



Estimating Government Spending
on Early Childhood Development:
A Methodological Guide

January 2023

Estimating Government Spending on Early Childhood Development: A Methodological Guide

© United Nations Children’s Fund, Eastern and Southern Africa Regional Office, United Nations Complex, Gigiri, PO Box 44145 – 00100, Nairobi, Kenya.

January 2023

This is a working document. It has been prepared to guide efforts by various stakeholders to estimate public investments in early childhood development and to stimulate discussion on the subject.

The designations in this publication do not imply an opinion on the legal status of any country or territory, or of its authorities, or the delimitation of frontiers.

Front cover © UNICEF/UN0569183/Chikondi

Acknowledgments

This technical note was written by Bob Libert Muchabaiwa (Public Finance Specialist) and Oliver Petrovic (Early Childhood Development Regional Adviser) under the guidance of Matthew Cummins (Social Policy Regional Adviser) of UNICEF's Eastern and Southern Africa Regional Office (ESARO).

Huge appreciation to the following people for their valuable comments (in alphabetical order by first name): Ahmad Mmadi (UNICEF Malawi), Alessandro Ramella Pezza (UNICEF Malawi), Boniface Kakhobwe (UNICEF HQ), Florence Naluyinda Kitabire (UNICEF ESARO), Jennifer Asman (UNICEF HQ), Maniza Ntekim (The Conrad N. Hilton Foundation), Patrick Chege (UNICEF Kenya), Rolland Andrianjaka (UNICEF Madagascar), Samuel Phiri (UNICEF Zimbabwe) and Tapiwa Kelvin Mutambirwa (UNICEF Malawi).



Table of Contents

List of Tables	6
List of Figures	6
List of Acronyms	7
Part 1. Introduction	9
1.1 The importance of ECD.....	9
1.2 A multisectoral ECD framework for action.....	11
1.3 ECD and government budgets.....	12
1.4 Takeaways	13
Part 2. A Step-by-Step Approach to Measuring ECD Spending	15
Step 1. Prepare	15
Step 2. Map multisectoral ECD interventions	16
Step 3. Map relevant ministries, departments and agencies	19
Step 4. Gather relevant budget information	20
Step 5. Collect, clean and organize budget data	21
Step 6. Analyze the data and interpret the findings.....	26
Step 7. Write the report.....	31
Step 8. Use the evidence	31
Takeaways	32
Part 3. Tips when Doing ECD Budget Analysis	34
3.1 Preparing to do the analysis	34
3.2 Conducting the analysis.....	34
3.3 Interpreting the analysis	35
Final Thoughts	36
Additional reading	37

List of Tables

Table 1: Examples of ECD-specific and ECD-sensitive interventions	17
Table 2: Health budgets covering ECD aspects: An example from Kenya	20
Table 3: Environmental health budgets covering ECD aspects: An example from Kenya	22
Table 4: ECD budget lines: Examples from Eastern and Southern Africa	23
Table 5: Pre-school education budgets: An example from Eswatini	24
Table 6: Excel-based ECD budget tracker: An example from Eswatini	26
Table 7: Example of ECD Budget by Economic Classification	28
Table 8: Illustrative examples of red flags and their implications	30

List of Figures

Figure 1: Rate of return to investment in human capital	10
Figure 2: Nurturing Care Framework	11
Figure 3: Factors contributing to an enabling environment for ECD	12

List of Acronyms

CRC	Convention on the Rights of the Child
CSO	civil society organization
DHS	Demographic Health Survey
ECD	early childhood development
ECE	early childhood education
ESA	Eastern and Southern Africa
ESARO	(UNICEF) Eastern and Southern Africa Regional Office
GDP	gross domestic product
IBP	International Budget Partnership
MDAs	ministries, departments and agencies
MICS	Multiple Indicator Cluster Survey
MIS	management information systems
PBB	program-based budgeting
PER	Public Expenditure Review
PETS	Public Expenditure Tracking Survey
PFM	public financial management
SDGs	Sustainable Development Goals
WASH	water, sanitation and hygiene
WHO	World Health Organization



Part 1. Introduction

Early childhood development (ECD) is defined as the period of human development from conception (when pregnancy starts) through the transition to the early years of primary school (typically ending at age 8)¹. ECD is an outcome of the continuous process of acquiring skills and abilities during this age period – across the domains of cognition, language, motor, social and emotional development – which are considered the foundation of health, learning, productivity, well-being and the building blocks for future human capital formation.

Despite the overwhelming evidence of the high returns of investing in ECD programs, ECD is not a priority for most governments in Eastern and Southern Africa (ESA). In general, low political commitment translates into a lack of resources to expand and improve ECD services, which further perpetuates planning and delivery challenges.

The ongoing deterioration of the human capital base due to COVID-19, climate, conflict and other shocks means that governments in ESA must urgently increase investments in ECD. The proof of concept and evidence of doing so abound, as this technical note will show later. But first, it is important to know how to measure and estimate government expenditures on ECD. This information is required to inform public financial management (PFM) reforms and support evidence-based planning and budgeting.

This technical note presents a step-by-step process for analysing government budgets to estimate the size and composition of public investments in ECD. The main objective is to provide a simple methodology for policymakers, civil society organizations (CSOs) and development partners to measure and report on ECD spending as well as improve the design and implementation of ECD budgets. The note focuses on investments made by central and local governments through national systems and less on off-budget expenditures or expenditures by private sector service providers. The analyses generated by the methodology presented in this note can be packaged into various products e.g. ECD budget briefs, ECD budget analysis reports, ECD Public Expenditure Reviews (PER).

1.1 The importance of ECD

The arguments in favor of promoting the development of children at a very young age are robust and compelling. Some of the most prominent ones are summarized in the following.

ECD is essential for all children to achieve their full potential

In Sub-Saharan Africa, two out of every three children under the age of five are at risk of poor developmental outcomes. This means that far too few children are thriving because of illness, inadequate nutrition, exposure to stress, a lack of love and early stimulation, and limited opportunities for early learning². As one example, still around one in three young children in Eastern Africa and one in four young children in Southern Africa

1 The early childhood period encompasses several quite distinct phases: from 'conception to birth' and from 'birth to 3 years, with emphasis on the first 1,000 days (from conception to 24 months), followed by 'pre-school (3 years to 5 or 6 years, or the age of pre-primary years and school entry) and 6-8 years of age (or the age of transition into primary school). These are not precise phases, but they are useful categories to ensure policy development and programming responses to the specific sensitive periods along the developmental trajectory.

2 Black, M. M. et al. (2017) "[Early Childhood Development Coming of Age: Science through the Life Course.](#)" The Lancet (389)10064, pp. 77-90.

are impacted by stunting, which are among the highest levels globally³. Underdevelopment of young children is often associated with high morbidity and mortality and decreased cognitive, motor, language and socio-emotional development. Other consequences include an increase in non-communicable diseases, low school performance and decreased work capacity. Ultimately, poor ECD outcomes limit the ability of young children to grow out of poverty and contribute to national economic and development progress.

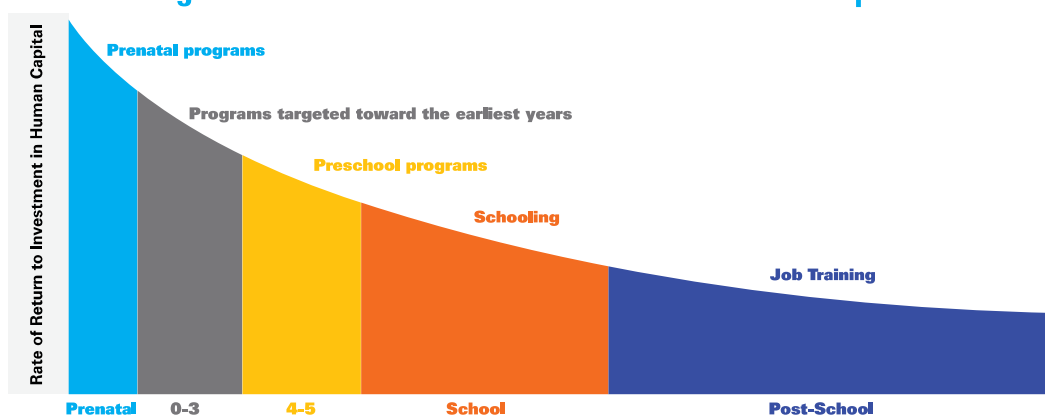
ECD is essential for brain development

One of the most important recent discoveries in neuroscience has been that the brain is built by genes, experience and environment – a combination of nature with nurture⁴. The process begins well before birth and is influenced by a pregnant woman’s health, nutrition and environment. After birth, a baby’s brain continues to develop, being shaped and altered in response to positive and negative experiences⁵. Positive experiences include good nutrition, sensory and motor stimulation, nurturing interactions and protection provided by family members or caregivers. In contrast, negative experiences, such as neglect, stress, violence and exposure to pollution, can significantly hamper early development⁶.

