Investing in **Early Childhood** to Advance Human Capital Development

EARLY CHILDHOOD DEVELOPMENT BUDGET BRIEF 2023



Is Zambia Maximizing Investments in the Early Years of Life?



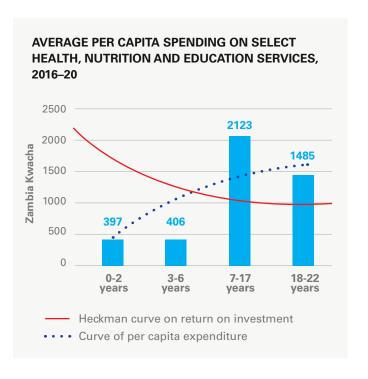
Key Messages

Recognizing the importance of early childhood development (ECD), the Government of Zambia is developing a National Multisectoral Early Childhood Development Policy and Strategic Framework but this process is ongoing. ECD is the continuous process of acquiring skills and abilities across the domain of cognition, language, motor, social and emotional development which help us to think, solve problems, communicate, express our emotions, and form relationships.

Recommendation: The Government is called upon to finalize the draft policy and strategic framework aligning it with the nurturing care framework - the set of conditions that provide for children's health, nutrition, security and safety, responsive caregiving, and opportunities for early learning - and ensure that a costed implementation plan is developed to guide resource mobilization and budgeting.

The Government of Zambia and its development partners are investing significantly less resources in the early years of life (0-6 years) compared to older children. From 2016 to 2020, the Government spent an average of ZMW397 and ZMW406 per child under 2 years and between 3-6 years of age, respectively. This is compared to ZMW2,123, and ZMW1,485, per child between the ages of 7-17, and 18 to 22, respectively.

Recommendation: The Government should reorient social sector budgets to ensure that the early years get a fair share of available public resources. A body of evidence exist to show that investments done in the early years achieve considerably more returns than those made later in life.



Pre-primary education spending as a share of total education expenditure, averaged 0.4% between 2016 and 2020, compared with the internationally recommended target of 10% of the total education sector budget. Clearly, investment in early childhood education is much lower than financing needs hampering early learning opportunities for young children, which translates to lower academic achievements in primary school, higher rate of school drop-out, with longer term consequences such as lowered productivity, earnings, and poor health outcomes.

Recommendation: The Government is encouraged to commit at least 10% of the total education budget to ECE to improve access to pre-primary education.

Most of the investment in early years goes to child's health and nutrition. The Government and donors collectively invested ZMW1.6 billion in children between 0 and 6 years via the health sector compared to ZMW38.7 million via the education sector between 2016 to 2020. However, the amount invested in child health and nutrition is still lower than investments in older children.

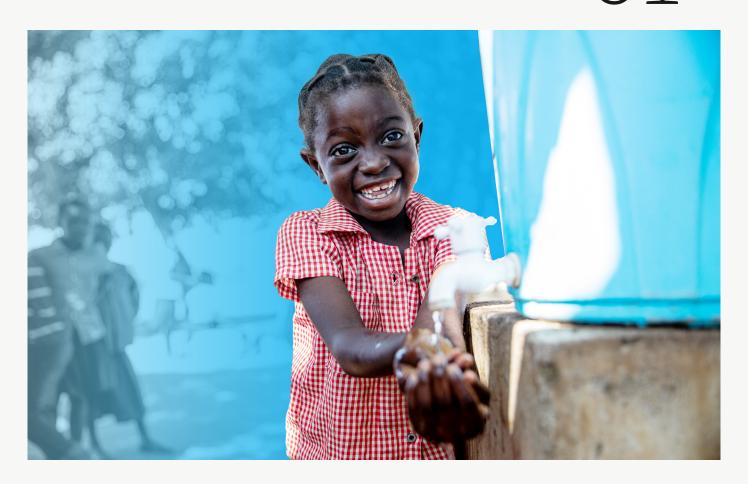
Recommendation: The Government is requested to ensure that all elements of the Nurturing Care Framework (NCF) get the necessary policy and budgetary attention. The NCF refers to the conditions that promote health, provide adequate nutrition, ensure security and safety, responsive caregiving, and opportunities for early learning.

Apart from a select health and nutrition programmes and ECE, most early childhood services are not easily identifiable in government budgets, making it difficult to regularly monitor and measure public investments in the early years of life.

Recommendation: The Government is called upon to review the budget classification system to enhance the identifiability of ECD in government budgets. Output-based budgetiang is, therefore, an opportunity for the Government to improve the visibility of ECD in government budgets.

