



Add Today Multiply Tomorrow:

Building an Investment Case
for Early Childhood Education

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Foreword

Transforming education starts early.

Early Childhood Education (ECE) requires our greater attention and investments because of its enormous benefits for children, parents, and the societies that they live in. With 2030 in sight, this is a crucial time to invest in ECE to realise our commitment to transform education and improve outcomes, especially for vulnerable and marginalised children.

With the call for more investment in ECE, it is understandable that only domestic resources will not cover all needs. Donors and partners will have to support the cause by matching government contributions, providing technical support, and advocating the case for investment into ECE. We advocate for allocating at least 10 per cent of the education budgets for ECE. With the current levels of investment, we need to progressively increase ECE budgets to reach this benchmark if we want to stay intact for achieving SDG 4.2 targets by 2030. Alongside the 10 per cent allocation for ECE, the expansion of overall fiscal space is equally important. This includes promoting innovative financing sources and mechanisms, such as results-based financing (RBF), and channelling existing and emergency

international education funds, such as those of the Global Partnership for Education (GPE), Education Cannot Wait (ECW), and International Finance Facility for Education (IFFEd), to ECE.

This investment case report by UNICEF, Education Commission, and the LEGO Foundation is very timely as it comes at a crucial juncture with education systems recovering from COVID-19 losses and partners committing very recently to the united objective of transforming education through more, equitable and efficient investments. The report not only highlights the state of ECE financing and the need for investment, but it also provides case studies of countries that are making efforts to invest in the early years. The country cases highlight diverse and contextualised initiatives by governments and partners to promote ECE and achieve milestones through increased investments in ECE.

ECE is worth our investments. We need a progressive campaign to promote ECE financing to create better opportunities for millions to cherish their contributions towards societal and individual gains in the years to come. We are trying to play our part to this end and have plans to scale up our efforts in the future. We call on all governments, donors, partners, civil society organisations, teachers, and parents to help us with the cause. Together, we can intelligently and intelligibly enhance investments into ECE and transform education in the early years for a better and brighter future.



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Executive Summary

Early Childhood Education (ECE) has gained more visibility and attracted increased domestic and international financing. More children have access to ECE, and the service delivery is also improving through varied and versatile partners and delivery methods. However, with millions of unreached children, the impact of COVID-19 and humanitarian crises, and alignment to SDG 4.2 targets, there is still a vast gap to ensure equitable access to quality ECE. Addressing this gap requires significant contributions and investments from all stakeholders. This report makes a case for more and smarter investments in ECE by underlining the high returns to investing in ECE, proposing ways to identify and make smarter investments in ECE, sharing examples of innovative financing sources and mechanisms, and highlighting the current and needed status of ECE financing. Key takeaways and recommendations from the report are below:

Key Takeaways

- + Universal ECE is the most effective among the twenty practices for improving learning outcomes (Education Commission, 2016).
- + Providing at least one year of free and compulsory ECE results in a 12-percentage point improvement in primary graduation rates in low- and lower-middle-income countries (Earle et al., 2018).
- + Low-income countries only spend 2 per cent of public education expenditure on ECE and receive 1 per cent of education aid for ECE (UNICEF, 2019).
- + Every dollar spent on ECE results in US\$9.25 on average in benefits. The benefits are higher for upper-middle-income countries than for lower-middle-income countries (Muroga et al., 2020).
- + The benefits of ECE investments are much higher for disadvantaged children. One dollar invested in ECE for disadvantaged children can bring benefits equivalent to US\$17 (Zubairi & Rose, 2017).
- + Countries like Belarus, Bulgaria, Ecuador, Liberia, and Mongolia are spending more than one-fifth of their education budgets on pre-primary education. In these countries, the adjusted net enrolment rate (one year before primary education) has reached 80 per cent or higher.