ECD delivers huge economic returns

The economic benefits of investing in the early years of life are reaped in better education and health outcomes, lower crime and higher individual earnings (e.g. up to 25 per cent in adulthood), among others⁷. Investing in ECD also enables a more skilled workforce that can tackle future challenges related to the global and digital economy. Because many early childhood interventions can be integrated into existing services, the cost of investing in ECD can be surprisingly affordable. For example, for an estimated average of US\$0.50 per person annually, parenting programs for families with young children can be added to existing health and nutrition services⁸. Perhaps most important, the returns on investments in ECD services are highest at the earliest stages of life (Figure 1).

Figure 1: Rate of return to investment in human capital



Source: James Heckman (<https://heckmanequation.org/resource/the-heckman-curve/>)

3 UNICEF, WHO and World Bank (2021). *The Levels and Trends in Child Malnutrition: Group Joint Child Malnutrition Estimates*. Washington, DC: UNICEF, WHO and World Bank.

4 Shonkoff, J.P. et al. (2012). “The Lifelong Effects of Early Childhood Adversity and Toxic Stress.” *Pediatrics* (129)1, pp. 232–246.

5 Ibid.

6 Ibid.

7 UNICEF (2017). *Early Moments Matter for Every Child*. New York City: UNICEF and Gertler, P. et al. (2014). “Labor Market Returns to an Early Childhood Stimulation Intervention in Jamaica.” *Science* (344) 6187, pp. 998–1001.

8 Richter L. M., et al (2016) ‘Investing in the Foundation of Sustainable Development: Pathways to scale up for early childhood development’, *The Lancet*. Vol. 16. Page 108–109.

ECD is the foundation of sustainable development

As a critical component of the 2030 Agenda for Sustainable Development, ECD is a global development priority. Several Sustainable Development Goals (SDGs) are about ECD, accompanied by clear targets on the same. For instance, SDG target 2.2 is about nutrition, 3.3 focuses on child health, and 4.2 about early learning.

Development is a child's right

All countries that have ratified the Convention on the Rights of the Child (CRC) are 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.

1.2 A multisectoral ECD framework for action

The ECD framework for action hinges on two interrelated action areas, which include the Nurturing Care Framework and the enabling environment. These are discussed below.

The first action area is the Nurturing Care Framework, which provides a roadmap for helping children survive and thrive. Developed by the World Health Organization (WHO), UNICEF, the World Bank and other partners, the Nurturing Care Framework draws on state-of-the-art evidence on how ECD unfolds and sets out the most effective policies and services that will help parents and caregivers provide nurturing care for their children. The Framework outlines children's needs for optimal development: good health, adequate nutrition, security and safety (i.e. child protection, social protection, and water, sanitation and hygiene or WASH), responsive caregiving and opportunities for early learning (Figure 2). All five components are equally important for healthy growth and development among young children.

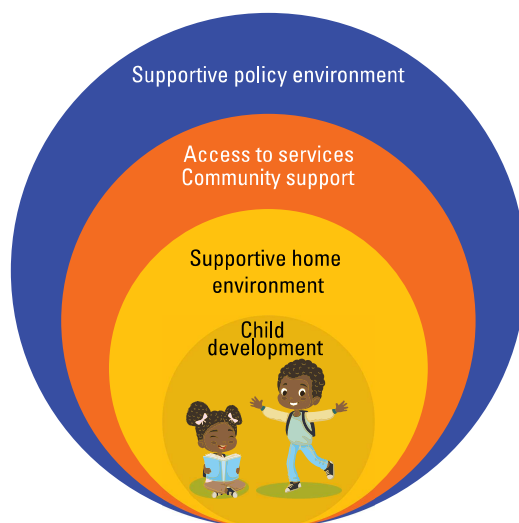
Figure 2: Nurturing Care Framework



Source: <https://nurturing-care.org/>

The second action area pertains to the enabling environment for young children to thrive. This recognizes the critical role that parents and other primary caregivers have in providing nurturing care. It also articulates the importance of communities, services and policies to support young children and their families (Figure 3).

Figure 3: Factors contributing to an enabling environment for ECD



Source: Bronfenbrenner (1989)

1.3 ECD and government budgets

Whether local or national, government budgets are the most sustainable source of funding ECD services. Unfortunately, young children (0-6 years) benefit from less public spending from governments and their development partners than older children and adults. A recent study analyzed health and education government expenditure in ESA by age group and identified average spending of US\$542 per person between the ages of 18 and 22, US\$411 on those aged 7-17, US\$88 per child for children between 3-6 years and US\$207 per child aged 0-2⁹. The study also revealed severe ECD funding gaps in most places.

Despite some efforts, measuring government spending on ECD has been a challenge for most countries. While there are a handful of ECD budget briefs and investment cases produced in ESA¹⁰, there are no initiatives to routinely monitor government spending in this area. One of the main reasons is the lack of a methodology. This technical note is, therefore, an attempt to bridge this knowledge gap by providing a step-by-step process to estimate ECD expenditures.

The development of the technical note was triggered by feedback received from several countries about the difficulties of estimating ECD expenditures. The main challenges identified were as follows:

- ▶ ECD services involve multiple sectors (child protection, education, health, nutrition, social protection, WASH), which means they are budgeted for and delivered by various ministries, departments and agencies (MDAs).
- ▶ Most governments do not have designated budget lines for ECD-related services, which makes them difficult to identify in national and sub-national budgets.
- ▶ There are inconsistent definitions of what constitutes an ECD service, which are further complicated by

9 Camaione, D. and Muchabaiva, B. (2021). "[Quantifying Heckman: Are Governments in Eastern and Southern Africa Maximizing Returns on Investments in Early Childhood Development?](#)" UNICEF Eastern and Southern Africa Regional Office Social Policy and Early Childhood Development Working Paper.

10 See UNICEF ESA [budget brief](#) and [public finance for children](#) websites.

important differences between ECD-specific interventions (those that directly influence ECD outcomes) and ECD-sensitive interventions (those that indirectly influence ECD outcomes).

- ▶ Many ECD services are delivered at the local level, including by communities and households, which requires complicated and time-consuming data collection processes to generate a complete and accurate picture of investment trends.
- ▶ ECD data and statistics are patchy, oftentimes not disaggregated by age and gender, which are required to better interpret budget figures, if available.

1.4 Takeaways

- ▶ The real commitment of any government to developing human capital is measured by the size of its investments in ECD services.
- ▶ In addition to being the right thing to do, investing in children at the start of their lives is affordable and smart economics.
- ▶ Governments play a key role in the delivery of ECD services by committing resources in their budgets to operationalize relevant laws, policies, strategies and plans related to ECD.
- ▶ In the absence of a systematic methodology to measure ECD government budget allocations and expenditure, it is impossible to determine if ECD investments are a national priority or to identify funding gaps and spending inefficiencies.



© UNICEF/UN0512433/Dejongh





Part 2. A Step-by-Step Approach to Measuring ECD Spending

This section describes the specific steps to conduct an ECD budget analysis. Although the steps are presented linearly, in reality, there are many overlaps. To enhance efficiency, it is recommended that the analysis be done by a team of at least two people: an ECD subject specialist and a PFM expert.

Sufficient time should be dedicated to this work. The process usually takes 3-6 months depending on the availability and comprehensiveness of budget data and other non-financial information. The time requirements are heavily influenced by: (i) the availability of budget information in public domains; and (ii) the level of cooperation of public officials from the ministries in charge of finance and social sector ministries responsible for implementing ECD interventions. Prior formal engagement and approval by senior heads of these institutions are required for buy-in, effective participation and release of government data. ECD budget analysis demands considerable face-to-face interactions with several MDAs. The interactions, which are usually in the form of key informant interviews, are aimed at understanding and clarifying the different ECD programs and budget lines to be included in the analysis as well as obtaining additional information required to interpret the findings.