Unavailability of up to date and comprehensive data and statistics has made planning and budget allocation decisions for ECD difficult.

Recommendation: The Government is encouraged to strengthen national and sector level (i.e. education, health and social protection), data and information systems.



Introduction

Introduction

This brief presents the findings of a study that assessed whether the Government of Zambia and its development partners are maximizing their expenditures in the early years as recommended by Professor James Heckman. Through this study, UNICEF analyzed the investment of the Government of Zambia and developmental partners into a child's health, nutrition and education, throughout the life course. In his various research, Heckman (2008; 2012;2017) established that investments in the early years (especially the first 1,000 days) through public expenditures on pro-

grammes such as pre-school, pre-and post-natal care, child grants, childcare and safety programmes realize significantly higher returns than investments done later in life. Investment in early childhood pays off through better health, enhanced learning capacity, increased adult earning, poverty reduction, fewer inequalities, and a more peaceful society as described below. The highest rate of return in human development comes from investing as early as possible, from birth through age five, in disadvantaged families.

Early Childhood Development (ECD) is the continuous process of acquiring skills and abilities across the domain of cognition, language, motor, social and emotional development which help us to think, solve problems, communicate, express our emotions, and form relationships. It is the foundation of health, learning, productivity, and wellbeing and the building blocks for future human capital development. The early childhood period encompasses several phases: from conception to 3 years, with emphasis on the first 1,000 days - that period lays the foundation for health, well-being, learning, and productivity throughout a person's whole life, followed by the "pre-primary years" (3 years to 6 years, or the age of school entry).

Development is the result of the interaction between the environment and the child. A stable environment is one that is sensitive to children's health and nutritional needs, with protection from threats, opportunities for early learning, and interactions that are responsive, emotionally supportive, and developmentally stimulating. When children miss out on support during this critical period of life, intergenerational cycles of disadvantage and inequality persist.



The highest rate of return in early childhood development comes from investing as early as possible, from birth through age five, in disadvantaged families. Starting at age three or four is too little too late, as it fails to recognize that skills beget skills in a complementary and dynamic way. Efforts should focus on the first years for the greatest efficiency and effectiveness. The best investment is in quality early childhood development from birth to five for disadvantaged children and their families.

JAMES J. HECKMAN

Nobel Memorial Prize Winner in Economics and an Expert in the Economics of Human Development.

Using the Heckman curve as the conceptual framework, the background study estimated government spending on ECD. In the study, public spending on select health programmes and early childhood education were used as proxy measurements of ECD spending.

Specifically, the study estimated per-capita public spending by the government and development partners on select health and education programmes for children between the ages of 0-5.

Spending on child protection, social welfare, and other services recommended under the nurturing care framework (NCF) was omitted due to the lack of comprehensive budget data.

The per capita spending for children between 0-6 was then compared with that of children and young people between 7-17 and 18-22 age groups. Additionally, the background paper estimated the ECD funding gaps based on national costed plans.

Data used for the analysis was obtained from government sources especially approved government budgets and expenditure reports. Except otherwise indicated, the financial data represent expenditures and not allocations. The year 2016 is used as the baseline for all inflation adjustments.

BOX 1: WHY INVEST IN EARLY CHILDHOOD?

Children who do not receive adequate health, nutrition, early stimulation, learning opportunities, care, and protection, tend to have lower cognitive, language, and psychosocial outcomes, which translates to poor academic achievement in primary school and, ultimately, dropping out of school. The longer-term consequences are noted in lowered productivity, earnings, and poor health outcomes but also in potential engagement in crime. Early deprivation leaves a genetic mark that is expressed in future generations as well.

Economic evidence. Investing in quality early childhood is socially fair and economically smart. Benefits derived from ECD investments far outweigh costs, with ECD investments giving back almost 13 per cent annually. The returns are actualized in reduced poverty and income gaps, as well as increased prosperity and competitiveness of economies. The personal cost of inaction is high – up to a loss of 37% of average adult income. The societal cost of inaction is even higher – by not applying effective interventions the future cost of inaction as a percentage of Gross Domestic Product is 2-3 times greater than the current government expenditure on health.

Development is a child's right – Zambia has ratified the United Nations Convention on the Rights of the Child (CRC) and is duty-bound to provide universal access to essential services for early health and well-being, with a particular focus on protecting the rights of vulnerable and marginalized children.

