvotes.

> Budget line allocations are enacted via central planning from the MoFP to relevant line ministries and the LGAs responsible for service delivery.

In principle, public funding is directed to the district level, and the district should shoulder most of the service delivery mandate. However, various reviews indicate that the funding flows from the national level and the internally generated resources at the district level are not adequate to meet the requirements, or even the planned allocations.[256] While the districts have the mandate to budget, plan and allocate funding to priorities according to these plans, it is also reported that district commissioners hold significant influence over how funding is allocated within districts and have a direct channel of communication to the President.[257]

It should be noted that financing for service delivery also comes from non-public sources. This includes development assistance and private funding – mostly out-of-pocket payments by households and contributions by the private sector. However, this funding is extra-budgetary, meaning it does not fall within the PFM architecture.

3.2.2 PFM architecture and bottlenecks

The budget in Tanzania is prepared and implemented on an annual basis, and the financial year runs from 1 July to 30 June. Budget estimates are prepared and presented to the public each June, just before the financial year begins. Tanzania uses a medium-term expenditure framework (MTEF) and resource projections are done in a three-year plan. The budget calendar is presented in Figure 26.

The district level, responsible for most service delivery, is also responsible for a number of key PFM functions. Tanzania now controls all its expenditure and revenue using Epicor ERP.[258] The system manages the GoT's

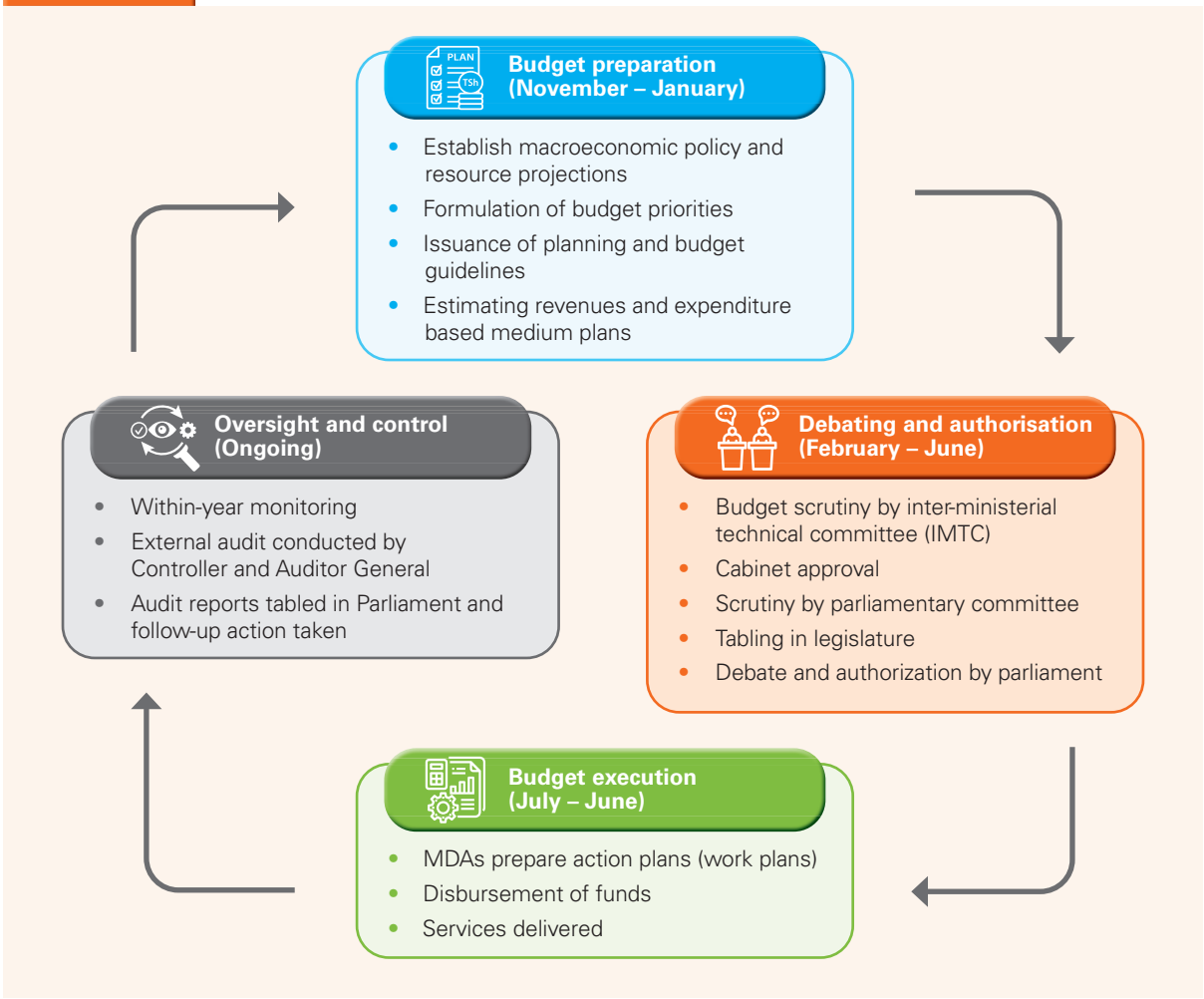
- budgeting management;
- funds management;
- financial transactions receipts and payments;
- printing reports meeting international standards; and
- procurements and commitments.

[256] See, for example, Mdee and Mushi, 'Untangling Blame and Responsibility for Service Delivery and Local Governance Performance: Using a grounded social accountability approach in Tanzania', *Local Government Studies,* vol. 47, no. 6, 2020.

[257] Ibid.

[258] EPICOR, 'Success Stories', 2023, <https://www.epicor.com/en/resource-center/success-stories/government-of--tanzania/>

Figure 26 » **Tanzania budget calendar**



Financial accountability is achieved through auditing. At the council level, this is done by the internal auditor looking at activity (quarterly) reports in collaboration with councillors, while at the regional level, the external audit is conducted on annual basis, and, at the national level, it is done by the Auditor General's (AG) team on an annual basis.

Importantly, there are a number of structural issues that affect the extent to which PFM safeguards expenditure in ECD in Tanzania:

Challenge I: Planning and budgeting process

Incorporating funding for ECD-specific services in the budget through the MTEF process can be a challenge. This is on account of the activity-based costing nature of the MTEF submission formats and templates. On the one hand, the annual budget review and scrutiny process requires adaptable, easy-to-update formats for cost, activity and expected output projections. However, the current MTEF costing and budget planning forms have been found to be complex, lengthy and difficult to adapt.[259] The MTEF planning process in Tanzania is iterative and requires submissions to be

[259] MoFP, *Assessment of the Public Financial Management Systems of the Central Government: Applying the 2016 Framework,* Government of Tanzania, Dodoma, Tanzania, 2022.

amenable to change by line ministries. Yet, in this case, plans and budgets for ECD may not reflect the resource needs in a multi-year budget planning framework process. This is due to process- and tool-related issues (including the ease of use and adoption of the right template). In an environment where fiscal discipline is high, the administrative issues in incorporating the planning for ECD services appropriately in the budget results in a persistent mismatch between resource requirements for ECD services and available resources.

Incremental budgeting approach: Tanzania uses an incremental budgeting approach, which limits the ability to link resources to concrete results. Most countries are shifting to programme- (or performance)-based budgeting (PBB) to link budgets to concrete results. While Tanzania has programme budgets in place, the current programme definitions are too broad to clearly delineate for which outputs and outcomes specific expenditures contribute, and in turn, evaluate expenditure performance critically.

Tanzania uses an incremental budgeting approach, which limits the ability to link resources to concrete results.

At a national level, a potential solution for this problem is adding the provision of technical and other assistance in reviewing and simplifying some of the forms that are used to compile information for the MTEF. This simplification, especially for the line ministries, may not lead to an overall significant change in the MTEF planning outputs and can thus be feasible to conduct within a relatively short period of time. At the district level, planners and officials have reported various challenges with staffing, supervision and computer access and internet connectivity.[260] Service providers rely on their LGAs for technical assistance, and LGAs are required to advise facilities on governance and management, including resource mobilization and management, as well as the audit of funds. However, limited LGA resources undermine the ability of the staff at the council level to perform their roles.

Challenge II: Implementing the budget

The main challenges in Tanzania regarding PFM performance revolve around budget implementation. They include budget credibility, mismatches between approved budgets and expenditure, misuse of public finances, inadequate enforcement of procurement and financial regulations, inadequate financial allocations to development budget, low mobilization of LGAs' own revenue and unsecured funding for priority investments.

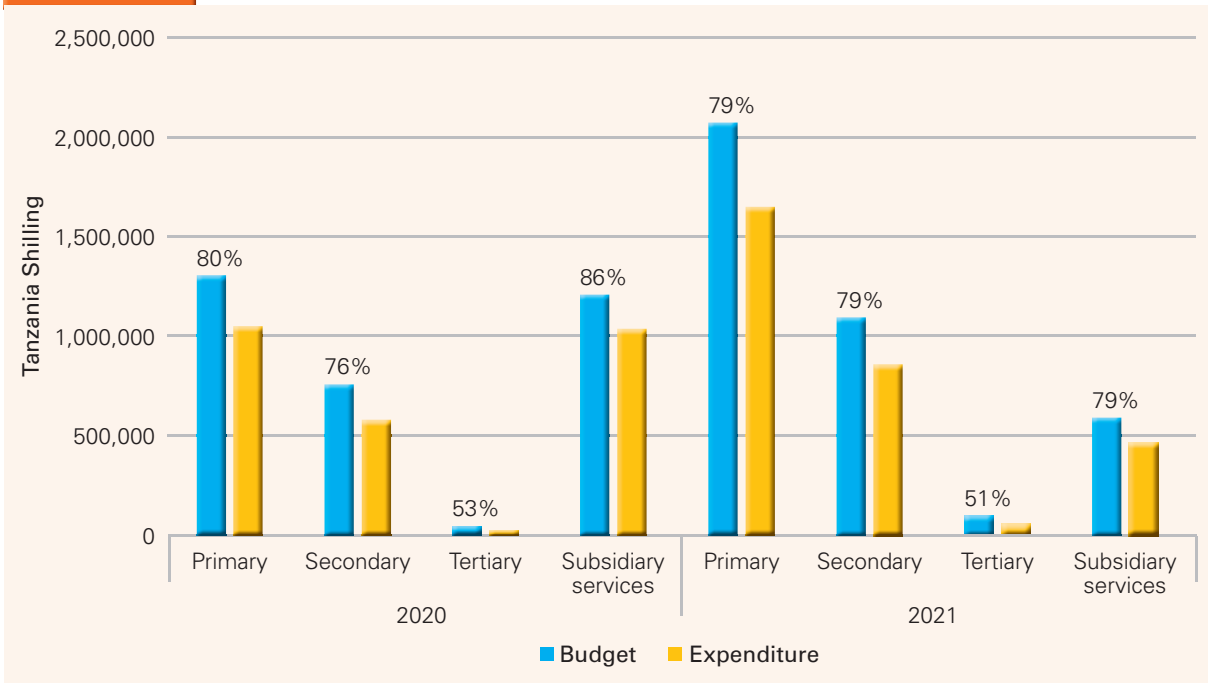
Budget reliability continues to be a challenge in Tanzania. The most recent PEFA assessment (PEFA 2022) reported that 'cash rationing' continues to be widely in practice, a process where on a month-to-month basis the available funding released to social sectors may be reduced on account of the available fiscal space. While this is a problem across GoT, reduced funding to ECD services that are already underfunded will have a larger than proportionate impact on the delivery and quality of services. This is particularly acute in cases where the available budget is largely allocated to expenditure items that have little variability year on year, such as salaries. The specific issue here is when such a

[260] Pasape, L. and E. Godson, 'Challenges Affecting Effective Implementation of Financial Management Information Systems in Local Government Authorities in Tanzania as Part of the Digital Ecosystem', *Journal of Financial Risk Management,* vol. 11, 2022, pp. 522–548.

relatively blunt mechanism is used to ensure aggregate fiscal discipline (by ensuring spending does not exceed available funds), it undermines other PFM system objectives, such as strategic allocation of resources, and in the case where investment in ECD should be a strategic priority (with a high return on investment), any cuts in aggregate spending should not affect ECD spending. The incidence of 'cash rationing' necessitates another objective of PFM to strengthen cost efficiency of the ECD sector, broadly through rewarding (by extra allocation) for the performance delivered. The role of the PFM system in this regard is to strengthen the availability of monitoring and routine data that enables policymakers to direct resources not just towards ECD services but towards subcomponents within these services that are relatively under-resourced.

For more efficient service delivery, service managers should receive agreed upon resources in a predictable manner. Yet, the Tanzania's PFM system still performs poorly on in-year resource allocation.[261] Poor in-year resource allocation affects planning for key service delivery arrangements, such as staff recruitment and procurement, which in turn affect the realized outcomes in the domain of ECD services. Budget execution rates in the education sector vary by educational level and are particularly acute at the secondary level, where actual expenditure hovers around 50 per cent of what is budgeted for.[262] This is illustrated in the figures below showing data from 2020 and 2021 (the two most recent years for which data are available). Across the ministries, some of the lowest budget execution rates are in the education budget and Figure 27 shows the variation between budget allocation and actual expenditure in Tanzania. The reasons for the gap are likely late disbursements of resources or bottlenecks in procurements.[263]

Figure 27 » **Budget allocation and actual expenditure of GoT across level of education, 2020 and 2021[264]**



[261] Ibid.

[262] National Bureau of Statistics, *Economic Surveys Data, Tanzania,* Government of Tanzania, Dodoma, Tanzania, 2020 and 2021.

[263] UNICEF, Education Budget Brief: Tanzania Mainland, UNICEF: Dar es Salaam, Tanzania, 2020.

[264] Data from National Bureau of Statistics, *Economic Surveys Data, Tanzania,* Government of Tanzania: Dodoma, Tanzania, 2020 and 2021.

Implementation of the budget should support allocative efficiency. In the case of ECE, for example, this means that funding in education flows to all the right levels (ECE, primary, secondary and tertiary) in the right proportions, and within these categories, the mix between capital and recurrent expenditure and economic classifications (salaries and wages, goods and services, etc.) are approximately right. The current PFM structure does not facilitate a clear flow of funding to ECE services, for example. ECE services are provided for under the MoEST vote, and this vote has seven subvotes to which funding is directed (and reported).[265] Expenditure within line ministry budgets, therefore, must be addressed to ensure that allocative efficiency is being achieved.

> The current PFM structure does not facilitate a clear flow of funding to ECE services. Expenditure within line ministry budgets, therefore, must be addressed to ensure that allocative efficiency is being achieved

Challenge III: Tracking, monitoring and reporting

Tracking, monitoring and reporting of public funding for ECD are complicated by budget structures. This is a particular challenge for ECE, which falls within the Basic Education subvote, and within this subvote are various categories of line items to which budget can be directed, and they do not include ECE. Instead, funding to ECE is subsumed within the broader national primary programme. Thus, a combination of cash rationing and aggregation of ECE within the broader national primary education programme results in a significant reduction in funding that makes its way to ECE services. Given the extent of need in basic education, where additional resources will continue to be required to meet the needs of the sector, underspecified allocation within the PFM system rules will mean spending at service delivery points towards ECD may be at the discretion of officials managing these institutions. With limited specification for ECD-specific services in the PFM system, the budgeting and planning framework around ECD services remains weak and vulnerable to allocation to other areas, even where the strategic intent of the government is to ensure ECD services are well funded.

A relatively easy win would be the creation of a stand-alone national programme to allow a specific budget line for ECE. This would mean that expenditure is not subsumed into the primary programme and would be easier to track due to its visibility. There is precedent that this is feasible in Tanzania. For example, in the Ministry of Community Development, Gender, Women and Special Groups, a subvote for Child Survival and Development exists. From a PFM architecture perspective, it is possible to plan, budget and allocate funding to the specific budget line over the medium term, and within the immediate year.

Without the availability of timely, good quality budget execution reports, monitoring, evaluation and learning on how funding to ECD services is being released and how to improve performance remains difficult. In Tanzania, regular budget execution reports are currently not routinely prepared and shared, which makes it difficult to assess not just for the social sectors, but also for ECD specifically, how much is flowing to key services.[266] For ECD services, this is a compounded

[265] MoFP – Estimates of Public Expenditure (2022), Volume IV.

[266] Ibid.

issue, given the earlier discussion. First, without sufficient delineation of ECD services in the PFM architecture, the tracking of funding and understanding the alignment between policy priorities and actual spending would always be difficult. It would also certainly be more expensive, as it would require secondary data collection techniques, as opposed to assessing it through the analysis of public expenditure data. Second, the public expenditure data at the sector level is not routinely released, and when it is released, it is not always reported consistently. Under such scenarios, identifying what is not working well and how to structure corrective action will always be a challenge.

3.3 Options for the future

There are different initiatives the GoT, and its partners, can consider in strengthening the PFM system to support improved funding for ECD services. Improving ECD outcomes in Tanzania will require considering a number of options to spend more, allocate resources better and also spend well. This must all be approached in combination and the proposed solutions must factor in specific contextual issues. A few options are particularly important, which are outlined in the Table 4 and summarized briefly below:

> Improving ECD outcomes in Tanzania will require considering a number of options to spend more, allocate resources better, and also spend well.

- **Spending more on ECD:** The priorities need to be directed towards (i) stabilizing the funding flows to MoFP, so that year-on-year social sector spending is more predictable; (ii) strengthening LGAs' ability to raise more revenue and allocate them to various sectors; (iii) advocating for a larger share of development assistance to be channelled on budget; and (iv) incrementally allocating the budget share to social sectors, as the economy grows.
- **Allocating available resources better:** There are issues with geographic distribution of funding, as well as tagging current spending specifically to priorities or objectives in ECD. At the national level, some of this will be addressed through considering needs-based or outcomes-based allocation of funding to the LGAs. Within sectors, some of this will be alleviated by strengthening the planning and budgeting process, both in terms of tools and approaches and, also, in terms of the staffing capabilities of officials in LGAs. A combination of these would support more equitable allocation of available resources, while also ensuring that funding is tagged to outcomes.
- **Spending better:** Efforts to strengthen tracking, monitoring and evaluation of the budget and expenditure will need to be considered. Further, improving a raft of service delivery modalities (that are not necessarily linked to financing) should also be explored.

Table 3 » **Suggested PFM reforms for national and local government levels**

Findings related to finance and PFM	Affected ministry and/or level of government	Policy implications
Low investment in WASH, significantly below the target	Health, Water and Irrigation and Education ministries at national and district level and PO-RLAG	The investment case finds that gains from improved WASH, particularly in rural WASH, will drive the benefits for young children. Rural WASH appears to be hampered by investment in infrastructure in rural areas and disparate spending levels geographically (where some regions receive more investment than others) and low budget execution. Specific proposals for the WASH sector include increasing the share of spending being used in LGAs significantly below the country averages for expenditure or outcomes. This should help to equalize both outcomes and spending.
Low investment in health (below regional benchmarks)	Health sector, national and district levels and PO-RLAG	Low investments in health and nutrition are a result of many factors, including overall fiscal space, and also the capability of LGAs to raise more taxes and allocate locally raised funding towards the social sectors. Proposals here include expanding the types of taxes that LGAs may collect to include property tax. However, this is a long-term engagement and will require additional evidence and advocacy.
Low investment in nutrition	Health and Education at the national and district level	
Activity-based costing tools feed into the MTEF process, which are too detailed and hard to adapt	All sectors, at the national and district level	Options to tackle this bottleneck include (i) simplification of budget submission forms and planning tools used by front-line ministries and departments and (ii) capacity strengthening in forecasting and planning. These actions should improve the reliability of estimates for spending that are commensurate to the needs faced in ECD.
Budget credibility is poor. Cash rationing is taking place, where funding is released based on availability and not on predetermined priorities	All sectors, at the national and district level	More predictable resource flows to the MoFP will reduce the impact of fluctuations in the available funding and smoothen spending for various sectors. A wide range of options should be explored here, including channelling more development assistance through the budget and strengthening budgetary controls that limit making commitments when the funding is not there, and closer monitoring of execution rates.
Budgeting is incremental – **funding from previous budgets is adjusted upward based on overall budget ceilings** rather than priorities or need	All sectors, at the national and district level	Strengthened programme budgeting where activities are linked to results at the LGA level, coupled with the above reforms will shift the system towards a zero-based budgeting approach where (i) plans and resource estimates are stronger and more realistic; (ii) only available funding is committed; and (iii) specific policy priorities and outcomes are specified.

(Continued)

(Continued)

Findings related to finance and PFM	Affected ministry and/or level of government	Policy implications
There are significant **in year-on-year resource allocation, in part caused by low budget execution**	All sectors, at national and district level	
Budgets and expenditure on ECD are difficult to track, monitor and evaluate	All sectors, at the national and district level	Options to improve include developing strengthened ECD budgeting guidelines, appended to existing guidelines for plans and budgets and tweaking the PFM budget structure by adding specific line items (for example, to allocate and track ECE expenditure)

04

Cost–benefit and cost-of-inaction analysis

Given the clear financing challenges that ECD is faced with in Tanzania, a cost–benefit and cost-of-inaction analysis was performed. Its purpose is to provide evidence on the strong economic case for investing in ECD. A thorough exploration of the methodology for this analysis is provided in *Annex III*. In brief, a basic package of 69 interventions from across the health and nutrition, WASH, education, social protection and child protection sectors was developed. ECD-sensitive and ECD-specific interventions were included on the basis of a selection criterion. The baseline coverage rates of these interventions were sourced from the best possible data source (with a preference given to up-to-date, national data points). A model was then developed to estimate the benefits and costs associated with scaling up coverage of these interventions from their baseline rate to a target coverage rate. Benefits and costs were analysed over a short (up to 2030), medium (up to 2040) and long (up to 2050) time horizon. This modelling took place on a number of tools, including Avenir Health's *One Health Tool*, UNICEF's *ECE Accelerator*, and advanced Excel. This model was applied for two scale-up scenarios:

This model was applied for two scale-up scenarios:

- A **fast scale-up:** coverage rates for each intervention are scaled up incrementally from their baseline rate to the target rate by 2030, and then maintained for the remainder of the study period (2050), and
- A **slow scale-up:** coverage rates for each intervention are scaled up incrementally from their baseline rate to the target rate at the end of the study period (2050).

The outputs of this analysis are reported in the following sections. They include a description of the benefits associated with the ECD package according to each scale-up scenario in both monetary and non-monetary terms. This is followed by an estimation of the anticipated additional costs incurred for each scale-up scenario and over different time horizons. Both benefits and costs are reported in incremental (or additional) terms – in other words, they are the difference between the baseline scenario and the scale-up scenario under study. The monetized benefits and costs were then compared and are expressed as incremental benefit–cost ratios and the incremental cost-of-inaction. The calculations for incremental benefit–cost ratios and incremental cost-of-inaction are presented below. It should be noted that all outputs are recorded over the different time horizons and, for monetary benefits or costs, they are presented discounted at a rate of 10 per cent.

$$\textbf{Incremental benefit–cost ratio} = \frac{\text{Additional benefit (monetary)}}{\text{Additional costs (monetary)}}$$

Incremental cost-of-inaction = Additional benefit (monetary) – additional costs (monetary)

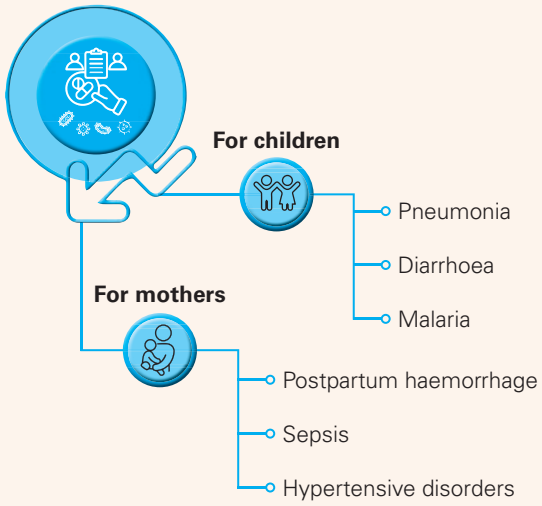
4.1 Benefits

4.1.1 Health, nutrition and WASH benefits

Scaling up the coverage of these interventions was found to bestow impressive benefits, in both monetary and non-monetary terms. Table 4 shows the non-monetary health benefits of implementing this ECD package, in terms of the additional child deaths averted and the DALYs averted

in children, mothers and together, each year and in total. It provides these health benefits for both Scale-up Scenario A (fast) (scenario, where targets are achieved by 2030 and then maintained) and Scale-up Scenario B (slow scenario, where targets are achieved in 2050). For children, the disease burden areas most reduced by the interventions were pneumonia, diarrhoea, and malaria – all of which are among the top 10 leading causes of death and disability in Tanzania. Lower-respiratory infections are the second leading cause of death and disability in the country, while malaria and diarrhoeal disease rank third and seventh, respectively.[267] For mothers, the disease burden areas most reduced by the interventions were post-partum haemorrhage, sepsis and hypertensive disorders.

Disease burden areas most reduced by the interventions in Tanzania



Intuitively, the health benefits of Scale-up Scenario B (slow) are smaller than that for Scale-up Scenario A (fast). With targets not achieved until 2050 (instead of 2030), a larger proportion of children are left uncovered by these critical health and nutrition interventions during the study's time horizon. Compared to the baseline scenario, a significant number of child deaths and DALYs in mothers and children are still expected to be averted. To summarize these results:

In the fastest scale up

- Compared to the baseline scenario, an additional **3.1 million child deaths could be averted by 2050 in Tanzania,** and **nearly 747 million additional DALYs could be averted in children and mothers** over the same time horizon.
- With each additional child reached by these interventions, **health benefits are reaped and, even before targets are achieved in 2030, an additional 400,000 child deaths and 80 million DALYs could be averted. Annually, an average of 106,000 child lives could be saved** (2022–2050) in the faster scale-up scenario.