- + Low- and lower-middle-income countries are spending US\$325 on average annually per student enrolled in public pre-primary education.
- + Low- and lower-middle-income countries are spending a combined 3.3 per cent of their education budgets on pre-primary education on average, while upper-middle- and high-income countries are spending a combined 8.3 per cent of their education budgets on pre-primary education.
- + To achieve SDG 4.2.2 target (all children participating in organised learning one year before the official primary entry age), an additional resource allocation of 0.6 per cent of the education budget is needed for low- and lower-middle-income countries.
- + To achieve the SDG 4.2 targets, the overall expenditure on ECE in low- and lower-middle-income countries should rise from approximately US\$21.7 billion annually in 2022 to an average of US\$48.6 billion during the 2023-2030 period.
- + Several innovative financing sources and delivery mechanisms have been implemented for ECE provision across the globe, such as public-private partnerships, catalytic grants, corporate social responsibility models, earmarked tax, and result-based financing.

Case Studies

One of the unique features of this report is the ECE case studies. These case studies highlight some of the important, effective, and innovative work being done at the country level on ECE. Some key themes emerging from the case studies include the focus on community-based approaches to ECE and a shift towards quality alongside improving access to ECE. The report documents case studies from the following countries:

- + Bhutan (focusing on community-based ECE centres in rural and remote locations)
- + Cambodia (implementing community-based pre-schooling)
- + Jordan (government ownership, increased ECE financing, and quality improvements)
- + Kenya (quality improvements and cost-effective ECE interventions)
- + Rwanda (government ownership and increased funding for ECE)

- + South Africa (focusing on quality improvements and reaching better ECE outcomes)
- + Tanzania (implementing innovative approaches to ECE and ensuring equity through experimenting with satellite ECE schools for hard-to-reach children)
- + Uzbekistan (government ownership and public-private partnerships in ECE).

Way Forward

- + To improve access to quality education in ECE and curtail the COVID-19 learning losses, governments should progressively allocate and expend at least 10 per cent of their education budgets on pre-primary education.
- + For high returns of ECE to be realised, ensuring quality in delivery is essential. For such quality inputs, it is recommended to dedicate at least 25 per cent of recurrent pre-primary budgets to non-salary expenditures, such as teacher training and on-the-job support, curriculum development, teaching and learning materials, and quality assurance mechanisms.
- + Efforts should be made to include equity considerations in ECE financing, for example, through per capita funding mechanisms or dedicated funding for ECE centres serving marginalised communities and children with disabilities.
- + Given the resource constraints, it is imperative to scale up existing innovative financing approaches for ECE and explore untapped innovations in the field. A future opportunity lies in testing and implementing community-based approaches towards ECE and innovations in improving the quality of ECE. Furthermore, innovative financing mechanisms, such as results-based financing, could be used to align all stakeholders around improving learning outcomes.

Investments should follow the evidence, and more efforts should be placed on evidence-gathering around investments with the potential to improve learning outcomes.

- + Both governments and donors should make a firm commitment to track and report expenditures on pre-primary education. This will allow better knowledge of gaps and advocate for effective and equitable allocations and spending on ECE.
- + Sustained partnerships will be vital in determining a closer reach to the SDG 4.2 targets, given the enormity of the challenge. Investing now, more, better, and innovatively will ensure that the world reaches a much higher than the currently projected pre-primary gross enrolment ratio (GER) of 68 per cent by 2030.
- + Increased investment in ECE is not sufficient to ensure improved learning outcomes for children unless funding is spent wisely. Investments should follow the evidence, and more efforts should be placed on evidence-gathering around investments with the potential to improve learning outcomes.





Section 1

Introduction and Background

ECE has become a crucial area for social investment as it attracts wider benefits for young learners, their caregivers, and society. This is a key factor behind the push to invest in ECE. ECE programmes are usually school-based or otherwise institutionalised programmes for a group of children (e.g., centre-based, community-based, and home-based) and include ages 0-2 years and pre-primary education¹.

The provision of universal ECE is considered the most effective practice (among 20 common practices) for improving learning outcomes throughout primary schooling and into secondary education (Education Commission, 2016). If ECE were implemented widely and effectively, it could transform education systems and significantly improve education outcomes in developing countries.

