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Financing the Foundations: Public Investment in Early Childhood Development in East and Southern Africa

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Acknowledgements

This policy note is based on analysis by Genesis Analytics and UNICEF, building on the methodology and findings of earlier work in UNICEF's 2021 "Quantifying Heckman" study. It was written by Margaret Irving and Sarah Hague, with inputs from UNICEF colleagues Bob Muchabaiwa, Oliver Petrovic, Radhika Mitter and Tawanda Chinembiri. The work also benefited from close collaboration with UNICEF country offices across the region.

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Key Takeaways

- Investments in the early years deliver the highest returns to human capital, yet current financing in Eastern and Southern Africa remains poorly aligned with this evidence.
- Public spending on ECD has increased over the past two decades but remains low, fragmented, and volatile. Domestic budgets dominate expenditure, yet in some countries, many ECD services continue to depend on donor-funded programmes, reflecting both fiscal constraints and weak institutional prioritization.
- Two approaches to estimating ECD financing (global database vs. budget book analysis) yield very different results, underscoring systemic data challenges and weaknesses in budget reporting on early childhood.
- Estimates using global databases record a rapid increase in ECD spending from USD 48 per capita in 2002 to USD 150 in 2014, followed by stagnation. Data show about 85 percent of estimated ECD-related spending is captured under health, mainly for immunisation and maternal and child health.
- Analysis of national budgets books record much lower allocations to ECD, with visible spending in most countries significantly less than USD 10 per child. Early Childhood Education – a programme that can be more easily tracked – averages just 0.11 % of education budgets in the region, far below the UNESCO 10% Tashkent target.
- Even where ECD-related spending is recorded, budget lines for core programmes remain largely invisible, reflecting fragmented institutional responsibilities and weak accountability.
- Strengthening Public Financial Management (PFM) systems, improving expenditure tracking, and embedding ECD within coordinated budget frameworks are essential to translate policy intent into measurable results.

The investment case for Africa: Why early childhood matters

Early childhood development (ECD) is the foundation of human capital formation, influencing learning, health, and productivity across the life course. However, spending patterns in Eastern and Southern Africa suggest that governments are investing after the most critical window for impact has already passed. Recent analyses by UNICEF show that social spending remains heavily skewed toward older children and adults, with limited allocation to the first years of life (UNICEF, 2024a; UNICEF, 2024b). Across Africa, less than 7 percent of child-related public spending benefits children under five, even though the evidence is strongest that investments during this period generate the highest long-term returns (UNICEF, 2024a).

Foundational research by James Heckman and colleagues established that returns to human-capital investment are greatest in early childhood, when cognitive and socio-emotional skills are most malleable (Heckman, 2006; Heckman et al, 2010). Neuroscience confirms this, showing that brain development proceeds most rapidly during the first years of life, laying the groundwork for future learning, health, and behaviour (Shonkoff & Phillips, 2000).

Across Africa, a growing body of evidence reinforces these global findings. In Mauritius, a randomized controlled trial combining nutrition and cognitive stimulation improved neurocognitive functioning and reduced antisocial behaviour and crime in adulthood (Raine et al, 2003). In South Africa, expansion of the Grade R reception year produced measurable learning gains through primary school, particularly in better-resourced schools (Van der Berg et al, 2013). In Uganda, a community-based parenting programme integrating mental health and stimulation support improved child cognition and language development while reducing maternal depression (Singla et al, 2015). Longitudinal evidence from Ethiopia links early-life famine exposure to lower cognitive scores, shorter stature, and weaker labour-market outcomes in adulthood (Dercon & Porter, 2014). In Kenya, school-based deworming improved long-run employment and earnings, highlighting how even low-cost early health interventions can generate lasting human-capital gains (Baird et al, 2016). Together, these studies show how investments in early health, learning, and caregiving yield persistent effects across multiple dimensions of well-being.