In the slower scale-up

- An **additional** almost **2 million child deaths and 460 million DALYs will be averted by 2050.** Therefore, even with a less ambitious plan, the social returns of investing in ECD are very high.
- However, across the study's time horizon, **56 per cent more child deaths could be averted if the Scale-up Scenario A (fast) were implemented instead of Scale-up Scenario B (slow).**

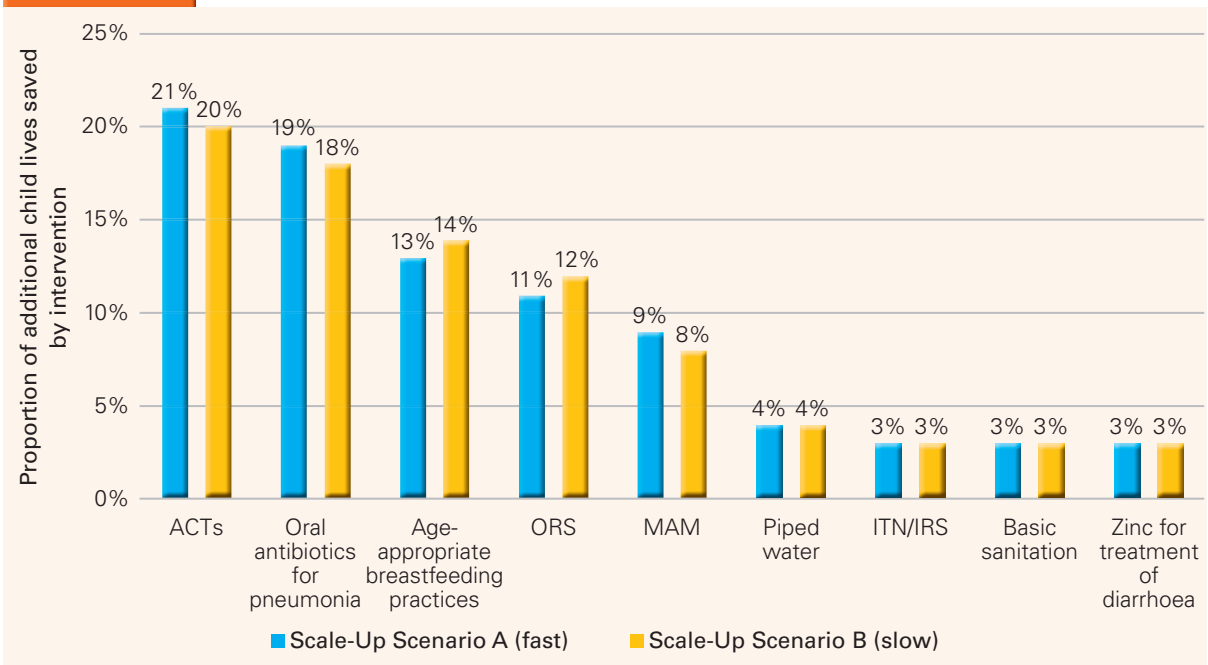
[267] Institute for Health Metric and Evaluation (IHME), *United Republic of Tanzania,* 2019, accessed 5 December 2022, <https://www.healthdata.org/tanzania>

Table 4 » **Additional child deaths and DALYs (in children, mothers, and in total) averted for Scale-up Scenario A (fast) and B, annually and in total, 2023–2050**

	Scale-up Scenario A (fast)				
	Child deaths averted	**Stunting cases averted**	**DALYs averted in children**	**DALYs averted in mothers**	**Total DALYs averted**
2023–2030	406,731	5,414,375	76,629,062	5,019,328	**81,648,390**
2031–2040	1,121,306	23,564,616	262,945,639	12,252,136	**275,173,793**
2041–2050	1,544,946	33,685,203	379,675,334	16,701,007	**396,241,206**
Total	**3,072,983**	**62,664,194**	**719,090,918**	**33,972,471**	**753,063,389**
	Scale-up Scenario B (slow)				
	Child deaths averted	**Stunting cases averted**	**DALYs averted in children**	**DALYs averted in mothers**	**Total DALYs averted**
2023–2030	139,610	1,641,535	23,700,858	1,855,411	**25,556,269**
2031–2040	604,111	10,743,249	124,710,726	7,640,549	**132,351,274**
2041–2050	1,218,841	25,804,515	288,780,289	14,795,775	**303,576,064**
Total	**1,962,562**	**38,189,299**	**437,191,873**	**24,291,735**	**461,483,608**

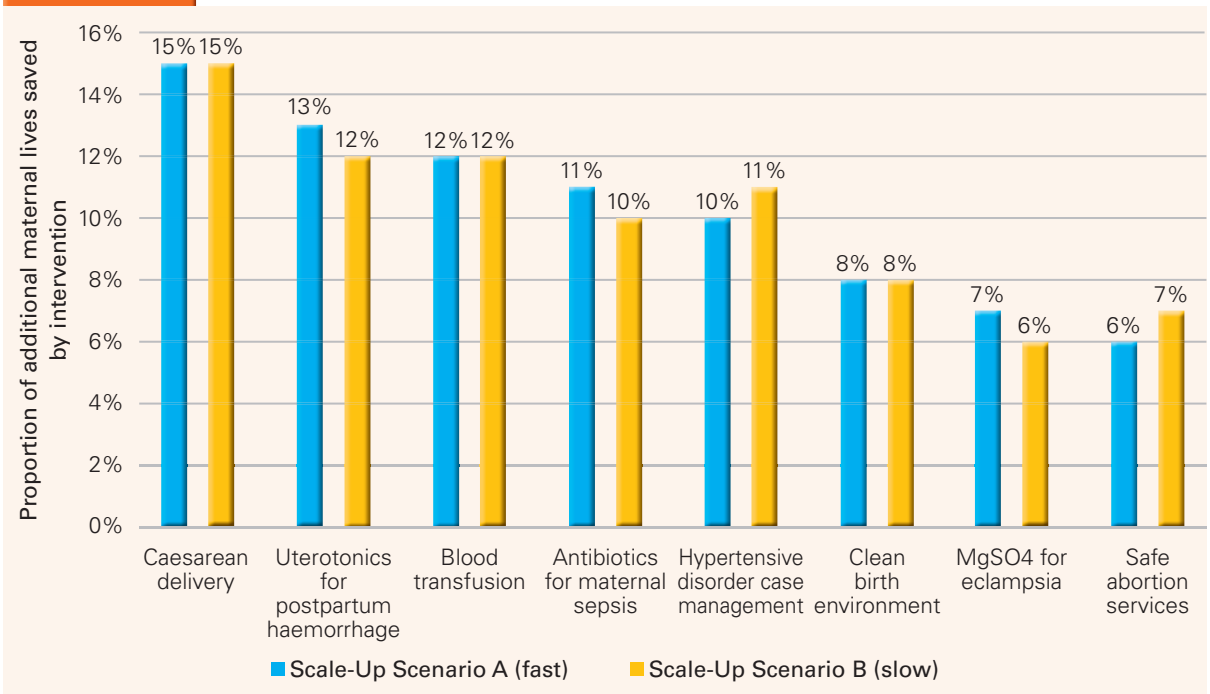
A few interventions were particularly effective in improving the health outcomes analysed. Children were the primary beneficiaries of scaling up these ECD interventions, accruing around 90 per cent of all additional DALYs averted across the study time horizon. As aforementioned, across Tanzania there are concerningly high rates of child and maternal morbidity and mortality. Therefore, the interventions targeting the biggest contributors to this morbidity and mortality were the most effective.

Figure 28 » **Additional child deaths averted in Scenarios A and B by intervention, with their proportional contribution to total child deaths averted annotated, across time horizon 2023–2050**



For children, the interventions which were expected to avert the highest numbers of child deaths included artemisinin compounds for the treatment of malaria (ACTs), oral antibiotics for pneumonia and age-appropriate breastfeeding practices (Figures 28 and 29). For maternal mortality, health outcomes were most improved by scaling up coverage of (medically essential) caesarean delivery, uterotonics for post-partum haemorrhage and blood transfusion as part of emergency obstetric care (Figure 29). This information could be of particular use when prioritizing the scale-up of interventions.

Figure 29 » **Additional maternal deaths averted in Scenarios A and B by intervention, with their proportional contribution to total child deaths averted annotated, across time horizon 2023–2050**



When monetized, these improved health outcomes for children and mothers have a high economic value. In order to get a sense of the economic gains that investing in ECD could bestow, the additional gains were transformed into monetary benefits by converting DALYs into a productivity contribution to society. This conversion followed standard practices in the literature. Table 5 displays the projected economic returns in 10-year increments and in total for the study's time horizon. Further analysis suggests that, for Scale-up Scenario A (fast), an average annual monetary benefit **(2023–2030)** of nearly **TZS 38 trillion** would accrue owing to the scale-up of these health and nutrition interventions. For Scale-up Scenario B (slow), this figure is lower at just under **TZS 11 trillion.** These average annual monetary benefits would rise over the study time horizon, reaching **TZS 67 trillion annually (2041–2050)** for Scale-up Scenario A (fast) and **TZS 38 trillion** in Scale-up Scenario B (slow).

Table 5 » **Monetization of additional benefits for Scale-up Scenario A (fast) and Scale-Up Scenario B (slow), in 10-year increments and in total (expressed in trillions of TZS, adjusted for inflation and discounted at rate of 10 per cent)[268]**

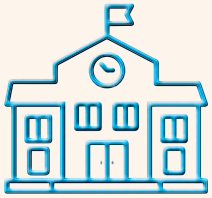
Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
2023–2030	2031–2040	2041–2050	2023–2050	2023–2030	2031–2040	2041–2050	2023–2050
338	815	666	1,818	96	309	381	786

[268] The benefit of these interventions is counted in the year the intervention is implemented rather than the year the benefit is realized.

4.1.2 Education benefits

4.1.2.1 Reduced years of primary school repetition

Children who benefit from ECE are less likely to repeat years in primary school. In Tanzania, where the current primary school repetition rate stands at 3.6 per cent, the benefits of reducing this repetition could be significant.[269] A recent study of 109 developing low- and middle-income countries found that for every 10-percentage point increase in preschool enrolment, there would be a subsequent 0.55 percentage point decrease in the primary school repetition rate.[270]

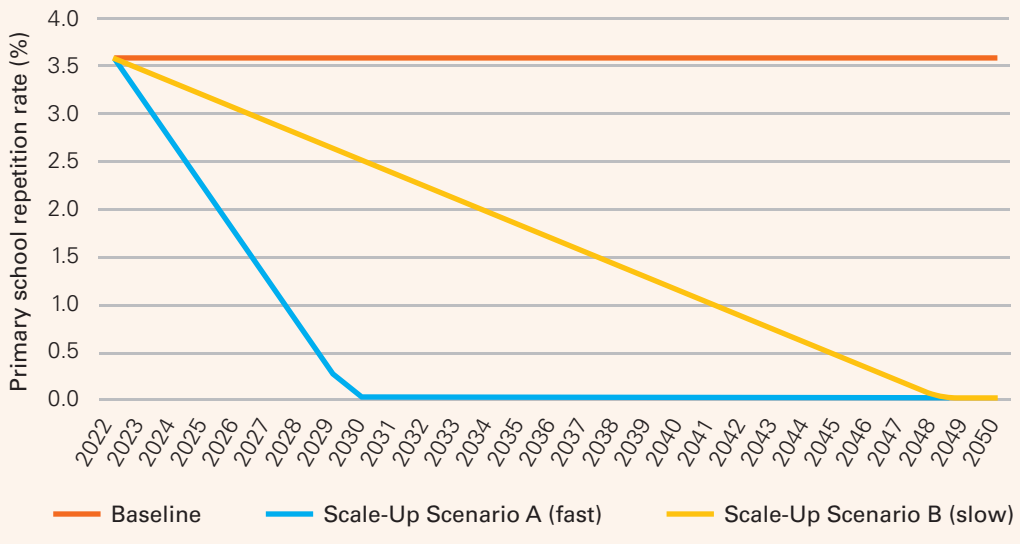


For every **10%** point increase in preschool enrolment,

there is **0.55%** point decrease in the primary school repetition rate

Scaling-up ECE services in Tanzania would have a dramatic impact on the primary school repetition rate and number of years of primary school which children would repeat. Figure 30 shows the modelled changes to the primary school repetition rate under each scenario modelled. In the Baseline Scenario, the primary school repetition rate is expected to remain at 3.6 per cent across the study time horizon. In Scale-up Scenario A (fast), the primary school repetition rate would drop rapidly, as young children's access to ECE quickly increases to their target levels in 2030 and are then maintained until 2050. Under Scale-up Scenario B (slow), this drop in the primary school repetition rate happens more gradually, at 2.5 per cent in 2030 and 1.1 per cent in 2040.

Figure 30 » **Primary school repetition rate under baseline scenario, Scale-up Scenario A (fast) and Scale-up Scenario B (slow) (modelled estimates)**

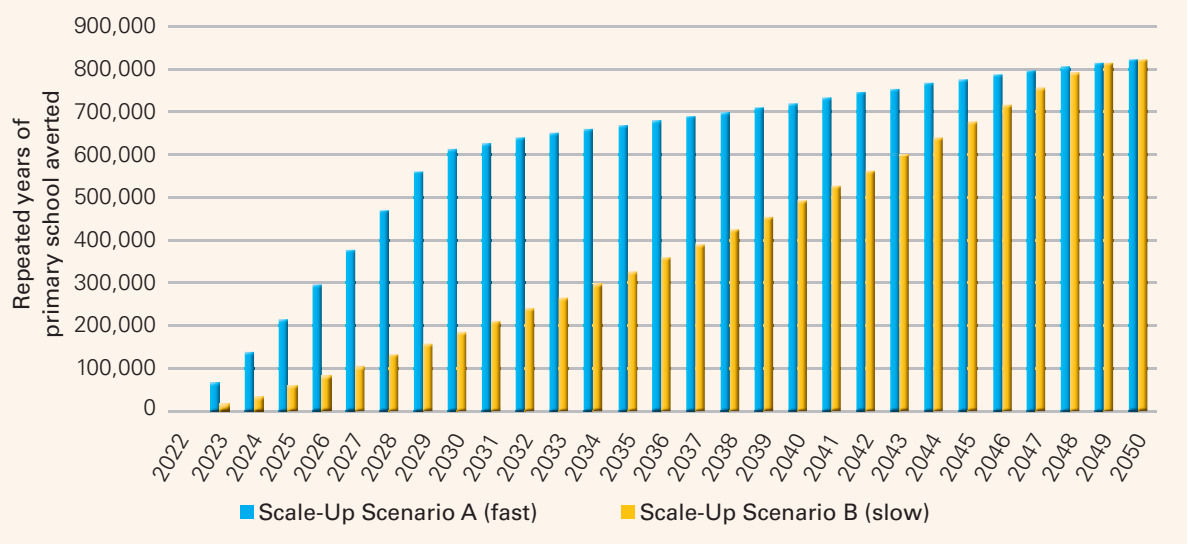


[269] UNESCO Institute for Statistics, 'Tanzania', *UIS Database,* 2018, <https://uis.unesco.org/>.

[270] Muroga, A., H.T. Zaw, S. Mizunoya et al., 'COVID-19: A reason to double down on investments in pre-primary education', *Innocenti Working Paper WP-2020-11,* UNICEF Office of Research, Florence, Italy, 2020.

The number of repeated years of primary school are, therefore, expected to fall in both Scale-up Scenario A (fast) and Scale-up Scenario B (slow). Figure 31 illustrates the magnitude in this reduction of repeated years across the study time horizon. Because the primary school repetition rate falling in the Scale-up Scenario A (fast) is much faster than in Scale-up Scenario B (slow), the number of repeated years averted also is much greater. Compared to the Baseline Scenario, 17 million repeated years of primary school could be averted in Scale-up Scenario A (fast). For Scale-up Scenario B (slow), this is lower but still significant, at 11 million.

Figure 31 » **Repeated years of primary school averted under Scale-up Scenario A (fast) and Scale-up Scenario B (slow)[271]**



When monetized, the gains of averting these repeated years of primary school are significant. These economic benefits were calculated by estimating the expenditure per year of primary education in Tanzania, which was then multiplied by the number of repeated years of primary school averted owing to the scale-up in ECE. The results are presented in Table 6. Across the study time horizon (to 2050), **nearly TZS 1 trillion** could be saved in averting primary school repetition in the faster Scale-up Scenario (A). Under this Scenario, **TZS 354 billion** would already be realized by 2030. In the slower Scale-up Scenario (B), the economic gain could reach **TZS 102 billion** by 2030 and **nearly half a trillion TZS** by 2050. While this is significantly lower than Scale-up Scenario A (fast), this is still an impressive economic benefit. As much of the cost of providing primary school education is borne by the public sector in Tanzania, these benefits would be predominantly realized by the government in terms of efficiency savings. These savings would represent additional fiscal space and provide budgetary room, which could be used to bolster the starkly low levels of public expenditure in ECE currently.

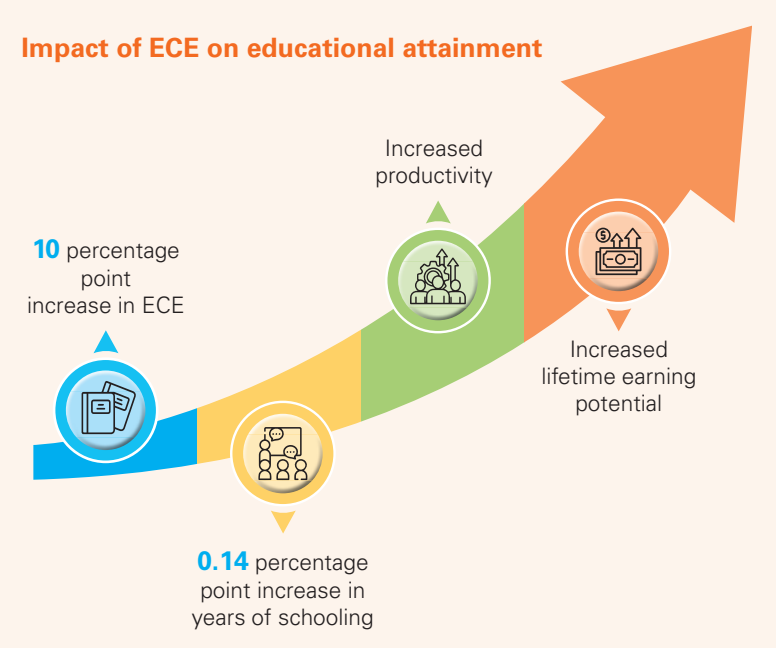
Table 6 » **Monetization of additional benefits (cost savings) associated with reducing primary school repetition (expressed in billions of TZS and discounted at a rate of 10 per cent)**

Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
2023–2030	**2031–2040**	**2041–2050**	**2023–2050**	**2023–2030**	**2031–2040**	**2041–2050**	**2023–2050**
354	418	187	959	102	204	161	467

[271] The impact of ECE on a child's propensity to repeat is counted in the year of the intervention being implemented, rather than the year the benefit would be realized.

4.1.2.2 The benefits of more years of schooling

Evidence shows that early childhood education improves both the quantity and quality of lifelong learning. Studies from the international literature find strong associations between high-quality ECE and higher years in schooling, as well as higher learning-adjusted years of schooling (LAYs). A recent multi-country analysis of the impact of ECE on educational attainment found that for every 10-percentage point increase in ECE, there would be a subsequent 0.14-percentage point increase in the average years of schooling across the population.[272] Further, a comparison of 150 interventions using the LAYs metric found that ECE had among the most significant impacts of any intervention under study on the quantity and *quality* of schooling.[273] It suggests that beyond ECE increasing the likelihood of children finishing school, it also increases the quality of children's learning experience. Increasing educational attainment can have a significant economic return. Studies show that increasing years of schooling is associated with an increase in productivity and lifetime earning potential.[274] In East Africa, it is estimated that for each additional year of education is equivalent to an 11 per cent increase in lifetime earnings.[275]



Each additional year of education is equivalent to an 11 per cent increase in lifetime earnings.

Scaling up ECE could result in a notable rise in the expected years of schooling in Tanzania. While under the Baseline Scenario, the expected years of schooling would remain at 7.2 years per child, this could increase to 8.2 years by 2050. Under faster Scale-up Scenario (A), this additional 1 year of schooling would be achieved by 2030 and then maintained. Meanwhile, under the slower Scale-up Scenario (B), this increase would happen more gradually – with the expected years of schooling reaching 7.5 in 2030, 7.8 in 2040 and then 8.2 in 2050.

[272] Muroga, A., H.T. Zaw, S. Mizunoya et al., 'COVID-19: A reason to Double down on investments in pre-primary education', *Innocenti Working Paper WP-2020-11,* UNICEF Office of Research: Florence, Italy, 2020.

[273] Angrist, N., D.K. Evans, D. Filmer, R. Glennerster, F. Halsey Rogers and S. Sabarwal, 'How to Improve Education Outcomes Most Efficiently? A comparison of 150 interventions using the new learning-adjusted years of schooling metric', *Center for Global Development, Working Paper* 558, 2020.

[274] To avoid double counting, only the additional years of schooling has been monetized. To additionally monetize the economic value of LAYs would involve counting the benefits of improving schooling and educational attainment twice, which would distort the subsequent cost–benefit analysis. The decision that additional years of schooling would be chosen for monetization was taken as a result of it being more common practice in the literature. LAYs remain a new metric and, therefore, research associating them with the economic impact remain nascent.

[275] Authors' calculation based on data cited in Pscharopoulos, G., and H.A. Patrinos, 'Returns to Investment in Education: A decennial review of the global literature', *Education Economics,* Vol. 26, No. 5, 2018, pp. 1–4.

When monetized, the impact of this increase in expected educational attainment is highly impressive. The economic benefit of ECE on lifetime earnings is calculated as the additional years of schooling × rate of return of education × lifetime earnings.[276] Table 7 provides the results of these calculations. Under **Scale-up Scenario A (fast)**, the economic benefits of increasing years of schooling attained are exceptionally high – at **TZS 69 trillion** across the study time horizon. Comparatively, **Scale-up Scenario B (slow)** has far lower of these economic benefits, at **TZS 25 trillion.** These benefits are enormous and account for the vast majority of all the monetized benefits associated with increasing ECE enrolment. This is the result of the value of schooling being so high in East Africa – with each additional year equating to an increase in lifetime earnings of 11 per cent.[277] As ECE is expected to add an additional one year of education by 2050 (in both Scale-up Scenarios), this translates into this vast economic boost.

This table also divides the benefits into 10-year time blocks to show how the gains evolve over time. It should be noted that the benefit of this improvement in lifetime earnings is counted in the year of the intervention (i.e., when the child receives ECE), rather than in the year(s) they would realize the benefit. In reality, these benefits would be felt much later than indicated in this table – accruing across the life course of children who have benefited from exposure to ECE. However, these benefits are accounted for in the year that the intervention has finished, rather than the year the benefit is expected to be realized to allow for greater comparability.

Table 7 » **Monetization of additional benefits of increased years of schooling (expressed in billion TZS and discounted at a rate of 10 per cent)**

Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
2023–2030	**2031–2040**	**2041–2050**	**2023–2050**	**2023–2030**	**2031–2040**	**2041–2050**	**2023–2050**
13,105	32,855	23,447	69,407	1,070	7,688	16,343	25,101

4.1.2.3 The benefits of increasing (female) caregiver time

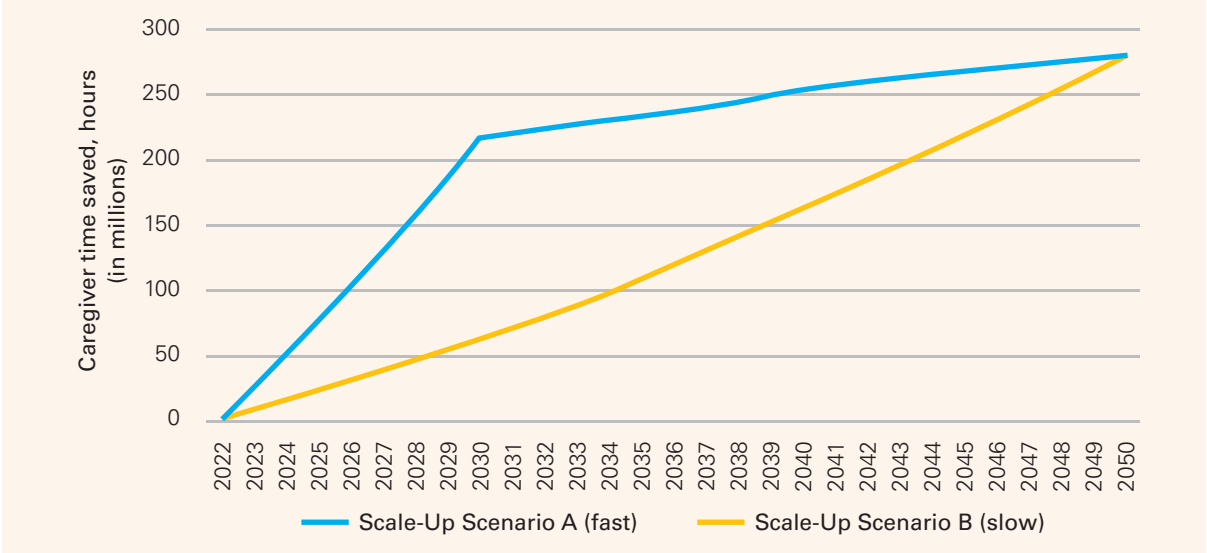
The provision of ECE services frees up time for caregivers (usually women). Studies show that this 'freed up' time can be significant and, often, can be spent in income-generating activities.[278] Enrolling children in ECE would be expected to have a sizeable time-saving impact for caregivers in Tanzania under both scale-up scenarios. Figure 32 depicts this additional caregiver time that would be made available owing to scaled-up in ECE coverage. As shown, the time savings would be more significant in Scale-up Scenario A (fast) compared to B, owing to coverage rates being achieved more quickly and, therefore, more children benefiting from the intervention. Across the study time horizon, it is expected that an additional **6 million hours** of time would be saved for caregivers in **Scale-up Scenario A (fast),** compared to **3.7 million hours** in **Scale-up Scenario B (slow).**

[276] The impact of ECE on lifetime earning is counted in the year the intervention is implemented rather than the year in which it is realized.

[277] Pscharopoulos, G., and H.A. Patrinos, 'Returns to Investment in Education: A decennial review of the global literature', *Education Economics,* Vol. 26, No. 5, 2018, pp. 1–4.

[278] Hojman, A. and F. Lopez Boo, 'Public Childcare Benefits Children and Mothers: Evidence from a nationwide experiment in a developing country', *Journal of Public Economics,* vol. 212, 2022, p. 104686; Fink, G., D.C. McCoy and H.I. Hatamleh, 'Economic Implications of Investing in Early Childhood Care and Education in Jordan', *Queen Rania Foundation, Working Paper,* 2017.

Figure 32 » **Caregiver time saved annually, hours (in millions) (Scale-up Scenario A [fast] and Scale-up Scenario B [slow])**



These time savings could translate into a significant economic opportunity for caregivers, many of whom are women. In line with the literature, it was assumed that half of these 'freed up' hours (for caregivers without other children below the age of five) would be spent in income-generating activities. On this basis, and using a conservative estimate of a caregiver's potential hourly wages, the economic benefit was calculated. The results of these calculations are displayed in Table 8. Scale-up Scenario A (fast) provides a greater incidence of economic benefit, at **TZS 1.4 billion** across the study time horizon, and **over TZS 300 billion** by **2030** alone owing to an increase in caregiver time being spent on income-generating activities. In Scale-up Scenario B (slow), these economic benefits are also significant – at **TZS 783 billion** across the study time horizon and **TZS 92 billion** by **2030**. These large benefits are particularly important as they are reaped directly, and immediately, by families and caregivers. The subsequent increase in household incomes as a result further enhance child development – for example, through investing in more nutritious foods and reducing exposure to toxic stress as a result of poverty. These additional incomes could also be pivoted towards supporting household contributions towards the provision of ECE, if these services cannot be fully resourced through public financing.

Table 8 » **Monetization of additional benefit of increased caregiver time in Scale-up Scenario A (fast) and Scale-up Scenario B (slow) (expressed in billions of TZS and discounted at a rate of 10 per cent)**

Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
2023–2030	**2031–2040**	**2041–2050**	**2023–2050**	**2023–2030**	**2031–2040**	**2041–2050**	**2023–2050**
322	610	482	**1,414**	92	290	400	**783**

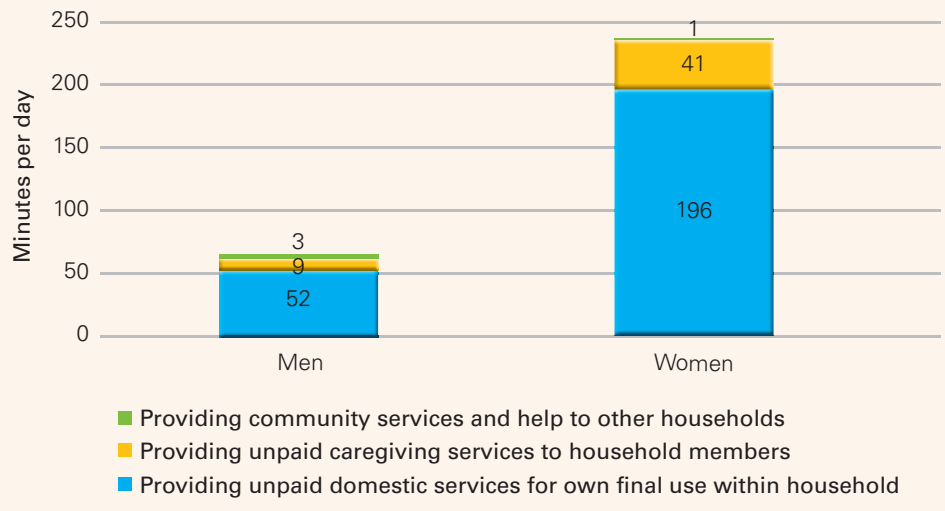
Importantly, women stand to particularly benefit from these time savings for caregivers associated with improved ECE coverage. Studies show that women shoulder the majority of unpaid care work, including care for young children.[279] Analysis of time-use studies in Tanzania found that

[279] Addati, L., U. Cattaneo and E. Pozzan, *Care at Work: Investing in Care Leave and Services for a More Gender Equal World of Work,* ILO, Geneva, 2022; Azcona, G., A. Bhatt, W. Cole, R. Gammarano and S. Kapsos, The Impact of Marriage and Children on Labour Market Participation, ILO and UN Women, Geneva, 2020.

women undertake nearly four times more unpaid care work each day, equivalent to an additional 3 hours per day (Figure 33).[280] For unpaid care work related to caregiving services to household members (including children), this disparity is even higher, with women spending 4.5 times more time on caregiving within the household in comparison to men. These figures are close to the average for other sub-Saharan African countries.[281] For this reason, women stand to benefit disproportionately from improved access to ECE services, including in improving their ability to participate in income-generating activities.

Women stand to benefit disproportionately from improved access to ECE services, including in improving their ability to participate in income-generating activities.

Figure 33 » **Unpaid care work undertaken by men and women in Tanzania, by type of unpaid care work, in minutes per 24-hour day[282]**



Female labour force participation would likely be impacted by caregiver time saved owing to ECE.[283] Female labour force participation is high across sub-Saharan Africa, including in Tanzania where 76 per cent of the female population over the age of 15 participates in the labour force.[284] However, there are significant disparities in labour force participation between women living in different household structures. In sub-Saharan Africa, the female labour force participation of a

280 J. Charmes, *Unpaid Care Work and the Labour Market: An analysis of time use data based on the latest World Compilation of Time-use Surveys,* ILO, Geneva, 2019.