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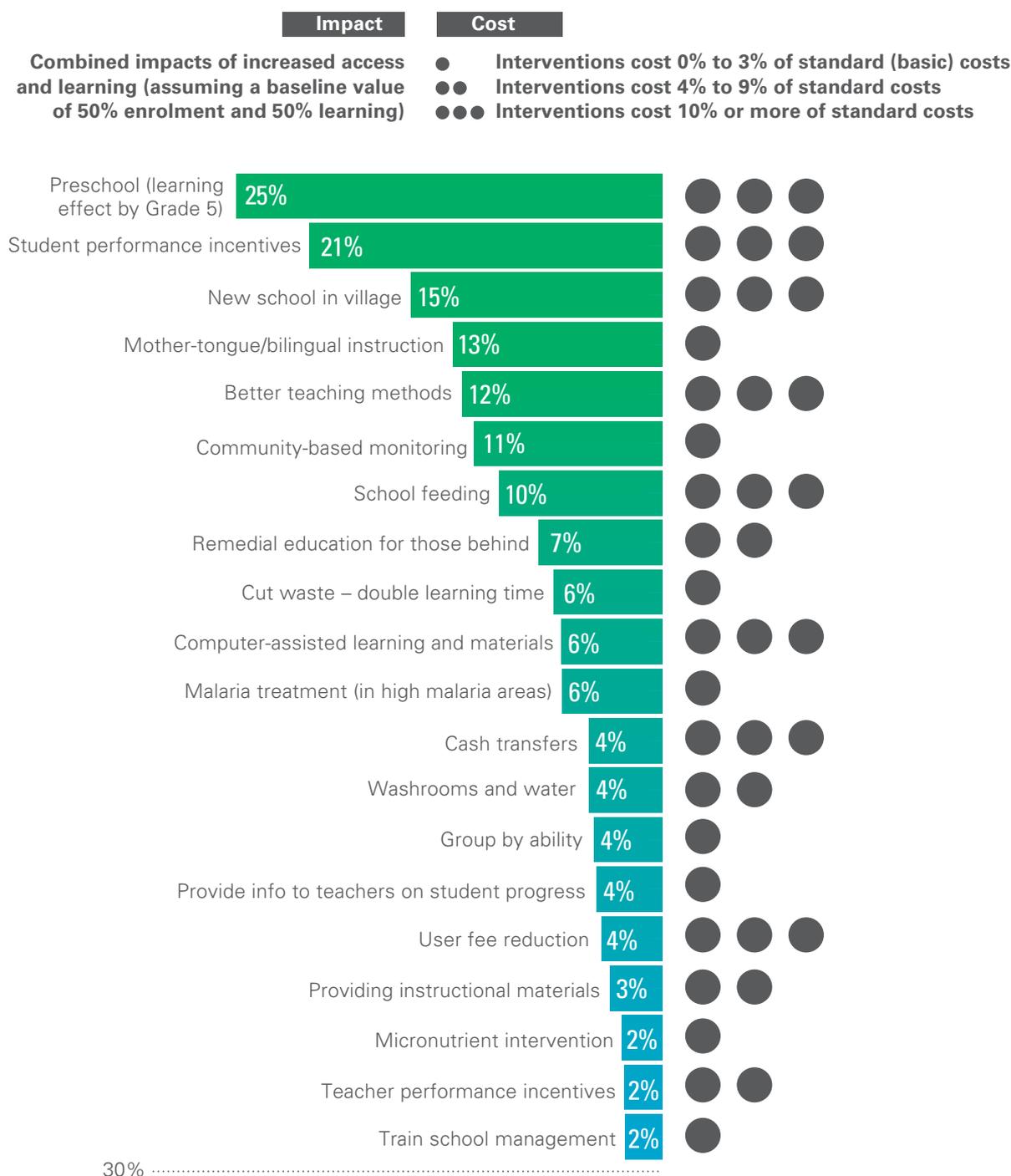
1 <https://uis.unesco.org/node/3674220>

Investments in ECE

Providing at least one year of free and compulsory ECE results in a 12-percentage point improvement in primary completion rates in low- and lower-middle-income countries, controlling for national income and level of urbanisation (Earle et al., 2018). However, low-income countries spend significantly lower

portions of their education budgets on ECE than high-income countries (Zubairi & Rose, 2017). Low-income countries, for example, spend only 2 per cent of public education expenditure on ECE and receive 1 per cent of education aid for ECE (UNICEF, 2019). In comparison, high-income countries spend 10 per cent of their education budgets on ECE (UNICEF, 2019).