ECD is foundational for the SDGs ECD is part of the transformative agenda for 2030, making it an international priority for the 21st century. Global targets in education (SDG 4.2); health (SDG 3.2); nutrition (SDG 2.2); and protection (SDG 16.2) address key outcomes to realize young children's developmental potential. Addressing inequities early in life can convert a vicious cycle of inequality into a virtuous cycle.



ECD Policy & Institutional Frameworks

ECD Policy & Institutional Frameworks

Recognizing the importance of early childhood development (ECD), the Government of Zambia is developing a National Multi-sectoral Development Policy and Strategic Framework. This overarching multisectoral policy framework for ECD is essential considering the multidimensional and integrated nature of ECD, the large number of players, and the wide range of services to be provided. However, the Policy is still under development; the process needs to be completed as soon as possible. Besides this effort to drat a national ECD policy, there are sector specific policies and plans that guide the provision of ECD services such as the Education and Skills Sector Plan (2017-2021), National Health Strategic Plan (2017-2021), National Policy on Disability (2012) and the National Child Policy (2006).



The policy mandates for ECD are spread across several ministries and departments, hence the need for a strong coordination mechanism. The efforts of these government institutions are complemented by non-state actors, including civil society organisations, donors, private ECD service providers and other cooperation partners (CPs). The ECD functions span across sectors including health, education, youth development, sports and local government in light of the nurturing care framework. Strengthening coordination mechanisms in ECD planning, budgeting and service delivery is key to maximize impact.

BOX 2: NURTURING CARE FRAMEWORK

Children need nurturing care to develop to their full potential - the conditions that promote health, provide adequate nutrition, ensure security and safety, responsive caregiving, and opportunities for early learning.

The Nurturing Care Framework (NCF) developed by UNICEF, World Health Organisation (WHO), the World Bank and other agencies, draws on state-of-the-art evidence on how early child development unfolds to set out the most effective policies and services that give families, parents, and caregivers the knowledge and resources to provide nurturing care for young children.

The NCF outlines what children need for optimal development: good health, adequate nutrition, security and safety, responsive caregiving, and opportunities for early learning. All five components are related, indivisible and equally important for healthy growth and development and are inclusive of specific laws, policies, services, and interventions. The example of effective interventions that can boost child development are:

- **Health**: Interventions under this element include immunization, antenatal, neonatal, and postnatal care, as well as care for children with disabilities.
- Nutrition: Interventions include promotion of breastfeeding, maternal and neonatal nutrition, promotion of breastfeeding, vitamin supplementation, deworming, and growth monitoring through home visits.
- **Childcare**: Interventions include parental counseling, rooming-in for mothers, communication activities of caregivers with the child, and community childcare.
- Early learning: This is largely about play-based early learning opportunities, playing and reading groups, mobile toy and book libraries, and preschool education.
- Security and safety: Relevant services and interventions included birth registration, cash or in-kind transfers, social insurance, support for family care, and prevention of violence within families.



Overview of key ECD indicators and coverage of services

Overview of key ECD indicators and coverage of services

Several ECD outcomes in Zambia have improved, but a lot still needs to be done to ensure universal access and quality of a comprehensive package of services. According to UNICEF, an estimated 78% of all children under 5 years in Zambia, are at risk of poor developmental outcomes. The greatest burden of poor development is shouldered by children from the poorest and most marginalized communities. While an increasing number of children are surviving, but far too few are thriving because of poor health, inadequate nutrition, exposure to stress, a lack of love and early stimulation, and limited opportunities for early learning.

The number of children aged 3 to 6 years accessing early learning services increased by 22% from 167,000 in 2019 to 204,000 in 2020. The proportion of Grade 1 learners with pre-school experience increased from 29.8% in 2016 to 37% in 2019. This is attributed to improvements in infrastructure and teacher training programs for early childhood education (ECE). The number of ECE facilities nearly doubled from 1,526 in 2014 to 2,832 in 2019. When it comes to health, antenatal care coverage increased from 80% in 2016 to 96% in 2020, while institutional deliveries dramatically increased from 58% to 73% during the same period. Underweight prevalence among children between 24 to 59 months drastically declined from 5% in 2017 to 0.99% in 2020.