281 Ibid.

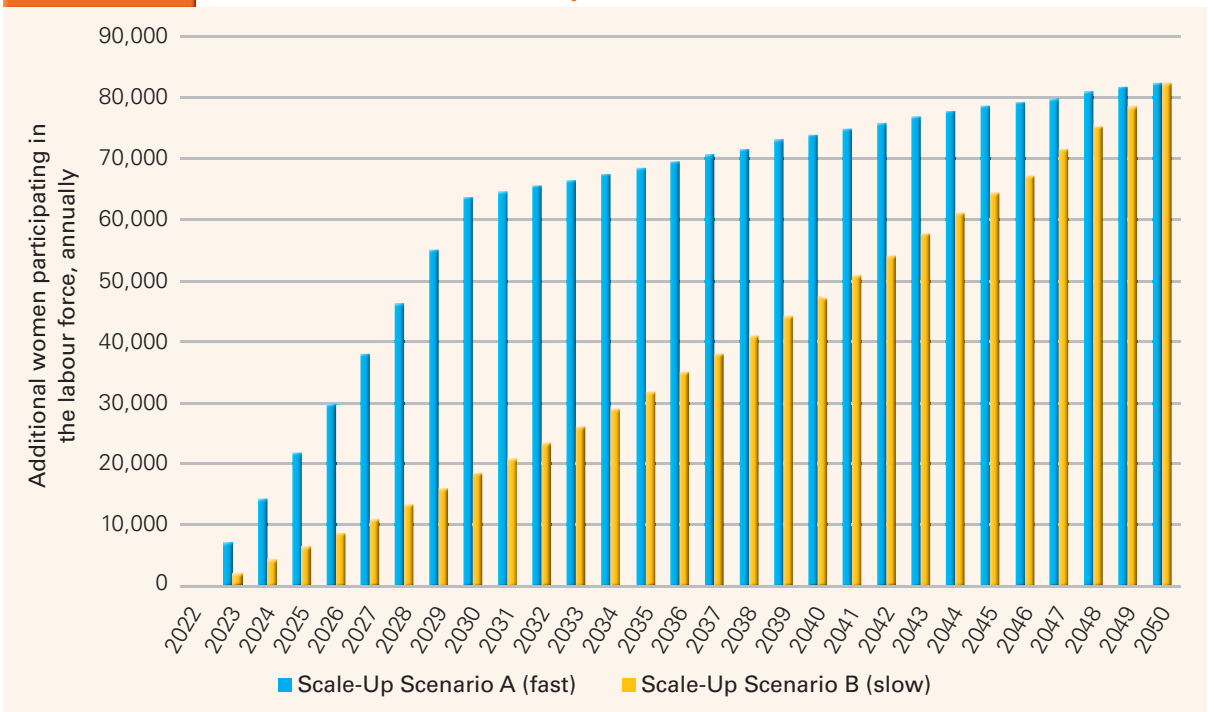
282 Authors. Data from Charmes J., *Unpaid Care Work and the Labour Market: An analysis of time use data based on the latest World Compilation of Time-use Surveys,* ILO, Geneva, 2019.

283 This analysis assumes that the Tanzanian economy has the capacity to absorb these additional labour market entrants. There will be significant pressure on the economy to keep up with demographic pressures and a transitioning population. Unemployment has been declining in recent years; however, it is anticipated that an additional 7.5 million jobs will be needed to accommodate the population transitioning into the workforce. Adding additional entrants through interventions such as ECE will add to these pressures on the economy. However, in line with the basic assumptions applied across this cost–benefit and cost-of-inaction analysis, it is assumed that the Tanzanian economy will be able to keep up with these demands (further, a very conservative estimate of wage earning is taken, to account for the likelihood that caregivers (usually women) will engage in informal, irregular, and low-paid work).

284 ILO, 'Labour Force Participation Rate, ILOSTAT, 2021.

woman living in a lone household is 91.8 per cent.[285] This is far higher than for a woman living in an extended household family with children under the age of six, whose labour force participation rate is 72.7 per cent.[286] Assuming that access to ECE means that women with children under the age of six are able to participate in the labour force at a rate commensurate with those in a lone household, the impact of this intervention could be significant (Figure 34). In Scale-up Scenario A (fast), increasing access to ECE could result in a **0.5 percentage point increase** in the female labour force participation rate, from 76 per cent in 2022 to 76.5 per cent by 2030. In Scale-up Scenario B (slow), this impact would be smaller and felt later – with the female labour force participation rate increasing by a maximum of **0.4 percentage points** (to 76.4 per cent) in 2050. This would result in adding an **additional 60,000 women on average per year** in the labour force in Scale-up Scenario A (fast) (2022-2050 average), or **37,000 women on average per year** in Scale-up Scenario B (slow).

Figure 34 » **Additional women participating in the labour market, annually, Scale-up Scenario A (fast) and Scale-up Scenario B (slow)**



4.1.3 Social protection and child protection benefits

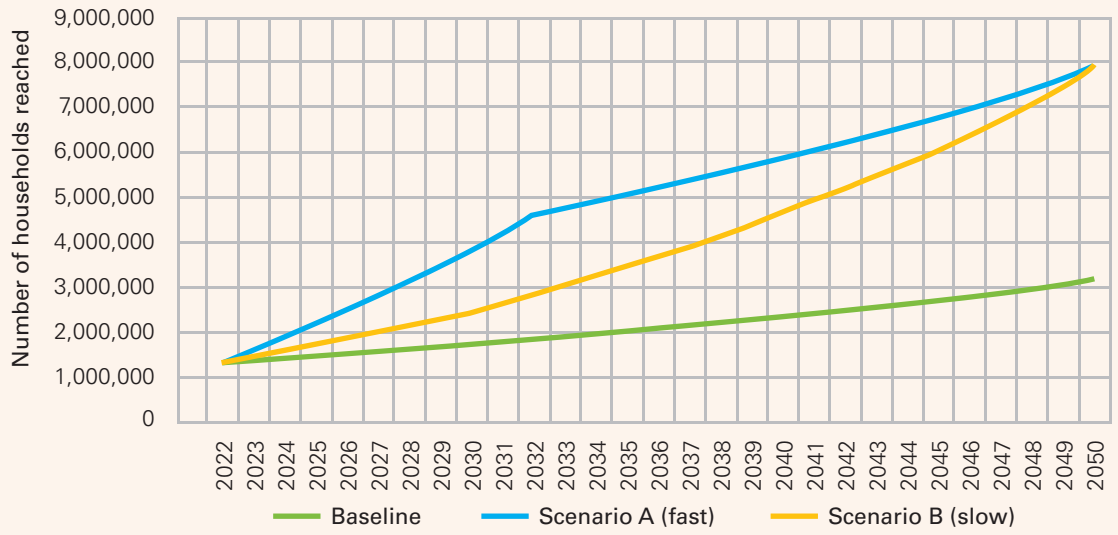
Under both scale-up scenarios, the non-monetary and monetary benefits of scaling up social protection and child protection benefits are anticipated to be significant. As discussed in the Methodology (Annex III), social protection and child protection benefits included in this ECD package are largely seen as enabling environment factors to child development. Cash transfers would also generate additional impacts on the economy by providing a local economic stimulus. The results are presented here for the more limited cash transfer option – *Option 1: Expanding coverage of the PSSN*

[285] Azcona, G., A. Bhatt, W. Cole et al., The Impact of Marriage and Children on Labour Market Participation, UN Women and International Labour Organization, 2020.

[286] Ibid.

to 90 per cent of all households living under the poverty line with a child under the age of 12.[287] Figure 35 shows how households reached by the PSSN would increase at a quicker rate under Scale-up Scenario A (fast) than B (slow).

Figure 35 » **Households reached by the PSSN under Baseline Scenario, Scale-up Scenario A (fast) and Scale-up Scenario B (slow)**



The macrofiscal impact of scaling up this cash transfer programme in Tanzania was then calculated and found to be sizeable. Table 9 details the economic return under both Scale-up Scenarios, in 10-year increments and in total – it also reports on the outcome of the sensitivity analysis conducted, using a lower bound estimate of the impact of the intervention. Across the study horizon, over **TZS 10 trillion** could be returned to the economy in the fastest scale-up, and by 2030 alone **TZS 3 trillion** could have been generated. For the slower scale-up, this would be lower (around half) at just under **TZS 5.7 trillion** by 2050 and **TZS 1.1 trillion** by 2030.

Table 9 » **Additional economic benefits of cash transfer (Option 1) under Scale-up Scenario A (fast) and Scale-up Scenario B (slow) (expressed in billions TZS and discounted at a rate of 10 per cent).**

	Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
	2023–2030	**2031–2040**	**2041–2050**	**2023–2050**	**2023–2030**	**2031–2040**	**2041–2050**	**2023–2050**
Local economic stimulus	3,080	5,083	2,662	10,826	1,100	2,385	1,083	5,668
Sensitivity analysis – lower bound impact	2,822	4,658	2,439	9,919	1,008	2,185	2,000	5,193

[287] The results for the more comprehensive cash transfer option – *Option 2: Expanding coverage to provide cash transfers to all children under five with a transfer value equal to 20 per cent of monthly per capita income for all children under five* – are presented in the Annex of this report.

4.1.4 Economic benefit summary

Table 10 » **Monetized additional benefit summary table: Scale-up Scenario A (fast) and Scale-up Scenario B (slow) (expressed in trillions TZS and discounted at a rate of 10 per cent)**

	Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
	2023–2030	2031–2040	2041–2050	2023–2050	2023–2030	2031–2040	2041–2050	2023–2050
DALYs and stunting cases averted	338	815	666	1,818	96	309	381	786
Cash transfer macroeconomic stimulus	3	5	3	11	1	2	2	6
Reduced primary school repetition	0.4	0.4	0.2	1.0	0.1	0.2	0.2	0.5
Additional lifetime earnings from increased years of education	13	33	24	69	1	8	16	25
Caregiver time saved from ECE	0.3	0.6	0.5	1.4	0.1	0.3	0.4	0.8
TOTAL	**354**	**854**	**692**	**1,901**	**99**	**320**	**400**	**818**

4.2 Costs

Table 11 presents a summary of the additional costs, highlighting how costs are anticipated to differ between the Scale-up Scenarios. In the Annex III, a breakdown of these costs by sector can be found. Overall, Scale-up Scenario A (fast) is anticipated to lead to higher costs. On average, in the first 10 years of the scale-up, it is anticipated that an additional cost of **TZS 9.7 trillion** would be incurred between **2023 and 2030** in **Scale-up Scenario A (fast),** compared to roughly **TZS 3.3 trillion** during the same period in **Scale-up Scenario B (slow).** This is due to a higher number of beneficiaries and the costs of scale-up are concentrated up-front (owing to the faster scale-up) when they have a higher value in the present than costs that will occur later. This is because costs are discounted at a rate of 10 per cent.

Similarly, over time, it is anticipated that the additional average annual cost of the scale-up will increase. This is a result of increasing coverage rates for intervention. While annual average costs are expected to be around **TZS 1 trillion** (Scale-up Scenario A [fast]) or **TZS 370 billion** between 2022 and 2030 (Scale-up Scenario B [slow]). This is predicted to rise in Scale-up Scenario A (fast) (to TZS 1.5 trillion) in 2040, before falling to TZS 900 billion between 2041 and 2050. For Scale-up Scenario B (slow) the average additional costs will continually rise to nearly **TZS 900 billion** for Scale-up Scenario B (slow) between **2041 and 2050.**

Finally, when viewed in per child under eight terms, costs are low. Across the study time horizon, the additional average per child under eight cost is expected to be just **53,793 for Scale-up Scenario A (fast)** and **27,711 TZS** for Scale-up Scenario B (slow).

Table 11 » **Total additional costs for Scale-up Scenario A (fast) and B, across different time horizons. Costs are expressed in TZS, adjusted for inflation, and discounted at a rate of 10 per cent[288]**

	Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
	2023–2030	2031–2040	2041–2050	2022–2050	2023–2030	2031–2040	2041–2050	2022–2050
Average annual cost per period, in trillion TZS	1.08	1.46	0.89	1.15	0.37	0.79	0.87	0.69
Average annual cost per child under eight (in TZS)	53,916	73,749	37,223	53,793	17,669	31,683	30,937	27,711
Total cost per period (in trillion TZS)	9.68	14.63	8.95	33.36	3.33	7.85	8.73	19.92

These incremental costs were compared to the current public expenditure on social sectors relevant to ECD to assess the financial feasibility of a scale-up. Significant additional resources will need to be allocated to these social sectors in order to meet the costs of the scale-up estimated in Table 11. To understand the scale of the funding gap that might emerge, the additional costs of both Scale-up Scenarios were compared to the projected expenditure across social sectors for which data on public expenditure were available (health/nutrition, WASH, education and social protection) over the next five years. The projected public expenditure was calculated by taking the base year (budgeted spend in 2022) and inflating by economic growth in coming years. The assumption was that the budget for each of the social sectors would increase with real GDP growth (as reported by the International Monetary Fund (IMF)) – with other factors (e.g., tax/GDP ratios and proportional allocations of the budget to these social sectors) being kept constant.

> Projected public expenditure was calculated by taking the base year (budgeted spend in 2022) and inflating by economic growth in coming years.

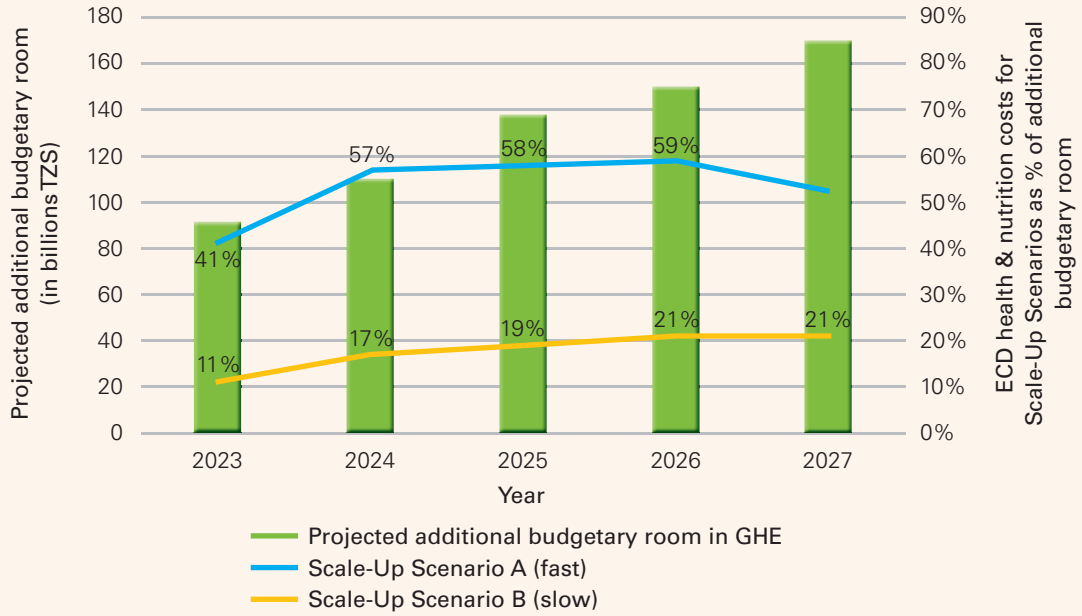
The health sector should have the budgetary room to accommodate the resource requirements, if ECD is adequately prioritized. Figure 36 compares the additional budgetary room expected for the health sector[289] with the additional costs associated with each scale-up. This analysis suggests that the additional annual costs to the health and nutrition sector associated with scaling up ECD services could be entirely covered by allocating additional budgetary room of the MoHSW to these interventions. In Scale-up Scenario A (fast), the additional costs would account for 41 per cent of the additional budgetary room of the MoH in 2023, which would rise to 50 per cent by 2027. In comparison, in Scale-up Scenario B (slow) this would be lower at 11 per cent in 2023, rising to 21 per cent in 2027. This would leave a significant proportion of additional budgetary room (around

[288] Costs reflected here are based on Cash Transfer Option 1 – *Expanding Coverage of the PSSN. For costs related to Cash Transfer Option 2: Universal Child Cash Transfer*, see Annex.

[289] Additional budgetary room is calculated as the difference between projected budgets in one year (say, 2024) from the previous year (in this example, 2023). The projected budgets are calculated by inflating the base year (2022) budget by economic growth estimates, as reported by the IMF and keeping all other assumptions constant.

50 per cent in Scale-up Scenario A (fast), compared to 75–90 per cent in Scale-up Scenario B [slow]) for investments in other health interventions and priority areas. Further, it is important to note that additional budgetary room will be just one avenue that these Scale-up Scenarios can be financed. It is likely that, in practice, a variety of financing mechanisms would be utilized to cover the costs associated with this ECD package (as discussed in Section 5.1, less than half of all health spending currently comes from GHE). It is very promising, therefore, that such budgetary room will become available in the coming years. It indicates a strong viability for increasing government funding to ECD health and nutrition interventions. It is recommended that additional health and nutrition budgetary room is earmarked for expenditure on ECD-related health and nutrition interventions, and would impact the greatest number of young children if directed towards Scale-Up Scenario A (fast).

Figure 36 » **Projected additional health and nutrition budgetary room (in billion TZS), with additional ECD-related health and nutrition costs under both scale-up scenarios represented as a proportion of the additional budgetary room (%), 2023–2027**



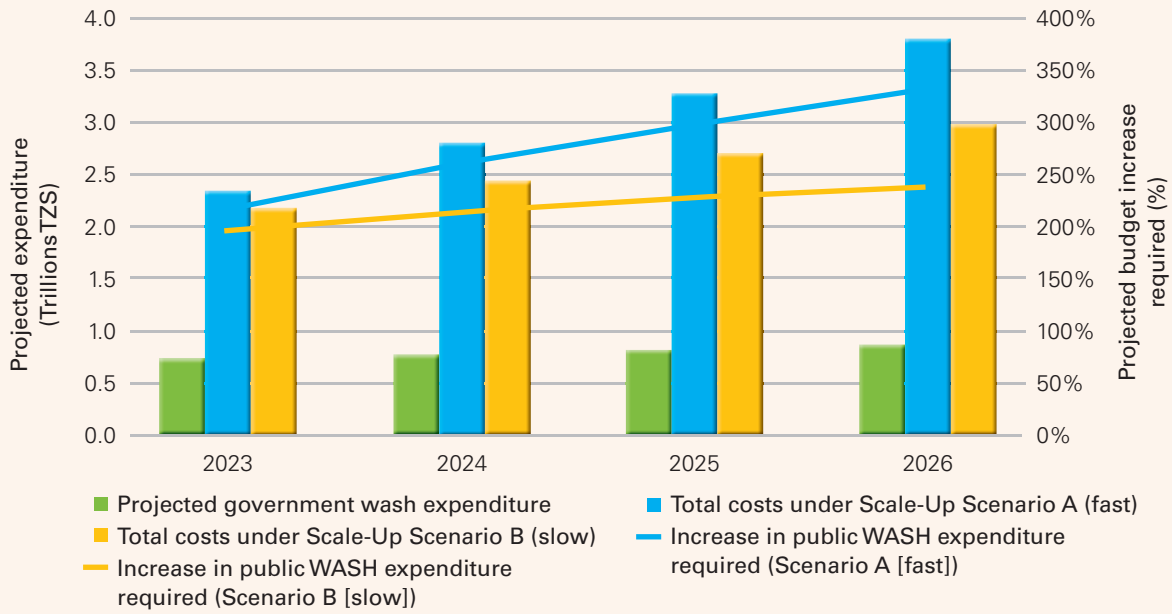
The costs in the WASH sector, however, are expected to result in much more significant funding gaps, which cannot be plugged through additional budgetary room alone. Figure 37 depicts the total resource requirements in the WASH sector in Scale-up Scenarios A and B for the next five years, alongside the projected total government WASH budget. It presents a picture of concern, with resource requirements far outstripping public budgets, and the funding gap growing each year. The difference in the resources required under Scale-up Scenario A (fast) and the projected expenditure on the WASH sector overall grows from TZS 1.6 trillion in 2023, to TZS 3.4 trillion in 2025. Under Scale-Up Scenario B (slow), the gap is actually slightly lower in 2027 (TZS 1.3 trillion) than in 2023 (TZS 1.4 trillion).[290] This is a result of the much slower scale-up in coverage under Scale-up Scenario B (slow), where costs are spread out over the long term (up to 2050). It is clear, however,

[290] Ibid.

that under both scale-up scenarios, a significant funding gap will emerge and other financing options will need to be explored. These options include:

- Advocating for an increase in the proportion of the GoT's budget allocated to WASH (the WASH sector is projected to receive less than 1.7 per cent of the total budget of the GoT in 2022/3);
- Engagement with the private sector through public–private partnerships to leverage additional funding (the private sector is already a major stakeholder in WASH service provision); and
- Lobby of investments (particularly related to one-off costs, such as for infrastructure) from development partners.

Figure 37 » **Projected government wash expenditure as compared to total ECD-related WASH costs under both scale-up scenarios (in trillion TZS), 2023–2026**



The outlook for education is far more positive, with the additional budgetary room associated with real GDP growth being projected to plug additional resource requirements for ECE. Figure 38 presents the results of modelling the additional annual costs of ECE under each Scale-up Scenario against additional budgetary room projected for the education sector.[291] It reveals that under Scale-Up Scenario A (fast), these costs would account for 51 per cent of additional budgetary room in 2023, which would grow to 83 per cent in 2027. Under Scale-Up Scenario B (slow), ECE costs would account for a fairly consistent amount of the additional budgetary room, hovering around 40 per cent. While this would require the government to significantly prioritize ECE in coming years, given the current stark under-investment in early learning (government expenditure on ECE is recorded as zero) and the potential returns of quality ECE modelled in this study, earmarking this additional budgetary space would be advisable. Further, even with this additional prioritization within the budget of the MoEST and LGAs, ECE allocation would still not reach the international target of 10 per cent of educational spending (Figure 39).

[291] It should be noted that expenditure for education is channelled both through the MoEST and local government authorities. This accounts for the government education expenditure reported in the Citizen's Budget 2021/22.

Figure 38 » **Projected additional education budgetary room (in billion TZS), with additional ECE costs under both scale-up scenarios represented as a proportion of the additional budgetary room (%), 2023–2027**

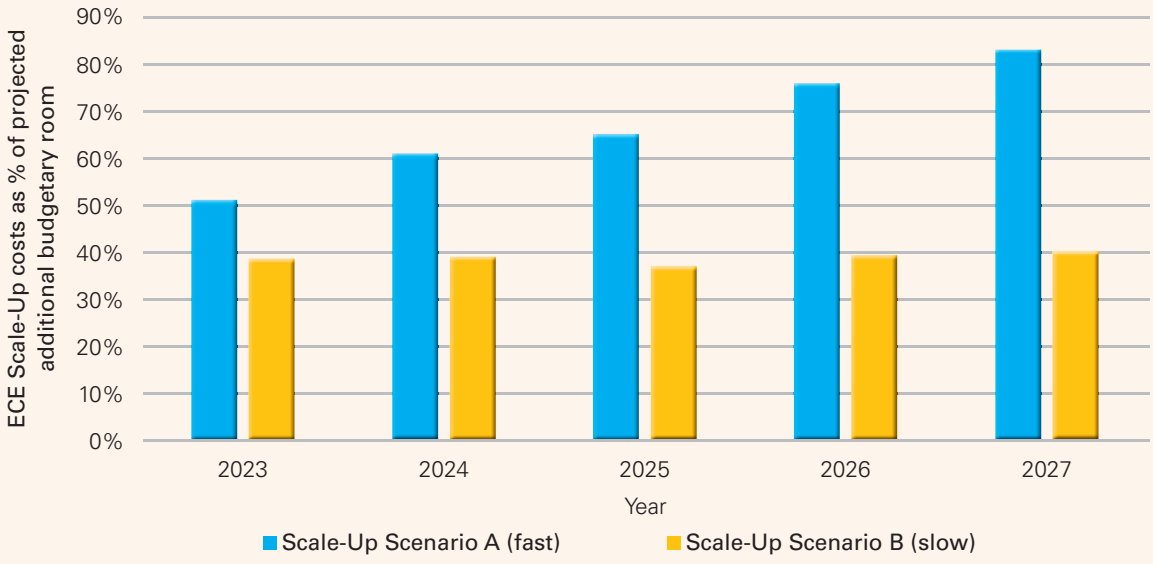
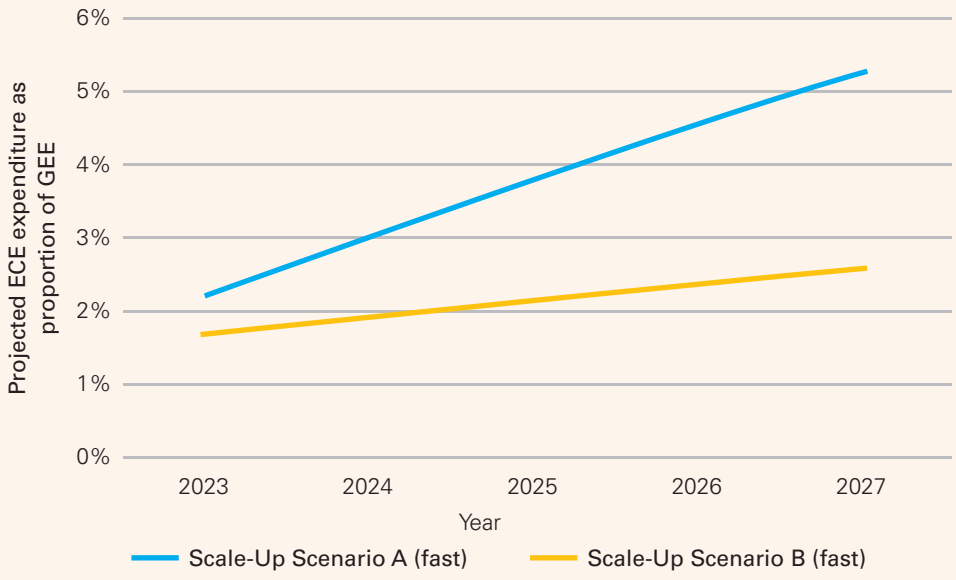


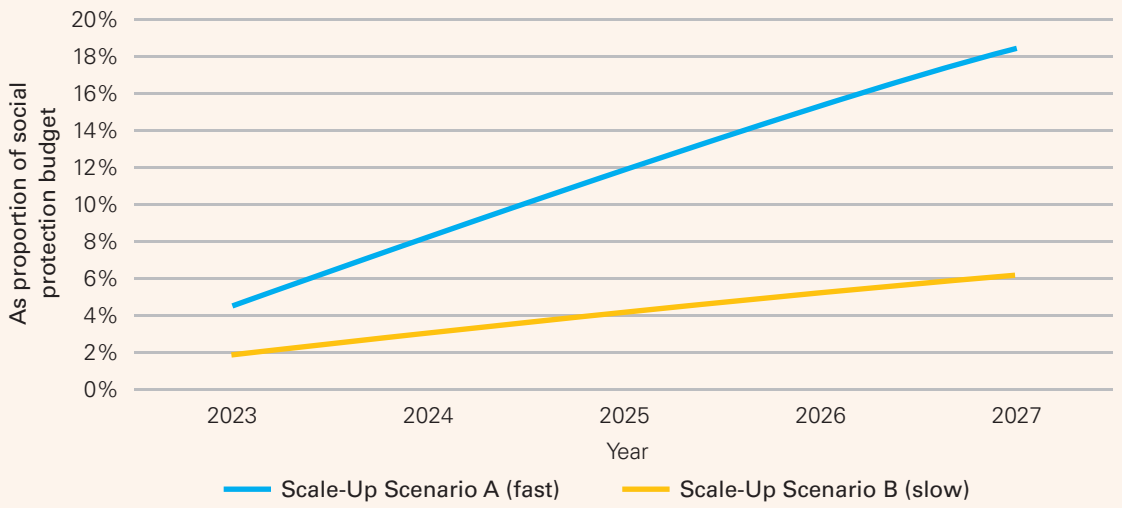
Figure 39 » **Total projected expenditure on ECE (Scale-up Scenarios A and B) as a proportion of projected government education expenditure (%), 2023–2027**



Finally, in the social protection sector, additional budgetary room will be inadequate to meet the additional resource requirements needed to satisfy these Scale-up Scenarios, which implies that other avenues for financing will need to be explored. It is estimated that in 2023, 88 per cent of additional budgetary room would need to be allocated to the ECD interventions in Scale-up Scenario A (fast) (this would be lower, at 31 per cent, under the Scale-up Scenario B [slow]). However, by 2027, additional budgetary room would be outstripped by the resource requirements of scale-up. In Scale-up Scenario A (fast), resource requirements would be 2.5 times the projected additional budgetary room in 2027 (and for Scale-up Scenario B (slow), it would equate to 94 per cent

of additional budgetary room). However, it should be noted that from 2023 to 2027, scaling up ECD-related social protection interventions modelled in this study would comprise 12 per cent (on average) of *total* government social protection expenditure under Scale-up Scenario A (fast), falling to 4 per cent for Scale-up Scenario B (slow) (Figure 40). While other social protection interventions are also in need of financing, at least it is evident that the Scale-up Scenarios are not exceeding the total projected social protection projected budget. Increasing prioritization of child-focused social protection interventions within the social protection budget, as well as advocating for an increase in the government allocation of its budget to the sector, would both be important mechanisms for bridging the anticipated financing gap.