FIGURE 1. Effective practices to increase access and learning outcomes, ECE vs other interventions



Source: UNICEF (2019), adjusted from Education Commission (2016)

While countries invest in ECE using domestic resources, the contributions are relatively small, inconsistent, and well below the 10 per cent advocated benchmark for ECE spending (out of the total education budget). Given the resource limitations, there is an urge from governments, local partners, and civil society organisations for the international donor community to prioritise ECE investments. This is critically important if countries are to achieve SDG 4.2 targets by 2030 and even beyond.

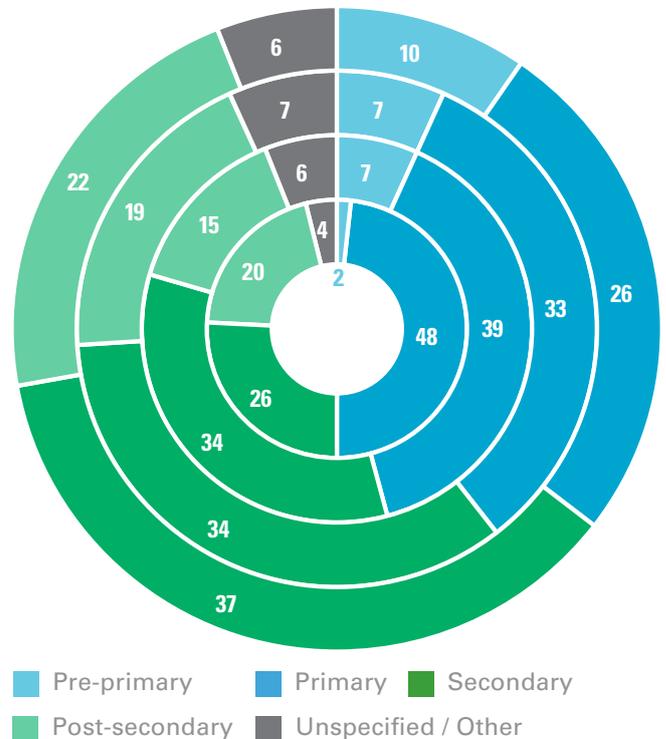
Alongside attracting more financial resources, greater resource allocation and utilisation efficiency are required. For this, there is a need to analyse ECE interventions and implementation modalities from effectiveness and efficiency lenses and prioritise those that ensure the best value for money. In addition, advocacy and additional work are needed to increase the demand for ECE services among parents and communities, especially in underserved communities. The greater demand from beneficiaries is expected to attract more investments from governments and donors.

The Impact of COVID-19 on ECE

COVID-19 has been a critical constraint in achieving SDG 4.2 targets (and SDG 4 targets in general). While the pandemic still exists at varying levels of intensity across the globe, the economic contraction caused by it has resulted in lowered funding for education (World Bank & UNESCO, 2021), including ECE. According to Richter et al. (2021), preschool closure during the first COVID-19 wave risked future earning losses equivalent to around 2.5 per cent of GDP. These losses were more pronounced in low- and lower-middle-income countries. This is primarily because of lower system resilience to shocks like COVID-19, the quality of ECE service delivery and system response in these countries. The global estimate of loss in lifetime earnings due to pre-primary school closures is US\$1.6 trillion (Nugroho et al., 2021).