TABLE 1: CHILD HEALTH AND NUTRITION INDICATORS, 2016–2020

Selected ECD indicators	2016	2017	2018	2019	2020
First antenatal coverage (%)	80	74	82	83	96
Average Antenatal Visits per year	2.8	2.9	2.1	3	3.3
Institutional deliveries (%)	58	53	59	64	73.4
First Postnatal Coverage	80	83	78	70	46.7
Children with severe Malnutrition (incidence per 1,000 pop)	n.d	9.20	0.54	2.70	2.50
Underweight Prevalence (children 0-23 months) %	n.d	7.00	0.58	0.78	0.93
Underweight Prevalence (children 24 - 59 months) $\%$	n.d	5.00	1.00	1.04	0.99
Underweight Ratio %	n.d	9.20	0.54	2.70	2.50

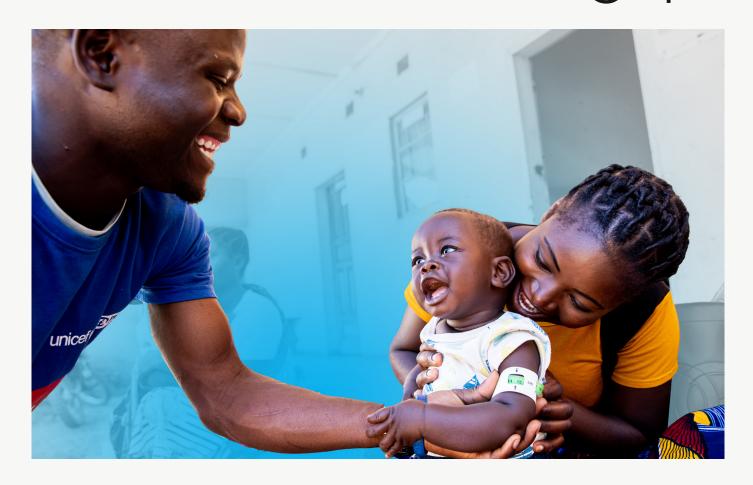
Source: Ministry of Health (2021)

Despite this progress, several challenges remain. First, when looking at enrollment in pre-school, an estimated 59% of children enter grade 1 without exposure to ECE as of 2021. This is too high a number that should be reduced. Immunization rates have regressed, with the number of fully Immunized children under the age of one falling from 93% in 2016 to 88.6% in 2020. Postnatal care coverage reduced to 46.7 % in 2020 from 78% in 2018, partly because of COVID-19. Social and child protection programmes are not reaching all children below 6 years. Water and sanitation problems also persist, causing diseases amongst children.

There are numerous structural root causes of the above situation. These include (i) inadequate policies, compounded by limited enforcement, poor oversight, and weak coordination mechanisms; (ii) and suboptimal financial resources allocated to health, nutrition, and early childhood development services, as well as to parents.

Key Takeaways

- The finalization of a National Multisectoral ECD Policy and Strategic framework is key for it to serve as the rallying point for national efforts to improve investments in ECD.
- The Government should consolidate gains made in the past five years to improve access to quality ECD services by all children in Zambia, including those from rural, peri-urban and other marginalized communities.



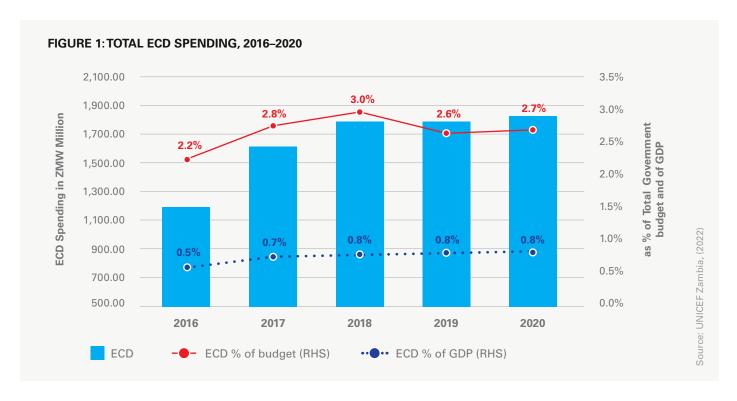
Early childhood financing in Zambia

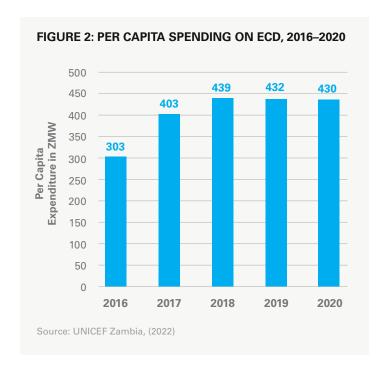
Early childhood financing in Zambia

4.1 Total ECD spending

Total Government investment in health, nutrition, and education of young children has modestly trended upwards between 2016 and 2020. In absolute terms, total spending increased from ZMW1.1 billion in 2016 to ZMW1.8 billion in 2020 (Figure 1). As a percentage of total government budget, ECD spending increased from 2.2% to 2.7% during the