Figure 40 » **Total costs of social protection interventions in Scale-up Scenarios A and B as a proportion of projected total government social protection expenditure (%), 2023–2027**



4.3 Cost of inaction

Significant economic benefits will have be conceded if these investments in early childhood are not made. Analysis of the cost of inaction (COI) indicates that failing to scale-up this package of interventions could cost the Tanzanian economy **nearly two quadrillion TZS** between **2022 and 2050** (under Scale-up Scenario A [fast]). The COI is calculated by determining the total additional economic benefit of the scale-up scenario (in comparison to the baseline), less the costs of the scale-up.

Over all the time horizons and both scale-up scenarios under study, the COI is considerable and highlights that a failure to invest would be a large missed opportunity for economic development. Across both scale-up scenarios, the COI is greater over longer time horizons. This is a result of additional benefits accruing at a much faster rate than costs, translating into a greater lost opportunity over the long term. When comparing the **time horizon 2022–2030** compared to **2022–2050** for Scenario B (slow), for example, the **cost of inaction** is expected to be over eight times lower. Further, the COI is also expected to be greater for Scale-up Scenario A (fast) compared to Scenario B (slow). This is a result of the higher additional economic gains associated with the faster scale-up, as more beneficiaries are exposed to these interventions. While additional costs are also higher for Scale-up Scenario A (fast) compared to B, the **costs of not investing** are expected to more than **double** in the faster scenario.

Table 12 » **Economic benefits, costs and the cost-of-inaction for scale-up Scenarios A and B, across different time horizons (expressed in trillion TZS, discounted at a rate of 10 per cent)[292]**

	Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
	2023–2030	2023–2040	2023–2050	2023–2030	2023–2040	2023–2050	2041–2050	2022–2050
Total additional economic benefits	354	1,208	1,901	99	419	818	0.87	0.69
Total additional costs	10	24	33	3	11	20	30,937	27,711
Cost of inaction	**345**	**1,184**	**1,868**	**95**	**408**	**799**	**8.73**	**19.92**

4.4 Benefit–cost ratio

Investments in ECD will have an exceptionally strong rate of return, especially over the long term. This analysis of benefits, costs and cost-effectiveness of scaling up this package of ECD interventions fed into the development of incremental benefit–cost ratios (IBCRs). These IBCRs compare the total additional monetary benefits accruing from scaling up coverage of these interventions with the total additional costs (all compared to the baseline scenario).

Table 13 shows these IBCRs for each scale-up scenario, and they reflect an impressive case for investment. In the short term, the costs incurred in scaling up these interventions are anticipated to have good returns. In Scale-up Scenario A (where costs are higher, especially in the short term), for **every 1 TZS invested, 37 TZS are expected to be returned to the economy** between 2022 and 2030. Over the longer term, this return on investment is expected to grow significantly as societal benefits continue to be accrued and outweigh the costs. Across the full study time horizon, investments in scaling up these ECD interventions are expected to have a **57-fold return** (in Scale-up Scenario A).

Table 13 » **Incremental benefit–cost ratios for scaling-up ECD for Scenarios A and B, across different time horizons (TZS)**

	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2023–2030	2023–2040	2023–2050	2023–2030	2023–2040	2023–2050
Benefit–cost ratio	**37**	**50**	**57**	**30**	**37**	**41**

[292] The results displayed here are for Cash Transfer Option 1, and the results for Option 2 are displayed in the Annex IV.

05

Conclusions

The evidence in this report presents a very strong case for increasing investment in ECD in Tanzania. Reinforcing the findings in the global literature, this report illustrates how high-quality ECD programmes could promote healthy development of young children and be among the most effective interventions of any available in human capital development. While progress has been made across the various sectors concerned with ECD in Tanzania, more can be done.

Supporting interventions targeting the health and nutrition outcomes of young children is expected to have lifelong returns and uphold the basic right of every child to survive and thrive. Currently, Tanzania has the 10th highest burden of newborn mortality globally.[293] Scaling up ECD interventions was found to have the potential to drastically improve children's (and mothers') survival outcomes. The results of this study found that between 2 million (Scale-up Scenario B [slow]) and 3.1 million (Scale-up Scenario A [fast]) child deaths could be averted by 2050. This study also found that the interventions that are the most effective at averting child deaths are related to WASH-attributable diseases – pneumonia, diarrhoea and malaria. This is highly notable. Over two-thirds of the country's health budget is currently channelled towards preventable WASH diseases and WASH remains seriously undeserved in homes, schools and health facilities.[294]

Currently, Tanzania has the tenth highest burden of newborn mortality globally. Scaling up ECD interventions was found to have the potential to hugely improve children's (and mothers') survival outcomes.

Expanding access to high-quality ECE is crucial for the long-term cognitive, socio-emotional, communication and motor development for Tanzania's youngest children. In spite of policy reforms to improve access, coverage of high-quality ECE remains poor in Tanzania. Sufficient resources to cultivate safe and nurturing learning environments have not been made available, leading to high student:teacher ratios and student:classroom ratios at the pre-primary levels.[295] Global research, however, shows that poor quality ECE has little effect on child development.[296] To optimize GoT's current investments in ECE, the focus of the government needs to rest on improving quality alongside coverage. This study found that improving quality and expanding access to ECE could provide impressive benefits. It projected that repetition rates at the primary level would be reduced, which could result in an average of nearly 600,000 fewer students repeating a year of primary school annually between 2023 and 2050 (Scale-up Scenario A [fast]). This would not only improve progression and survival rates at primary school but also result in significant cost savings for the government. Further, child development owing to ECE is expected to produce lifelong productivity gains. As a result of improved enrolment in high-quality ECE, children would be expected to each receive an additional year of schooling, which in turn, could have a dramatic effect on their lifelong earning prospects.

This study also illustrates the high economic returns associated with the recommended investments in ECD. Having monetized (as far as possible) the benefits associated with scaling up a package of highly effective ECD investments, the additional costs of this scale-up were assessed. When comparing these monetized benefits and costs, the case for investment is undeniable. Scaling up essential ECD services targeted at young children could generate a return on investment of up to 57 times by 2050 (Figure 41). This means for every 1 TZS invested, 57 TZS would be realized in socioeconomic benefits. Meanwhile, the cost-of-inaction amount to TZS 1.87 quadrillion by 2050. The impetus to invest is,

293 World Health Organization, Newborns: Improving survival and well-being, *WHO*, 2020, <https://www.who.int/news-room/fact-sheets/detail/newborns-reducing-mortality>, accessed 3 November 2022.

294 WHO/UNICEF, *Joint Monitoring Programme,* 2022, <https://data.unicef.org/resources/data_explorer/unicef_f/>.

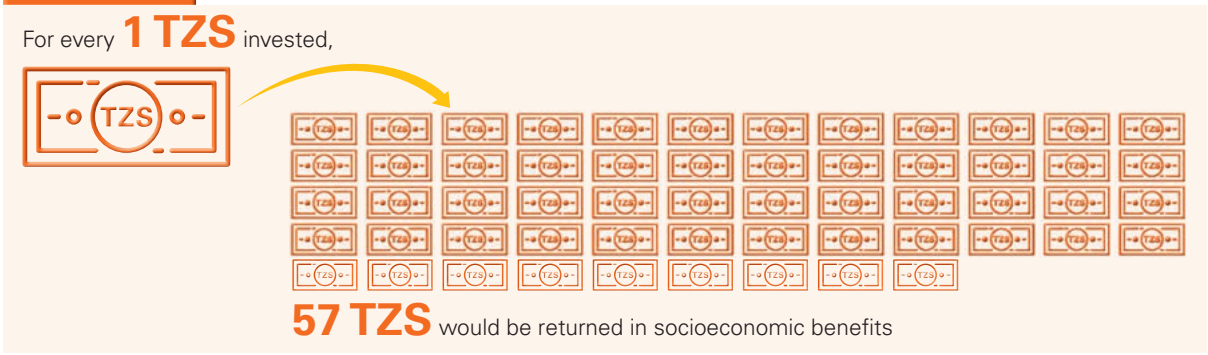
295 Ibid.

296 Sylva, K., E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'Pre-school Quality and Educational Outcomes at Age 11: Low quality has little benefit', *Journal of Early Childhood Research,* vol. 9, no. 2, 2011, pp. 109–124.

therefore, more urgent than ever. With a highly youthful population, the time for investment is here if the country is to reap a demographic dividend from its highly youthful population structure. Investments in ECD offer the best hope for catalysing socioeconomic transformation and long-term development.

Investments in ECD offer the best hope for catalysing socioeconomic transformation and long-term development.

Figure 41 » Return on investment of ECD under Scale-up Scenario A (fast), 2023–2050



In this context, the low spending in Tanzania's social sectors is a matter of concern. The present levels of public spending (both in relative and absolute terms) for child development does not contribute to optimal outcomes for children currently, which prevents Tanzania from reaping the large social and economic benefits modelled in this study. At present, to attain Universal Health Coverage, it is suggested that GoT increase the per capita spend on health as the present spend level is not adequate. Further, the GoT's allocations to WASH as a proportion of its budget are declining. To provide high-quality ECE or eliminate child poverty, the GoT needs to mobilize adequate resources. There is a need for GoT to improve spending on ECD if the massive opportunities presented by Tanzania's youngest children are not to be missed. The focus has to be on mobilizing resources (both public and private) at pace in the coming years, especially in high-priority areas that present the biggest opportunity for effectively improving child outcomes (such as the WASH sector).

The per capita spend on health can be increased to attain Universal Health Coverage.

Scaling up a basic package of ECD services will require significant financial resources. According to results of this study, the additional costs associated with a scale up could be met by the GoT's growing budgetary room in coming years. Tanzania is expected to experience strong rates of real GDP growth in coming years, which could translate into a significant expansion in the government's budgetary room.[297] This budgetary room is projected to be large enough to cover the resource needs of scaling-up interventions in health, nutrition and ECE, if it is ring-fenced for young children. However, recognizing that fiscal space will continue to remain limited, it is advisable that other financing options are explored and interim solutions put in place to maximize child development. In ECE, for example, long-term evidence on the impact of home-based models or parenting programmes is not sufficiently developed as to allow an empirically sound cost–benefit analysis. However, some studies (short-term) have found promising results, particularly if an emphasis is placed on quality. In the short term, as the GoT begins to invest in setting up strong formal ECE systems, they might consider rolling out these kinds of initiatives (which tend to be cheaper) to maximize human capital development.

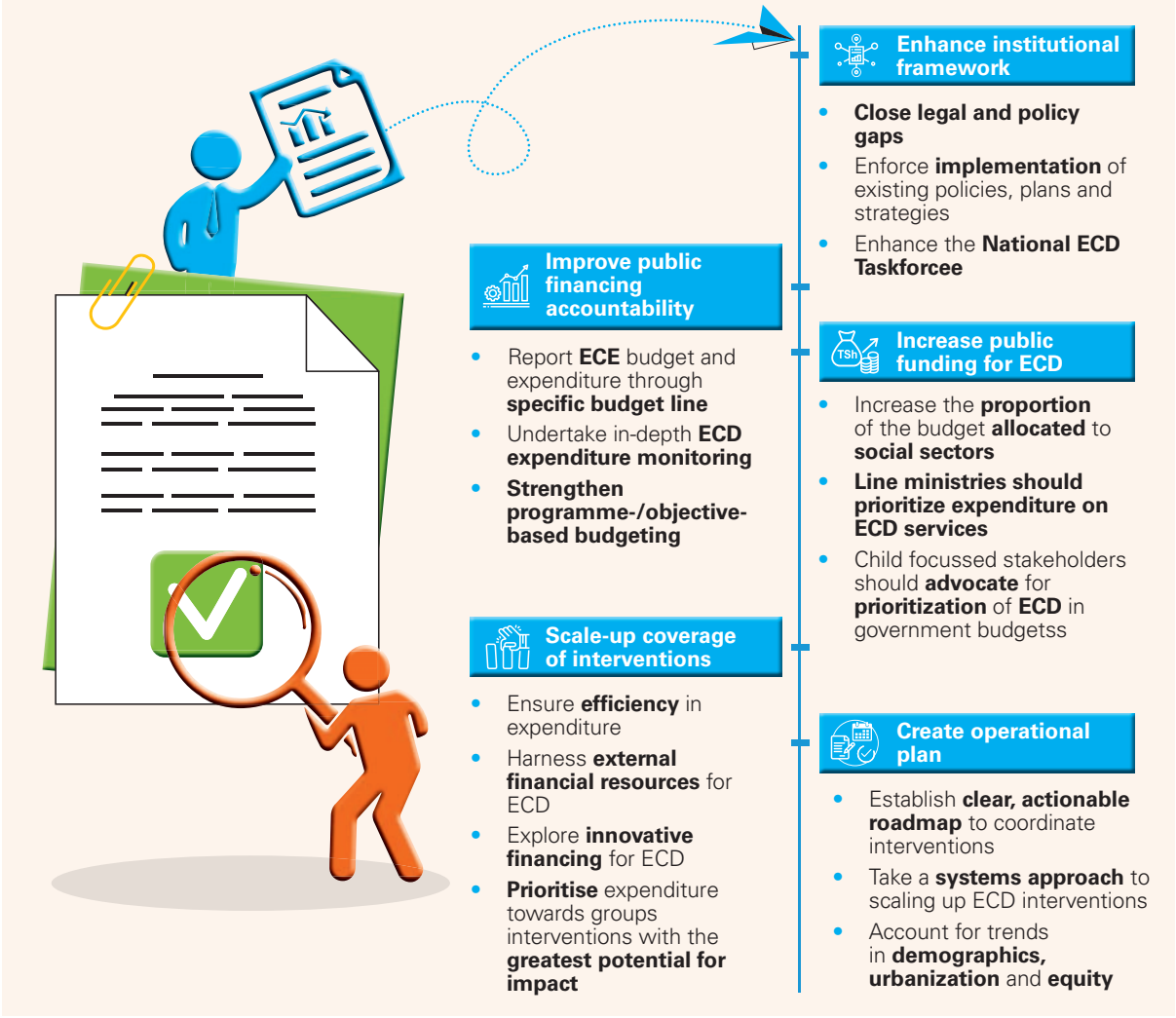
[297] IMF, 'United Republic of Tanzania', 2023, <https://www.imf.org/en/Countries/TZA>.

Ultimately, stakeholders in Tanzania are presented with a hugely significant decision – whether to invest in its young children or whether to maintain the status quo. The evidence presented in this report represents the most solid evidence collated to date to justify investment in ECD in Tanzania. When allied to the youthful population, both the time and rationale are ripe for reform. This economic and financial argument should not eclipse the strong social and moral one for improving ECD. While every child has the right to survive and thrive, these rights are not being universally realized in Tanzania. Access to high-quality programmes is often inequitable along the parameters of intersectionality (including income, disability, gender or geographical location). Investments in ECD should be seen as critical to the building of a strong and equitable foundation for the future.

5.1 Policy recommendations

Capitalizing on these opportunities requires intensive, coordinated efforts. It is felt that a strong enabling environment needs to be built to facilitate access to high-quality ECD for all, which will be underpinned by robust social sector service delivery. A set of policy recommendations has been developed to guide efforts and maximize the potential of ECD investment for success. These recommendations are summarized in Figure 42 and explored in more detail below, with practical actions and examples being used for illustration.

Figure 42 » Policy recommendations



Recommendation 1: Strengthen and streamline the institutional framework underpinning ECD

- **Close legal and policy gaps which hinder progress in ECD.** Progress has been made in passing supportive legislation for ECD (such as the Free Basic Education Policy); however, substantial gaps remain. In particular, legislation in the social protection and child protection spheres remains under-developed. The GoT and its partners should look towards passing progressive, child-focused legislation, which ensures safety and security for all children. Examples from the regional community can be drawn upon, with the Republic of Kenya passing the Children's Act in 2022, which has enshrined and safeguarded child rights and made provisions for better financing of child protection.

- **Enforce the implementation of existing policies, plans and strategies.** The GoT has made promising commitments to improvements in ECD across many of the social sectors (such as the FYDP III targets or the *One Plan III*), yet many policies, plans and strategies have not yet been fully implemented. The GoT should look to ensure adequate resources (financial and other) are made available to implement these policies, while development partners and other stakeholders should rally around the GoT and its relevant line ministries to achieve its targets.

- **Enhance the National ECD Taskforce.** The creation of the National ECD Taskforce is a constructive step towards improving synergies and coordination for young children in Tanzania. Currently, the institutional landscape is crowded, with vertical organization making coordination and collaboration more challenging. The National ECD Taskforce needs to be provided the resources to become effective at mobilizing the momentum for ECD. This will require concerted and sustained energy from the GoT to the Taskforce (including from the relevant line ministries), coupled with development partners supporting the body.

Recommendation 2: Strengthen accountabilities for public allocation of funding to ECD and monitoring of performance

Improved systems of budgeting and expenditure tracking need to be put in place to facilitate better financing for ECD. Current systems of PFM make it infeasible to accurately or precisely measure how much is being spent on young children. It is, therefore, very difficult to indicate how more public funds can be channelled towards critical services for these groups or how to improve the efficiency, effectiveness or equity of this expenditure. As we know, because fiscal space is limited in Tanzania, better PFM systems are needed to inform decisions that maximize efforts in targeting towards ECD. In this regard, three recommendations emerge:

- **Amplify the visibility for ECE funding through elevating ECE spending to a specific budget line in the basic education budget.** Within the current implementation and PFM framework, ECE funding is hard to trace and is not linked to performance; therefore there are weak accountabilities in implementing the current policies. ECE should be elevated to a budget line that will be tracked year-on-year on allocation and expenditure performance. A specific budget line for ECE also paves way for a planned and transparent increase in public funding towards ECE by motivating for larger than budget increments to this budget line as the economy grows. That way, ECE funding can increase without necessarily reducing the existing budget allocations to other sectors.

- **Undertake an in-depth ECD expenditure monitoring exercise (such as a PER) and then routinize data collection and monitoring for ECD spending and outcomes.** A child-focused

analysis of public expenditure would help to better figure out the complicated system of public financing for children and clarify the status of spending on ECD. With the data that are currently available, it is clear that the benefits of public spending are not focused towards children or equitably felt between them. It could be conducted by a government agency or facilitated by a development partner, such as UNICEF or the World Bank.

- **Strengthen the programme-based or objective-based budgeting so that more granular and specific inputs and outputs by programme can be monitored.** The current system of public budgeting is still dominated by a line-item approach despite efforts in reforming this system. Apart from resource allocation issues that this system causes, budget line items are not closely linked to performance. The GoT can thus consider strengthening performance-based budgeting so that the ECE budget line above is linked to specific performance measures with clear accountabilities. To this end, development partners and associated stakeholders need to act as be strong advocates for such PFM reforms, providing technical and financial assistance to support the reform efforts.

Recommendation 3: Current public investments in early childhood need to be increased if development goals of the GoT are to be met

Trends in public budgeting and expenditure in the social sectors relevant to ECD indicate an under-prioritization of young children. While the fiscal space of the GoT is limited, it cannot be viewed as a sound rationale for this underspend. It is clear that young children could be better prioritized within current budgets, which would have powerful impacts on per capita spending on and, hopefully, outcomes in human development. To improve this situation, the following needs to be done:

- **The GoT should increase the proportion of its budgets allocated to the social sectors.** The GoT could improve investment in the social sectors relevant to ECD (such as health and WASH) through a focused priority on them. Analysis suggests that public expenditure on ECD is consistently failing to meet the international targets and benchmarks in financing for the social sectors and is often spending below the regional comparators. Earmarking funds to the social sectors and progressively increasing the allocation of budgets to the social sectors will give line ministries additional budgetary room to spend on young children. This is particularly important for sectors, such as WASH, which have the largest funding gaps and have witnessed declining proportional allocations of the government budget. Advocates should use evidence generated in this Investment Case for ECD to advocate for reprioritization of government budgets towards child-focused social sectors. Public funds directed to these social sectors should be put in the context of long-term investment (with strong emphasis on the rate of return of these investments and the role of ECD in development strategies) to counter narratives about social sector spending being associated with consumption.

- **Line ministries should prioritize expenditure on services for young children.** While public under-spending on young children is in part a consequence of suboptimal budget envelopes to relevant line ministries in the social sectors, it is also being caused by allocation inefficiency in the use of these budgets. Line ministries must look to reorient financing towards the youngest children and earmark additional budgetary room that is made available to them for this group. In the education sector, for example, this need is particularly acute. Given global (and national) evidence that investments in early childhood have the greatest return of any human capital intervention, under-prioritization of this group is an indication of allocation inefficiency and should be proactively

addressed. The MoEST, for example, should increase its allocation to pre-primary education to match the international benchmark of 10 per cent of public spending on education.

- **Child-focused stakeholders should advocate for the prioritization of ECD in government budgets.** Investment in ECD is more than just an issue of fiscal space. The evidence (Annex II) suggests that there is, and there will continue to be, additional fiscal room to invest towards ECD. Investment in ECD is also determined by a political economy that is conducive to a sustained commitment towards young children.[298] Governments will always face competing demands for funds and efforts. It is therefore key to leverage the data and evidence generated through this investment case to frame the issue of ECD as an investment, rather than an expense. Moreover, it is vital that this investment case is transformed in order to best be understood by key stakeholders and decision-makers. Evidence from low- and middle-income countries suggest that the framing of investments in ECE and ECD as key pre-requisites for school readiness and an effective method to improve primary school outcomes gained significant buy-in from policymakers.[299] Therefore, advocacy and use of this investment case to illustrate the value of ECD to the existing goals of policymakers – to improve national education systems and therefore enhance economic development – will be key in ensuring the uptake of reforms and increased investment in ECD sectors.

Investment in ECD is also determined by a political economy that is conducive to a sustained commitment towards young children.

Recommendation 4: Scale-up the coverage of a package of high-quality multisectoral ECD interventions as quickly as possible

The findings of the cost–benefit and cost-of-inaction study were very clear – there will be a huge social and economic return on investment if ECD interventions are scaled up. The rate of return could be as high as 57 times over the next 28 years and, if a scale-up does not occur, Tanzania loses an opportunity cost totalling TZS 1.87 trillion and may have to let three million children die from preventable causes. The GoT, with its partners, must mobilize towards scaling-up the interventions as quickly as possible (ideally, in line with Scale-up Scenario A [fast]). In order to do so, the substantial additional costs related to this scale-up will need to be met. Therefore, it is recommended that the GoT and child-friendly stakeholders do the following:

- **Implement Recommendation 3.** Currently, under-investment in the sectors most relevant to ECD are a critical challenge and analysis produced by this Investment Case suggest a significant funding gap for ECD exists. To plug this funding gap, a significantly higher volume of public finances will need to be made available to scale-up interventions for young children.

Currently, under-investment in the sectors most relevant to ECD are a critical challenge and analysis produced by this Investment Case suggest a significant funding gap for ECD exists.

[298] Neuman, M.J., and S. Powers, 'Political Prioritization of Early Childhood Education in Low- and Middle-income Countries', *International Journal of Education Development*, vol. 86, 2021, p. 102458.

[299] Neuman, M. and S. Powers, 'Political Prioritization of Early Childhood Education in Low- and Middle-income Countries', *International Journal of Educational Development*, vol. 86, 2021, p. 102458.

Recommendation 3 must be implemented by the GoT in order to increase public spending on relevant line ministries and ensure that this is targeted towards young children.

- **Ensure efficiency in expenditure.** While the GoT is expected to see budgetary room increase in the coming years (in line with economic growth), preliminary analysis suggest that there will still be substantial pressure on fiscal space (Annex II). Therefore, exploring how efficiency savings could be made in the provision of social sector services would be advisable. Research could be commissioned to understand the potential for cost-saving measures, including how integrated service delivery could reduce unit costs. However, in investigating these efficiency savings, it is important to ensure that recommendations do not become adverse to the quality of outputs and outcomes. It could be conducted by a government agency or facilitated by a development partner, such as UNICEF.

- **Harness external financial resources for ECD.** The GoT receives significant support from development partners; however, as Tanzania becomes increasingly economically developed (having already attained LMIC status), it is expected that a transition away from donor support may occur. Over-reliance on external support via development partners should, therefore, be reduced to prevent financial unsustainability. In the short to medium term, however, external financing is likely to remain an important component of financing for the social sectors. For external support to be effective, it should be well coordinated, aligned to national priorities and not duplicative, and pooling resources into a centrally coordinated arrangement could be helpful. Child-focused stakeholders should use evidence produced in this Investment Case to advocate that development partners pivot their investments to young children. Each line ministry should work closely with development partners and understand how to build strategic partnerships in underfunded priority areas, such as WASH.

- **Explore innovative financing (IF) for ECD.** Non-traditional forms of resource mobilization, such as IF, could be considered as one pathway to plug the financing gap. It should be noted that the use of IF instruments in the social sectors is still nascent and should not be seen as a silver bullet solution. Recent research into IF for ECD can be used as a guidance for stakeholders interested in understanding how mechanisms might be used, as well as their potential strengths and weaknesses. Certainly, opportunities to crowd-in the private sector should be taken. Private finance is already an important contributor to the social sectors in Tanzania, making potential partnerships with the private sector ripe for development. Examples of the use of IF for ECD should be carefully studied and, where relevant, built into wider public finance for children (PF4C) strategies.[300]

- **Prioritize expenditure towards groups and interventions with the greatest potential for impact.** The size of the financing gap for the Scale-up Scenarios modelled in the cost–benefit and cost-of-inaction analysis should not be under-estimated. While all potential options for plugging these resource gaps must be explored, it is likely that the GoT and its partners will need to make decisions on prioritization. Some of these decisions might include the following:
  - focusing resources on certain parts of the country (e.g., where there are poor relative or absolute outcomes for young children) or to vulnerable population groups (e.g., children with disability or those living in absolute poverty);
  - on interventions which are likely to have the highest impact or effectiveness. Data presented in this study might also be used to guide the government in deciding which interventions are likely to be the most effective at promoting improved outcomes. For example, in the health and nutrition sector, this might mean prioritizing scaling up coverage of WASH services, ACTs for malaria, or oral antibiotics for pneumonia.

[300] UNICEF, *Innovative Finance for Early Childhood Development*, UNICEF, New York, 2022.

- implementing 'interim' solutions to reduce costs. Since ECE in Tanzania, for example, will require long-term, extensive investment to become high-quality and universal, prioritizing interim mechanisms could be very effective in stimulating better learning outcomes for young children. This might include focusing on community- and home-based interventions in the short term, such as parenting programmes, or ECE provision in homes or community centres. Studies have revealed that these programmes still have beneficial impacts on children, their learning trajectory and on the economy – even if not at the scale that high-quality formal ECE provision might have.

Recommendation 5: Create an operational plan involving all stakeholders to provide clear guidance towards progress in ECD

There are a variety of elements to creating a clear plan for ECD in Tanzania. It is crucial to establish a clear, actionable road map to coordinate the multisectoral ECD strategy and interventions. An effective road map will include concrete steps and milestones for each of the goals laid out in the ECD strategy. This road map will include considerations on financing, staffing, infrastructure, data systems, service delivery and monitoring and evaluation. Development partners can play a sizeable technical role in many of these activities, particularly with regards to training and capacity development. They can assist in training local authorities in activities such as how to do costing and budgeting for ECE, and how to set up easily accessible data systems for ECD.

Planning is key to realizing the gains explored in this Investment Case. For instance, despite the introduction of free basic education across Tanzania, gross enrolment ratios have dramatically fluctuated throughout the years – being as low as 37 per cent and as high as 103 per cent.[301] Issues of high indirect costs on parents, as well as under capacity and understaffed schools, have contributed to many of these schools delivering poor quality services, leaving the most vulnerable children with the fewest resources and poorest learning outcomes.[302] To avoid a similar situation when adopting ECD reforms, it is important that the GoT carefully plans how best to improve access and quality across ECD sectors. Careful planning will also ensure that the most vulnerable children – children in rural areas, poor children, nomadic children and children with disabilities – are considered as high-priority populations for ECD interventions and are therefore not left behind, as often happens in the existing education system.[303]

> Careful planning will ensure that the most vulnerable children are considered as high-priority populations for ECD interventions.

A key part of planning is to understand the trends in demographics and urbanization over the coming years. Tanzania's child population will double in the next 30 years, reaching 59 million by 2050.[304] Tanzania's population has been experiencing rapid urbanizing and these trends are expected to continue. Tanzania has the sixth highest rate of urban population growth in the world; however, this growth has been largely informal and unmanaged so far.[305] It is key that programming is prepared to cater to the needs of the large number of children in urban areas and has the capacity to assist the already significant number of children across the country.

301 Mabagala, D.L., and R. Shukia, 'Pre-Primary Education in Tanzania: Teachers' knowledge and instructional practices in rural areas', *Huria Journal,* vol. 26, no. 1, 2020.