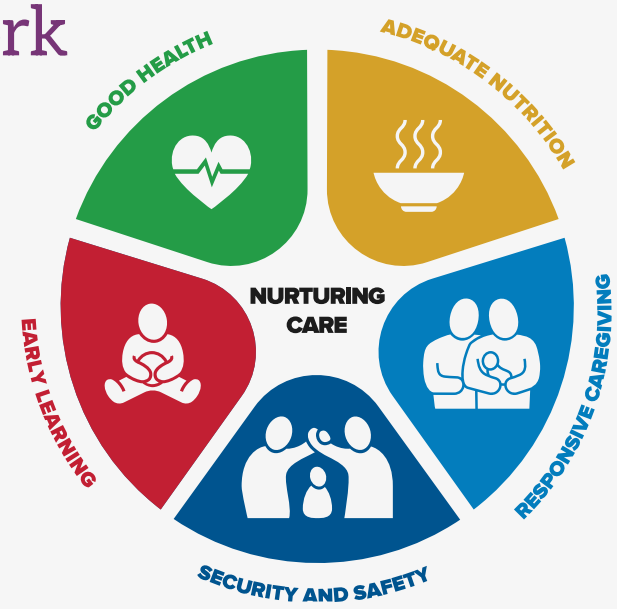
These impacts operate through three main channels:

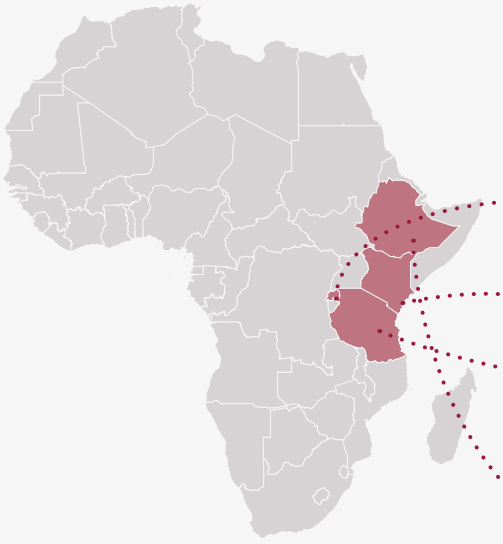
1. Cognitive and socio-emotional development, improving readiness for school and learning outcomes, with long-term knock-in impacts for productivity and economic growth.
2. Reduced long-term fiscal costs, by lowering the need for remedial education, health interventions, and social assistance.
3. Greater equity and intergenerational mobility, as early interventions disproportionately benefit children from poorer or rural households (Britto et al, 2017).

Given this evidence, assessing whether governments are investing adequately and strategically in the early years is critical. The key question is one of allocative efficiency - whether public spending is allocated in ways that generate the greatest long-term social and economic returns. From a human-capital perspective, this means directing resources toward the early years, where investments yield the strongest multiplier effects for both individual outcomes and countries' long-term productivity. Ensuring that budgets follow this life-cycle logic is essential for achieving both effective and equitable public spending. This policy brief therefore examines how financing in Eastern and Southern Africa aligns with these priorities, and whether current ECD expenditure patterns reflect an optimal balance in the early years.

Defining ECD spending: The nurturing care framework

To do so, a clear framework is required to define what constitutes ECD spending. The Nurturing Care Framework (NCF), developed by WHO, UNICEF, and the World Bank, provides such a structure. It identifies five interconnected domains essential for children to survive and thrive: good health, adequate nutrition, responsive caregiving, opportunities for early learning, and safety and protection (WHO, UNICEF, & World Bank, 2018). Each domain cuts across multiple sectors, highlighting that ECD is inherently multisectoral in both design and financing.





Across Eastern and Southern Africa, governments have been adopting integrated ECD strategies consistent with this framework, linking early learning, health, and social protection under shared policy plans. What is unclear is the extent to which these commitments are reflected in public budgets and actual spending. Understanding this relationship between policy ambition and fiscal allocation is essential for determining whether current financing patterns are sufficient and aligned with the region's human capital potential.