There are eight proposed steps to conduct an ECD budget analysis. These are summarized directly below and then unpacked in the remainder of Part 2.

- Step 1. Prepare
- Step 2. Map multisectoral ECD interventions
- Step 3. Map relevant MDAs
- Step 4. Gather relevant budget information
- Step 5. Collect, clean and organize budget data
- Step 6. Analyze the data and interpret the findings
- Step 7. Write the report
- Step 8. Use the evidence

Step 1. Prepare

Everything starts with sound preparation. The preparation process entails several activities aimed at getting the right stakeholders on board and a robust analytical framework in place as well as defining the work plan. Key aspects include:

- ▶ **UNICEF team composition:** The internal team should, at a minimum, include one person with a PFM background and another with knowledge of ECD.

- ▶ **Government ownership:** One of the most important preparatory steps is to ensure that the relevant government MDAs are supportive of the ECD budget analysis and agree to take forward the main recommendations at the outset. This should further include the agreement of one specific entity/platform to oversee and lead the process, which could take the form of a steering committee.
- ▶ **Partners:** In addition to the government MDAs, this could include CSOs, research institutions, UN agencies and international financial institutions (e.g. the World Bank).
- ▶ **Analytical framework:** The analysis should be guided by a national framework, which is ideally the government's policy/strategy/plan on ECD. If this does not exist or is incomplete, then the Multisectoral ECD Frameworks for Action, presented earlier, can serve as the guide.
- ▶ **Geographic coverage:** Clarity on the level of government to focus on (national, subnational) is important because this influences the mapping of roles and responsibilities of the MDAs and stakeholders to be involved as well as the identification of relevant budget lines. In most cases, it will be strategic to examine a sample of sub-national authorities (regions, provinces, counties, districts, etc.) to complement national-level analytics.
- ▶ **Timeframe:** A three to five-year period is considered ideal for trend analysis of expenditure patterns.
- ▶ **Desk review:** It is important to identify and quickly review relevant public finance analyses, e.g. Public Expenditure Reviews (PER), Public Expenditure Tracking Surveys (PETS) and other diagnostics such as cost-benefit analyses from which useful commentaries about ECD expenditure patterns can be drawn. This will include education, health, nutrition, social protection and WASH-specific analyses that often include ECD components. It is advisable to build on other analyses rather than reinvent the wheel.
- ▶ **Resource mobilization:** It is strongly encouraged that the analysis be conducted in-house by UNICEF staff where possible. However, if external expertise is required, the total costs of engaging a qualified consultant or consultancy firm to do this work can vary considerably across countries, ranging from US\$10,000 to \$70,000.
- ▶ **Work plan:** Develop a work plan with clear timelines and deliverables.

Step 2. Map multisectoral ECD interventions

The second step entails mapping multisectoral ECD interventions that should be financed by the government. Mapping should be guided by ECD national policies and/or plans. In instances where policies and/or plans do not include all critical ECD interventions, it is recommended to engage with national experts and create a list of essential ECD interventions that should be budgeted through national and local budgets. It is important to indicate upfront that there is no clear cutoff line on what interventions fall under ECD. For this reason, a key step in measuring government spending on ECD is to create national consensus on the programmatic boundaries.

It is important to distinguish between ECD-specific and ECD-sensitive interventions. Whereas ECD-specific interventions are designed with the primary objective of achieving the social-emotional and/or cognitive development of a child, ECD-sensitive interventions are not explicitly designed to contribute to ECD outcomes but do so indirectly. Take immunization as an example. While this is important for child health and contributes to child development, it should not be counted as ECD-specific spending because immunizations are not explicitly designed with the primary objective of improving the social-emotional or cognitive development of a child. ECD-specific and ECD-sensitive interventions are summarized in Table 1 according to specific delivery platforms (health, nutrition, education, child protection, social protection and WASH), which are critical to identify in the ECD budget analysis.

Table 1. Examples of ECD-specific and ECD-sensitive interventions

Sector	ECD interventions
Health	<p>ECD-sensitive</p> <ul style="list-style-type: none"> • Antenatal care and childbirth care • Essential care for newborn babies • Integrated management of childhood illnesses • Prevention of mother-to-child transmission of HIV • Immunization
	<p>ECD-specific</p> <ul style="list-style-type: none"> • Programs that promote early stimulation and responsive caregiving (such as care for child development intervention) • Programs that reduce the risk of maternal depression and promote maternal mental health (such as caring for caregivers) • Early identification of children with developmental delays and early intervention/referral • ECD corners at health facilities
Nutrition	<p>ECD-sensitive</p> <ul style="list-style-type: none"> • Maternal nutrition, including micronutrient supplementation • Early initiation, exclusive breastfeeding and continued breastfeeding after 6 months • Appropriate complementary feeding • Micronutrient supplementation • Salt iodization • Growth monitoring and promotion, including intervention • Deworming • Management of moderate and severe malnutrition
	<p>ECD-specific</p> <ul style="list-style-type: none"> • Programs that promote early stimulation and responsive caregiving (such as care for child development intervention) • Programs that reduce the risk of maternal depression and promote maternal mental health (such as caring for caregivers)
Education	<p>ECD-specific</p> <ul style="list-style-type: none"> • Community childcare and other forms of early childhood care, learning and development programs • Home-based childcare • Mobile libraries, mobile toy and similar interventions to support early learning • Pre-primary education • Parenting programs that provide information, support and opportunities for early learning
Child protection	<p>ECD-sensitive</p> <ul style="list-style-type: none"> • Birth registration • Supporting family care and foster care over institutional care • Prevention of child maltreatment, abuse and neglect • Prevention of violence and case management when needed • Child-friendly spaces in humanitarian contexts
	<p>ECD-specific</p> <ul style="list-style-type: none"> • Parenting programs that provide information, support and counselling about violence against children and other protection issues

Sector	ECD interventions
Social protection	ECD-sensitive <ul style="list-style-type: none"> • Cash transfers targeted to pregnant women and families with children under the age of five
	ECD-specific <ul style="list-style-type: none"> • Cash plus interventions that include childcare and/or early stimulation and responsive caregiving component
WASH, including environmental programs	ECD-sensitive <ul style="list-style-type: none"> • Provision of safe WASH services in childcare centres and pre-schools • Prevention and reduction of indoor and outdoor air pollution • Clean environments free of hazardous chemicals
	ECD-specific <ul style="list-style-type: none"> • Safe family and play spaces in urban and rural areas • Promotion of good hygiene practices, including handwashing among young children

Source: Authors

Health

The health system, including community-health care, primary health care and hospitals, is the only system that potentially can reach all young children and their families in the first 1,000 days of life. While many health interventions, such as antenatal care and immunization, play an important role in improving overall child health and well-being, it is important to incorporate ECD-specific interventions into the health system. This includes parenting programs and counselling services that promote responsive caregiving, stimulation, mental health of caregivers, protection from harm, screening, early identification of children with developmental delays and support for children with disabilities or high risk (e.g. exposure to HIV). Such interventions are critical to improving holistic child development. Ideally, the budget analysis should identify both sets of interventions within the health system: ECD-sensitive (i.e. immunization) and ECD-specific (i.e. responsive caregiving).

Nutrition

The mother's nutrition during pregnancy affects her health and well-being, as well as the developing child's nutrition and growth. Young children flourish on exclusive breastfeeding from immediately after birth to the age of 6 months. Starting at 6 months, young children then need complementary foods that are frequent and diverse, and which contain the micronutrients needed to fuel the rapid growth of their body and brain. Nutrition-specific interventions are typically delivered through health and/or community-based systems, and if they combined with interventions that support responsive feeding, counseling of caregivers on early stimulation, play and communication with young children, a young child will flourish and achieve optimal development.

Education

Developmentally appropriate early education is crucial to children's cognitive and social development, and to their preparation for formal schooling. Today, the world is facing a learning crisis, which is largely rooted in a failure to invest in quality early childhood education (ECE). The early learning opportunities, inclusive of quality community childcare and pre-schools, can reach children typically 3 years of age and older. This is an important platform not only for improving child outcomes but also for increasing women's empowerment.

Child protection

Young children cannot protect themselves and are vulnerable to unanticipated danger, physical pain and emotional stress. Maltreatment—exposure to violence, abuse, neglect and other adverse childhood experiences—can have powerful, long-lasting effects on brain architecture, psychological functioning, mental health and behaviors around health risks. Programs that promote responsive caregiving and non-violent discipline can create positive interactions between caregivers and children. These are critical to protecting the brains of young children, improving their development in early childhood, and laying the foundation for lifelong health and well-being.