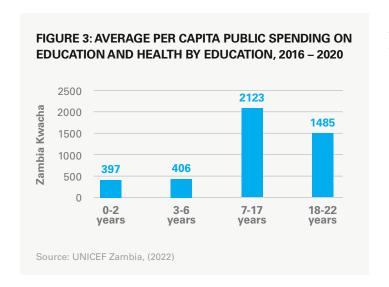
same period, and from 0.5% to 0.8% of GDP. As earlier indicated, total ECD spending is proxied by selected health and education services on children aged 0-6 years. The early learning part only corresponds to ECE, which covers children aged between 3 and 6. Health components cover select health services between 0 and 6 years.





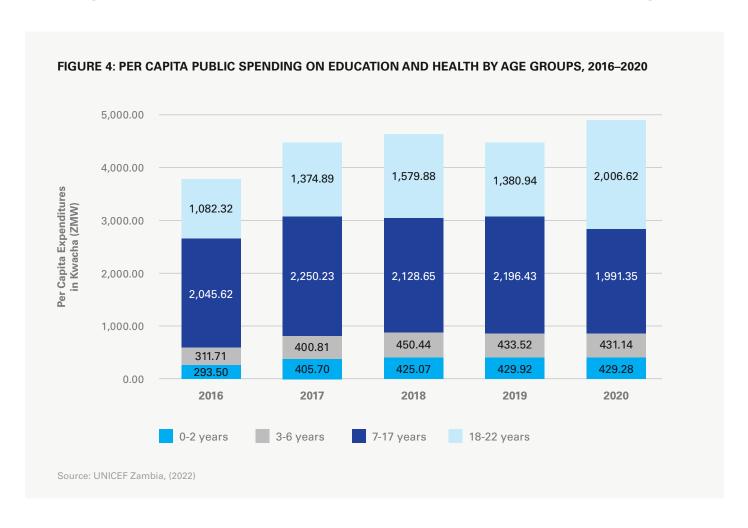
When looked at in per capita terms, total ECD spending has stagnated over the past three years, averaging ZMW401 per child per year. The sharpest increase in per capita spending of 33% (from ZMW303 to ZMW403) occurred between 2016 and 2017. Since then, per capita ECD spending has edged downwards from ZMW439 per child in 2018 to ZMW430 in 2020 (Figure 2). This decline is partly attributed to the impact of the Covid-19 pandemic.

Although total spending has been on an upward trajectory, the Government of Zambia is investing less in the education and health of younger children (0-6 years) compared to the age groups which follow. Between 2016 and 2020, per capita expenditures on children between 7 to 17 years of age (ZMW 2,123) was approximately five times larger than those of children between 0-6 years (ZMW 401), on average.



Spending on 0-6-year-olds during the same period was three times less than that of young people between 18-22 years estimated as ZMW1,485. Even after discounting for differences in costs of service delivery, especially for education, this expenditure pattern seems to suggest that the government is not prioritizing investments in the years.

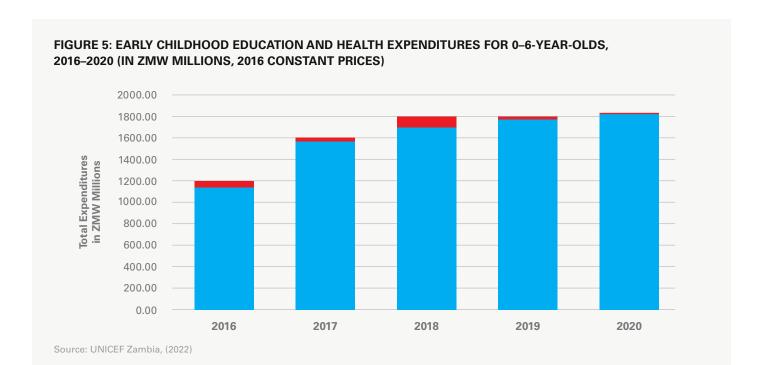
In per capita terms, while expenditures on young people (18-22) increased, expenditures on children between 0-6 years went down between 2018 and 2020. This trend suggests that when faced with resource constraints, the Government is likely to cut expenditures on younger children. This could be interpreted to mean that ECD is not a spending priority.