ECE was most severely hit during COVID-19 because, in most cases, it was left out of digital, remote, or remedial learning plans. Countries gave the least priority to this level for school reopening because of the children’s young age (World Bank, UNESCO, & UNICEF, 2021; UNESCO, UNICEF, World Bank, & OECD, 2021). During the first wave of COVID-19 (between March 2020 and February 2021), schools for around 168 million children across the world were closed (UNICEF, 2021), with

FIGURE 2:
Budgetary Allocation at Different Income and Education Levels



Inner ring = low income
 Second inner ring = lower middle income
 Second outer ring = upper middle income
 Outer ring = high income

Source: Zubairi & Rose (2017)

about 120 million students at the pre-primary level unable to benefit from digital and broadcast remote learning (UNICEF, 2020). An estimated 10.75 million additional children fell “off track” in their early development because of disrupted ECE services, with projected developmental losses concentrated in low- and lower-middle-income countries, which risks further exacerbating within- and between-country inequalities (McCoy et al., 2021). Also, many young children were at risk of experiencing harmful situations whilst at home during the school closures (e.g., parents who did not have childcare options often left young children unattended at home, where they were sometimes exposed to neglect and abuse). As such, many children lost learning and development opportunities and were exposed to harm.

It is important to outline here that in addition to COVID-19 shocks, many countries are currently facing crises like inflation, high-interest rates, currency depreciation etc. These are all converging to produce recession and higher dollar-denominated

debt servicing that might further constrain education budgets. Alongside this, many countries are experiencing the impacts of humanitarian crises - including climate change and conflict - which negatively impact ECE access. In the future, it is essential to invest more in various system strengthening and mitigation measures to guarantee resilient education systems and address learning losses due to shocks like COVID-19.

Why this Report

Even before the COVID-19 pandemic, there was limited progress on ECE access, quality, and financing indicators, especially in low- and middle-income countries. With the pandemic and its aftershocks in sight, achieving the SDG 4.2 targets by 2030 presents a significant challenge. This calls for concerted efforts by governments and donors to prioritise ECE delivery so that the risk of losing the social and economic strides we have made so far can be minimised. This also leads to an opportunity to build better and design resilient education systems that can absorb similar shocks in the future. It provides the impetus for prioritising ECE, considering its positive social and economic impact and the outsized return on investment that ECE can bring to labour markets and children's future earnings.

Despite the above considerations and the impetus, it is a fact that ECE receives a minimal share of domestic financing on education and international donor funding. It is high time we started a progressive campaign to promote ECE financing. This can improve the prospects for millions of children and secure their contributions towards society. We can achieve this if there is enough awareness about the benefits of investing in the early years and the critical need for additional investments.

It is high time we started a progressive campaign to promote ECE financing. This can improve the prospects for millions of children and secure their contributions to society.

This report builds the case for investing in ECE by looking at various cost-effective interventions from the perspective of delivery costs and returns on investment. It also proposes ways to identify and make smarter investments in ECE, sharing examples of innovative financing sources and mechanisms, presenting country case studies on ECE, and highlighting the current and needed status of ECE financing.





Section 2

Cost-benefit of ECE

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By providing children with a strong developmental foundation, investment in early years' education has been proven to have huge benefits. This is primarily due to a reduction in repetition rates throughout the child's educational journey and an increase in the total number of years of education attained. The cost-benefit analysis allows for gauging the economic returns of interventions (Karoly, 2012), and despite standardisation issues, ECE interventions show

returns of up to US\$17 for every dollar invested. Richter et al. (2021) estimate the costs of not making pre-primary programmes universal in terms of forgone lifetime earnings and find considerable losses, particularly in low- and lower-middle-income countries. According to Heckman (2008), the rate of return on investment in human capital is highest in the early years and through preschool programmes.