- ***Rwanda's** NECDP (2018–2024) integrates health, nutrition, education, sanitation, and social protection within a single strategic plan, creating one of the region's most comprehensive frameworks for coordinated early childhood services.*
- ***Tanzania's** NM-ECDP (2021/22–2025/26) similarly unites multiple sectors through national coordination mechanisms, aligning ECD priorities with the country's nutrition and violence-prevention action plans.*
- ***Ethiopia's** ECD framework links health, education, nutrition, and social protection interventions to provide a cohesive national approach to child well-being.*
- ***Kenya's** 2024 draft integrated ECD policy reinforces inter-ministerial collaboration across education, health, and social protection, aiming to strengthen coordination and improve service delivery for young children.*

Two approaches to ECD financing analysis: Global databases vs. budget books

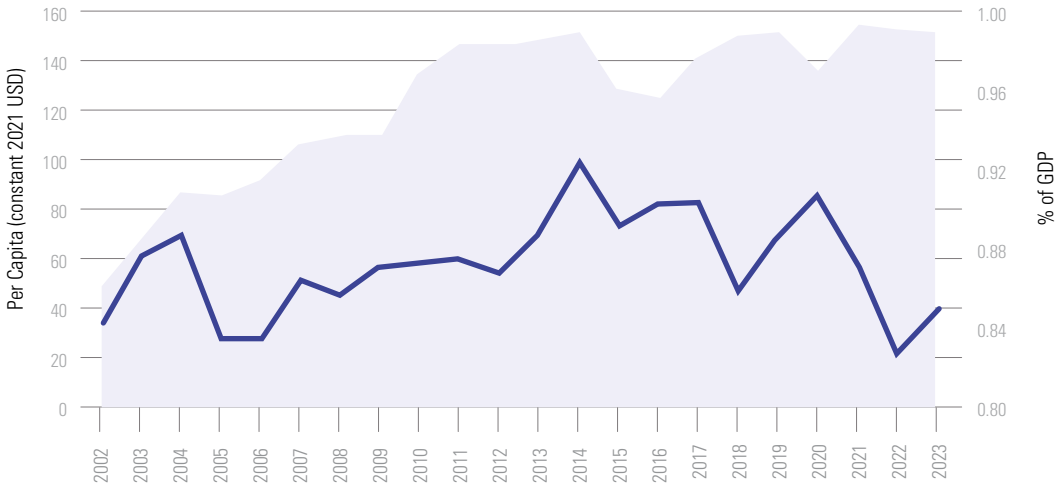
While the NCF provides a clear structure for identifying the key components of ECD, it also brings into focus the difficulty of tracking public expenditure across them. Because ECD spending spans multiple ministries and programmes, it is often fragmented and embedded within broader budget lines. This complexity makes it challenging to assess how much governments actually invest in young children.

Given these constraints, there are two main ways to assess public spending on ECD - using global databases and using national budget information. The global budget databases in the first instance have been used extensively in comparative studies to estimate spending on ECD-related services across countries. These databases, including WHO National Health Accounts, and UNESCO Institute for Statistics (UIS), draw on national reporting from the health and education sectors to infer ECD spending. The estimation approach captures identifiable ECD components, such as pre-primary education and maternal and child health programmes, and in some cases applies population-based estimation to fill gaps where age-specific expenditure data are unavailable. While this approach provides valuable cross-country comparability and long-term trend analysis, it is constrained by its limited sectoral scope and the difficulty of isolating early childhood spending within broader programmes. It also cannot expose important funding gaps in areas such as WASH and responsive caregiving, which fall outside standard international budget reporting , and may be imprecise in contexts where ECD services are not yet fully institutionalized.

Findings from the global database analysis point to a number of patterns in the region over time, alongside cross-country differences in data quality and coverage.

- **Sustained growth followed by stagnation:** Between 2002 and 2014, estimated per-capita ECD spending nearly tripled in real terms, from roughly USD48 to around USD150 (see shaded area in Figure 1). Much of this reflects not only economic growth but also a stronger policy focus on early childhood. Since 2014, however, per-capita spending has plateaued, reflecting fiscal pressures, competing priorities, and rising child populations.

FIGURE 1: Estimated average government expenditure on ECD (0-6 years) in ESA countries, 2002-23, using global databases (in per capita USD, 2021 constant prices and as a % of GDP)



SOURCE: Authors' calculations based on UIS and WHO data
NOTE: ECD expenditure figures are averaged over all children in the relevant age cohort and do not reflect per-beneficiary spending.