Social protection

When caregivers are unable to earn adequate income, children's basic needs, including nutrition, medical care and education, cannot be met. Cash transfer programs that provide direct, regular and predictable income support for poor and vulnerable households enable minimum levels of consumption to be maintained, thereby ensuring adequate and diverse diets among young children as well as access to different social services when needed. When cash transfer beneficiaries are targeted by specific ECD messages and further connected childcare and parenting programs, social protection interventions can significantly boost developmental outcomes among young children.

WASH and environmental health

To protect young children's health and support their development, it is essential that they have clean water and sanitation services, apply good hygiene practices and have access to protective play spaces. Programs that create sustainable environments and reduce children's exposure to modifiable environmental hazards are essential for enabling young children to thrive.

Step 3. Map relevant ministries, departments and agencies

The third step is to map out all MDAs that are responsible for budgeting for specific ECD services. The mapping should be guided by the list of programs and interventions developed in Step 2. As indicated above, the starting point is to know which MDA is responsible for the coordination and providing policy direction on ECD matters. Thereafter, identify other ministries (e.g. home affairs/interior, health, education, youth, local government, justice) that are mandated to deliver specific ECD services. This may need to be expanded to include relevant departments at the sub-national level, including within municipalities, depending on the scope of the analysis. As indicated earlier, budget allocations to ECD are found in several MDAs, reflecting its cross-sector nature. Below is a list of MDAs that typically budget for ECD services:

- ▶ Ministry responsible for health
- ▶ Ministry responsible for local government
- ▶ Ministry responsible for primary education
- ▶ Ministry responsible for water and sanitation
- ▶ Ministry responsible for social welfare
- ▶ Ministry responsible for gender
- ▶ Ministry responsible for community development
- ▶ Ministry responsible for agriculture and animal resources
- ▶ Department responsible for nutrition

- ▶ Nutrition council/coordination agency
- ▶ Department responsible for children's services
- ▶ Ministry responsible for finance/treasury
- ▶ Decentralized government agencies (e.g. regions, provinces, counties, districts)

The purpose of this exercise is to link each component of the ECD program to a specific institution that is responsible for budgeting. For instance, as shown in Table 2, the program on Reproductive Maternal and Neonatal Health is naturally embedded under the Ministry of Health. Where unsure about the institutional location of certain programs, you should reach out to relevant authorities to get clarity. This step lays the foundation for the tracking of ECD budget lines.

Table 2. Health budgets covering ECD aspects: An example from Kenya

Vote 1081 Ministry of Health
PART F: Summary of Expenditure by Programmes, 2020/2021 - 2022/2023

Programme	Baseline	Estimates	Projected Estimates	
	2019/2020	2020/2021	2021/2022	2022/2023
	KShs.	KShs.	KShs.	KShs.
0401020 Non-communicable Disease Prevention & Control	422,611,721	496,711,286	496,797,400	496,901,848
0401030 Reproductive Maternal Neo-natal Child & Adolescent Health-RMNCAH	1,357,342,090	4,322,046,881	3,529,247,608	2,006,930,990

Source: Government of Kenya, Program-Based Budget, 2020/21

Step 4. Gather relevant budget information

Three types of information are required to effectively estimate ECD expenditures. These are: (i) budget data; (ii) other financial information; and (iii) non-financial information.

Budget data

Budget data is at the core of information required to measure government spending on ECD. This should be obtained in budget documents produced by the government. According to the International Budget Partnership (IBP), there are eight key budget documents that governments should make publicly available (Box 1).

Box 1: Key budget documents

1. Pre-budget statement
2. Executive's budget proposal/draft estimates of expenditures
3. Citizens' budget
4. Enacted budget
5. In-year reports
6. Mid-year review
7. Year-end report/finance statement
8. Audit report

Source: International Budget Partnership, 2021

While all the above documents are needed, three are indispensable to produce a meaningful ECD budget analysis. These include: (i) the enacted budget (approved estimates of revenues and expenditures); (ii) the year-end report/financial statement; and (iii) the finance minister's speech or statement during the budget presentation to Parliament at the start of the year. For many countries, these budget documents are publicly available on the websites of ministries responsible for planning. In decentralized contexts, budget documents can be found in relevant local authorities, including departments or agencies responsible for public finances. If the budget documents are not publicly available, make an official request with the ministry responsible for finance/treasury and also contact the relevant line MDAs at both national and local levels. This is important because in some cases the breakdown of resources is kept by the ministry with the responsibility to deliver specific ECD services.

To compare ECD expenditures across countries, check available information from global databases. Information from other countries will help you to assess how your country is performing in relation to others. Most notably use the [UNESCO Institute for Statistics](#) and the [WHO Global Health Expenditure Database](#). The former normally contains information about government expenditure on pre-primary education in absolute terms and as a percentage of total expenditures while the latter provides information about health and some nutrition expenditures by age, which allows assessment of health spending for the early years. This financial information can also be found in the [World Bank's World Development Indicators](#), which aggregates information from other sources (although usually with a six month delay).

Other financial information

In addition to budget documents, it is important to collect other financial information to assess the adequacy and purchasing power of ECD budget allocations. This includes cost estimates, unit prices of ECD goods and services, exchange rates and annual inflation rates. This information is usually kept by National Statistical Offices, Central Banks and/or Ministries of Finance.

Non-financial information

To interpret budget data, it may also be useful to collect administrative and survey data about available ECD services, their reach and target beneficiaries. This could include information about the population of children between 0-8 years, number of children enrolled in pre-school and parenting programs, number of children left out/not reached by certain services, types of services offered, service utilization rates, etc. For example, information about total enrollment or ECD population can be used to calculate expenditures per child. Information about the reach of services helps in examining the equity of investments, while data on services offered shed light on the quality of expenditures. This information is usually contained in education, health and child protection management information systems (MIS) as well as national surveys, such as the national population census, Multiple Indicator Cluster Survey (MICS) and/or Demographic Health Survey (DHS).

Step 5. Collect, clean and organize budget data

Data collection

This first element of step five involves a line-by-line review of selected budget documents to collect information about sources of ECD financing, approved estimates and actual expenditures. The review should be guided by the list of programs and interventions listed in step two. With the relevant budget documents in hand, you will have to carefully go through the votes for all selected MDAs. Take note that the identification of relevant ECD budget lines is usually easy if the budget documents are comprehensive and if

program/performance/output-based budgeting is used. Budgets that are line item-based make it difficult to know how much is allocated to ECD programs. If the budget documents are online, a keyword word search may be a good starting point.

For most countries, ECD budget lines are not easily identifiable. Hence, reading through the entire vote for selected MDAs helps to spot relevant programs or sub-programs that may not be worded using ECD language. In most countries, ECD-specific budgets are often hidden under broad programs or sub-programs. In Kenya, for example, in 2021, the budget line for nutrition for the national government was under the program on 'Environmental health' while the expanded program on immunization was under the program on 'Reproductive Maternal Neo-natal Child & Adolescent Health-RMNCAH.' While most analysts would quickly discard the program on environmental health as irrelevant to ECD, this is where child nutrition is housed (Table 3). The point here is to be careful! Also from the Kenya example, "Villages declared open defecation free" can be classified as an ECD-sensitive intervention under the "security and safety" component of the Nurturing Care Framework.

**Table 3. Environmental health budgets covering ECD aspects:
An example from Kenya**

Sub Programme: 0401090 Environmental Health

Delivery Unit	Key Output (KO)	Key Performance Indicators (KPIs)	Targets 2020/2021	Targets 2021/2022	Targets 2022/2023
1081003200 Nutrition	Nutrition interventions as a component of primary health care strengthened	Vitamin A Supplementation (VAS) coverage for children 6 to 59 months	75%	78%	80%
1081007800 Environmental [Health Services	Villages declared open defecation free	Proportion of open defecation free villages	27%	37%	50%

Source: Government of Kenya, Program-Based Budget, 2020/21

It is important to recognize that most of the terms used by ECD practitioners are not the same as those used in the world of finance and budgeting. For example, it is not common to find budget lines on things like 'home visits,' 'responsible caregiving,' 'parenting,' 'promotion of breastfeeding' and so on. This, again, underscores the need to inquire with the relevant MDAs if certain programs are budgeted for or not, and if yes, how so? In cases where governments are implementing program-based budgeting (PBB), the list of targets and indicators under each MDA provides a clue on what a particular budget line entails. However, if not, you will have to rely on interviews with MDAs to get more information.