Variations in Benefits of ECE Investments

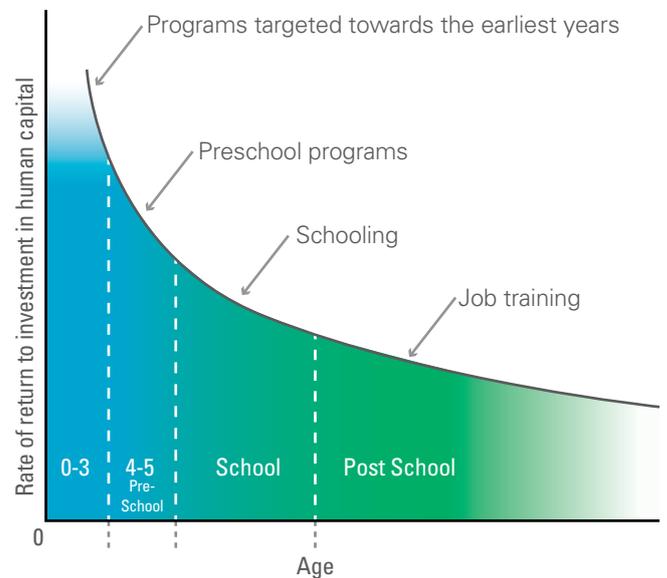
It is acknowledged that there are variations in the scope and extent of benefits of ECE, but overall, the evidence is positive and significant. A recent study by Muroga et al. (2020) estimates that every dollar spent on ECE yields US\$9.25 in benefits, on average. These benefits are higher for upper-middle-income countries (US\$10.86) compared to lower-middle-income countries (US\$6.99). The benefits are also more pronounced for the case of disadvantaged children, as one dollar investment leads to a return of US\$17 (Zubairi & Rose, 2017). This demonstrates the potential of ECE to help reduce educational inequality as well.

One of the most widely cited literature on the benefits and costs of ECE programmes is from the United States, where several longitudinal studies have evaluated these programmes' economic and non-economic benefits (Vandenbroeck et al., 2018). Some of the oldest programmes include the High/Scope Perry Preschool Project, Abecedarian Project, and the Chicago Preschool Project. A recent study, for example, looks at the benefits generated by the Perry Preschool Project. This project aimed at promoting the social mobility of disadvantaged African-American children in Michigan and provides valuable insights into the life-cycle benefits of ECE through late midlife. According to Garcia et al. (2021), each dollar invested in the project generated an estimated US\$14 in benefits.

Evidence from other contexts, such as Jordan, demonstrates the benefits of a higher dose (longer duration) of ECE interventions. It is estimated that providing three years' ECE to Jordanian children will create total benefits of US\$23,881 per child over an accumulated time while they complete their education and enter the labour market (Fink, 2017). Further evidence alludes to an average total educational attainment of 0.7 more schooling years for children with full access to ECE compared with those who do not undergo full three years. From a macro perspective, each dollar invested in ECE in Jordan creates estimated benefits of between US\$9-20.

There is also evidence of higher long-run social return on investment in ECE when the eligibility age is lowered. For example, the LOGSE² reform in Spain in 1990 reduced the eligibility age for publicly subsidised preschool from 4 to 3 years. This significantly contributed to increased enrolment rates in the country, from 8.5 per cent in 1990 to 67 per cent in 2002 (Van Huizen et al., 2016). While the reform also had a short-

FIGURE 3: Returns to a Unit Dollar Invested at Different Ages from the Perspective of the Beginning of Life, Assuming One Dollar Initially Invested at Each Age



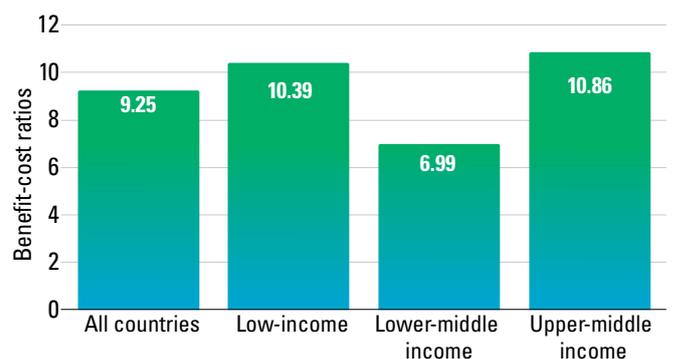
Source: Heckman (2008)

term impact, investment in ECE generated positive net benefits to society in the long run. Van Huizen et al. (2016) tracked the societal benefits and costs for one cohort of three-year-old children. For one academic year, a cost of EUR 546 million generated societal benefits equivalent to EUR2.35 billion, while the net benefits accounted for 0.35 per cent of the GDP.