- **COVID-19 disruption:** Funding shifts during the pandemic caused a decline in spending in 2020, followed by partial recovery. This volatility suggests that ECD remains vulnerable to fiscal shocks and short-term budget adjustments.

- **Spending concentrated in health:** Using the global budget database method, roughly 85 percent of the ECD-related spending is attributed to the health sector, primarily through immunization programmes and maternal and child health services. This concentration reflects both the genuine scale of health-related investment in the early years but proportionality reflects the structure of the available data, which draw mainly from health and education systems with established international reporting frameworks. As discussed above, the omission of areas like WASH and responsive caregiving does not necessarily indicate low investment but rather underscores the limits of current global data systems, which capture only a partial picture of ECD financing.

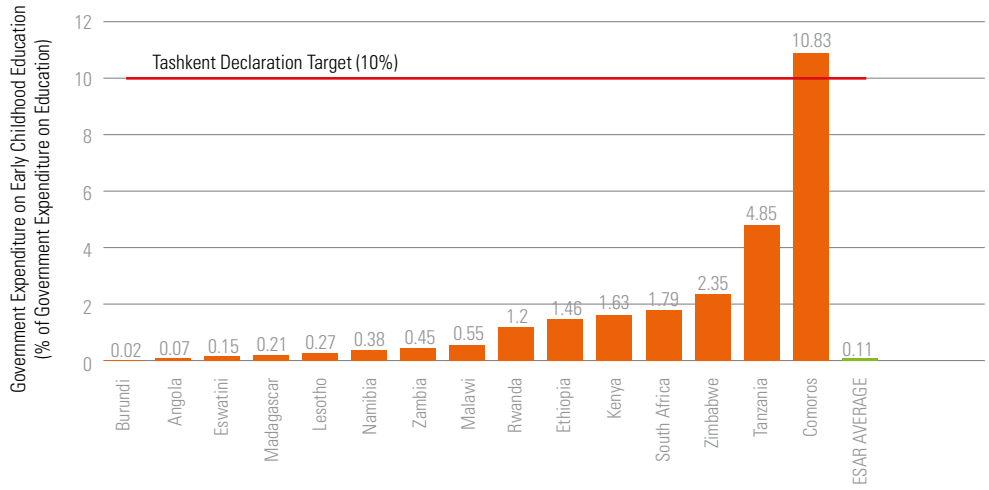
- **Wide disparities across countries:** Spending differences between income groups in the region are stark: low-income countries spend about USD 26 per year per child, lower-middle-income countries about USD 113, and upper-middle-income countries about USD 573, meaning the richest spend more than twenty times than the poorest. This likely reflects both fiscal capacity and policy prioritisation.

Across countries in the analysis, estimated annual spending per child ranged from USD 6 in Madagascar to USD 744 in South Africa.

- **Pre-primary education is underfunded:** According to UIS data, countries allocate on average about 0.11 percent of total education budgets to pre-primary education, far below the 10 percent benchmark set by the 2022 Tashkent Declaration (see Figure 2 below).

For Botswana, Mozambique and Uganda, no UIS data on pre-primary spending was available over the period from 2002 – 2023, highlighting the challenge of gaps and reporting inconsistencies in global data systems.

FIGURE 2: Government expenditure on early childhood education in 2023, or latest available, in select ESA countries (as a % of government expenditure on education)



SOURCE: authors' calculations based on UIS data

Limited donor role: Additional analysis using OECD DAC data show that donor contributions to ECD represent roughly 8 percent of government ECD spending, suggesting that domestic budgets remain the dominant source of ECD financing. However, regional averages may obscure actual dependence on donors in specific contexts; it is also challenging to differentiate between on- vs-off budget aid.

Most aid is directed to LICs and LMICs. In 2023, donor funding to ECD was around USD 18 per child per year in LICs, USD 13 in LMICs, and USD 9 in UMICs.

Historically, most ECD programs in Ethiopia have been funded by donors. Until the launch of the National ECDE Policy framework in 2022, there was no strong policy compelling government allocation of funds to ECD programs, except for sector-specific plans that may include ECD spending not explicitly categorised.