All budget lines relevant to ECD should be captured in an Excel table for analytical purposes. In doing this, it is advisable to start with a long list of all relevant budget lines and then screen based on the Nurturing Care Framework and feedback from MDAs. The ultimate objective is to select budget lines that are directly and indirectly contributing to ECD outcomes. While Table 4 shows examples of budget lines relevant to ECD from budget books of select countries in ESA, it is important to become familiar with the key budget documents in your country.

Table 4. ECD budget lines: Examples from Eastern and Southern Africa

Country & document	ECD budget line and code	Lead vote or MDA	Sector
Eswatini (budget estimates, 2021/22)	91-Pre-School Education	Head 30: Ministry of Education & Training	Education
	10142 National Nutritional Council of Eswatini	Head 45: Ministry of Health	Health
	10508 Children in Clinics and Hospitals	Head 45: Ministry of Health	Health
	10603 Child Welfare Foster Children	Head 06: Deputy Prime Minister's Office	Social welfare
	10213 Grants to Nurseries	Head 06: Deputy Prime Minister's Office	Social welfare
Kenya (national PBB, 2020/21)	0501040 Early Child Development and Education	Vote 1066 State Department for Early Learning & Basic Education	Education
	0401030 Reproductive Maternal Neo-natal Child & Adolescent Health-RMNCAH	Vote 1081 Ministry of Health	Health
	1081009000 Kenya Expanded Program Immunization	Vote 1081 Ministry of Health	Health
	0401090 Environmental Health (2020/21 National Budget)	Vote 1081 Ministry of Health	Health
	081003200 Nutrition	Vote 1081 Ministry of Health	Health
Malawi (Document 5, PBB, 2021/22)	99.02 Early Childhood Development	Vote 320: Ministry of Gender, Community Development and Social Welfare	Social welfare
	99.03 Family Nutrition and HIV	Vote 320: Ministry of Gender, Community Development and Social Welfare	Social welfare
South Africa (national expenditure estimates, 2021/22)	South African Congress for ECD	Vote 19 Social Development	Social welfare
	Centre for ECD	Vote 19 Social Development	Social welfare
	ECD grant	Vote 19 Social Development	Social welfare
Uganda (approved national expenditure estimates, 2020/21)	14 Reproductive and Child Health	014 Ministry of Health	Health
	10 Institute of Maternal and Newborn Child Health	014 Ministry of Health	Health
	085607 Immunization Service	014 Ministry of Health	Health

If it is not possible to identify relevant budget lines, it is recommended to estimate ECD expenditures through apportionment. Apportionment aims to estimate a 'reasonable share' of indirect budgets that could be counted as ECD spending. This is done through weighting using a wide range of parameters, such as the content of a given program, allocation of staff time, target population, utilization of a specific ECD service, job functions, coverage of services, etc. For example, under the element of safety and security, if an analysis of childcare cases handled by a social worker over a reasonable period (e.g. 2-3 years) shows that 50% of cases are related to children between 0-8 years, 30% are intimate partner-related, 10% are elderly related and 10% to other issues, it would be sensible to apportion at least 50% of the social worker's time – and salary – to public spending on childcare services. Or if the expenditures are highly aggregated, such as for a community outreach program, consultations with the responsible MDA could point that approximately 20% of that budget

line is focused on teaching good parenting practices. There are obvious limitations to apportionment, but a rough estimate is a starting point for advocating for more and better information in future budgets.

The logic behind apportionment is that adding all indirect budgets carries a risk of significantly overstating ECD spending. Ultimately, the estimated total ECD spending will be arrived at by adding direct and apportioned budgets. Should apportionment be found to be complicated, the most practical strategy is to either track the aggregate budget line for the parent MDA or check if responsible officials can share additional information that is not publicly available in government budgets. The latter is often preferable because the mathematical process of apportionment does not always produce accurate results. It is also difficult to know if there are changes in utilization patterns of the aggregate budget line.

Beyond estimating direct and apportioned budget allocations, it is also important to collect information about actual expenditures. This information may be found in one or more budget documents. Some budget documents show approved estimates, actual expenditures and medium-term expenditures in one place. Eswatini provides a good example. The budget book for fiscal year 2021/22 shows actual expenditures for the previous year minus one (2019/20) for pre-school. As described later, this information is required to analyze ECD budget credibility. If data are not included in the approved estimates, budget execution data can be collected from line ministries.

Table 5. Pre-school education budgets: An example from Eswatini

ACTIVITY 91-PRE-SCHOOL EDUCATION						
CONTROL		2019/20	2020/21	2021/22	2022/23	2023/24
ITEM	DESCRIPTION	ACTUAL	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
01	Personnel Costs	3,56,292	1,148,583	1,208,482	1,305,160	1,370,418
02	Travel, Transport and Communication	31,454	70,694	58,676	61,610	64,690
04	Professional and Special Services	986,396	1 486,269	1,233,603	1,295,283	1,360,048
06	Consumable Materials and Supplies		56,158	46,611	48,942	51,389
10	Grants and Subsidies - Internal		62,800	62,800	62,800	62,800
TOTAL		4,587,142	2,824,504	2,610,172	2,773,795	2,909,345
HEAD TOTAL		3,459,109,064	3,261,351,027	3,432,189,964	3,641,119,560	3,728,963,882

Source: Eswatini Budget Estimates (2021/22)

In some countries, the required budget information is usually in several budget documents. In Angola, for example, the government produces separate documents showing budget allocations by program, function and economic classification. In Malawi, detailed estimates of recurrent and capital expenditures and the PBB are two separate budget documents (Document 4 and 5), the latter which is available in three versions (Central MDAs, Subvented Organizations and Local Councils). It is therefore important to know which information is found in which government budget document.

All data collected should be captured in an Excel spreadsheet with clear labels and sources. Information about vote heads (names of aggregate budget lines) and program codes for each budget line should also be provided. This will help in the process of data verification and validation, including by third parties.

When all budget data is in place, remember to collect other financial information. As indicated earlier, this includes cost estimates for individual ECD programs, if available, inflation trends, exchange rates, as well as national, regional and global financial benchmarks. Cost estimates, for instance, are required to perform a funding gap analysis. Additional information can also be obtained from available PERs and other PFM diagnostics.

Data cleaning

Once all data is captured in Excel sheets, the next step is to verify and clean it. Data cleaning is the process of fixing or removing incorrectly captured, duplicate or incomplete data within a dataset. When entering data in the master Excel sheet, it is common to miss a number, mislabel sections, forget budget codes or enter data twice. Another person may help with checking the data by comparing it with what is in the original budget books. Sometimes when copying and pasting data, you can override or even create duplicate entries. If not carefully checked, all of this may result in misleading results. Also, challenges often arise when combining multiple data sheets into one. Wherever possible, ensure the verified data is validated by the responsible MDAs.

Data organization

Before the data is ready for analysis, it should be organized in a way that enables meaningful budget analysis. There are various ways through which national and sub-national data can be organized, for example:

- ▶ Total ECD budgets over time (3-5 years)
- ▶ ECD budgets by sector and over time
- ▶ ECD budgets by program or functional classification
- ▶ ECD budget by economic classification¹¹ and over time
- ▶ ECD budgets per institution and over time
- ▶ ECD budgets by administrative area and institution and over time
- ▶ ECD budgets by the source of funds and over time
- ▶ Approved ECD budgets vs actual expenditures and over time

Each category can be a separate Excel sheet. You can also link tabs to the original dataset so that when entries change in the master sheet, everything else will automatically change. Some UNICEF country offices (e.g. Angola, Eswatini and Malawi) have organized their data into ECD budget trackers containing all the information needed for the analysis (Table 6). Please note that there is a need for further cleaning and verifying once the data organization is complete. This is an important step before proceeding to the data analysis.



11 The economic classification of budget documents, identifies the type of expenditure by, for example, salaries, goods and services, transfers and interest payments, or capital spending.