Universal versus Targeted ECE

Pursuing quality ECE for all children should be our target while reaching out first to the most

FIGURE 4: Benefit-Cost Ratios of Expanding Access to Pre-primary Education by Income Group



Source: Muroga et al. (2020)

2 LOGSE is the Spanish acronym for General Law of the Education System.

disadvantaged populations, where social returns are often the highest. SDG 4.2 calls for at least one year of free pre-primary education. However, given the resource and time limitations, it is essential to ensure an explicit focus on the lowest-income and most vulnerable children. This is covered in more detail in the following sections.

A recent study by Penn Wharton Budget Model (PWBM)³ for the United States highlights the need to target ECE interventions to benefit marginalised and disadvantaged children. This means that rather than universalising public pre-schooling, the children who can afford non-public means of early education should use those modes. To facilitate this argument, the research by PWBM demonstrates that a universal preschool programme (combined with childcare) will lower GDP by 0.2 per cent in 2051. However, a targeted preschool programme (combined with childcare) will increase GDP by 0.1 per cent in 2051.

Structuring ECE Investments for Equitable Benefits

Despite the evidence of positive returns on investing in the early years, the benefits are often not realised equitably. They can exacerbate existing inequalities to the detriment of the more marginalised and vulnerable. For example, due to limited donor support, governments' prioritisation for ECE, and an unsustainable domestic budget stream for ECE, urban areas have benefitted more from the ECE reforms compared with rural and less-developed areas (Rossiter et al., 2018). This notion of inequity can be analysed further through an economic lens. According to Kim et al. (2022), the beneficiaries of economic growth are possibly the greatest beneficiaries of pre-

primary education reform initiated by the government. This is also relevant for the disadvantaged and less economically developed communities as they are more likely to be behind in terms of pre-primary education expansion as well. This highlights the need to ensure that ECE investments are carefully structured to reduce and not exacerbate social and economic inequalities.

By providing children with a strong developmental foundation, investment in early years' education has been proven to have huge benefits.

There has also been a recent interest across countries to impart skills from an early age, including socio-emotional literacy, creativity, critical thinking, digital literacy, financial skills, emerging technical and STEM skills, and social and financial education to advance equity, prepare children for the future, and set the foundations for lifelong learning. The Early Childhood Education for Sustainable Development (ECESD) programme by Aflatoun International, for example, uses multiple pathways to target economically disadvantaged children through both formal and non-formal modalities and is being integrated into the national curriculum of several countries. It combines active learning and learning through play methodologies in ECE to equip children with the necessary social and financial life skills. However, there is still a long way to go regarding acknowledging and demonstrating the power and importance of developing skills in the early years.



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3 <https://knowledge.wharton.upenn.edu/article/weighing-costs-benefits-preschool-childcare-policies/>



Section 3

Cost-Effectiveness of ECE

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The previous section presented the rapidly growing body of evidence on the sizable returns to investments in the early years and the positive returns to investments in ECE. This section builds on this evidence base on the effectiveness of ECE and focuses on where programme effectiveness meets the reality of the resource constraints facing governments, i.e., cost-effectiveness.

This section makes a case for a two-pronged approach to investing in ECE. The first prong relates to an increase in government and donor investments in ECE (see section 1 for details), and the second prong is a reconsideration of allocations across ECE investments guided by cost-effectiveness. Such a shift towards smarter investments necessitates more and better information on the cost-effectiveness of

different ECE models and interventions. The section gives examples of different approaches to examining cost-effectiveness in ECE, highlights findings from these different approaches, shares examples of cost-effective interventions, and puts forward a research agenda to improve the guidance provided to governments for smarter investment decisions.

Examining cost-effectiveness in ECE

Studying a particular ECE programme's cost-effectiveness is challenging as it requires both the robust measurement of programme impact and the collection of high-quality cost data. Moreover, information on the cost-effectiveness of a single programme is less likely to give adequate guidance

for resource allocation decisions. More relevant is a comparison of the cost-effectiveness of different ECE programme options. However, aggregating findings from various cost-effectiveness studies is a highly complicated task due to differences in the measured outcomes and the methods used to calculate costs.