These findings reveal a clear narrative of persistent underinvestment in ECD, while also underscoring the methodological limits of analysing global budget databases. The data are valuable for identifying broad regional trends and for advocacy, but they offer limited visibility into how countries actually structure their budgets or how resources align with the five domains of nurturing care. The result is a picture that is directional rather than definitive: useful for tracking broad trends over time but insufficient for guiding policy or reform at the country level.

To obtain a more grounded understanding of how ECD financing is reflected in government budgets, this study applied a national budget analysis approach across thirteen ESA countries.[1] This involved systematically reviewing national budget books and related financial documents to identify allocations aligned with the five domains of the NCF. Unlike global databases that rely partly on modeled estimates, this approach draws directly from country budget data to track how ECD-related investments are planned and structured. Each line item linked to ECD services was identified, categorized under the relevant NCF domain, and aggregated to assess sectoral and cross-sectoral allocations. Where available, executed expenditures were used; where not, approved allocations served as the reference point.

The analysis aimed to be as comprehensive as possible by including both explicit ECD programmes (such as pre-primary education or child immunization) and implicit investments that contribute to early childhood outcomes, such as child grants or nutrition interventions. To maintain transparency and comparability, entire budget lines were classified as contributing to ECD rather than applying arbitrary proportions.

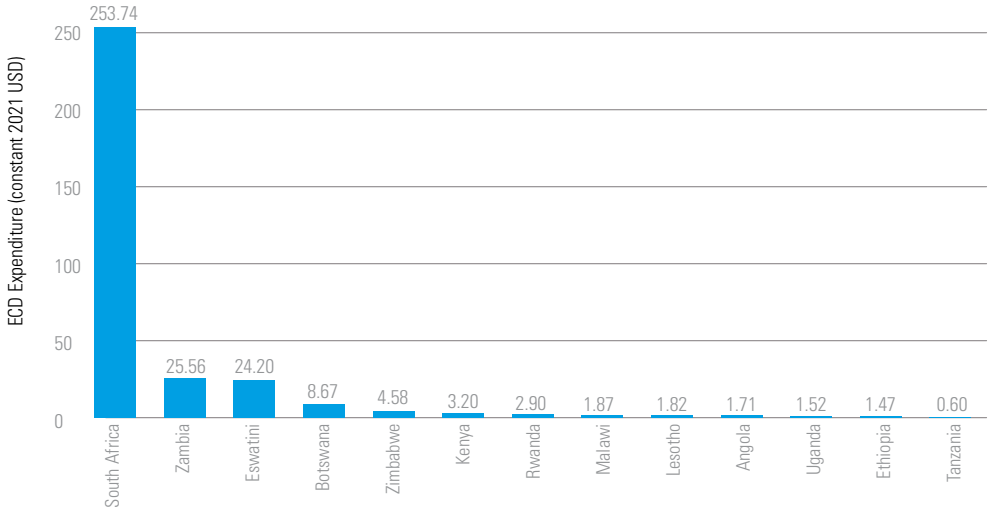
1 The budget analysis covered the five most recent fiscal years available (typically 2017–2022), depending on country data availability. Thirteen countries were included: Angola, Botswana, Ethiopia, Eswatini, Kenya, Lesotho, Malawi, Rwanda, South Africa, Tanzania, Uganda, Zambia, Zimbabwe.

The findings from the national budget analysis reveal a more constrained and uneven picture of ECD financing than suggested by global database estimates, pointing to both underinvestment and limited visibility across key domains.

Lower investment levels overall: Compared to estimates from global databases, ECD allocations were consistently lower when looked at in detail within national budget documents (see Figure 3 below). Excluding South Africa, visible spending on ECD in the ESAR countries in the sample was just USD 6.51 per child, less than 5% of global database figures.

In Angola, estimated ECD expenditure under the global database approach was USD 87 per child, compared with just USD 1.71 in the budget book approach. This wide gap reflects differences in estimation methods, with global accounts capturing modeled national spending on health and education, and budget data recording only identifiable allocations.