Table 6. Excel-based ECD budget tracker: An example from Eswatini

A	B	C	D	E	F	G
Kingdom of Eswatini						
Identifiable ECD Budget lines						
	2017/18 Actual	2018/19 Actual	2019/20 Actual	2020/21 Estimate	2021/22 Estimate	Source
Baseline indicators						
Annual GDP	59,806,995,000	624,811,663,000	64,228,762,000	64,710,333,000	70,843,509,000	Government Budget Estimates
Annual Total Spending	19,551,175,000	20,013,914,000	21,771,875,000	23,498,956,000	24,043,966,000	Government Budget Estimates
Revenues + Grants	15,394,958,000	15,956,239,000	1,788,209	18,247,309,000	19,450,979	Government Budget Estimates
National Population	1,124,805	1,336,281	1,148,130	1,160,164	1,172,362	World Bank
Health Sector Budget	1,908,039,840	1,861,703,544	2,536,734,176	2,747,612,360	2,797,968,965	Government Budget Estimates
Inflation	6,2	4,8	2,6	38	3,9	Central Bank
CPI (2017=100)	100	104,8	107,5	111,6	116	
ECD Relevant budget lines						
Nutrition Council	2,750,000	1,250,000	1,250,000	1,250,000	1,250,000	Government Budget Estimates
Children in clinics	11,900,000	11,900,000	11,900,000	15,600,000	15,600,000	Government Budget Estimates
Pre-school	4,494,268	3,991,131	4,587,142	2,824,504	2,610,172	Government Budget Estimates
Child welfare (foster children)	18,94		19,03	102,2	102,2	Government Budget Estimates
Total identifiable ECD budgets	19,163,208	17,141,131	17,756,172	19,776,704	19,562,372	

Source: UNICEF Eswatini (2021)

Step 6. Analyze the data and interpret the findings

The last step is to analyze the data to assess the size, composition, sustainability, allocative efficiency and equity of public investments in ECD. The ultimate objective is to establish government spending trends and challenges as well as identify funding gaps. Core aspects of the analysis are briefly discussed below.

Visibility of ECD in government budgets and alignment with plans

A starting point in ECD budget analysis is a qualitative assessment of the link between the national ECD strategy and sector plans, on the one hand, and government budgets, on the other. A secondary objective is to compare spending patterns with international standards and commitments, including the recommendation to allocate at least 10% of education sector budgets to early learning. There are three dimensions to consider under this section:

- ▶ **Level of integration of ECD plans into government budgets:** This is assessed by the number of identifiable budget lines for certain ECD policy areas, such as pre-school, child health, and child nutrition. If there are few or no visible budget lines, this may be indicative of poor integration of ECD in government budgets.
- ▶ **ECD targets and indicators in PBBs:** In situations where the government has adopted program/performance/output-based budgeting, it is important to assess if there are clear targets and indicators on ECD. If yes, the next step is to assess their appropriateness, coverage and usefulness as well as how they co-relate with ECD expenditures.
- ▶ **Link between priorities and funded ECD programs (allocative efficiency):** The other important issue to assess is the relationship between ECD priorities at a given point in time and what is funded in government programs. If most of the funded programs do not address priority needs, then the link is said to be weak.

Size of ECD spending

A core aspect of ECD budget analysis is to regularly monitor and measure the size of total spending on ECD. This is a crucial step to determine the adequacy of investment and subsequently estimate the funding gap. The most common calculations include:

- ▶ **Total nominal and real values of ECD budgets over time in the national currency.** The real values are obtained by adjusting approved estimates/expenditures for inflation. Total investments are the sum of all identifiable budget lines on ECD programs, across sectors and geographic areas. In general, ECD budgets account for a very small portion of the national budget because some of the services are provided by households and private actors. Nonetheless, it is still important to understand the overall level of public investments in ECD, their evolution over time and the priority within the national budget.
- ▶ **Total ECD budgets as a % of the total government budget and gross domestic product (GDP):** This calculation provides a picture of the extent to which ECD is a spending priority of the government. The result can also be compared with other countries.
- ▶ **ECD budget per child (0-8 years old):** The objective is to calculate how much the government is spending on each young child (0-8 years) per year. The age cut-off can be adjusted to suit national definitions and is also influenced by the availability of data. The budget per child is found by dividing the total budget by the total population of children in the ECD category.

A few points to note when estimating the size of ECD expenditures. First, it is important to adjust all figures for inflation to get the real value of spending. Second, if there are no direct budget lines, apportionment is recommended as discussed above. Third, time-series analysis should be done to determine trends and shocks over time. Fourth, it is important to assess several parameters alongside each other before concluding. For example, simply assessing increases in spending on learning as a share of the education or national budget is insufficient; it is also important to look at absolute figures in real and in per capita terms. Lastly, take care to avoid under/overestimating expenditures, especially in cases where apportionment was done.

Composition of ECD spending

Besides estimating the total ECD budget in a country, it is also important to examine the distribution across sectors, programs and geographic areas. The aim is to assess where ECD resources are being invested.

- ▶ **ECD expenditures by the level of government/geographic area:** This shows the distribution of ECD resources across regions, provinces, counties, districts, wards, etc. within a country. It is advisable to compare expenditures per child instead of comparing total allocations to a geographic area. Per capita expenditures are preferable because they shed light on the territorial equity of expenditures. Beyond estimating expenditures at the subnational level, it is also important to investigate challenges and opportunities offered by fiscal decentralization.
- ▶ **ECD expenditures by program:** The aim is to understand the composition of ECD expenditures by the type of program as guided by national plans and strategies and also the Nurturing Care Framework. Core programs to be considered include child nutrition, early learning programs, including pre-primary education, child health and child protection. A recent analysis by UNICEF¹² shows that child health and nutrition services tend to dominate ECD expenditures in ESA if compared to ECE and child protection (safety and security of children), for example. Of course, there is no internationally agreed benchmark on how expenditures should be distributed across priority policy areas, but obvious imbalances are likely to emerge.
- ▶ **Composition by economic classification:** This breaks down ECD expenditures according to their purposes. The most common purposes are salaries for the ECD workforce, recurrent goods and services, transfers and capital (or development) investments, such as the construction of early learning centers or

12 Camaione, D. and Muchabaiwa, B. (2021). "[Quantifying Heckman: Are Governments in Eastern and Southern Africa Maximizing Returns on Investments in Early Childhood Development?](#)" UNICEF Eastern and Southern Africa Regional Office Social Policy and Early Childhood Development Working Paper.

the procurement of learning materials. Most government budgets in ESA report a breakdown of programs and sub-programs by economic classification as shown in Table 7.

Table 7. An ECD budget by economic classification: An example from Kenya

0501040 Early Child Development and Education

Economic Classification	Baseline Estimates	Estimates	Projected Estimates	
	2019/2020	2020/2021	2021/2022	2022/2023
	KShs.	KShs.	KShs.	KShs.
Current Expenditure	3,917,415	3,118,066	4,428,222	4,444,702
2200000 Use of Goods and Services	3,917,415	3,118,066	4,428,222	4,444,702
Capital Expenditure	-	-	15,000,000	15,000,000
2200000 Use of Goods and Services	-	-	5,000,000	5,000,000
2600000 Capital Transfers to Govt. Agencies	-	-	10,000,000	10,000,000
Total Expenditure	3,917,415	3,118,066	19,428,222	19,444,702

Source: Government of Kenya, National Program-Based Budget, 2020/21

- ▶ **ECD expenditures by sector:** Instead of breaking down ECD expenditures into different programs, the information can also be presented by sectors or government functions, such as education, health, social protection, child protection and WASH.
- ▶ **ECD expenditures by age group:** In line with the life-cycle approach to policy formulation and budgeting, it is recommended that ECD expenditures be analyzed by age cohorts. For example, it would be good to see how much is spent on children between 0-2, 3-5, and 6-8. A recent UNICEF ESARO revealed, for example, that children between 3-5 years often receive less public funding compared to their counterparts in the 0-2 and 6-8 age cohorts¹³.
- ▶ **ECD expenditures by funding source:** Here the aim is to understand specific funding sources for ECD expenditures, including specific domestic and external resources. External resources can be further disaggregated into grants and loans.

Composition analysis reveals inequities and imbalances in the allocation of resources to different cost centers. It also shows areas that are over/underfunded. This way policymakers become aware of gaps, duplication and opportunities to improve impact through greater coordination across regions, ministries and programs. Such information is also critical to inform ECD budget allocations and expenditures as holistic child development requires effective budget allocations across all five components of the Nurturing Care Framework. As highlighted earlier, the extent to which ECD composition analysis can be successfully done is largely dependent on the comprehensiveness of government budgets.