302 UNICEF, *Education for All: Free schooling spells increased enrollment,* UNICEF Tanzania, 2019, <https://www.unicef.org/tanzania/stories/education-all>

303 UNICEF, *The Journey of a Child,* 2021.

304 Ibid.

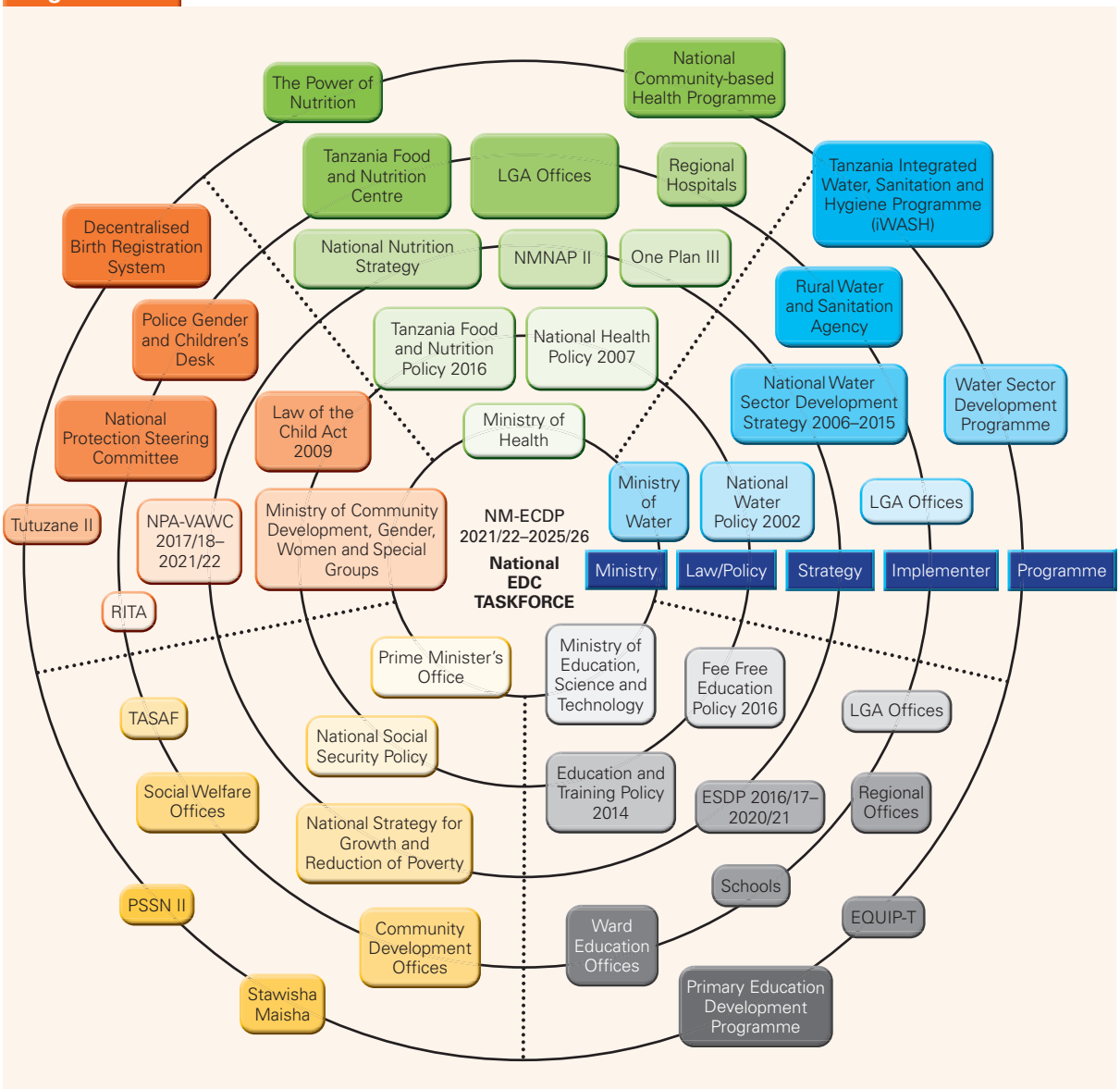
305 Worrall, L., S. Colenbrander, I. Palmer et al. 'Better Urban Growth in Tanzania: A preliminary exploration of the opportunities and challenges', *Coalition for Urban Transitions, Working Paper,* 2017.

06

Annex I: Institutional framework for ECD

Improving Nurturing Care requires a multisectoral approach. The interventions that are required span a vast range of sectors, fall within the mandate of numerous ministries, departments and agencies (MDAs) and are guided by an array of policies and legislation in Tanzania. Mobilizing an effective and efficient response to ECD challenges can, therefore, be complicated by this institutional environment. This annex will explore the GoT's approach to ECD. An institutional framework for ECD in Tanzania has been developed to guide this analysis. The institutional framework for ECD is made up of the MDAs, policies, strategies, implementing entities and programmes which affect the holistic well-being and development of children (Figure 43).

Figure 43 » **Institutional framework for ECD**



The institutional framework depicts the complex web of laws, stakeholders and entry points that contribute to ECD and target pregnant women, young children and their caregivers. At the centre of this institutional framework lies the NM-ECDP, and in concentric circles the ministries are represented, followed by policies, strategies, implementers and programmes. They are divided broadly into groups related to (starting from top centre and moving clockwise) health and nutrition, WASH, education, social protection and child protection. Each of these are explored in turn below.

6.1 National multisectoral early childhood development programme

The GoT has demonstrated its commitment to developing a high-quality approach to ECD. It is the first country in Eastern and Central Africa to launch a NM-ECDP, which covers the period 2021/22 to 2025/26. The NM-ECDP, guided by the *Nurturing Care Framework,* employs a multisectoral approach aimed at a holistically addressing the needs of children aged 0–8 years. Its multisectoral approach covers the sectors of health, nutrition, WASH, education and social protection.

The NM-ECDP gives effect to the Nurturing Care for Early Childhood Development (NCfECD)'s *Strategic Action One: Lead and Invest* by clearly outlining governance, planning and financing modalities. The NM-ECDP is also strategically aligned with the most recent National FYDP (FYDP III 2021/22 to 2025/26), which focuses on w*"building a competitive industrial economy for human development."*[306] As such, the NM-ECDP recognizes the importance of investing in human development as early as possible (conception), with the objective of developing a healthy and productive human capital resource as a base for economic development. Therefore, the overarching vision of the NM-ECDP is to ensure that *"all children in Tanzania are developmentally on track to develop to their full potential."* It acknowledges that barriers to children reaching their full potential are a developmental problem, as well as a hindrance to national socioeconomic goals.[307]

Currently, ECD in Tanzania is vertically organized, making coordination difficult. Owing to the large number of laws, policies and players supporting various components of ECD in Tanzania, the ECD landscape is crowded. This is because services and interventions seldom fall neatly under the mandate of a singular ministry. Taking the National Multisectoral Nutrition Action Plan 2021/22 to 2025/26 (NMNAP II), for example, it has been collaboratively developed by ministries affecting various points of the nutrition supply chain (i.e., Ministry of Health, Ministry of Livestock and Fisheries, Ministry of Trade and Industry, Ministry of Energy and Minerals, Ministry of Natural Resource Management and the Ministry of Labour, Youth, Employment and Persons with Disability, to name a few).

In order to achieve this, ECD is now promoted through laws and policies which are connected by the overall framework of the NM-ECDP. The Ministry of Community Development, Gender, Women and Special Groups is the coordinating ministry of the NM-ECDP; however, various other line ministries are responsible for the formulation of legislation and the provision of services that fall under different sectors that make up ECD. These include the MoEST, MoHSW, PO-RALG, MoW, MoFP, Ministry of Home Affairs (MoHA) and the Prime Minister's Office (PMO). The overall formulation of policies and the implementation of strategies are overseen by these ministries in their respective sectors. Yet, there is overlap between the ministries across sectors. For instance, while MoW is largely responsible for the WASH sector, the National Sanitation Campaign is implemented by MoHSW in health facilities and MoEST is responsible for the implementation and management of WASH projects in schools.[308] The implementation of programmes at subnational level is then coordinated by the PO-RALG across all ECD-related sectors. This is where the local-level ECD coordination mechanisms should take responsibility.

306 Ministry of Finance and Planning (MoFP), National Five-Year Development Plan (FYDP III) 2021/22–2025/26, 2021.

307 Ibid.

308 UNICEF, *WASH Budget Brief: Mainland Tanzania, 2020.*

To enhance synergies under the NM-ECDP, the PMO, which has the power to convene other ECD-related ministries, organizes and chairs a National ECD Forum annually. This forum is designed to review all ECD services at the national level. Further, the MoHSW should, on a quarterly basis, organize an NM-ECDP Technical Working Group to report on progress with respect to the implementation of ECD services. At the subnational level, various sectors are responsible for the implementation of ECD. The PO-RLAG coordinates multisectoral meetings and regional quarterly review meetings take place among the various sectors. At the council level, quarterly ECD review meetings are convened. In these meetings, progress reports from wards and villages/streets will be reviewed and action points will be decided upon.[309]

The NM-ECDP complements the existing policies and laws which pertain to ECD, which will be explored in the following sections. These include the *Health Policy (2007), Child Development Policy (2008), Law of the Child Act (2009)* and *Education and Training Policy (2014)*, and the last one is currently under review. Further, it supports and seeks to build upon existing multisectoral national programmes related to ECD, such as the *National Plan of Action to End Violence against Women and Children 2017/18 to 2021/22*, and *National Multisectoral Nutrition Action Plan II 2021/22 to 2025/26*. The NM-ECDP aims to mobilize the key actors in governance across relevant sectors, development partners, non-government organizations, civil society organizations, academia and the private sector to coordinate their efforts to ensure that Tanzanian children aged 0–8 years meet their developmental potential.

6.2 Health

Tanzania's health system follows a decentralized governance structure. At the central government level, stewardship of the health and social welfare sectors coupled with the formulation of policy, legislation, strategies and guidelines fall under the mandate of the MoHSW. The essential health care package is also determined by the MoHSW.[310] Further, the MoHSW oversees the implementation of legislation and policies through sector-wide monitoring and evaluation.[311] At the local government level, PO-RALG oversees the implementation of health services, which are delivered by LGAs.[312] Funding for the provision of services is disbursed from treasury directly to LGAs – who also hire health care staff in consultation with the President's Office of Public Service Management.[313]

Tanzania's health and social welfare legislation can be divided into five categories:[314]

- ***Public health legislation:*** Governs the control of epidemics, infectious disease and environmental health protection.
- ***Health professional legislation:*** Governs the practice and conduct of health professions and professionals.
- ***Health financing legislation:*** Governs the health financing mechanism to the end of enhancing government's financing of health services towards universal health coverage (UHC).

309 MOHCDGEC, *National Multisectoral Early Childhood Development Programme (NM-ECDP) 2021/22–2025/26,* United Republic of Tanzania: Dodoma, Tanzania.

310 Piatti-Fünfkirchen, M. and M. Ally, *Tanzania Health Sector Public Expenditure Review 2020*, World Bank, Washington, D.C. 2020.

311 MOHCDGEC, *Health Sector Strategic Plan: July 2021–June 2026 (HSSP V),* United Republic of Tanzania, Dodoma, Tanzania.

312 Ibid.

313 Piatti-Fünfkirchen, M. and M. Ally, *Tanzania Health Sector Public Expenditure Review 2020*, World Bank, Washington, D.C. 2020.

314 MOHCDGEC, *Health Sector Strategic Plan: July 2021–June 2026 (HSSP V),* United Republic of Tanzania: Dodoma, Tanzania, 2020.

- ***Rights and social protection legislation:*** Governs legislation concerning the rights and protection of vulnerable groups (i.e., pregnant women, disabled persons, children, the elderly, etc.) who are unable to pay for health services.
- ***Legislation concerning institutions:*** Governs the establishment of autonomous and health and social welfare institutions for a particular need, such as National Institute for Medical Research, national and special hospitals, Institute of Social Work, etc.

The National Health Policy (NHP) 2007 is the guiding policy framework for the health sector in Tanzania. Through the NHP, the GoT has made a concerted effort towards improving the survival outcomes of children and women by providing free maternal and child health services.[315] The mission of the policy is "to facilitate the provision of equitable, quality, and affordable basic health services, which are gender sensitive and sustainable, delivered for the achievement of improved health services." This requires the maintenance and renovation of the existing infrastructure to keep it functional and efficient and developing an investment plan for the construction of new health facilities in line with the minimum standards.[316] NHP 2007 is currently under review, and drafts of the National Health Policy 2020 are at an advanced stage.[317] Another guiding government document, which demonstrates the country's commitment towards improving the health of women and children, is the National Plan for Reproductive, Maternal, Newborn, Child and Adolescent Health and Nutrition 2021/22 to 2025/26 *(One Plan III)*. Among the goals articulated in *One Plan III* is to expedite the reduction of preventable morbidity and mortality among mothers, newborns, children and adolescents. This goal is consistent with those articulated in the *National Development Vision 2025*.[318] Given how broad the area of RMNACH is, *One Plan II* also covers related thematic areas such as family planning, prevention of mother-to-child transmission of HIV/AIDS, immunization and vaccine development, reproductive health cancers and gender in reproductive health and gender-based violence.[319]

Box 5 One Plan III Targets[320]

Reduce maternal mortality from 250 to 100 per 100,000 live births by 2025

Reduce neonatal mortality rate from 20 to 15 per 1,000 live births by 2025

Reduce under-5 mortality from 50 to 38 per 1,000 live births by 2025

One of the most significant programmes supporting maternal, infant and child health is the one related to community health workers (CHWs) (Box 6). In 2018, the Minister of Health, Community Development, Gender, Elderly and Children (now renamed as the MoHSW) announced the GoT's commitment to expand the CHW workforce by employing 30,000 CHWs in more than 15,000 villages by 2020.[321] This has tremendously improved ECD services provision at the community level, expanding access and coverage of key interventions.

315 Ibid.

316 MOHCDGEC. *National Multisectoral Early Childhood Development Programme (NM-ECDP) 2021/22–2025/26,* United Republic of Tanzania: Dodoma, Tanzania.

317 MOHCDGEC, *Health Sector Strategic Plan: July 2021–June 2026 (HSSP V),* United Republic of Tanzania, Dodoma, Tanzania.

318 Ibid.

319 Ibid.

320 Ministry of Health, Community Development, Gender, Elderly and Children, *National Plan for Reproductive, Maternal, Newborn, Child and Adolescent Health and Nutrition (2021/2022–2025/2026,* 2021.

321 Mkapa Foundation, Joint Meeting to Spearhead Community Health Workers Agenda Took Place in Dar es Salaam, 2018, <https://mkapafoundation.or.tz/joint-meeting-to-spearhead-community-health-workers-agenda-took-place-in-dar-es-salaam/>.

Box 6 Case study of Tanzania's community health workers programme[322]

CHWs are an essential part of Tanzania's health system and have serviced villages in Tanzania from as far back as the 1960s. In 2014, the National Community-Based Health Programme (CBHP) was approved by the GoT. CBHP sought to institutionalize paid CHWs under the public sector. Under CBHP, CHWs receive comprehensive 12-month training (which includes practical components) from government-accredited health training institutions, which enables them to provide essential promotive and preventative interventions in their respective villages. Over 12,000 CHWs have been trained to date.

Other responsibilities undertaken by CHWs include data collection and analysis, household visits and community education. Daily supervision of CHWs is provided by Village Executive Officers, who the CHWs report to. While institutionalizing CHWs is a positive step towards achieving UHC in Tanzania, there is no formal evaluation as yet on the how the CBHP policy has impacted health equity.

6.3 Nutrition

Nutrition has been a high priority on the policy agenda in Tanzania for decades. This is evidenced by several milestones such the enactment of the Tanzania Food and Nutrition Act of 1973, which gave way to the establishment of the Tanzania Food and Nutrition Centre (TFNC).[323] TFNC, as the technical arm of the GoT through MoHSW, spearheads and coordinates nutrition response in the country.[324] Further, the guiding document for the nutrition response in the country, the Tanzania Food and Nutrition Policy (TFNP), was developed in 1992 and revised in 2016. Other milestones in the nutrition sector include the development of guidelines such as the 1997 Policy Guidelines for Micronutrient Supplementation, 2004 Tanzania Strategy on Infant and Young Child Nutrition and 2008 National Policy Guidelines on Infant and Young Child Nutrition.

To enhance synergies across the various sectors which influence nutrition outcomes, nutrition has been mainstreamed in several sectoral policies such as health, agriculture, social welfare and food security.[325] The TFNP is operationalized through NMNAP II, which adopts a multisectoral approach to the nutrition response and coordination of the network of state and non-state stakeholders in the realm of nutrition. This coordination structure is led by the multisectoral High Level Steering Committee on Nutrition, which falls under the PMO, which has convening power to coordinate multisectoral activities.[326] At the local level, district nutrition offices are responsible for the coordination of nutrition-related activities and the preparation of nutrition budgets.[327]

NMNAP II is the second evidence-based five-year strategic action plan, speaking specifically to nutrition. Similar to the NM-ECDP, the NMNAP II adopts a human development perspective, recognizing that nutrition is a means to improving the health and productivity of Tanzanians, and thereby achieving socioeconomic goals.[328] Building on the findings from NMNAP I (which covered the period 2016–2021), the NMNAP II has four key areas of focus:

- **Reducing undernutrition**
- **Reducing micronutrient deficiencies**

322 Community Health Workers Central, *Tanzania's Community-based Health Program, 2020,* <https://chwcentral.org/tanzanias-community-based-health-program/>, accessed 5 December 2022.

323 Oxford Policy Management, *Nutrition Public Expenditure Review: Mainland Tanzania and Zanzibar,* UNICEF, Dar es Salaam, Tanzania, 2018.

324 Tanzania Food and Nutrition Centre, <https://www.tfnc.go.tz/>

325 Oxford Policy Management, *Nutrition Public Expenditure Review: Mainland Tanzania and Zanzibar,* UNICEF, Dar es Salaam, Tanzania, 2018..

326 UNICEF, *Improving Public Finance for Nutrition in Tanzania,* UNICEF, Dar es Salaam, Tanzania, 2018.

327 Ibid.

328 Ministry of Health, Community Development, Gender, Elderly and Children, *National Multisectoral Nutrition Action Plan* (NMNAP) 2021/22–2025/26, Government of Tanzania: Dodoma, Tanzania, 2021.

- **Reducing overweight and obesity**
- **Strengthening the enabling environment**

Further, the NMNAP is strategically aligned with existing national, regional and global policies and strategies related to nutrition (Figure 44).[329]

Figure 44 » **Selected national, regional, and global nutrition-related policies supported by the NMNAP II[330]**

6.4 Water, sanitation and hygiene

The WASH sector in Tanzania is cross-cutting and involves various players across line ministries. The MoW and RUWASA are the key players in the sector. The MoW is given the mandate for the overall formulation of WASH policy and implementation of strategies and programmes. Since the establishment of the RUWASA following the ratification of the water Supply and Sanitation Act in July 2019, coordination and delivery of WASH services has been transferred from the Regional Administration Secretariat and LGAs to RUWASA. The MoHSW is another key player in the sector. The National Sanitation and Hygiene Committee is chaired by the MoHSW and is responsible for developing sanitation and hygiene policies for implementing agencies, such as RUWASA and LGAs. Further, the National Sanitation Campaign, which aims to increase access to WASH in health facilities, is implemented by the MoHSW. The MoEST is responsible for the implementation and management of WASH projects in schools.[331]

The FYDP III recognizes the important role that WASH plays in human development and sets out specific interventions and goals for the sector. The FYDP III has laid out ambitious targets for the WASH sector (Box 7). Furthermore, to improve coverage of WASH at the school level, MoEST introduced the *National Guidelines for Water, Sanitation and Hygiene for Tanzania Schools* in 2016. The guidelines were developed with the support of and financing by various stakeholders, including

329 Ibid.

330 Adapted from NMNAP 2012/22–2021/26.

331 UNICEF, WASH Budget Brief: Mainland Tanzania, 2020.

UNICEF. It outlines tools and minimum standards, as well as ideas on how to design WASH facilities in a sustainable manner in schools. It also addresses important issues such as disability access and menstrual hygiene management, which impede school attendance for vulnerable groups.[332] In 2017, *the National Guidelines for Water, Sanitation and Hygiene in Health Care Facilities,* with the support of UNICEF and WaterAid Tanzania, were introduced. The guidelines provide technical guidance on planning, budgeting, operations and maintenance of WASH services in health facilities. It also seeks to establish a system for monitoring WASH facilities for quality improvement.[333]

Box 7 FYPD III WASH Targets[334]

Increase rural access to improved sanitation facilities to 75 per cent by 2025/26

Increase rural access to piped water as main source of water to 85 per cent by 2025/26

6.5 Education

The MoEST is the main actor in the education sector in mainland Tanzania. The formulation of policy, planning, monitoring and evaluation for basic, technical, vocational, folk, non-formal and higher education fall under the mandate of MoEST.[334] The education sector is decentralized, and PO-RALG is responsible for the coordination administration, delivery and management of pre-primary, primary and secondary education. The PO-RALG is also responsible for the deployment of teachers, while LGAs supervise schools through regional, district and ward-level education officers and quality assurance officers.[336]

Tanzania has developed an enabling environment to promote early learning. Tanzania introduced compulsory pre-primary education for a duration of not less than one year in its *Education and Training Policy (ETP)*, 2014. Pre-primary education became integrated into basic education, making it mandatory for every primary school to offer a pre-primary stream.[337] The ETP further states that once children aged 4–6 years have completed pre-primary education, they must receive basic education for 10 years (it should be noted that mandatory pre-primary education is being reduced to one year).[338] In 2015, the *Tanzania Pre-Primary Curriculum* (a revision of the 2005 curriculum) was developed with a special focus on reading, writing and arithmetic. That same year, the *Guide for Pre-primary Schools, 2015* was also introduced. Guided by the ETP's directives, it established a quality standard for public and private pre-primary schools.[339] Furthermore, as of 2016, the country declared basic education (i.e., pre-primary and primary education) free.[340]

[332] MoEST, *National Guideline for Water, Sanitation and Hygiene in Tanzania Schools,* Government of Tanzania: Dodoma, Tanzania, 2016.

[333] Ministry of Health, Community Development, Gender, Elderly and Children, *The National Guidelines for Water, Sanitation and Hygiene in Health Care Facilities,* Government of Tanzania, Dodoma, Tanzania, 2017.

[334] *MoFP, National Five-Year Development Plan 2021/22–2025/26, Government of Tanzania, Dodoma, Tanzania, 2021.*

[335] UNICEF, *Education Budget Brief 2020: Mainland Tanzania,* 2020.

[336] Ibid.

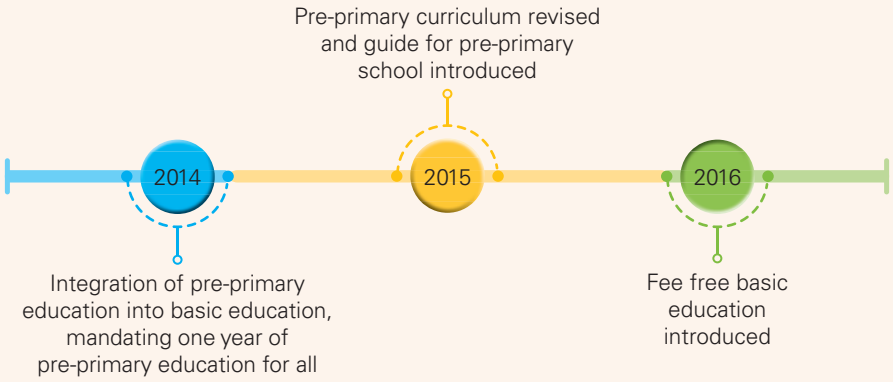
[337] Ministry of Health, Community Development, Gender, Elderly and Children, *NM-ECDP 2021/22–2025/26,* 2021.

[338] Education International and Tanzania Teacher's Union, *Situation Analysis and Baseline Study on Early Childhood Education in Tanzania Mainland – Final report,* 2017.

[339] Ndijuye, L.G. and N. Rao, 'Pre-primary Education Policy in Tanzania: Does it meet the educational needs of newly naturalized refugee children?', Global Education Review, vol. 5, no. 4, 2018, pp. 36–54.

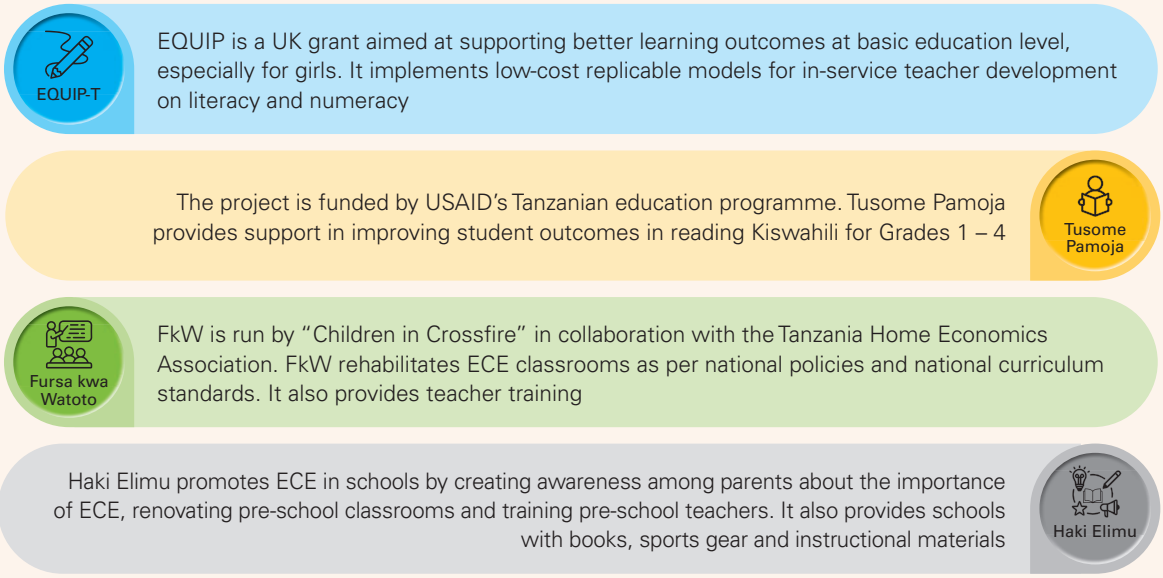
[340] Ibid.

Figure 45 » **Timeline of pre-primary reform interventions in Tanzania**



Aside from the GoT, donors and other stakeholders in the education sector play an important role. They provide school readiness and child stimulation programmes, as well as educator programmes aimed at the development of ECE teachers' modules. A selection of these programmes is displayed in Figure 46.

Figure 46 » **ECE programmes in Tanzania**[341]



6.6 Social protection

Social protection services in Tanzania are provided collaboratively through different ministries and agencies each one responsible for a specific group of children. Government stakeholders involved in social protection include the: (i) MoEST; (ii) MoHSW; (iii) PO-RALG; (iv) MoW; (v) MoFP; (vi) MoHA; and (vii) PMO. In recognition of the adverse effects that poverty and inequality have on economic growth, the GoT is motivated to implement a set of social protection programmes to better

341 Authors. Information from: Education International and Tanzania Teacher's Union, *Situation Analysis and Baseline Study on Early Childhood Education in Tanzania Mainland – Final report*, 2017.

tackle poverty, vulnerability and social exclusion and hence contribute to equitable economic growth and inclusive social development. Owing to the multisectoral nature of social protection in Tanzania, social protection programmes in the country are implemented by various line ministries, departments and agencies.[342]

6.6.1 Social assistance

In 2013, the GoT approved the implementation of its flagship programme, the PSSN. The PSSN is a nationwide cash transfer targeted at the extremely poor segment of the population.[343] PSSN, the largest social assistance programme in the country, is managed by the Tanzania Social Action Fund (TASAF), which provides regular cash transfers to poor and vulnerable households. The current phase of PSSN (2020–2023) targets 1.2 million households in villages in 187 implementation areas under a common targeting system.[344] Cash transfers disbursed by PSSN fall into three main categories:[345]

- A (fixed) basic monthly transfer to improve household consumption;
- A variable conditional transfer for households with children aimed at incentivizing households to invest in the human capital of children;
- A seasonal transfer linked to participation in labour-intensive public works to increase sustained household assets and help households increase incomes and therefore consumption during lean seasons.

Figure 47 » Selected ECD-related social protection programmes in Tanzania[346]

342 UNICEF, *Stawisha Maisha Nourishing Life Programme in Tanzania: Enhancing Infant and Young Child Nutrition Through the National Security Safety Net,* 2022.

343 Ulriksen, M.S., *The Development of Social Protection Policies in Tanzania, 2000–2015,* University of Cape Town, Cape Town, South Africa, 2016.

344 UNICEF, *Stawisha Maisha Nourishing Life Programme in Tanzania: Enhancing Infant and Young Child Nutrition Through the National Security Safety Net,* 2022.