4.2 Composition of early childhood spending

As expected, the Government is spending more on health of children between 0-6 years than on pre-school education. In 2020, for instance, the Government spent ZMW1.8 billion on selected health services for children between 0-6 years compared to ZMW7.2 million for pre-school (Figure 5) per year. Early learning suffered the largest funding reduction of 92.7% between 2018 and 2020 from a peak of ZMW98 million in 2018 to ZMW7.2 million in 2020. During the same period, expenditures for select health programmes increased from ZMW1.6 billion to ZMW1.8 billion.





The huge difference between health and education reflects the nature of programmes and different cost structures. For example, publicly funded child health services start earlier, even before birth, than ECE which usually starts at the age of 3. Select health budget line items for children aged 0 to 6 years are presented in Table 2. Total budgets for these lines drastically increased by 71.7% from ZMW44.7 million in 2016 to ZMW76.8 million in 2018, before declining to ZMW65.3 million in 2020.

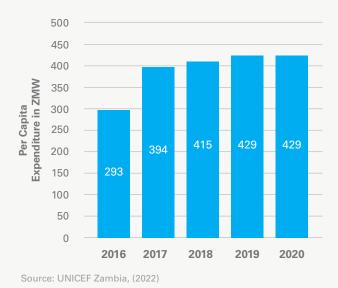
However, it is important to note that while all the interventions listed below are important to improve child health and nutrition outcomes, they have a different impact on child development outcomes. Some interventions, such as immunization, can reduce mortality, morbidity, and disability while improving the physical growth of young children but have limited effect on cognitive, or socio-emotional development.

Therefore, ensure that a comprehensive package of health services is delivered to also include other interventions such as iodine supplementation, childcare, maternal mental health, micronutrient supplementation, and programmes that support the improvement of parenting skills and responsiveness. These interventions should be costed and funded by the government as well.

TABLE 2: SELECTED HEALTH-RELATED BUDGET LINES FOR CHILDREN 0-6 YEARS, 2016–2020 (IN ZMW MILLIONS, MARKET PRICES)

elected Health Budget Lines	2016	2017	2018	2019	2020
0-2 YEARS					
002 Family Planning Services	0.54	0.74	0.80	0.55	0.49
005 Prevention of Mother to ChildTransmission (PMTCT)	0.20	_	_	_	_
006 Focused Antenatal Care and Safe Motherhood	0.32	0.32	0.35	0.24	0.21
001 Expanded Programme on Immunization	0.80	1.30	1.42	1.41	1.64
006 Printing of Under Five Cards	1.00	1.00	1.09	0.75	0.67
010 Infant and Young Child Feeding Counselling	0.12	0.12	0.13	0.09	0.15
Pharmaceuticals: Vaccinations	38.29	42.29	66.33	54.50	58.50
Subtotal	41.26	45.76	70.12	57.54	61.67
002 Integrated Management of Childhood Illnesses 005 Procurement of Cold Chain Equipment	1.00 2.00	0.27 2.00	2.92 2.18	2.01 1.50	2.27 0.95
B-6 YEARS					
005 Procurement of Cold Chain Equipment					
009 Community-Based Growth Monitoring and Promotion	0.12	0.12	0.13	0.09	0.16
012 Management of Malnutrition	0.24	_	_	_	0.13
013 Micronutrient Programme	0.17	0.41	0.44	0.31	0.13
014 Emergency Triage Assessment and Treatment	_	0.24	0.26	0.18	_
	_	0.14	0.16	0.11	_
015 Early Childhood Development (child health)		0.32	0.35	0.24	_
015 Early Childhood Development (child health) 016 Community IMCI	_				
·	_	0.30	0.33	0.22	0.06
016 Community IMCI	_ _ 3.53	0.30 3.80	0.33 6.76	0.22 4.66	0.06 3.70

FIGURE 6: PER CAPITA EXPENDITURE ON HEALTH FOR CHILDREN BETWEEN 0-6 YEARS (IN ZMW 2016 CONSTANT PRICES)



Per capita expenditures on health also modestly trended upwards between 2016 and 2020 but stagnated in 2019 and 2020. In 2020, the Government committed nearly the same amount to child health per person estimated at ZMW429 (Figure 6). As highlighted earlier, this stagnation

Expenditures for ECE have been fluctuating between 2016 to 2020. The sharpest increase of 185% was registered between 2016 and 2018 (from ZMW40.4 million to ZMW115.4 million in 2020). After that, expenditures for ECE plummeted by 88% to ZMW13.84 million in 2019. The ECE spending further dropped by 19.2 % to ZMW11.19 million in 2020 in nominal terms. In real terms, ECE spending plunged by 89% between 2018 and 2020.