Budget credibility and execution

Beyond measuring the size and composition of investments, it is equally important to assess how well the resources are spent. To this end, two measures are commonly calculated: budget credibility and budget execution. Budget credibility refers to the ability of the government to execute the budget as planned at the start of the fiscal year. This is measured by the difference between planned and actual spending on ECD services. Budget execution, in contrast, looks at the difference between the total amount of ECD funds

¹³ Ibid.

released to MDAs and how much is spent over a given period. A key point to note is that the execution rate should be arrived at by comparing actual expenditures against the amount released – not the approved budget.

In analyzing budget credibility and execution, it is important to compare rates within each category and with other budget line items. For example, you may wish to compare the rates between recurrent and capital items as well as the rates by region, program or policy area. It may also help to compare ECD budget credibility and execution against overall sectoral trends. Where major variances emerge, it is important to try to identify some of the higher-level underlying causes, and to always recommend further diagnosis, which can be one of the more powerful outcomes of the ECD budget analysis.

If information to assess budget credibility and execution is unavailable, explore other sources. This could include recent ECD performance/evaluation reports, PERs, PETS, sector performance reports, social accountability reports, donor progress reports, etc. These may help in identifying common budget implementation challenges that should be addressed to improve value for money. It is very uncommon that budgets are implemented as planned. The reasons can range from cash flow problems and late disbursements to emergencies, such as COVID-19, and poor budget planning to low absorption capacity and resource leakages/diversion.

ECD funding sources

To effectively advocate for more resources, it is important to understand the current funding sources for each level of government. There are three general sources: (i) government resources from taxes and other revenues; (ii) grants from donors; and (iii) loans that are earmarked for the provision of specific ECD services (although this is likely to be very limited).

While this technical note focuses on government expenditures, it is important to collect off-budget expenditures by donors, which is substantial in some contexts. Most off-budget expenditures are channeled through UN agencies and CSOs. A simple Excel-based questionnaire may be used to collect information from the above organizations.

When focusing on public funding sources, the main calculations include:

- ▶ Domestic and external funds as a percentage of total ECD budgets
- ▶ Size of funding by program, sector or component of the Nurturing Care Framework
- ▶ Size of funding by donor
- ▶ Share of a flagship/significant program or intervention funded by domestic and external resources

Funding gap analysis

This is a measure of the difference between total cost estimates (or financial benchmarks) for a given ECD package and what is committed by the government and development partners. The main objectives of funding gap analysis are to assess the adequacy of budgets and to guide the development of investment cases, budget advocacy and fundraising. The funding gap can also be computed against funding needed to meet certain national targets for ECD spending annually or over the policy period. An example of a benchmark is the emerging global consensus that governments should allocate at least 10% of their education budgets to early learning services.

Determination of the funding gap sometimes requires in-depth and separate analysis. This normally entails the costing of the delivery of ECD services and the creation of an enabling environment. Underpinning the costing exercise is information about forecasts of future demand for ECD services, likely changes in prices and the evolution of delivery mechanisms. The decision to do a funding gap analysis should be spelt out in the original scope and objectives.

Interpretation and validation of results

The final activity in this step is to interpret the analysis by discussing the implications of the findings on the delivery of ECD services. There are several ways of interpreting the data. The first method is to do the interpretation after every section, such as the size of spending or composition. The other way is to do the analysis once the core analysis for all sections is completed. Regardless of which method is used, the aim is to conclude the adequacy, sustainability, equity, efficiency and effectiveness of ECD expenditures for each of the key themes discussed above. There are, however, cases where results reveal red flags that should immediately trigger lobbying and advocacy by UNICEF and other partners. Table 8 presents some example red flags.

Table 8. Illustrative examples of red flags and policy implications

Analysis area	Common red flags	Policy implications
Visibility of ECD in government budgets	<ul style="list-style-type: none"> No ECD-specific budget lines or unique budget codes, despite available policies/programs/plans on ECD ECD policies and plans not aligned to identifiable budget line Previously separate ECD budget lines lumped up with other programs Only one or two ECD program areas are included 	<ul style="list-style-type: none"> Difficult to measure and monitor government spending on ECD ECD policies and plans may not be fully implemented High risk of virements and reallocations Compromising the holistic development of children
Size of ECD expenditures	<ul style="list-style-type: none"> The downward trend in per capita allocations in nominal and real terms Funding gap remaining the same or widening over time Irregular pattern, that is, ups and downs in size of expenditures 	<ul style="list-style-type: none"> Deteriorating quality of ECD services Fewer children will be reached with ECD services Likely changes in access and quality of services
Composition of ECD expenditures	<ul style="list-style-type: none"> Skewed allocations in favor of a few line items or programs 	<ul style="list-style-type: none"> Inequity in ECD expenditures Inefficiency and ineffectiveness of expenditures
Budget credibility and execution	<ul style="list-style-type: none"> Consistent over/underperformance of certain budget lines Huge variances between disbursed and expended budgets 	<ul style="list-style-type: none"> Inefficiency, wastage and pilferage of ECD resources Services may not be delivered on time and in the right quality
Funding sources	<ul style="list-style-type: none"> Decreasing share of domestic resources 	<ul style="list-style-type: none"> Sustainability risk and shrinking of fiscal space

Before proceeding with report writing, validation of key findings and recommendations is key. The validation process can be in the form of a multistakeholder workshop, involving all relevant MDAs as well as CSOs and donors involved in the financing and delivery of ECD services. Another way of validation is to circulate an annotated report outline or draft report.

Step 7. Write the report

The final step is putting pen to paper to produce a policy-oriented analytical report. The report should aim to cover the key components of the analysis described above. The analyst also has the option of producing an ECD budget brief. While the ultimate outline depends on the scope and objective of the analysis, the following are the core components of the report:

- ▶ Overview of the ECD context
- ▶ ECD budgeting framework
- ▶ Size of ECD spending
- ▶ Composition of ECD spending
- ▶ Equity of spending on ECD
- ▶ ECD funding sources
- ▶ ECD policy and structural issues

Step 8. Use the evidence

The last step is to ensure that the evidence generated is used to influence policy and budget decisions. To begin with, the analysis should be packaged into a concise report or ECD budget brief. The brief should outline key findings about the size, composition, equity, efficiency and funding as well as concrete recommendations to decision-makers on how public spending on ECD can be improved. The recommendations should be specific, measurable, attainable and timebound. Once the analysis is finalized and recommendations outlined, it is crucial that a concrete follow up plan be developed in consultation with key stakeholders.

There are several ways through which the analysis can be used, including the following:

- ▶ Organize formal dissemination and launch events
- ▶ Host multistakeholder policy dialogues
- ▶ Call for targeted advocacy meetings with lines ministries responsible for specific recommendations as well as the Ministry of Finance
- ▶ Present findings to relevant parliamentary committees
- ▶ Disseminate findings via the media and civil society platforms
- ▶ Engage donors, other UN agencies and international financial institutions

The findings can also be used to inform PFM reforms, like PBB, and strengthen budget transparency as well as data and information systems. For example, a government may see the need to improve budget classification systems and the chart of accounts to make ECD expenditures more visible in public finance processes. With the above in mind, the best use of findings is to provide technical assistance and capacity building to the government. Lastly, the analysis can provide pointers into areas for further research and analysis.

Takeaways

- ▶ The key steps in analyzing government budgets to measure the level of government investments in ECD are not always linear. In some cases, there are overlaps.
- ▶ The ease with which ECD budget analysis is conducted depends on the comprehensiveness of government budget documents.
- ▶ The analysis should not be an end itself. The results should be appropriately interpreted and used to influence decisions via multiple channels.



© UNICEF/UN0591023/Pedro



Part 3. Tips when Doing ECD Budget Analysis

Part 3 highlights some general tips in undertaking ECD budget analysis, from preparation to advocacy.

The tips are not exhaustive, and there is not a one size fits all approach. The process and dynamics will further vary depending on country circumstances. Some of the tips were covered in Part 2, especially with regards to preparation for the analysis.