345 World Bank, *Financing Social Protection in Tanzania,* World Bank, Washington, D.C., 2018.

346 Authors. Reproduced from World Bank, *Financing Social Protection in Tanzania,* 2018.

Box 8 Case Study – Stawisha Maisha[347]

Increasing household food consumption as a pathway to enhancing nutrition is a key objective of PSSN II. To this end, in 2018 and 2019 TASAF (with the support of UNICEF) piloted a small-scale programme to test how social behaviour change communication can be integrated with PSSN II cash transfers to improve infant and young child feeding practices. The Stawisha Maisha (Nourishing Life) programme targeted women, caregivers and senior members of PSSN households in two districts with high rates of stunting – Kaskazini B district (Zanzibar) and Mbeya DC (Mainland).

Volunteer peer leaders facilitated activity-based sessions intended to improve self-efficacy, knowledge, attitudes, skills and motivation around feeding practices. These sessions were held on all six payment dates throughout the year, with facilitation support from Community Management Committees and government district extension officers. The programme was implemented in 107 payment sites (8,029 recipients) and 20 payment sites (2,808 recipients) in Mbeya DC and Kaskazini B, respectively.

The second iteration of the programme is intended to be rolled-out in Lake Zone in 2022. This iteration will see the programme scaled-up to target 30 per cent of PSSN recipient households with children under five years of age (43,804 households) coupled with design changes to improve its impact.

6.6.2 Social Insurance

Social insurance programmes play a pivotal role in mitigating the effects of poverty. They can enable households to access health care, education and other services, which improve the status of ECD. The old-age pension system is the main form of social insurance in the country. It is mandatory for private sector and government employees. Other forms of social insurance offered in Tanzania include unemployment insurance and disability cover. These, however, cover a small segment of the population, despite the risk faced by the population.[348]

6.7 Child protection

The Ministry of Community Development, Gender, Women and Special Groups is the mandated ministry for all issues related to children in the country, including child protection. The ministry works collaboratively with the MoHA and the judiciary in matters related to violation of child rights. The Law of the Child Act 2009 is a landmark legislative work that consolidates laws relating to children. The law is holistic, addressing key issues such as provisions relating to custody, guardianship, foster care/adoption and access to essential services. However, the law is limited as it does not include a legal age for marriage and of provisions for child victims in criminal courts handling child abuse cases.[349] With support from UNICEF and other development partners, the GoT has taken further significant steps towards building and strengthening the child protection system in the country. Tanzania's regulatory framework now provides a clear definition of child protection and a comprehensive child protection system has been expanded to cover 51 local government authorities.[350] Further, in 2016 the *National*

[347] UNICEF, *Stawisha Maisha Nourishing Life Programme in Tanzania: Enhancing Infant and Young Child Nutrition Through the National Security Safety Net,* UNICEF Tanzania, Dar es Salaam, Tanzania, 2022.

[348] Ibid.

[349] UNICEF, *Building a Holistic Child Protection System, Step by Step, in the United Republic of Tanzania,* 2015, <https://bettercarenetwork.org/sites/default/files/Tanzania_CP_system_case_study.pdf>

[350] UNICEF, *Child Protection: Many children in Tanzania experience violence, neglect and exploitation,* 2022, <https://www.unicef.org/tanzania/what-we-do/child-protection#:~:text=Child%20protection%20is%20now%20well,with%20direct%20support%20from%20UNICEF.>

Plan of Action to End Violence Against Women and Children (NPA-VAWC) 2017/18 to 2021/22 was developed. The NPA-VAWC adopts an evidence-based approach towards prevention and response to violence against women and children. Its overarching goal is to *"eliminate violence against women and children in Tanzania and improve their welfare"* by implementing seven key strategies that have been proven to provide sustainable results. It encourages the involvement of stakeholders from different levels of government, the private sector and civil society, including mobilizing communities to take ownership of the issues and participating in decisions on the solutions. The NPA-VAWC is currently being evaluated with support from UNICEF, based on the findings and lessons learned, another National Plan of Action will be developed to continue the progress made thus far.

Box 9 NPA-VAWC targets[351]

Eliminate violence against women by 50 per cent in 2021/22

Eliminate violence against children by 50 per cent in 2021/22

[351] Ministry of Health, Community Development, Gender, Elderly and Children, *National Plan of Action to End Violence Against Women and Children in Tanzania 2017/18–2021/22,* Government of Tanzania, Dodoma, Tanzania, 2016.

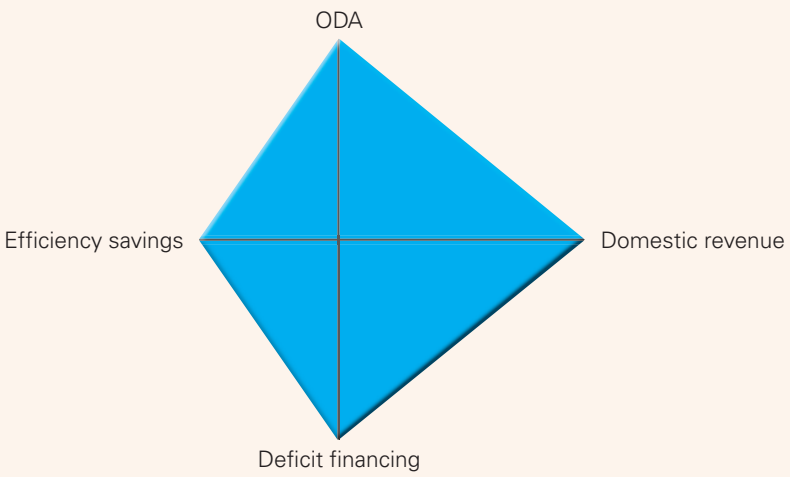
07

Annex II: Fiscal space analysis

A fiscal space analysis is an important part of understanding and assessing the current and likely availability of resources to governments to invest in a particular sector, subsector or programme.[352] This fiscal space analysis has been developed to support the GoT, and associated stakeholders, in understanding how increased investments in ECD might be realized. A fiscal space analysis is key to understanding the financial resources the GoT has available to invest in ECD-related programmes and packages. This will help to determine how the GoT can mobilize funding towards greater budgets for ECD.

Fiscal space is defined as 'the availability of budgetary room which allows a government to provide resources for a desired purpose without any prejudice to the sustainability of a government's financial position'.[353] A fiscal space analysis considers the five pathways through which fiscal space for a particular sector can be increased: (i) additional domestic revenue through higher taxes and/or reduced debt servicing payment, (ii) additional deficit financing, (iii) additional foreign grants (or official development assistance), (iv) allocating a higher proportion of the total government budget to these sectors and (v) spending the allocated budget more efficiently. The final two pathways are grouped together in one corner of the fiscal space diamond under efficiency savings, as depicted in Figure 48.

Figure 48 » **Fiscal space diamond**[354]



In addition to public resources invested in ECD, other resources are also used to finance ECD. These include resources from households, international organizations, non-government organizations and private organizations. All these funding sources tend to be off budget. In low- and middle-income countries, there is generally high levels of household expenditure on (children's) health relative to high-income countries (HICs). Indeed, out-of-pocket (OOP) health expenditure (as a percentage of current health expenditure) in LMICs is more than twice that of HICs at 35 per cent and 14 per cent, respectively.[355] In 2014/15, the government was the main source of finance for children's health,

[352] UNICEF, *Fiscal Space Analysis*, 2019, <https://www.unicef.org/mozambique/sites/unicef.org.mozambique/files/2019-04/2019-Fiscal-space-analysis.pdf>

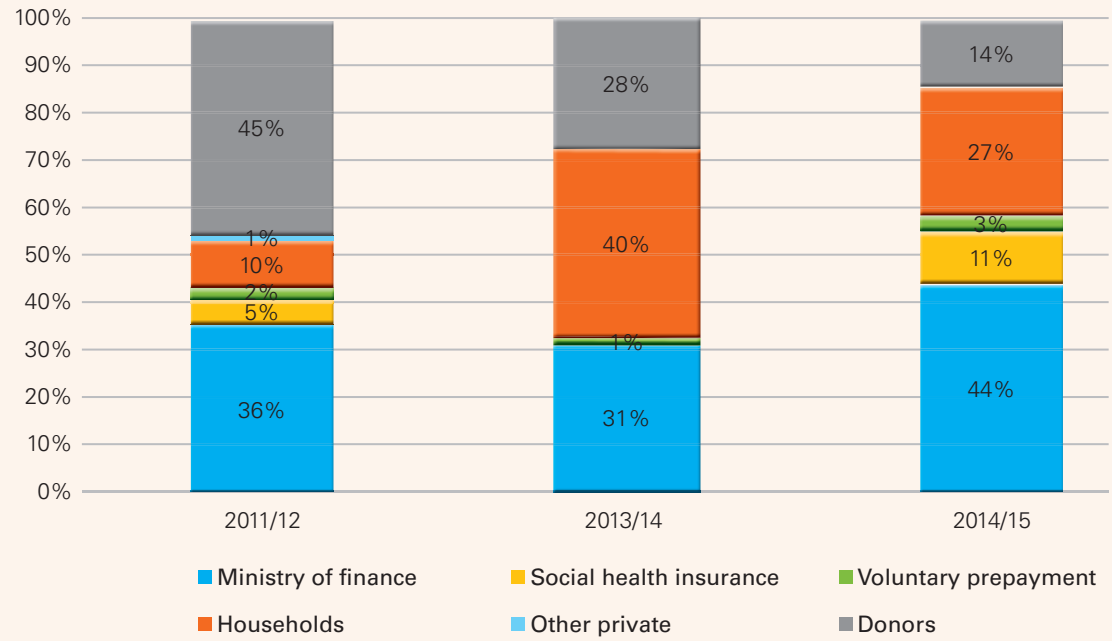
[353] Heller et al., 'Making Fiscal Space Happen: Managing fiscal policy in a world of scaled-up aid', IMF Working Paper, 2006, <www.imf.org/external/pubs/ft/wp/2006/wp06270.pdf>

[354] Adapted from Rathin Roy, Antoine Heuty and Emmanuel Letouzé (2007). "Fiscal Space For What? Analytical Issues From A Human Development Perspective",United Nations Development Programme (UNDP) Paper for the G-20 Workshop on Fiscal Policy, (Istanbul June 30 – July 2, 2007). Available at < https://www.undp.org/sites/g/files/zskgke326/files/publications/FiscalSpaceforWhat.pdf>.

[355] World Bank, Out-of-pocket expenditure (% of current health expenditure) – Low and middle income, high income, 2019, <https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS?locations=XO-XD>

accounting for 44 per cent of total health expenditure for children in Tanzania (Figure 49).[356] While the share of household spending in children's health has fluctuated over the years, it has remained relatively high. In 2011/12, households accounted for only 10 per cent of current expenditure in children's health.[357] A fourfold increase was observed in 2013/14, but in 2014/15, the figure declined to 27 per cent.[358] OOP expenditures have implications for children's health care utilization. High levels of OOP health expenditure are associated with unmet needs and delayed care seeking for children. Moreover, poor children and children without health insurance coverage are more likely to have unmet need and/or delayed care.[359] With respect to education financing in Tanzania, pre-primary and primary education are provided for free by the state. Despite this facility, households still spend a substantial amount on education owing to the indirect costs of educating children in public schools. Furthermore, households cover the full costs of educating children through the private schooling system. While 6.6 per cent of children receiving pre-primary education are enrolled in private institutions, 4 per cent are enrolled in private primary schools in Tanzania.[360]

Figure 49 » **Spending in children's health, by financing source, Tanzania[361]**



The remainder of this section will give a brief overview of Tanzania's macroeconomic background, followed by an analysis of two of the four corners of the fiscal space diamond for ECD – official development assistance and budget prioritization, as well as the scope to increase fiscal space in ECD through the reprioritization of expenditures.

356 MOHCDGEC, National Health Accounts Year 2015, United Republic of Tanzania, 2015.

357 MOHCDGEC, National Health Accounts Year 2015: United Republic of Tanzania, 2015.

358 Ibid.

359 Karaca-Mandic, P., S.J. Choi-Yoo, J. Lee and P. Scal, 'Family Out-of-pocket Health Care Burden and Children's Unmet Needs or Delayed Health Care', *Academic Paediatrics*, vol. 14, no. 1, 2014, pp. 101–108.

360 World Bank, *School Enrollment, primary, private* (% of total primary), Tanzania, 2019, <https://data.worldbank.org/indicator/SE.PRM.PRIV.ZS?locations=TZ>

361 Adapted from: MOHCDGEC, National Health Accounts Year 2015: United Republic of Tanzania, 2015.

7.1 Macroeconomic background

In the last decade, Tanzania has experienced sustained economic growth. As seen in Figure 50, real GDP growth ranged between 6 and 7 per cent between 2015 and 2019, declining to 4.8 per cent in 2020 as a result of the COVID-19 pandemic.[362] Concurrently, the country also witnessed an increase in GDP per capita. The GDP per capita currently is US$1,245 – an increase from US$732 in 2010.[363] Economic activity in the country is recovering and real GDP growth is projected to average at 6 per cent in the next five years.[364] Moreover, the government has committed to investing in public service delivery, with emphasis on the sectors of health and education.[365]

Figure 50 » **Evolution of real GDP growth and GDP per capita between 2010 and 2017, Tanzania[366]**

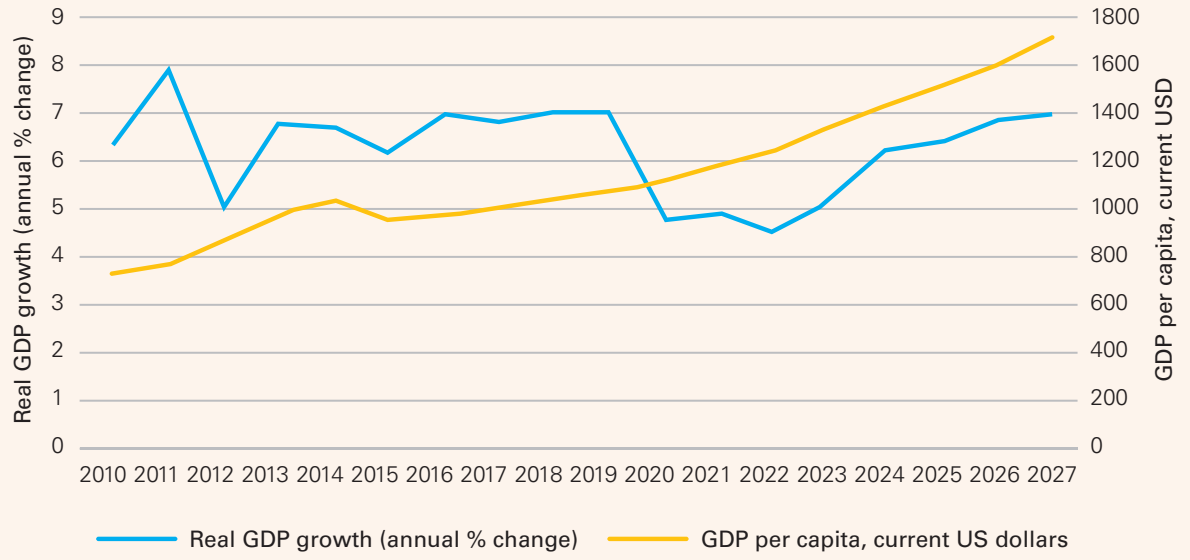


Table 15 illustrates the additional government revenue that is possible under the projected GDP growth scenario by the IMF World Economic Outlook indicators. Row 1 projects general government revenue until 2027, assuming that Tanzania experiences the growth projected by the IMF, and that general government revenue grows linearly with GDP growth. After 2027, we assume that growth remains constant at 7 per cent. Row 2 projects a scenario of no economic growth, and, therefore, no growth in general government revenue. Row 3 displays the additional government revenue that is available as a result of economic growth. Therefore, Tanzania stands to gain US$ 2 billion in 2024, and close to US$ 9 billion in 2030. Importantly, this additional budgetary room could be ring-fenced to finance a scale-up in ECD services.

362 IMF, *World Economic Outlook*, 2020, <https://www.imf.org/external/datamapper/profile/TZA>

363 Ibid.

364 Ibid.

365 World Bank, *The World Bank in Tanzania*, 2022, <https://www.worldbank.org/en/country/tanzania/overview>

366 IMF, *World Economic Outlook*, 2022, <https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/TZA?zoom=TZA&highlight=TZA>, accessed 21 November 2022.

Table 14 » **Government revenue growth scenarios as a result of GDP growth**[367]

		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	**General government revenue (US$ billion)**	9.03	9.73	11.31	13.05	15.23	17.63	20.56	24.07	24.75	26.90	29.05
2	**General government revenue (US$ billion) (No growth scenario)**	9.03	9.73	11.31	13.05	13.05	14.34	15.60	17.04	17.96	19.08	20.21
3	**Additional government revenue (US$ billion)**	–	–	–	–	2.18	3.29	4.95	7.04	6.79	7.82	8.84

7.2 Official development assistance

Official Development Assistance (ODA) is another option to increase funding to ECD. It can come in the form of funds to national government from a partner foreign government, debt forgiveness from international lending organizations or governments or from donor organizations. ODA can either be granted generally to a government or can be earmarked for a particular sector or project. Figure 51 shows the amount of ODA received by Tanzania between 2017 and 2019. Even prior to the COVID-19 pandemic, the ODA to Tanzania fell from over US$1,500 million in 2017 to just under US$1,200 million in 2019.[368] Figure 51 also illustrates the small proportion of ODA currently earmarked for ECD related services – ODA earmarked for ECE is so small compared to the total ODA Tanzania receives that it is imperceptible on this figure.[369] ODA for child health is the largest ECD aid received, varying between US$62 and US$38 million.[370] However, this still only represents about 4 per cent of the total ODA Tanzania receives.[371] Social protection as a whole (for both children and adults) receives between US$17 and US$33 million, only 2 per cent of total ODA received by Tanzania.[372] Moreover, as displayed in Figure 52, ODA contributions to Tanzania have been following a declining trend between 2012 and today. ODA contributions peaked in 2013 at over US$2,000 million, but have since fallen to only US$112 million in 2021.[373]

367 FRED Economic Data, General Government Revenue for Tanzania, 2022, <https://fred.stlouisfed.org/series/TZAGGRG01GDPPT>

368 OECD, OECD.Stat, 2022, <https://stats.oecd.org/Index.aspx?DataSetCode=TABLE1#>, accessed: 23 November 2022.

369 Ibid.

370 MOHCDGEC, National Health Accounts Year 2015: United Republic of Tanzania, 2015.

371 OECD, OECD.Stat, 2022.

372 Ibid.

373 Ibid.

Figure 51 » **Total ODA to Tanzania between 2017 and 2019**[374]

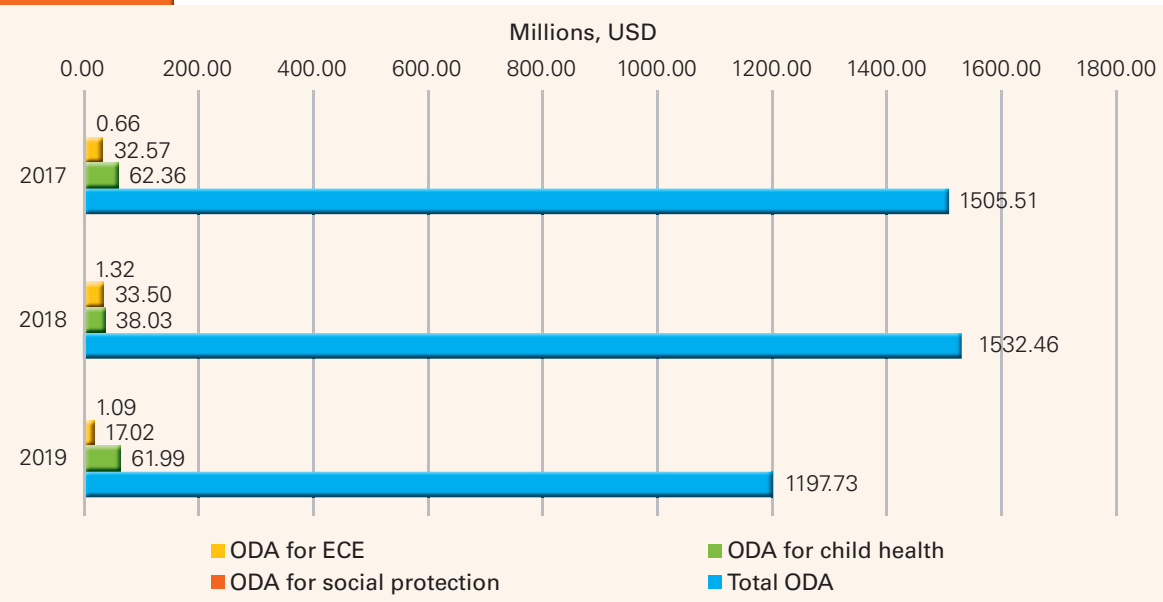
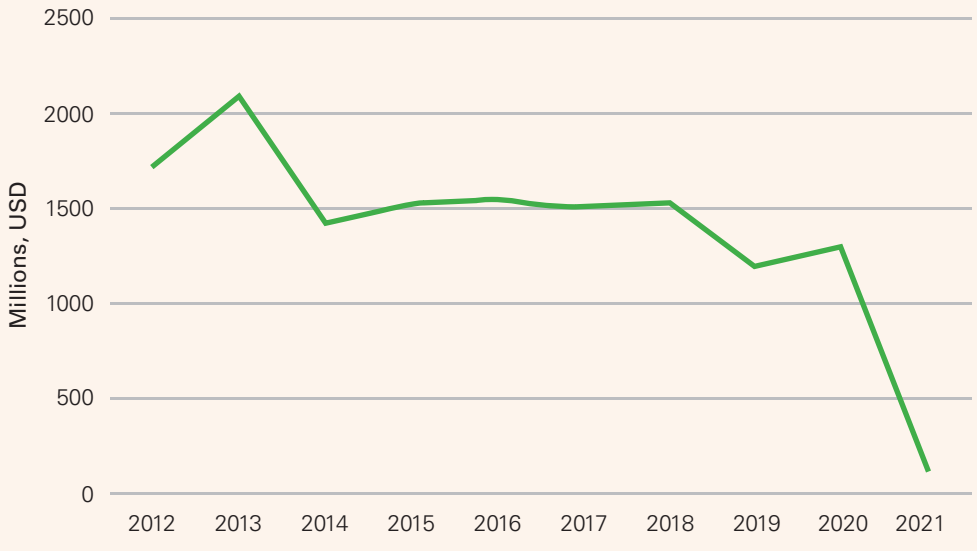


Figure 52 » **Trend in ODA in Tanzania between 2014 and 2021**[375]



As a small proportion of ODA is currently dedicated to ECD, there is scope for the Tanzanian government to reallocate non-earmarked funds to ECD programmes. However, this may require negotiations with donors to reallocate earmarked funds from other sectors into the ECD sector. In future ODA agreements, using the evidence of the high return on ECD investments, Tanzania should advocate to earmark additional funds for the specific use in ECD relevant sectors.

374 OECD, *OECD.Stat*, 2022.

375 OECD, *OECD.Stat*, 2022.

7.3 Budget allocation and efficiency savings

Efficiency savings refers to improving outputs for the same level of investment or maintaining the existing outputs for a reduced level of investment. This is a challenging source of fiscal space, as increasing available funds through efficiency savings can often require system-wide reforms in order to make processes more efficient, which may require structural changes (and investments) to the existing systems. However, it is also an excellent opportunity to increase financing for ECD without necessarily requiring an increase in the quantity of funds available.

Table 15 » **Additional government revenue available under projected GDP growth (2020–2030)**

		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	**General government revenue (US$ billion)**	9.03	9.73	11.3	13.1	15.2	17.6	20.6	24.1	24.8	26.9	29.1
2	**General government revenue (US$ billion) (no growth scenario)**	9.03	9.73	11.3	13.1	13.1	14.3	15.6	17.0	18.0	19.1	20.2
3	**Additional government revenue (US$ billion)**	-	-	-	-	2.18	3.29	4.95	7.04	6.79	7.82	8.84

Table 16 illustrates the additional government revenue that Tanzania is likely to accrue based on the projections of Tanzania's growth over the decade between 2020 and 2030. Therefore, Tanzania is likely to have an additional government revenue between US$ 2 billion and 8 billion to spend on ECD interventions in the coming years, without making any major shifts in spending priorities.

As discussed in the budgetary analysis above, despite over half of all government health expenditure being dedicated to child and maternal health, health outcomes for mothers and children remain poor. Efficiency savings can likely be found in examining high-performing councils in Tanzania to understand how their improved outcomes were obtained without necessarily spending more than other areas. Further, it is essential for Tanzania to move towards PBB to link the funding of public organization to the performance they are able to deliver and thereby enhance the efficiency and effectiveness of expenditure on ECD. PBB will also improve expenditure prioritization (particularly in a context where resources are constrained) by shifting resources to where they will have the most impact.[376] With regards to ECE and social protection, young children are not yet sufficiently prioritized and therefore reallocation of funds towards children under five years of age can result in massive strides to improve ECD outcomes across the country.

[376] Robinson, M.M. and M.D. Last, *A Basic Model of Performance-based Budgeting,* International Monetary Fund, Washington, D.C., 2010.

7.4 Implications for the fiscal space for ECD

From the analysis above, it is clear that there is room to increase investment in ECD interventions. The GoT is the key actor in this sphere as the main source of financing for children's health,[377] and given the opportunity that years of sustained economic growth presents.[378] However, external financing sources such as donor funding can also play an important role in stimulating Tanzania's ECD sector. As discussed above, ODA for ECD has waned over the years. Almost no ODA is earmarked for ECE, and only 4 per cent and 2 per cent are allocated for child health and social protection, respectively.[379] In order for donors to allocate more towards ECD, there is a need for the GoT to strengthen its commitment to ECD in order to attract donor investment and mobilize funding for ECD.[380]

Focusing on budget allocation, efficiency and making the most of the recent economic growth will be key in the improvement of the Tanzanian ECD sector. Through economic growth alone, the GoT stands to gain over US$ 8 billion, much of which can be invested in its ECD sector. Key areas to prioritize are pre-primary education and child-focused social protection. Meanwhile, in the health sector, the GoT needs to focus on improving efficiency to ensure that allocated budget is translated into improved maternal and child outcomes. Further opportunities lie in improving tax collection, as Tanzania's tax to GDP ratio has stagnated around 10 per cent in the past decade.[381] Improved tax collection coupled with increased revenues from economic growth and efficiency savings will vastly improve the fiscal space available for ECD, thus helping children across Tanzania to reach their full potential. The findings of this analysis indicate that the proportion of the additional fiscal space that will accrue in the coming years can be invested towards ECD without compromising the provisions for other critical services.

377 MOHCDGEC, National Health Accounts Year 2015: United Republic of Tanzania, 2015.

378 IMF, World Economic Outlook, 2020, <https://www.imf.org/external/datamapper/profile/TZA>

379 OECD, OECD.Stat, 2022; MOHCDGEC, National Health Accounts Year 2015: United Republic of Tanzania, 2015.

380 Neuman, M.J. and S. Powers, 'Political Prioritization of Early Childhood Education in Low-and Middle-income Countries', International Journal of Educational Development, vol. 86, 2021, p. 102458.

381 World Bank Group, Tax to GDP Ratio – Tanzania, 2022, <https://data.worldbank.org/indicator/GC.TAX.TOTL.GD.ZS?locations=TZ>, accessed on 21 November 2022.

08

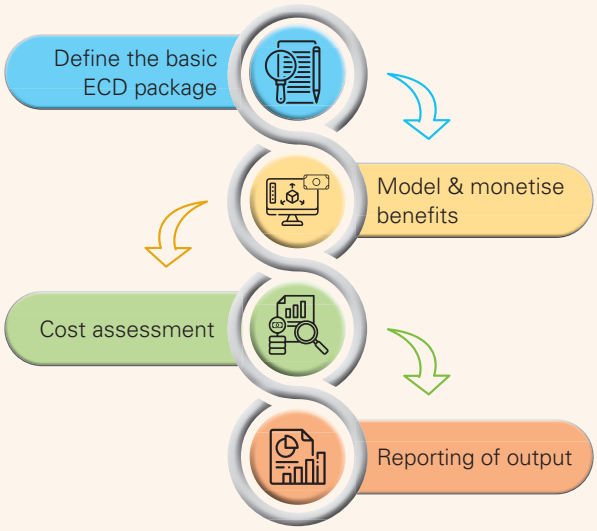
Annex III: Cost–benefit and cost of inaction analysis methodology

This section provides an overview of the approach and methodology adopted for this economic evaluation of investment in ECD in Tanzania. An investment case is intended to provide evidence to evaluate the value for money of an investment, which can then inform decision-making. In this kind of economic evaluation framework, evidence is presented by comparing relative costs (in monetary costs) to relative effects (in a quantifiable outcome measure) or benefits (in monetary units) of the projected investments. This investment case is based on a cost–benefit analysis (CBA) and cost-of-inaction (COI) analysis, both of which are grouped as full economic evaluations. CBA and COI analyses allow decision-makers to compare an intervention (or package of interventions in this case) in terms of its value for money, thus enabling maximum gains for the population within a constrained resource setting.