TABLE 3: ECE RELATED BUDGETS, 2016-2022 (IN ZMW MILLIONS, MARKET PRICES)

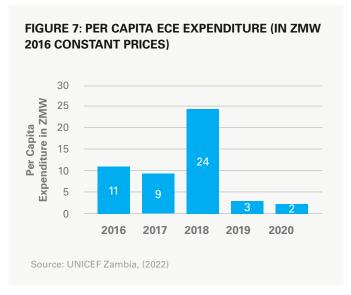
Early Childhood Education (ECE) Budget lines	2016	2017	2018	2019	2020
001 Early Childhood Education (ECE) Provision	5.75	5.78	14.45	13.12	10.98
002 Open and Distance Learning	0.00	0.00	0.00	0.30	0.09
003Teacher Education and Specialized Services	0.54	0.58	0.48	0.22	0.06
004 Curriculum and Materials Development	0.39	0.41	0.35	0.15	0.04
006 Educational Standards, Assessment and Evaluation	0.14	0.15	0.12	0.06	0.02
006 Infrastructure Development	33.63	30.08	100.00	0.00	0.00
Total	40.44	37.00	115.40	13.84	11.19

Source: Ministry of Finance Budget Documents (Yellow Books)

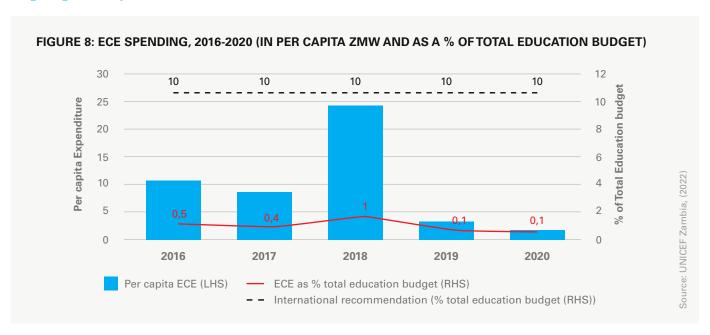


Per child spending on ECE followed a similar pattern, declining from ZMW24 in 2018 to ZMW1.70 in 2020 (Figure 7). This trend is concerning when considering the central role of ECE in boosting learning outcomes later in life. This also suggest that ECE is less prioritized if compared with child health.

Over the past few years, the bulk of ECE budgets was for infrastructure development, especially in 2018. Between 2016 and 2018, infrastructure development accounts for an estimated 84% of total ECE allocations, on average. However, this trend was reversed between 2019 and 2020, with other recurrent transactions accounting for an average of 96% of total ECE allocations.



ECE spending is a very negligible part of the total government spending on education. ECE spending as a share of total education expenditure averaged 0.4% between 2016 and 2020. In 2020, total ECE spending was estimated at 0.1% of the total education budget down from about 1% in 2018 (Figure 8). This financial commitment is lower than the international recommendation for Governments to allocate at least 10% of their budgets to pre-primary education.



Key Takeaways

- If the Government of Zambia is to improve early childhood development outcomes, it should progressively increase the size of its investments in all elements of the nurturing care framework in line with cost estimates in sector plans
- ECE is one of the most neglected ECD component which requires focused attention in government budgets. To begin with, the Government should increase ECE spending to at least 10% of the total education budget.
- Interventions, such as care for child development, and counseling on responsive caregiving, and similar which are not usually reflected in government budgets and not generally considered within the established boundaries of a health sector are also important; they should be costed, and estimates integrated in annual budgets.



Source of finance and estimated funding gap

Source of finance and estimated funding gap

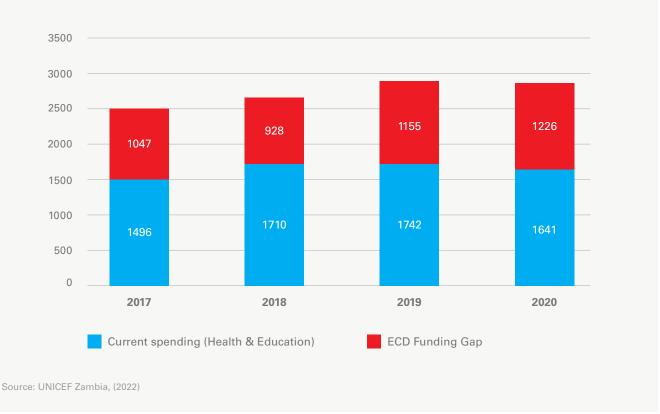


ECD services in Zambia are financed from domestic and international, and from public and private sources. While the government is a major financier of child health services, NGOs, faith-based organizations, households, and the private sector also play a role, especially in the provision of pre-school, child protection, nutrition and social protection services. Donor support to ECD is, however, mainly through child health and nutrition services. Although data is patchy, most pre-schools especially in urban areas are privately owned, with services paid for by households.