3.1 Preparing to do the analysis

- ▶ **Have the right skill set in place:** The core team should have a good understanding of PFM concepts and processes and knowledge of the structure and contents of standard budget documents as well as good knowledge of Excel. In addition, someone with knowledge of ECD programs and services is required.
- ▶ **Develop the right research questions:** Before getting started, develop a few research questions to guide the analysis. The questions should be based on a quick scan of topical ECD issues. For example, you may want to find out how much the government has spent on implementing a new policy that establishes early learning classes in every primary school.
- ▶ **Have adequate resources:** This includes resources for meetings, communication, travel (especially when data are not available online), dissemination and advocacy sessions, etc.
- ▶ **Triangulate the information:** To enhance the validity of the analyses and recommendations, it is advisable to compare the findings with other studies on public investments in ECD, where available. This could include budget briefs by other organizations, evaluation reports, sector performance reports, PERs, PETS and other public finance diagnostics focused on social sectors that likely capture some aspects of ECD.
- ▶ **Time the analysis appropriately:** If you are planning to influence the design of the next government budget, aim to finish the analysis before the budget planning process starts to allow time for lobbying and advocacy. This is usually 6-9 months before the start of the fiscal year in your country.
- ▶ **Develop a follow up plan at the onset:** It is important to develop a simple plan on how the evidence generated will be used. UNICEF ESARO's Impact Action Plan Short Guide could be helpful.

3.2 Conducting the analysis

- ▶ **Use simple templates:** Simple Excel templates for capturing data over time have the potential to aid quick data cleaning, organization and analysis.
- ▶ **Ensure consistency:** This includes sources of data, type of data used like allocations or expenditures, and also the language used.
- ▶ **Depth of the analysis:** Go beyond the aggregate analysis of spending trends (such as total ECD spending as a % of total government budget or GDP) to highlight policy, programmatic and budgetary implications on the well-being of children over time.
- ▶ **Adjust for inflation:** When analyzing spending trends over time, the data must be adjusted for inflation and presented in real terms.
- ▶ **Present available spending information by the five components of the Nurturing Care Framework:** When analyzing budgets, pay attention to ECD budget allocations and expenditures across the framework. This is key as inadequate funding in one component has the potential to negatively affect holistic child development.
- ▶ **Conduct trend analysis:** It is important to assess trends over time as well as structural breaks in trends. A 3-5-year period provides a good time frame for analysis.

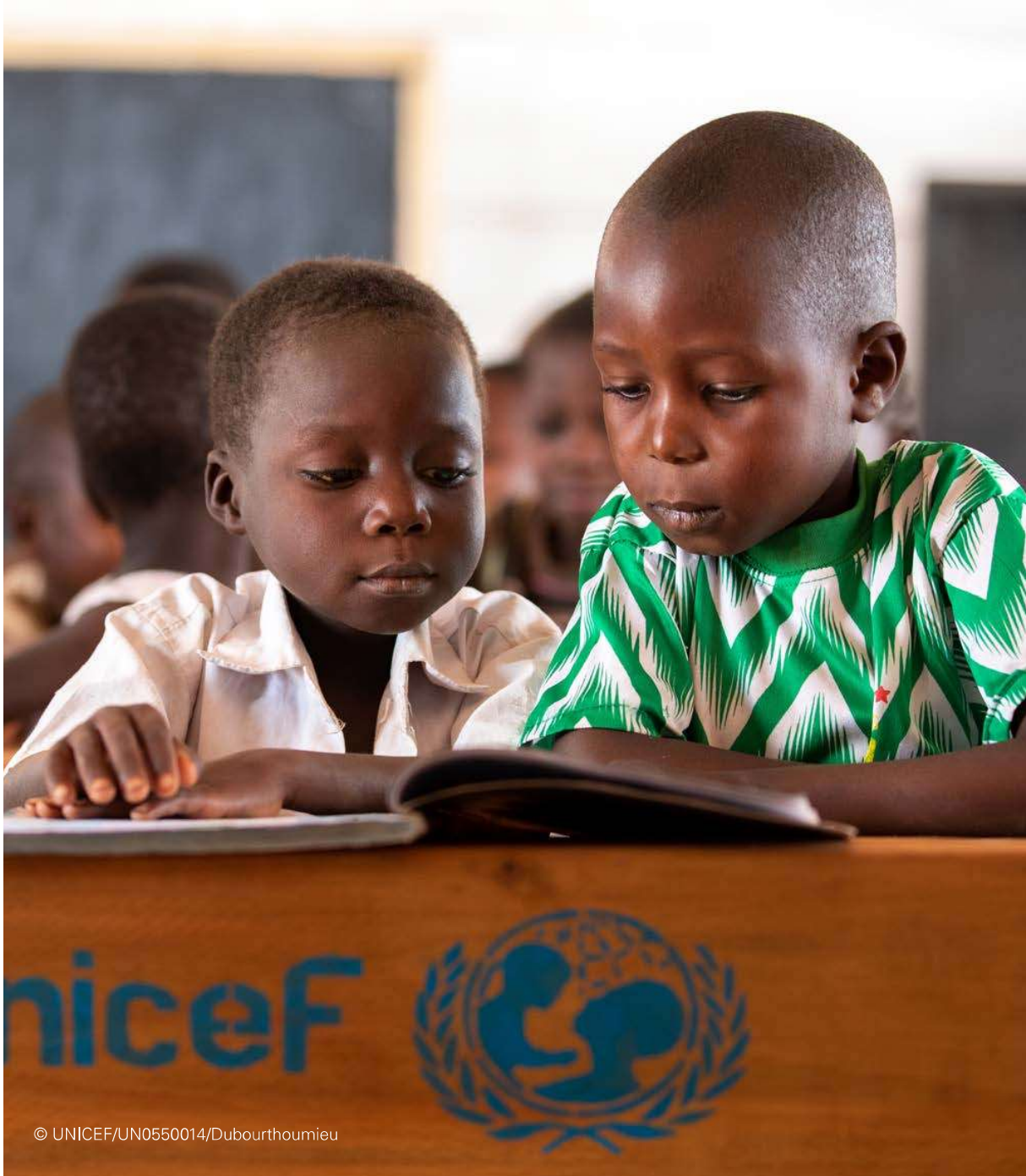
3.3 Interpreting the analysis

- ▶ **Cover core aspects of the analysis:** Comment on core dimensions of budget analysis namely adequacy, allocative efficiency, equity and sustainability of spending at an aggregate but also program and/or sector level.
- ▶ **Benchmark:** Where data is available, compare results with other countries and against global standards (e.g. 10% of the education sector budget for early learning).
- ▶ **Validate and triangulate:** To strengthen your conclusions, triangulate your findings with information from other studies and reports from the government and development partners.
- ▶ **Connect to PFM systems:** When interpreting the findings, it is important to reflect on the implications on PFM systems, including legal, policy and institutional measures that may need to be undertaken to improve the size and quality of ECD spending.
- ▶ **Quantify the funding gap:** Where data are available, comment on the funding gap and potential ways to reduce it. Cost estimates in sector plans can be used to do this.
- ▶ **Investigate the underlying causes of bad performance:** Through quick key informant interviews, find ways of pinpointing problems.
- ▶ **Contextualize:** Your analysis and conclusions should speak to country circumstances, with recommendations linked to ongoing PFM and ECD reforms.



Final Thoughts

We hope that you have learned something about the key steps and considerations in measuring government investments in ECD. Remember, to be effective, budget advocacy and PFM reform initiatives to strengthen ECD service delivery should be informed by robust evidence. Measuring the size, composition, performance and funding of ECD budgets is a sound way to create the evidence base. Good luck!



© UNICEF/UN0550014/Dubourthoumieu

Additional reading

- Camaione, D. and Muchabaiwa, B. (2021). [“Quantifying Heckman: Are Governments in Eastern and Southern Africa Maximizing Returns on Investments in Early Childhood Development?”](#) UNICEF ESARO Social Policy and Early Childhood Development Working Paper.
- Muchabaiwa, B.L. (2021). [A Rapid Assessment of Budget Briefs in Eastern and Southern Africa](#). Nairobi: UNICEF ESARO.
- Muchabaiwa, B.L. (2015). [Module 12: Budget Analysis and Tracking](#). London: Save the Children and the Open University.
- UNICEF (2020). [UNICEF Global Resource Guide on Public Finance for Children in Early Childhood Development](#). New York: UNICEF.
- UNICEF ESARO (2019). [Budget Brief Impact Action Plan: A Short Guide](#). Nairobi: UNICEF ESARO.

For every child
Whoever she is.
Wherever he lives.
Every child deserves a childhood.
A future.
A fair chance.
That's why UNICEF is there.
For each and every child.
Working day in and day out.
In 190 countries and territories.
Reaching the hardest to reach.
The furthest from help.
The most left behind.
The most excluded.
It's why we stay to the end.
And never give up.

unicef 

for every child