CBA and COI analyses are methods that compare the difference in costs (in monetary units) and the difference in benefits (in monetary units) between a scenario and a comparator/baseline. The comparator/baseline is a scenario in which there is no increase in coverage of any of the interventions included in the package analysed. This is compared to a second scenario where the coverage rates of an intervention within the package are incrementally scaled up towards a target coverage rate. The additional benefits associated with this scale-up scenario (in comparison to the baseline) are identified, quantified and monetized. Then all the additional costs are identified, quantified and monetized. In a CBA, the rate of return, or incremental benefit-cost ratio (IBCR), of an investment is calculated. Meanwhile, in a COI analysis, the opportunity cost of not investing in package is quantified by subtracting all the additional costs associated with the scale-up from all the additional benefits. Both approaches provide valuable information to decision-makers on whether investments in ECD in Tanzania would be sound socioeconomic investments.

The methodology for developing these economic evaluations follows four distinct phases, as illustrated in Figure 53. This section will explore each of these stages in turn in the following sections.

Figure 53 » Steps in the cost–benefit and cost-of-inaction analysis



8.1 Defining a basic ECD package

The *Nurturing Care Framework* forms the foundation for the package of ECD interventions that are covered in this report. Based on the interventions in the nurturing care framework, we use literature and available evidence to select a prioritized list of interventions for which a strong evidence of effectiveness exists. These then become the basis of the CBA and COI.

Table 16 » Components of nurturing care[382]

Component	Definition	Interventions
Good Health	Refers to the health and well-being of the children and their caregivers	• Family planning • HIV testing, prevention of mother-to-child transmission of HIV • Essential newborn care, including kangaroo care for small babies • Immunization of mother and child • Growth monitoring and counselling • Promotion of health and well-being, including health care-seeking behaviour • Prevention and treatment of childhood illness and caregiver physical and mental health problems • Care for children with development difficulties or disabilities
Adequate Nutrition	Refers to maternal and child nutrition	• Maternal nutrition • Early initiation and exclusive breastfeeding for 6 months, continued breastfeeding after 6 months with appropriate and responsive complementary feeding • Micronutrient supplementation for mother and child, as needed • Adequate physical activity, sedentary behaviour and sleep in early childhood • Management of moderate and severe malnutrition, as well as overweight and obesity
Safety and Security	Refers to safe and secure environments for children and their families, which includes physical dangers, emotional stress, environmental risks (e.g., pollution), and access to food and water	• Birth registration • Food security and access to clean water • Clean indoor and outdoor air • Good hygiene • Protecting children from physical punishment, abuse and neglect • Safe spaces to play • Social care services, including cash transfers to the most vulnerable families

(Continued)

[382] Authors. Reproduced from Nurturing Care Framework, *A Closer Look at the Nurturing Care Components*, 2020, <https://nurturing-care.org/nurturing-care-components/>.

(Continued)

Component	Definition	Interventions
Opportunities for Early Learning	Refers to any opportunity for the baby, toddler or child to interact with a person, place or object in their environment. Recognizes that every interaction (positive or negative) of an interaction is contributing to the child's brain development and laying the foundation for later learning.	*At home and in childcare spaces:* • Activities that encourage young children to move their bodies, activate their five senses, hear and use language and explore • Using daily routines to talk to, play, and interact with baby/toddler/child • Telling stories (including by elders) • Exploring books together and reading to the baby/toddler/child • Talking to and with the baby/toddler/child • Smiling, imitating/copying and simple games (e.g., peek a boo) • Age-appropriate play with household objects and people • Quality standards in formal childcare spaces
Responsive Caregiving	Refers to the ability of the parent/caregiver to notice, understand and respond to their child's signals in a timely and appropriate manner. Considered the foundational component because responsive caregivers are better able to support the other four components	*Across multiple services and touchpoints:* • Modelling and encouraging caregivers to make eye contact, smile, cuddle and praise • Helping caregivers to notice their child's cues and respond appropriately (sensitivity and responsiveness) – for example, signs of hunger, satiety, illness, emotional distress, interest to play, pleasure • Supporting caregivers to identify and use everyday moments to communicate and play with their child (e.g., feeding, bedtime) • Encouraging caregivers to develop safe and mutually rewarding relationships with their child (e.g., they enjoy being together)

8.1.1 Selection criteria

First, a literature review was used as the basis to identify the indicators for potential inclusion in the model. This review drew on a wide range of sources including recent publications in academic journals, government ECD strategies and policies, as well as grey literature (particularly that developed by UNICEF and similar agencies). Interventions were shortlisted for inclusion in the package if they fulfilled the following criteria:

- They aligned with the *Nurturing Care Framework* (explicitly or implicitly mentioned in Table 17).
- There was strong evidence in the literature that this intervention is effective in promoting child development in the long term.
- There was sufficient data available (impact, incidence, coverage, costs).
- Modelling tools were available to generate results on the costs and benefits of the intervention.

Then, based on a long list of potential interventions, a review was conducted where additional interventions that cannot be modelled were dropped. The reasons for dropping additional interventions were typically threefold:

- **Limited evidence on long-term effects** (benefits data): For some of these interventions, such as providing safe spaces to play, evidence on long-term benefits which can be monetized do not yet exist within the literature; so, it is not yet possible to calculate how the provision of a safe space to play for a child might reduce child deaths, poverty or stunting over the period.
- **Difficulty in obtaining reliable cost data for the intervention:** For other interventions, such as encouraging caregivers to develop safe and mutually rewarding relationships with their child, there are also additional challenges around costing. This intervention could be implemented through a variety of modalities (for example, through radio advertisements, through community health workers, at parenting programmes), each of which have different associated costs. As little evidence exists indicating which (or if any) of these modalities is effective in changing behaviours, it is difficult to cost the intervention and significant assumptions about the effectiveness of form of providing the intervention would have to be made. Further, the cost of providing this intervention may also already be covered by the roll-out of other interventions (such as PHC services delivered through CHWs) and thus it is not necessary to model them again.
- **Limited data on current coverage for the intervention:** Some interventions, such as care for children with developmental difficulties or delays or protecting children from physical punishment, abuse and neglect, cannot be modelled because data required to reliably interrogate their impact do not exist in Tanzania (or neighbouring countries). These data include impact data (related to point (i)), incidence data (e.g., type of disability, incidence of neglect) or current coverage data.

To ensure the quality of this package, the final package is cross-checked with other similar studies and a validation process was undertaken in Tanzania. This included comparing the ECD package to recent studies produced in eastern and southern Africa (including in Namibia, 2019 and Burundi, 2021) and discussing the package in detail with the stakeholders.

8.1.2 Interventions

In total, 69 interventions were included across the health, nutrition, WASH, education and early learning, child protection and social protection subsectors. Table 17 details each intervention modelled. Each row specifies the existing baseline rate for the chosen intervention (alongside the year and source of this data point), as well the target rate that was set for the intervention. The baseline rate draws from the best available data point for each intervention, with priority placed on getting recent, context-specific information. However, owing to data scarcity, some rates are proxies (based on international or regional estimates).

Table 17 » Interventions, by sector, with baseline and target rates

Intervention	Baseline			Target
	Rate (%)	Year	Source	Rate (%)
ACTs – Artemisinin compounds for treatment of malaria	95	2022	DHS 2022	100
Antenatal care (at least four visits)	65	2022	DHS 2022	90
Antibiotics for dysentery	3	2022	OHT calculation	90
Antibiotics for preterm labour	32	2022	OHT calculation	90

(Continued)

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Intervention	Baseline			Target
Antiretroviral therapy for children with HIV/AIDS	83	2022	UNAIDS Data Book	90
Assisted vaginal delivery	16	2022	OHT calculation	90
BCG vaccine	75	2022	WHO/UNICEF	90
Blood transfusion (labour)	17	2022	OHT calculation	90
Caesarean delivery (of women in need of it)	44	2022	OHT calculation	90
Clean birth environment	52	2022	OHT calculation	90
Clean cord care	61	2022	OHT calculation	90
Contraceptive prevalence rate	31	2022	DHS 2022	52
Cotrimoxazole	19	2020	UNAIDS/WHO	90
Deworming				
Diabetes case management (as part of antenatal care coverage)	9	2022	OHT global average	90
DPT vaccine	81	2022	WHO/UNICEF	90
Ectopic pregnancy case management	0	2022	OHT calculation	90
Fetal growth restriction detection and management	0	2022	OHT calculation	90
Full supportive care for prematurity	0	2022	OHT calculation	90
Health facility delivery	81	2022	DHS 2022	90
HepB vaccine	81	2022	WHO/UNICEF	90
Hib vaccine	81	2022	WHO/UNICEF	90
Hypertensive disorder case management	7	2022	OHT global average	90
Immediate drying and additional stimulation	57	2022	OHT calculation	90
Induction of labour (beyond 41 weeks)	7	2022	OHT calculation	90
ITN/IRS – Household protection from malaria	41	2022	DHS 2022	90
Kangaroo mother care	86	2021	Salim et al.[383]	90
Malaria case management	42	2022	OHT calculation	90
Management of eclampsia (magnesium sulfate)	50	2022	OHT calculation	90

(Continued)

[383] Salim, N., J. Shabani, K. Peven et al., 'Kangaroo Mother Care: EN-BIRTH multi-country validation study', *BMC Pregnancy and Childbirth*, vol. 21, no. 1, 2021, pp. 1–16.

(Continued)

Intervention	Baseline			Target
Manual removal of placenta	25	2022	OHT calculation	90
Maternal sepsis management	32	2022	OHT calculation	90
Measles vaccine	76	2022	WHO/UNICEF	90
Neonatal resuscitation	54	2022	OHT calculation	90
Case management of neonatal sepsis/ pneumonia	32	2022	OHT calculation	90
Oral antibiotics for pneumonia	40	2022	OHT calculation	90
ORS (oral rehydration solution)	39	2022	DHS 2022	90
Perinatal psychosocial treatment	10	2022	OHT global average	90
Pneumococcal vaccine	80	2022	WHO/UNICEF	90
Polio vaccine	70	2022	WHO/UNICEF	90
Prevention of malaria in pregnancy	33	2022	DHS 2022	90
Prevention of mother to child transmission of HIV/AIDS prenatal prophylaxis	80	2022	UNAIDS Data Book	90
Removal of retained products of conception	15	2022	OHT calculation	90
Rotavirus vaccine	77	2022	WHO/UNICEF	90
Safe abortion services	3	2022	OHT global average	90
Syphilis detection and treatment (as part of antenatal care coverage)	56	2022	OHT global average	90
Tetanus toxoid vaccination (as part of antenatal care coverage)	85	2022	DHS 2022	100
Thermal protection	62	2022	OHT calculation	90
Uterotonics for post-partum haemorrhage	57	2022	OHT calculation	90
Vitamin A for measles treatment (children)	99	2022	OHT calculation	100
Zinc (diarrhoea treatment)	18	2022	UNICEF	90
Balanced energy supplementation	49	2022	OHT calculation	90
Complementary feeding – education only	22	2016	DHS 2015–16	90
Complementary feeding – supplementary feeding and education	22	2016	DHS 2015–16	90
Early initiation of breastfeeding	70	2022	DHS 2022	100

(Continued)

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Intervention	Baseline			Target
Exclusive breastfeeding up to 1 month	84	2016	DHS 2015–16	100
Exclusive breastfeeding up to 6 months	64	2022	DHS 2022	90
Folic acid fortification	15	2022	Food Fortification Initiative	90
Iron fortification	4	2022	Food Fortification Initiative	90
Iron supplementation during pregnancy	81	2022	DHS 2022	90
Iodised Salt	86	2019	UNICEF Global Database on Iodised Salt	100
Treatment of MAM	0	2016	DHS/UNICEF	90
Treatment of SAM	0	2016	UNICEF	90
Basic sanitation	31	2020	SDG 6 Data Portal	90
Handwashing with soap	48	2020	SDG 6 Data Portal	90
Hygienic disposal of children's stool	68	2016	DHS 2015–16	90
Piped water	36	2020	WHO/UNICEF	90
Cash transfer – Option 1: Expansion of PSSN II (as % of households living under the poverty line)	39	2022	Author's calculation based on PSSN coverage data	90
Cash transfer – Option 2: Universal Cash Transfer (under 5s)	14			90
Birth registration	26	2016	DHS 2015–16	100
Pre-primary education (5–6 years)	31	2021	BEST 2021 Regional Data	100

8.1.3 Scale-up scenarios

Two scale-up scenarios are modelled. They each assume a linear increase in coverage from the baseline values in the table above in line with the following trends:

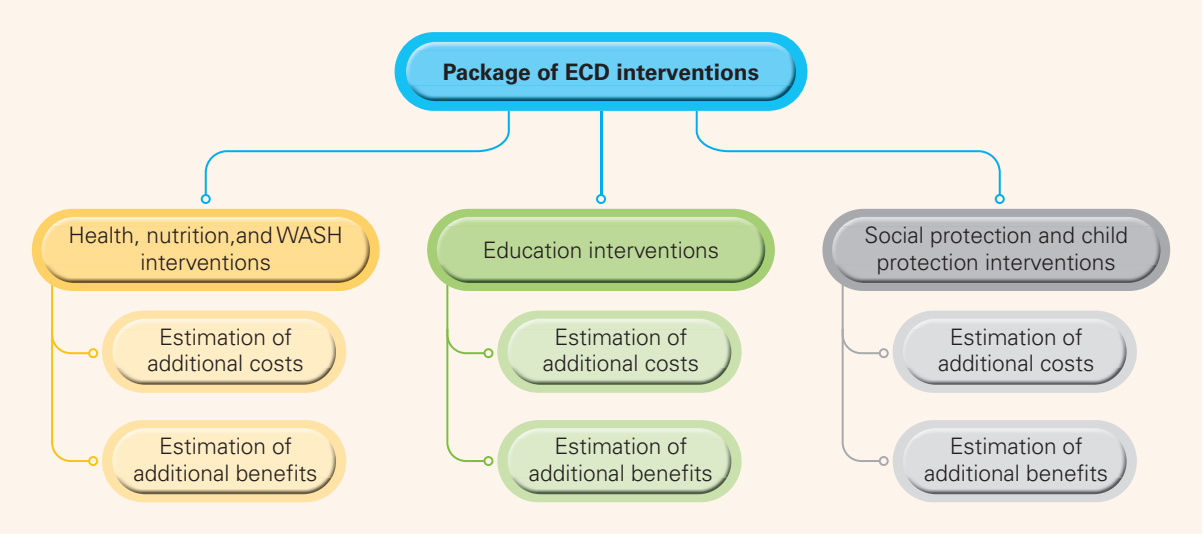
Scale-up scenario 1 (fast scale-up): Increase baseline coverage from 2023 until reaching target coverage levels in 2030 after which the target coverage level is sustained until 2050.

Scale-up scenario 2 (slow scale-up): Increase baseline coverage from 2023 until reaching target levels in 2050.

8.2 Modelling benefits

The modelling of these interventions can be categorized into three components (Figure 54): (i) modelling of health, nutrition and WASH interventions; (ii) modelling of education interventions and (iii) modelling of social protection and child protection interventions.

Figure 54 » **Components of benefit modelling**



8.2.1 Health, nutrition and WASH interventions

The analysis of direct outcomes attributed to the scale-up of health, nutrition and WASH interventions were mainly modelled in the One Health Tool[384] (OHT), with some interventions modelled in Excel. The OHT software package was used to model the majority of health, nutrition and WASH interventions for the following reasons:

- It is the standard epidemiologic modelling software that is widely used by leading development organizations and decision-makers.
- It uses up-to-date and robust evidence on the effectiveness of interventions on outcomes.
- It allows researchers to model the impacts of increasing coverage of interventions over time, consistent with scale-up plans that are relevant to decision-makers.
- Most of the interventions within the ECD package under study are included. In addition, OHT provides a consistent framework to jointly assess the impact of altering the coverage levels of multiple interventions at the same time, and
- By using OHT, results will be methodologically and empirically comparable to the investment frameworks in child's health and well-being in other sub-Saharan African countries.

[384] Avenir Health, 2021.

Conducting this modelling on OHT requires the following steps to be taken:

- The interventions contained in the packages identified as relevant for Tanzania were compared with interventions available in the OHT. This informed the identification of the interventions that could be modelled with the software. Some interventions matched those in the modules available, but for others appropriate proxy indicators were selected.
- Data was updated in OHT. This involved checking the data available in OHT for demography, health status, mortality and economic status in Tanzania. This was confirmed or edited according to trusted external sources. Baseline data available in OHT were compared against the baseline data collected for each of the interventions (which had been validated by stakeholders). Where appropriate, baseline data were updated.
- Next, the software was provided with specific scenarios in which the coverage of the interventions of interest gradually increases or is maintained over a given time frame. These coverage levels are the key input parameters in OHT. When coverage levels of the interventions change, incidence and prevalence of the associated diseases or conditions will also change over time as a result.
- Country-specific incidence and prevalence rates of the related conditions/diseases are available in the OHT software. These incidence or prevalence rates are combined with the projected population of Tanzania in OHT to estimate the number of cases of conditions or diseases at the baseline. Therefore, interventions affecting the population growth and demographic projections, such as family planning, will interact and have an impact on the number of cases that will result from other interventions.
- Based on the effectiveness of the interventions modelled, the impact of increased coverage was estimated using the relevant module in OHT. The impact was calculated. Interventions were assumed to be implemented simultaneously. This is to avoid double-counting of the benefits of interventions with the same impact pathway (e.g., breastfeeding promotion and complementary feeding supplementation). The impact was captured in terms of the following: child deaths averted, maternal deaths averted and stunting cases averted for different diseases or conditions.
- We used these outputs (impacts) derived from OHT to estimate disability-adjusted life years (DALYs) averted on Excel. DALYs is a frequently used outcome in health economic evaluations that measure years of life lost (YLLs) owing to premature death and years of life lost to disability (YLDs) owing to a health condition or its consequences. Additional assumptions to calculate DALYs consisted of standard life expectancy at age of death and the cause of death- and age-specific YLD/YLL ratio derived from the Global Burden of Disease 2019 database.
- Next, an incremental analysis was conducted – that is, additional DALYs averted owing to an increase in coverage of interventions in each scale-up scenario were calculated in comparison with the baseline scenario.

A few health interventions included in this ECD package are not available for modelling on the OHT. For this reason, bespoke Excel models were developed – drawing on impact evidence within the literature – to estimate the additional benefits of scaling up each of these interventions.

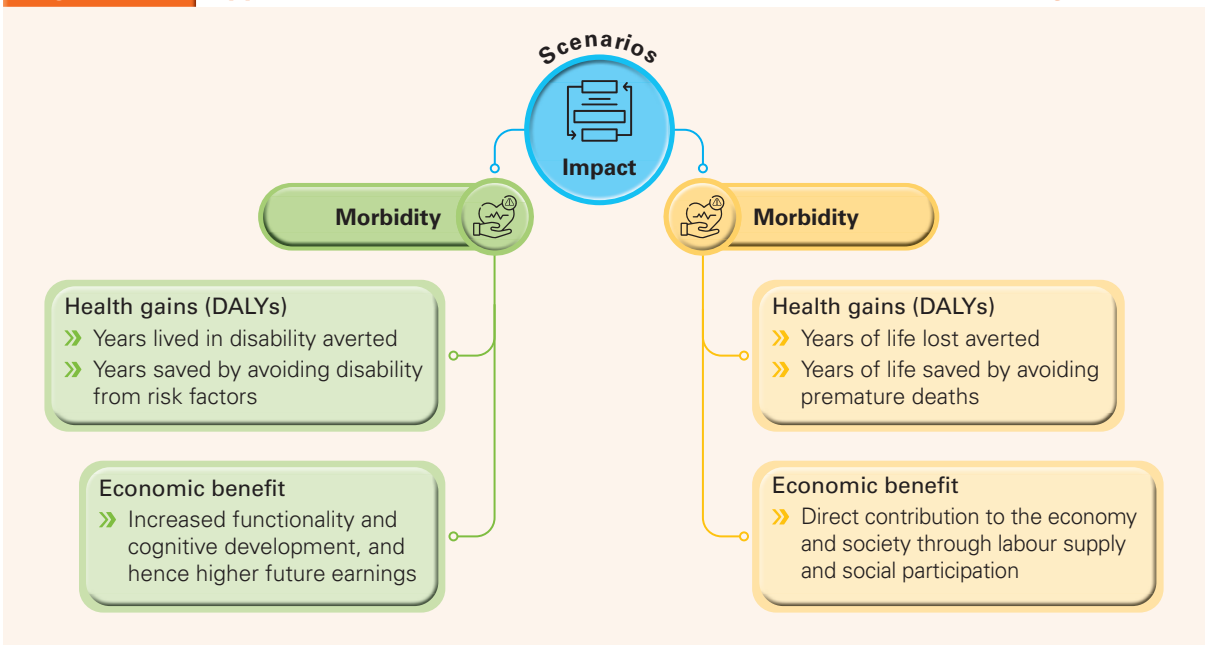
8.2.2 Monetizing benefits

DALYs and stunting cases averted for all interventions were then converted into monetary values. This CBA and COI analysis was based on the principle that outcomes have a monetary value

that is based on what society is willing to pay for improvements in life expectancy and quality of life. Figure 55 shows our approach to the valuation of DALYs in terms of economic gains.

- Mortalities averted were expressed in monetary benefits by converting lives saved into a productivity contribution to society. To estimate this, a monetary value of 1.5 times GDP per capita is assigned to each life-year saved (e.g., DALY averted) in the period 2023–2050 based on the results of a recent investment study of maternal and child health interventions.[385] The value of 1.5 times GDP per capita corresponds to an average benefit of one time GDP per capita for the direct contribution to the economy through increase labour supply and productivity, while the value of 0.5 time GDP per capita corresponds to the social contribution made by the person whose life was saved.[386]
- Child stunting cases averted were expressed in monetary terms by calculating increased future earnings via gains in productivity and improvements in cognitive development.[387]
- The reduction in iodine deficiency owing to the promotion of salt iodization and deworming was also calculated in terms of productivity gain. The size of this productivity gain was based on a study that estimates an association between iodine deficiency cases and cognitive impairment, which in turn leads to reduced lifetime earnings.[388]
- Treatment effectiveness of deworming was derived from a meta-analysis on the efficacy of recommended drugs against soil-transmitted helminths, and DALYs were converted into monetary value following the valuation of statistical life described by Stenberg et al. (2014) and discussed in Point 1 above.[389]

Figure 55 » **Approach to the valuation of health benefits in terms of economic gains**

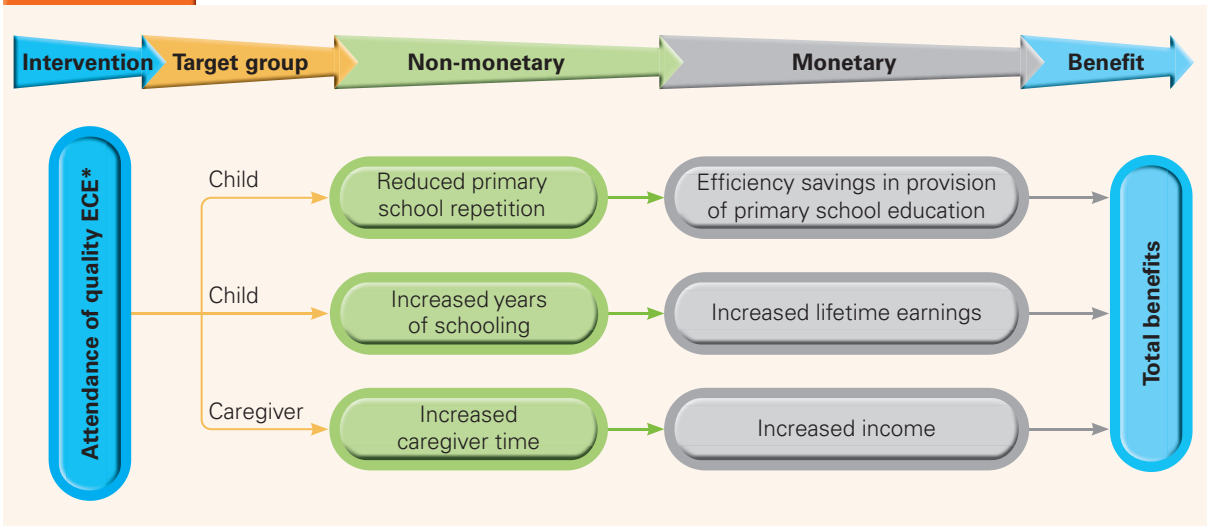


385 Stenberg et al. (2014).
386 Ibid.
387 Hoddinnott et al. (2013), Hoddinott et al. (2011) and Horton and Ross (2003).
388 FSANZ (2006) and Abuerto et al. (2014).
389 Moser et al. (2017).

8.2.3 Education modelling

The decision on which tools and approaches to use was determined based on an assessment of their utility for this project and their contextual relevance. Based on this research, we built an Excel simulation model to estimate the benefits of expanding ECE. This model was used to quantify the benefits of expanding ECE. We measured the benefits of expanding ECE coverage through three impact pathways (Figure 56).

Figure 56 » **ECE impact pathways**



**Studies indicate that benefits of ECE on child development are only realized if ECE is of high quality and usually lasts for a duration of at least one year.[390] To account for this, in our costing model we assumed a student:teacher ratio of 25:1, and a student:classroom ratio of 50:1 (assuming double-shift patterns). Benefits only accrued after a child has experienced at least one year of ECE.*

- **Reduced primary school repetition:** Studies show that access to high-quality ECE can reduce the primary school repetition rate.[391] ECE is associated with improved school readiness, socialization and cognitive development, which contributes to children progressing better at later stages of education.[392] We drew on empirical findings a recent study of 109 developing countries[393] to model the impact of increasing access to high-quality ECE on the primary school repetition rate of the country, as well as the number of primary school years that are repeated. This non-monetary benefit was then monetized by estimating the cost per student of a year of primary school multiplied by the

390 Reynolds, A.J., J.A. Temple, S.R. Ou et al., 'School-based Early Childhood Education and Age-28 Well-Being: Effects of timing, dosage and subgroups', Science, vol. 333, no. 6040, 2011, pp. 360–364; Sylva, K., E. Melhuish, P. Sammons et al., 'Pre-school Quality and Educational Outcomes at Age 11: Low quality has little benefit', *Journal of Early Childhood Research,* vol. 9, no. 2, 2011, pp. 109–124.

391 Earle, A., N. Milovantseva and J. Hermann, 'Is Free Pre-primary Education Associated with Increased Primary School Completion? A global study', *International Journal of Child Care and Education Policy,* vol. 12, 2018, p. 13.

392 Berlinski, S., S. Galiani and P. Gertler et al., 'The Effect of Pre-primary Education on Primary School Performance', *Journal of Public Economics,* vol. 92, no. 1–2, 2008, pp. 219–234; Smithers, L.G., A.C.P. Saywers, C. R. Chittleborough et al., 'A Systematic Review and Meta-analysis of Effects of Early Life Non-cognitive Skills on Academic, Psychosocial, Cognitive and Health Outcomes', *Nature: Human Behaviour,* vol. 2, no. 11, 2018, pp. 867–880.

393 Muroga, A., H.T. Zaw, S. Mizunoya et al., 'COVID-19: A Reason to Double Down on Investments in Pre-Primary Education', *Innocenti Working Paper WP-2020-11,* UNICEF Office of Research, Florence, Italy, 2020; McCoy, D.C., S. S. Zuilkowski, H. Yoshikawa and G. Fink, 'Early Childhood Care and Education and School Readiness in Zambia', *Journal of Research on Education Effectiveness,* vol. 10, no. 3, 2017, pp. 482–506; Kim, J.H., 'Preschool Participation and Students' Learning Outcomes in Primary School: Evidence from national reform of pre-primary education in Ethiopia', *International Journal of Educational Development,* vol. 94, 2022, p. 102659.

years of repeated primary school averted due to the intervention. This was in line with a number of other studies that have been successfully integrated this approach, including recent cost–benefit studies of ECE in Malawi[394] and Jordan.[395]

- **Increased years of schooling:** As stated above, ECE is associated with improved child development outcomes, school readiness and socialization, all of which contribute to children being more likely to stay in school for longer and to graduate from secondary school.[396] The impact of these additional years of schooling was quantified by drawing on evidence about the impact of ECE on years of schooling reported in the international literature.[397] The impact of these additional years of schooling was then quantified and monetized. Following similar studies, benefits were calculated by multiplying the additional years of schooling by the rate of return to a year's education by the anticipated lifetime income of an individual.[398] This was then multiplied by the population group who have benefited from the intervention.[399]

- **Increased caregiver time:** The provision of ECE services frees up time for caregivers (usually women).[400] Studies show that this 'freed up' time can be significant and, often, can be spent in income-generating activities.[401] We modelled the potential increase in caregiver time as a result of scaled up ECE provision. This is calculated by estimating the number of hours saved annually (based on regional studies on time savings associated with ECE), which was then multiplied by the number of caregivers who would benefit.[402] We then modelled the potential increase in caregiver income as a result of scaled-up ECE provision. This was calculated by estimating the number of hours saved annually, which would be spent on income-generating activities (based on literature), which would be multiplied by a conservative estimate of hourly wages and the number of caregivers who would benefit.[403] Using the literature on female unpaid care work, we were also able to estimate the impact of increased ECE on the female labour force participation rate.[404]

The monetized benefits from these three income pathways were then summed to create an estimate of the total benefits of scaling up the ECE provision. These economic benefits were also then discounted.