Figure 3: ECD budget allocations per child for select ESA countries in 2022 (constant 2021 USD)



SOURCE: data collected from country budget books
NOTE: The unusually high share of ECD-related spending in South Africa reflects the inclusion of the Child Support Grant - while the grant benefits many children under six, the grant covers all children under the age of 18, meaning allocations attributed to ECD in this analysis also cover older children and households. This inflates the apparent share of ECD spending relative to other countries.

Limited tagging and sectoral imbalance: Most national budgets lack dedicated ECD coding or clear ECD budget lines, leaving spending embedded in broad functional categories with little age or service-level disaggregation. As a result, it is difficult to isolate total ECD allocations or assess whether funds reach intended beneficiaries. Unlike the global data, which show ECD spending concentrated in health, the detailed budget analysis reveals that visible allocations are dominated by education and social protection, where pre-primary and child-grant programmes are explicitly budgeted, while much of child health spending remains untagged within wider sectoral envelopes.

Year-on-year patterns reveal instability in sectoral allocations. Angola and Botswana included a distinct nutrition component in earlier years, which vanished from 2022 budgets.

Allocations to sectors also vary over time with countries including Lesotho, Eswatini, Kenya, and Rwanda having allocations that vary in share per NCF domain each year, indicating high volatility and potential shifting priorities.

- **Little funding for early learning:** Despite policy commitments, pre-primary education remained deeply underfunded, aligning with global findings above. The budget book approach suggests that in several countries, it received less than 0.5% of total education spending.

In Zambia, funding for early learning funding saw a drastic reduction of 92.7% from ZMW 98 million in 2018 to ZMW 7.2 million in 2020.

- **Allocation and execution patterns vary widely across countries:** Budget performance and the balance of spending across ECD programmes differ sharply across countries and years. Some governments allocate relatively large budgets to ECD but struggle to implement them fully, while others spend more consistently but concentrate visible resources in a narrower set of programmes.

In Botswana, up to 85 percent of planned ECD allocations went unspent in some years, reflecting persistent planning and procurement bottlenecks.

In South Africa, execution rates were stronger, but spending was concentrated in child grants as well as early learning and Grade R programmes, with limited visible funding for other Nurturing Care domains such as responsive caregiving.

The national budget analysis shows that much ECD-related spending remains difficult to identify within national budget systems. While the NCF provides a clear structure for mapping potential investments, many relevant expenditures, particularly in health, security and caregiving, were invisibly embedded within broader programme budgets. Nutrition spending was often captured within general primary health care allocations, leading to underestimation of ECD investment, while social protection programmes such as child grants were included even though they benefit a wider age group, inflating ECD totals. At the same time, a few countries demonstrate that visibility is possible when ECD programmes are clearly defined through specific budget lines.

Responsive caregiving accounts for 39 percent of identifiable ECD allocations in Angola and 64 percent in Ethiopia. Nutrition represents 20 percent of the visible ECD budget in Rwanda, while social and child protection dominate in South Africa (95 percent), Botswana (76 percent), and Zimbabwe (68 percent).

In countries with devolved governance systems, such as Kenya, South Africa, and Uganda, subnational governments also finance and deliver key ECD services, but their budgets are rarely consolidated or consistently reported. Because most budgets lack both age-specific and subnational disaggregation, it is difficult to determine how much of this spending truly targets the early years. The analysis also highlighted systemic barriers to multisectoral planning and execution, including fragmented mandates, weak coordination, and limited use of programme-based budgeting (PBB).

Nine countries in Eastern and Southern Africa are pursuing PBB reforms, which may help to integrate ECD into sectoral plans and improve transparency. Kenya's PBB model offers greater visibility of ECD allocations compared to Eswatini's line-item system, illustrating how PBB can help align spending with ECD outcomes.

Comparing the two approaches: What do the differences tell us?

The two approaches paint markedly different pictures of ECD financing. The global database approach suggests higher levels of investment concentrated in health, whereas the detailed budget analysis reveals lower overall allocations and limited visibility of ECD within national systems. This divergence reflects both methodological differences and structural weaknesses in how spending on ECD is budgeted and reported.