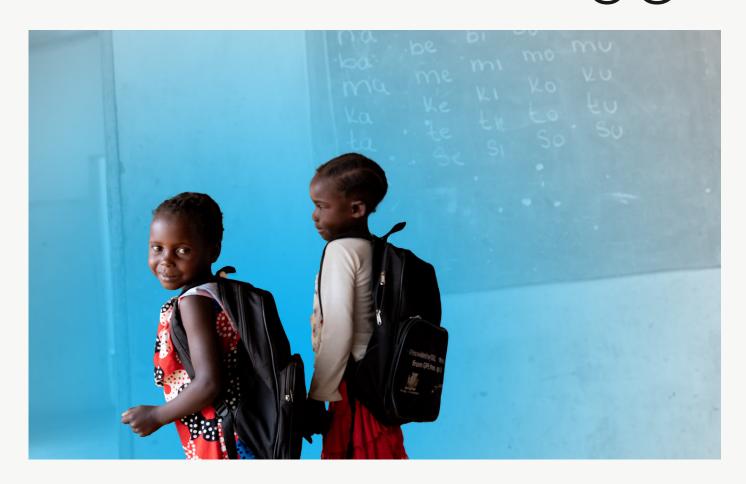
Considering the diversity of funding sources, an integrated financing mechanism is vital. A strong and coordinated financing mechanism will help ensure effective budgeting and improve ECD service delivery.

There are considerable funding gaps to improve ECD spending in Zambia. Judging by estimates in the Education Sector plan, ECE alone in 2020, had a funding gap of ZMW 1.2 billion. To meet the 2029 goal in the sector plan, an additional ZMW 1.5 billion will be required each year.





If the gap is to be closed, the government would have to at least double the current level of public resources committed to ECD. There may also be scope for redistributing current resources to prioritize investments in early childhood. The support of development partners will also be required considering current fiscal space constraints. The international financial institutions, especially the IMF and the World Bank, are called upon to increase grants and concessional finance support to Zambia. This is important because COVID-19 and other macro-economic shocks have deteriorated public finances.



Other policy and structural issues

Other Policy and structural issues



Besides the inadequacy of funding, there are other policy and public financial management challenges with a bearing on ECD financing and expenditures. To begin with, except for selected health services and ECE it was difficult to identify budget lines on ECD services covering other elements of the nurturing care framework in government budgets. For the most part ECD expenditures are lumped with other programs. While this reflects the cross-sectoral and multidimensional nature of ECD, the downside is that it makes it difficult to estimate the size of government spending on ECD.

Secondly, except for approved budgets, the Government is not publishing detailed expenditure reports to enable tracking of actual expenditures across several sectors and programs. Without access to expenditure information, it is difficult for researchers to measure and monitor ECD budget execution trends and bottlenecks. There is also hardly any ECD-focused financial diagnostics like Public Expenditure Reviews (PERs) or Public Expenditure Tracking Surveys (PETS) to shed light on how well ECD resources are utilized in Zambia.

Thirdly, there are limited up to date ECD data and statistics. Data inadequacies continue to hamper planning and budgeting for ECD, as well as analytical understanding of spending challenges and solutions.

Lastly, most of the public resources for ECD are centrally managed, with local authorities poorly resourced to deliver quality ECD services. It is recommended that the Government of Zambia strengthen fiscal decentralization and devolve resources for early years in critical sectors such as education, health and social protection.



Acknowledgements

This brief was drafted by Bob Muchabaiwa (Public Finance Specialist for UNICEF Eastern and Southern Africa) and Oliver Petrovic (Regional Adviser for ECD in UNICEF ESARO). The brief was developed from a background study conducted by Sylvia Mwamba, a UNICEF Consultant. Valuable comments and inputs were received from Arifa S Sharmin, Claude Kasonka, Daniel Kumitz, Mervis Pepino and Penelope Campbell all from the UNICEF Zambia Country office and from Matthew Cummins (Regional Adviser for Social Policy in UNICEF ESARO) as well as Yixin Xu (Public Finance Intern in UNICEF ESARO).

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