394 Larsen, B., B. Wong, S. Razvi et al., *Cost–Benefit Analysis of Expanding and Improving Early Childhood Education in Malawi,* Malawi Priorities, National Planning Commission (Malawi), Copenhagen Consensus Center (USA) and African Institute for Development Policy (Malawi), 2021.

395 Fink, G., D.C. McCoy and H.I. Hatamleh, 'Economic Implications of Investing in Early Childhood Care and Education in Jordan', *Queen Rania Foundation, Working Paper,* 2017.

396 Gertler, P., J. Heckman and R. Pinto et al., 'Effect of the Jamaica Early Childhood Simulation Intervention on Labour Market Outcomes at Age 31', *World Bank Policy Research Working Paper,* 9787, 2021.

397 Muroga, A., H.T. Zaw, S. Mizunoya et al., 'COVID-19: A Reason to Double Down on Investments in Pre-Primary Education', *Innocenti Working Paper WP-2020-11,* UNICEF Office of Research, Florence, Italy, 2020.

398 Muroga, A., H.T. Zaw, S. Mizunoya et al., 'COVID-19: A Reason to Double Down on Investments in Pre-Primary Education', *Innocenti Working Paper WP-2020-11,* UNICEF Office of Research, Florence, Italy, 2020.

399 Larsen, B., B. Wong, S. Razvi et al., *Cost-benefit Analysis of Expanding and Improving Early Childhood Education in Malawi,* Malawi Priorities, National Planning Commission (Malawi), Copenhagen Consensus Center (USA) and African Institute for Development Policy (Malawi), 2021.

400 Martinex, S., S. Nandeau and V. Pereira, *The Promise of Preschool in Africa: A Randomized Impact Evaluation of Early Childhood Development in Rural Mozambique,* World Bank and Save the Children, 2012.

401 Hojman, A. and F. Lopez Boo, 'Public Childcare Benefits Children and Mothers: Evidence from a nationwide experiment in a developing country', *Journal of Public Economics,* vol. 212, 2022, p. 104686; Fink, G., D.C. McCoy and H.I. Hatamleh, 'Economic Implications of Investing in Early Childhood Care and Education in Jordan', *Queen Rania Foundation, Working Paper,* 2017.

402 Martinex, S., S. Nandeau and V. Pereira, *The Promise of Preschool in Africa: A Randomized Impact Evaluation of Early Childhood Development in Rural Mozambique,* World Bank and Save the Children, 2012; Larsen, B., B. Wong, S. Razvi et al., *Cost-benefit Analysis of Expanding and Improving Early Childhood Education in Malawi,* Malawi Priorities, National Planning Commission (Malawi), Copenhagen Consensus Center (USA) and African Institute for Development Policy (Malawi), 2021.

403 Larsen, B., B. Wong, S. Razvi et al., *Cost-benefit Analysis of Expanding and Improving Early Childhood Education in Malawi,* Malawi Priorities, National Planning Commission (Malawi), Copenhagen Consensus Center (USA) and African Institute for Development Policy (Malawi), 2021.

404 Azcona, G., A. Bhatt, W. Cole et al., *The Impact of Marriage and Children on Labour Market Participation,* UN Women and International Labour Organization, 2020.

8.2.4 Social protection and child protection modelling

The main pathway in which social protection influences social benefits for children is through its effect on their access to health, nutrition and education services. These benefits were captured in the previous sections of this analysis, as described above. The residual benefits not captured above pertain to the effect of cash transfers on wider macroeconomic impacts. Experiences across sub-Saharan Africa indicate that the effect of cash transfers on the economy can be substantial. A study of cash transfer programmes found that in Zambia and Zimbabwe, for every US$1 transferred to beneficiaries of cash transfer programmes, US$1.75 worth of economic activities were generated.[405] Meanwhile, in Kenya, Ethiopia and Ghana, this impact was even higher – with US$2.50 worth of economic activities generated per US$1 transferred.[406] A recent review of available evidence from 10 programmes in sub-Saharan Africa revealed that the average income multiplier is 1.91 – meaning that for every US$1 invested into cash transfer programmes, US$1.91 would be returned.[407] This income multiplier was used to calculate the macrofiscal impact of scaling-up cash transfer programmes targeting young children in Tanzania.

Two forms of cash transfer were modelled in this analysis. Cash Transfer Option 1 *(Increased Coverage of the PSSN)* is a scale-up in coverage of the PSSN to all people living in poverty in Tanzania. Cash Transfer Option 2 *(Universal Child Benefit)* is a scale-up in coverage of a transfer to all children under the age of five, equivalent to 20 per cent of monthly per capita income. This was to provide a variety of options for the GoT, and associated stakeholders, with the associated costs and benefits. For simplicity, the main body of this report only reports on the Option 1 *(Increased Coverage of the PSSN)*; however, results for Option 2 *(Universal Cash Transfer)* are included in the Annex of this report.

8.2.5 Summary

Table 18 provides a snapshot of the modelling approach, including the tools used and the outcome measured for each of these sectors. The full methodology for this study can be found in an accompanying methodological note.

Table 18 » Summary of the modelling methods

Sector	Tool	Outcome
Health, Nutrition and WASH	One Health Tool Excel	◎ Reduced mortality for children and mothers ◎ Reduced stunting rates ◎ Reduced disability-adjusted life years (DALYs) lost ◎ Monetization of the above impacts
Social Protection and Child Protection	Excel	◎ Multiplier effect on the economy (impact on fiscal space through income tax and VAT) ◎ Enabling environment

(Continued)

405 Thome, K., J. E. Taylor, M. Filipski, B. Davis and S. Handa, *The Local Economy Impacts of Social Cash Transfers: A Comparative Analysis of Seven Sub-Saharan Countries,* Food and Agricultural Organization of the United Nations: Rome, Italy, 2016.

406 Ibid.; Egger, D., J. Haushofer, E. Miguel, P. Niehaus and M. W. Walker, 'General Equilibrium Effects of Cash Transfers: Experimental Evidence from Kenya', *National Bureau of Economic Research: Working Paper 26600,* 2019.

407 Cummins, M., 'Cash Transfers: A Lifeline for Children and Economies in Sub-Saharan Africa in 2021', *UNICEF Eastern and Southern Africa Regional Office Social Working Paper,* 2021.

(Continued)

Sector	Tool	Outcome
Education	ECE Accelerator Excel	◎ Reduced primary school repetition ◎ Increase in years of schooling attained ◎ Improved future earnings ◎ Increased caregiver time (and income) ◎ Increased female labour force participation

8.3 Cost assessment

An assessment of the costs of scaling up this ECD package was undertaken using a hybrid approach, making use of methodologies and tools from the different sectors under focus. These costs were then compiled to create a total cost for scaling up the ECD package under the different scale-up scenarios. In the main body of the report, additional costs per scale-up scenario are reported in the following terms: (i) total costs (2022–2050); (ii) average annual cost and (iii) annual cost per child under eight. Costs presented all account for the impact of inflation and are discounted at a rate of 10 per cent (unless otherwise stated).

8.3.1 Health, nutrition and WASH costs

For the cost side, a combination of modelling approaches was taken. The cost assessment was mainly based on costing calculations derived from the OHT, which were extracted and transferred to an Excel file and shared with stakeholders for validation. Net incremental costs were estimated – that is, calculating the difference in intervention-related costs between each scale-up scenario and the baseline scenario. Costs from OHT account for drugs, supply, labour and other recurrent and capital costs. They are also adjusted for inflation. For interventions not included on the OHT (deworming and salt iodization), unit costs were derived from the international literature (and specifically for sub-Saharan Africa) and applied to the population being covered. Incremental (additional) costs of providing these services under each scale-up scenario were calculated and added to the costs extracted from OHT. For WASH interventions, the SDG WASH Costing Tool was used, applying input cost estimates from Tanzania.

8.3.2 Education costs

The ECE Accelerator tool was utilized and adapted for the assessment of costs for the education interventions under study. Four modelling tools were considered for the analysis. These were UNESCO's SimuEd, Brookings Standardized Early Childhood Development Costing Tool, the Childhood Cost Calculator C3 (Center for Universal Education) and the ECE Accelerator tool developed by the Global Partnership for Education and UNICEF. After evaluating these tools, the ECE Accelerator tool was chosen for a number of reasons:

- The ECE Accelerator is an interactive, customizable and objective-based tool that allows users to estimate the scale-up of ECE.
- To support users, the ECE Accelerator tool offers checklists, templates and questions to guide the process, as well as illustrative country case studies and examples. Moreover, additional resources are provided to support users with costing early childhood development.

- There are two projection types offered under the ECE Accelerator: (i) needs-based projections and (ii) intervention-based projections. This case will apply a needs-based projection, where projections are driven by a target in terms of the gross enrolment rate at pre-primary and transition rate to the primary school, for example. Thereafter, all financial projections are based on this target enrolment rate, and the costs are calculated in accordance with how much it costs to provide these services (in terms of teachers and classrooms, etc.)
- The information users must put into the tool include education costs (including teacher costs, infrastructure costs and running costs among others), country macroeconomic indicators, population projections and baseline enrolment rates, broken down by types of education providers. The high degree of customization of education indicators makes this tool useful for this analysis.

Relevant sources and estimates of costs were obtained from national sources and calculated over time using the ECE Accelerator tool. The principle of this modelling process is built on baseline year costs, which is the most recent year for which necessary data is available. There are broadly three types of costs included: (i) costs that change as a direct result of policy changes (teacher remuneration and training and construction costs), (ii) costs that evolve indirectly (such as maintenance costs) and (iii) costs that evolve externally (such as population changes).[408] The modelling process to estimate costs on the ECE Accelerator tool broadly followed the steps below:

- Population projections, sourced from international organizations such as the World Population Prospects from the United Nations and from national sources, were entered.
- Enrolment rates and target rates/years were entered.
- Various baseline cost data were entered, including teacher salaries and number of teachers in order to estimate total salary cost and other recurrent expenditures as well as capital expenditures that estimate the costs of constructing additional classrooms based on classroom construction cost. Salary costs for teachers was estimated based on the expected number of pupils, the student:teacher ratio and approximate teacher salaries. Other recurrent costs and infrastructure costs will be incorporated according to available data.

It should be noted that in both Scale-up Scenarios, we have modelled costs against a student:teacher ratio of 25:1 and a student:classroom ratio of 50:1 at the pre-primary level. Student:teacher ratio is obtained by dividing the number of students at a given level of education by the number of full-time equivalent teachers while the student:classroom ratio is obtained by dividing the total number of students enrolled by the number of classes available. This is a significant reduction from the current student:teacher ratio. According to BEST 2021 National Data, the current student:teacher ratio is 123:1 and the student:classroom ratio is 75:1 at the pre-primary level. This shows us that in-service pre-primary teachers are currently expected to cater to over 100 students with no in-classroom support. The resulting overcrowded pre-primary classrooms currently exceed the maximum ratio at which the learning needs of all individual students can be met – the UNESCO UIS maximum student:teacher ratio for primary education is 40:1 and effective ECE is likely to require fewer students per teacher than prescribed by this ratio. This decision was taken to ensure that costs of this investment case are not just linked to enrolment in pre-primary centres but also at minimum standards of quality.

[408] ECE Accelerator, 'Tool 3.3 Tips: Checklist and Examples ECE Simulation Models', 2023.

8.3.3 Social protection and child protection costs

The social protection and child protection interventions included in this ECD package were costed in models developed in Excel. For the child protection intervention, such as birth registration, only costs were modelled and included in this analysis. The rationale for this analysis is that birth registration increases access to public basic services for children, the impact of which was already modelled when scaling up coverage to related interventions. The additional costs associated with birth registration were calculated by taking the unit cost per child registered at baseline (US$ 1.60),[409] adjusting it for inflation in each subsequent year, and multiplying it by the additional number of children benefiting in each year under both scale-up scenarios.

For social protection, the additional costs of enhancing coverage (and size) of cash transfers were modelled in Excel following standard approaches in the literature. As outlined in Section 4.2.3, two types of cash transfer were modelled: Option 1 – Expanded Coverage of the PSSN – and Option 2 – Universal Child Benefit. The unit cost of the transfer for Option 1 – Expanded Coverage of the PSSN – by extracting latest data regarding the current monthly payment from the PSSN II (equivalent to half the bimonthly payment). For Option 2 – Universal Child Benefit, the unit cost was calculated at 20 per cent of the monthly per capita income.[410] The annual additional cost of these options, under both scale-up scenarios, was calculated using the following formula:

*Monthly Cash transfer value (adjusted for inflation) * number of months per year * additional households reached*

These annual costs were then added up to provide incremental total costs of the scale-up under both scale-up scenarios. These costs were discounted at a rate of 10 per cent.

8.4 Reporting of outputs

The outputs of this analysis are reported in this Investment Case. These outputs include a statement of the impacts (benefits) according to each scale-up scenario, in both monetary and non-monetary terms, as well as a statement of the costs for each scale-up scenario. It should be noted that all these outputs are reported in incremental (or additional terms) – in other words, they are the difference between the baseline scenario and the scale-up scenario under study. Further, these impacts and costs will be compared and expressed as terms of IBCRs and ICOI estimates. The calculations for IBCRs and ICOI are presented below. It should be noted that all the outputs will be recorded over different time horizons and, for monetary benefits or costs, they will be presented in discounted terms.

$$\textbf{Incremental benefit-cost ratio} = \frac{\textit{Additional benefit (monetary)}}{\textit{Additional costs (monetary)}}$$

Incremental cost-of-inaction = *Additional benefit (monetary) – additional costs (monetary)*

[409] Bedasa, H., 'Advancing the Birth Registration System in Tanzania: Providing under-five children their right to protection', *UNICEF Office of Innovation,* 2016, published online 30 November 2016, <https://www.unicef.org/innovation/stories/advancing-birth-registration-system-tanzania>.

[410] Cummins, M., 'Cash Transfers: A lifeline for children and economies in sub-Saharan Africa in 2021', *UNICEF Eastern and Southern Africa Regional Office Social Working Paper,* 2021.

09

Annex IV: Results – Cash transfer option 2 (UCB)

9.1 Overview

This section presents the results of modelling the Cash Transfer – Option 2. This cash transfer option represents a Universal Child Benefit (UBC) provided to all children in Tanzania under the age of five and equivalent to 20 per cent of monthly per capita income. This is an ambitious cash transfer model and based on findings and recommendations in the literature.[411] The results presented in the main report were for a less ambitious cash transfer model – Option 1 – therefore, this section is intended to present the results if Option 2 were selected instead.

9.2 Benefits

Table 19 » **Additional economic benefits of cash transfer (option 2) under Scale-up Scenario A and Scale-up Scenario B (expressed in billions TZS and discounted at a rate of 10 per cent and sensitivity analysis is also presented)**

	Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
	2023–2030	2031–2040	2041–2050	2023–2050	2023–2030	2031–2040	2041–2050	2023–2050
Local economic stimulus	16,689	21,136	10,177	48,002	8,876	14,011	13,994	36,881
Sensitivity analysis – lower bound impact	15,291	19,365	9,325	43,981	8,132	12,837	12,821	19,141

9.3 Costs

Table 20 » **Additional Costs of cash transfer (option 2) under Scale-up Scenario A and Scale-up Scenario B (expressed in billions of TZS and discounted at a rate of 10 per cent and sensitivity analysis also presented)**

	Scale-up Scenario A (fast)				Scale-up Scenario B (slow)			
	2023–2030	2031–2040	2041–2050	2023–2050	2023–2030	2031–2040	2041–2050	2023–2050
Additional costs	8,738	11,066	5,328	25,132	4,647	7,336	7,327	19,309

9.4 Cost-of-inaction

Table 21 » **Economic benefits for cash transfer option 2, costs and the cost-of-inaction for Scale-up Scenarios A and B across different time horizons (expressed in trillions of TZS)**

	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2023–2030	2023–2040	2023–2050	2023–2030	2023–2040	2023–2050
Total additional economic benefits	368	1,238	1,938	107	438	850
Total additional costs	17	40	53	7	21	36
Cost of inaction	351	1,198	1,885	99	417	813

[411] Cummins, M. 'Cash Transfers: A Lifeline for Children and Economies in Sub-Saharan Africa in 2021', *UNICEF Eastern and Southern Africa Regional Office Social Working Paper,* 2021.

9.5 Benefit–cost ratio

Table 22 » **Benefit–Cost ratios for scaling-up ECD for Scenarios A and B, across different time horizons**

	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2022–2030	**2022–2040**	**2022–2050**	**2022–2030**	**2022–2040**	**2022–2050**
Benefit–cost ratio	22	31	37	14	21	23

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Annex V: Detailed cost tables, by sector

This section provides tables with more detailed costing information for the scale-up of the ECD package under different scale-up scenarios. These costing tables are disaggregated by the ECD subsector and present results in billions of TZS, by year, and in total.

10.1 Health and nutrition

Table 23 » **Undiscounted costs of health and nutrition interventions (expressed in billions of TZS)[412]**

Year	Scale-up Scenario A (fast)	Scale-up Scenario B (slow)
2022 (baseline)	0	0
2023	38	10
2024	63	19
2025	80	26
2026	89	32
2027	85	36
2028	75	41
2029	59	45
2030	38	50
2031	4	53
2032	–16	58
2033	–29	61
2034	–35	65
2035	–36	67
2036	–36	71
2037	–35	72
2038	–36	74
2039	–38	75
2040	–43	74
2041	–52	72

(Continued)

[412] Interventions included: contraception, folic acid fortification, safe abortion services, post abortion case management, ectopic pregnancy case management, iron fortification, zinc fortification, antenatal care visits (at least one visit), antenatal care visits (at least four visits), tetanus toxoid vaccination, prevention of malaria (intermittent prophylaxis), syphilis detection, calcium supplementation, treatment of bacteriuria, omega 3 FA supplements, low-dose aspirin, cervical stitch, stop smoking education, micronutrient supplementation, iron supplementation in pregnancy, multiple nutrient supplementation in pregnancy, balance energy supplementation, case management, hypertensive disorder case management, diabetes case management, malaria case management, MgSO4 management of pre-eclampsia, fetal growth restriction detection and management, PMTCT, clean birth environment, immediate drying and additional simulation, thermal protection, delayed cord clamping, clean cord care, basic emergency care, MgSO4 for eclampsia, antibiotics for preterm or prolonged PROM, antibiotics for maternal sepsis, assisted vaginal delivery, neonatal resuscitation, uterotonics for postpartum haemorrhage, manual removal of placenta, removal of retained products of conception, induction of labour lasting 41+ weeks, antenatal corticosteroids for preterm labour, cesarean delivery, blood transfusion, promotion of breastfeeding, feeding and supplements, complementary feeding – education only, complementary feeding – supplementary feeding and education, vitamin A supplementation, zinc supplementation, ITN/IRS – households protected from malaria, BCG vaccine, polio vaccine, Hib vaccine, HepB vaccine, pneumococcal vaccine, rotavirus vaccine, meningococcal vaccine, malaria vaccine, measles vaccine, maternal sepsis case management, neonatal, case management for premature babies, KMC, full supportive care for prematurity, case management for neonatal sepsis/pneumonia, ORS, antibiotics for treatment of dysentery, zinc for treatment of diarrhea, other infectious diseases, oral antibiotics for pneumonia, oxygen and pulse oximetry, vitamin A for treatment of measles, ACTs, treatment for SAM, treatment for MAM, HIV, cotrimoxazole, ART, HIV/AIDS resource needs.

(Continued)

Year	Scale-up Scenario A (fast)	Scale-up Scenario B (slow)
2042	–63	68
2043	–80	61
2044	–102	53
2045	–130	41
2046	–163	26
2047	–200	8
2048	–241	–14
2049	–286	–38
2050	–353	–67
Total (2022–2050)	**–1,445**	**1,137**

Table 24 » **Discounted costs of health and nutrition interventions, by period (expressed in billions of TZS)**

	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2022–2030	2022–2040	2022–2050	2022–2030	2022–2040	2022–2050
Discounted costs	318	247	105	143	313	345

10.2 WASH

Table 25 » **Undiscounted costs of WASH interventions (expressed in billions of TZS)[413]**

Year	Scale-up Scenario A (fast)	Scale-up Scenario B (slow)
2022	0	0
2023	237	68
2024	511	146
2025	820	235
2026	1,162	335
2027	1,542	447
2028	1,961	572
2029	2,423	711
2030	2,928	867
2031	3,078	1,039
2032	3,236	1,230
2033	3,404	1,441
2034	3,580	1,674

(Continued)

[413] Interventions included: WASH, basic sanitation, point of us filtered water, piped water, handwashing with soap and hygienic disposal of children's stool.

(Continued)

Year	Scale-up Scenario A (fast)	Scale-up Scenario B (slow)
2035	3,767	1,930
2036	3,964	2,212
2037	4,173	2,521
2038	4,393	2,859
2039	4,625	3,229
2040	4,869	3,632
2041	5,125	4,071
2042	5,394	4,549
2043	5,674	5,068
2044	5,966	5,630
2045	6,268	6,239
2046	6,581	6,896
2047	6,903	7,605
2048	7,234	8,368
2049	7,575	9,189
2050	7,923	10,070
Total (2022–2050)	**115,316**	**92,835**

Table 26 » **Discounted costs of WASH interventions (expressed in billions of TZS)**

	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2022–2030	**2022–2040**	**2022–2050**	**2022–2030**	**2022–2040**	**2022–2050**
Discounted costs	6,109	15,898	22,152	1,780	6,883	13,172

10.3 Social protection

Table 27 » **Undiscounted costs of social protection interventions (expressed in billions of TZS)**

Year	Cash Transfer Option 1		Cash Transfer Option 2	
	Scale-up Scenario A (fast)	**Scale-up Scenario B (slow)**	**Scale-up scenario A (fast)**	**Scale-up Scenario B (slow)**
2022	0	0	0	0
2023	73	26	478	254
2024	152	54	967	522
2025	233	83	1,428	789
2026	319	114	1,866	1,063

(Continued)

(Continued)

Year	Cash Transfer Option 1		Cash Transfer Option 2	
2027	410	147	2,278	1,348
2028	507	181	2,663	1,332
2029	610	218	3,021	1,501
2030	718	256	3,349	1,652
2031	831	297	3,695	1,815
2032	952	340	4,079	2,001
2033	980	385	4,078	2,221
2034	1,010	433	4,134	2,481
2035	1,040	483	4,251	2,794
2036	1,071	536	4,375	3,125
2037	1,103	591	4,501	3,473
2038	1,136	649	4,629	3,836
2039	1,170	710	4,755	4,212
2040	1,205	775	4,878	4,599
2041	1,241	842	4,996	4,996
2042	1,278	913	5,105	5,105
2043	1,315	986	5,205	5,205
2044	1,354	1,064	5,203	5,293
2045	1,394	1,145	5,369	5,369
2046	1,435	1,230	5,431	10,427
2047	1,477	1,319	5,482	10,593
2048	1,521	1,412	5,524	10,744
2049	1,565	1,509	5,559	10,879
2050	1,611	1,611	5,588	10,999
Total (2022–2050)	**27,712**	**18,309**	**112,977**	**118,629**

Table 28 » **Discounted costs of social protection interventions (expressed in billions TZS)**

Discounted costs	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2022–2030	2022–2040	2022–2050	2022–2030	2022–2040	2022–2050
Cash Transfer Option 1	1,613	4,272	5,668	576	1,824	2,967
Cash Transfer Option 2	8,738	19,803	25,132	4,647	11,983	19,309

10.4 Child protection

Table 29 » **Undiscounted costs of child protection interventions (expressed in billions of TZS)[414]**

Year	Scale-up Scenario A (fast)	Scale-up Scenario B (slow)
2022	0	0
2023	6	3
2024	12	6
2025	18	9
2026	24	12
2027	30	15
2028	36	19
2029	41	22
2030	46	26
2031	50	29
2032	49	33
2033	48	37
2034	47	41
2035	46	44
2036	46	49
2037	46	53
2038	47	57
2039	48	61
2040	49	65
2041	50	70
2042	52	70
2043	53	71
2044	54	71
2045	55	71
2046	55	71
2047	56	71
2048	56	71
2049	57	70
2050	57	70
Total (2022–2050)	**1,234**	**1,285**

[414] Intervention(s) costed: birth registration.

Table 30 » Discounted costs of child protection interventions (expressed in billions of TZS)

	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2022–2030	2022–2040	2022–2050	2022–2030	2022–2040	2022–2050
Discounted costs	116	240	294	60	174	245

10.5 Education

Table 31 » Undiscounted costs of education intervention (expressed in billions of TZS)

Year	Scale-up Scenario A (fast)	Scale-up Scenario B (slow)
2022	0	0
2023	121	92
2024	175	111
2025	234	132
2026	298	154
2027	370	179
2028	448	206
2029	534	235
2030	625	265
2031	659	299
2032	696	336
2033	736	376
2034	776	419
2035	818	465
2036	864	516
2037	913	572
2038	964	631
2039	1,020	697
2040	1,076	766
2041	1,132	839
2042	1,192	918
2043	1,256	1,003
2044	1,321	1,093
2045	1,389	1,189
2046	1,456	1,289
2047	1,530	1,389
2048	1,611	1,518

(Continued)

(Continued)

Year	Scale-up Scenario A (fast)	Scale-up Scenario B (slow)
2049	1,691	1,642
2050	1,770	1,770
Total (2022–2050)	**25,674**	**19,111**

Table 32 » **Discounted costs of education interventions (expressed in billions TZS)**

	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2022–2030	**2022–2040**	**2022–2050**	**2022–2030**	**2022–2040**	**2022–2050**
Discounted costs	1,529	3,657	5,044	775	1,995	3,187

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Annex VI: Cost-effectiveness findings – Health impacts

This section provides the results of cost-effectiveness analysis for scaling up this ECD package. It is presented as a cost-effectiveness analysis and was only carried out on a subsection of the ECD package – all those interventions that have an impact on health outcomes (all interventions except ECE). The results of the analysis are expressed as incremental cost-effectiveness ratios (ICERs), that is the *additional costs of the intervention divided by the additional number of deaths/DALYs lost/averted because of the intervention.*

The analysis suggests that scaling-up this ECD package is cost-effective in both scale-up scenarios. Tables 33 and 34 record the ICERs calculated for this study (in TZS and USD, respectively), namely the cost per child death averted and the cost per DALY averted for both scale-up scenarios and over different time horizons. The World Health Organization (WHO) suggests that an intervention can be deemed cost-effective if the DALY averted costs are less than one to three times the GDP per capita. In Tanzania, the GDP per capita sat at TZS 2,611,741 in 2021[415], meaning that the threshold for cost-effectiveness sits between TZS 2,611,741 and 7,835,223 per DALY averted. In this analysis, even the results producing highest cost per DALY averted (TZS 100,857 in Scale-up Scenario A for 2022–2030) remain far below this threshold. This means that investments in this package of ECD interventions are highly cost-effective over short- and long-term time horizons under both the scale-up scenarios. These figures can be highly useful for advocacy purposes, as it is possible to compare the cost-effectiveness of ECD in comparison with other packages and interventions.

Table 33 » **Cost-effectiveness of scaling-up the ECD package for Scenarios A and Scenario B across different time horizons (expressed in TZS, adjusted for inflation and discounted at 10 per cent and costs for Cash Transfer Option 1)**

	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2023–2030	**2023–2040**	**2023–2050**	**2023–2030**	**2023–2040**	**2023–2050**
Cost per child death averted	20,051,353	13,520,578	9,182,845	18,331,156	12,361,983	8,524,353
Cost per DALY averted	100,659	58,354	37,767	100,857	58,670	36,534

Table 34 » **Cost-effectiveness of scaling-up the ECD package for Scenarios A and Scenario B across different time horizons (expressed in USD, adjusted for inflation and discounted at 10 per cent and costs for Cash Transfer Option 1)**

	Scale-up Scenario A (fast)			Scale-up Scenario B (slow)		
	2023–2030	**2023–2040**	**2023–2050**	**2023–2030**	**2023–2040**	**2023–2050**
Cost per child death averted	8,726	5,884	3,996	7,978	5,380	3,710
Cost per DALY averted	44	25	16	44	26	16

[415] World Bank, 'GDP Per Capita (Current LCU), Tanzania, 2021', *World Bank National Accounts Data, and OECD National Accounts Data Files*, 2023, <https://data.worldbank.org/indicator/NY.GDP.PCAP.KN?locations=TZ>.