Sector coverage and scope: The global approach captures identifiable ECD components in education (for example, pre-primary) and ECD-relevant components in health. Coverage of other areas such as caregiving, protection, and WASH is limited because comparable datasets do not exist. The national budget analysis tries to map all five NCF domains from country budget books, but only items that are clearly tagged or described as ECD can be counted, so many items are missed.

Data construction and attribution: The global database approach combines reported line items with modeled extrapolations, assigning an estimated young child share within broad health and education programmes. This likely inflates ECD totals but enables regional comparison. The national budget analysis, by contrast, records only documented line items explicitly tagged to ECD. This produces more conservative figures and reveals how major early-childhood services remain invisible within national accounts.

Health-related ECD spending appears far higher based on global databases, averaging about USD 280 per child versus under USD 2 in national budgets. In Eswatini and Kenya per-child health spending is estimated at USD 203 and USD 91 in the global database approach, compared with just USD 0.70 and USD 1.90 in national budgets.

Level of government and timing: Global datasets mostly reflect standardised national aggregates and help to smooth volatility. National budget analysis depends on the latest country documents, is sensitive to classification changes as evidenced in volatile sectoral allocations. Both methodologies miss subnational spending in devolved systems when it is not consolidated.

The divergence is not only a data issue. It reflects both real differences in how resources are allocated and how information systems capture them. In global databases, spending on child health dominates because age-disaggregated health sector data are routinely reported through international systems, while early learning appears to be smaller as the full spectrum of interventions are not captured. In national budgets, however, early learning and child grants are more visible because they are explicitly coded, whereas much of child health spending remains embedded within broader programmes. The apparent differences between the two approaches therefore stem from both structural allocation patterns and the way budgets are classified and reported.

Strengthening the financing architecture for ECD

Despite growing recognition of ECD's importance, several barriers continue to constrain financing across Eastern and Southern Africa. Institutional responsibilities for ECD remain fragmented across ministries of education, health, gender, and social protection. Without a unified planning and coordination framework, each ministry pursues its own priorities, frequently leading to duplication, inefficiencies, and limited visibility of total investment. Many countries have developed holistic ECD policy frameworks, often with UNICEF's support, but these tend to remain aspirational rather than fiscally grounded. Ministries frequently lack the technical and political capacity to translate these frameworks into costed, budgeted programmes that can be implemented at scale.

Weak public financial management systems further limit the effectiveness of available funds. Delays in fund disbursement, limited subnational accountability, and inefficient administrative processes result in persistent under-execution of approved budgets, undermining service delivery and discouraging future allocations. The lack of consistent expenditure data, especially for areas like responsive caregiving, childcare, and WASH, also prevents systematic tracking and masks critical underinvestment. In countries with devolved governance, the absence of consolidated subnational reporting makes it even more difficult to assess the true level of spending on early childhood.

Addressing these challenges requires a coordinated, prioritized, and phased approach to planning, budgeting, and monitoring:

First, countries should **prioritize clear budget lines for a tractable number of high-impact, cost-effective ECD interventions, and develop costed implementation plans** with realistic financing strategies. Plans should include flexibility for phased rollout, ensuring sustainability and alignment with fiscal space constraints.

Second, **ECD should be institutionalized across national and subnational systems**. This may involve establishing a dedicated ECD budget line as above, or introducing cross-sectoral budget tagging to improve visibility. Tools such as PBBs and Medium-Term Expenditure Frameworks offer potential to help align ECD financing with national development and human capital strategies by improving accountability and predictability.

Third, **strong cross-government coordination and leadership** are essential. Experience from countries such as South Africa and Kenya shows that when planning and financing are anchored in a coordinated structure, often led by a high-level interministerial committee, implementation accelerates and duplication declines.

Fourth, governments and partners should **strengthen accountability and data systems**. Improved budget tagging, expenditure reviews, and fiscal space analyses can help identify financing gaps and opportunities, and track progress. Visibility of both national and subnational spending is critical to inform resource mobilization and to ensure that financing effectively supports services for the youngest children. This must be accompanied by reliable data on inputs and outcomes to link financial allocations with results.

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