Below is a description of two of the promising approaches for aggregating effectiveness studies with cost information with a comparative framework:

1. **LEARNING ADJUSTED YEARS OF SCHOOLING**

METRIC (LAYS) is a new metric used to report gains from education interventions by combining access and quality and comparing yields to a cross-country standard². Cost-effectiveness is then studied by examining the LAYS per US\$100 spent for a particular intervention, which also allows for cost-effectiveness comparison across interventions. LAYS focuses on education interventions more broadly, but the intervention categories

developed for the 150 studies from 46 countries⁴ also include Early Childhood Development (ECD). Of these ECD interventions, 11 have cost data available. Two of these ECD interventions with cost data identified as the most cost-effective vis-à-vis their outcomes measured by LAYS are shared below (see Box 1).

2. **EARLY YEARS TOOLKIT FOR SCHOOLS** is a user-friendly database developed by the Education Endowment Foundation (EEF) for schools based in the United Kingdom. It supports schools' efforts to improve learning outcomes in their ECE programmes by providing accessible summaries of educational research. Learning outcomes as an outcome are captured by an impact measure called 'additional months' progress'. The measure is based on effect sizes and shows the number of additional months of progress made, on average, by children and young people who received the interventions, compared to similar children and young people who did not. The toolkit also synthesises information on implementation cost

BOX 3.1:

Examples of cost-effective programmes as measured by LAYS per US\$100

**COMMUNITY EXPANSION MODEL:
MOZAMBIQUE COMMUNITY
PRESCHOOLS**

Community preschool models use a community-based approach to expand ECE and incorporate elements such as community school committees, community funding models, and upskilling community members. A community-based preschool expansion model for 3-5-year-old children was implemented in thirty communities in rural Mozambique, reaching 2,000 households (Martinez et al., 2017). Three preschool classes were provided per community as well as teacher training for local community members, learning materials, monthly parenting meetings and a school committee of ten community members. A randomised control trial evaluation showed that children who attended these pre-schools improved their cognitive development scores, communication skills, fine motor skills and socio-emotional skills by 0.33 standard deviations compared to the control group at a cost of US\$36 per child per year. The cost-

effectiveness of this intervention translates into 1.53 LAYS per US\$100 spent.

**FORMAL ECE EXPANSION MODEL:
ARGENTINA PRESCHOOLS**

Formal ECE centres can be expanded by making use of primary school facilities. Argentina expanded quality ECE effectively by investing in additional classroom space in existing primary schools and a new age-appropriate curriculum. The expansion afforded ECE provision for an additional 186,000 preschool children. The new curriculum prioritised communication, mathematical, and socio-emotional skills (Berlinski et al., 2009). The expansion of pre-primary schools showed a positive effect on third-grade language and mathematics test scores and non-cognitive behavioural skills at US\$20.74 per child per year. The additional one year of pre-primary school attendance added 1.4 LAYS per US\$100 spent. Furthermore, the additional year of preschool was more cost-effective in improving learning outcomes compared to reducing class sizes in Grades 1-3 by ten children (Berlinski et al., 2009).

4 <https://nangrist.wixsite.com/lays/the-database>

(on a scale of 0 to 5) and evidence strength (on a scale of 0 to 5). The interventions included in the Early Years Toolkit are divided into 12 categories. By providing easy-to-use information on effectiveness, costs, and strength of evidence for these intervention categories, the toolkit aims to guide decisions on allocating limited financial resources to ensure maximum impact on learning outcomes. The intervention categories that emerge as smart investments, which are low-cost and high-impact, are highlighted below.

Other approaches to cost-effectiveness include single programme evaluations with per-child cost analysis and systematic reviews comparing effect sizes and per-child costs across different programmes. Examples of the former approach put a spotlight on several effective programmes, including book-sharing programmes involving parents (Knauer et al., 2020) and teacher training and instructional support (Ngware et al., 2018). Examples of the latter approach include a meta-regression analysis of a global dataset of 50 studies that examine the effects of centre-based pre-primary education interventions on school participation, cognitive skills, socio-emotional skills, and per-child cost data (Holla et al., 2021).

The types of programmes and intervention categories highlighted in this section are not to be read as a recommended list of cost-effective ECE programmes. Instead, the examples put forward to demonstrate the viability of conducting cost-effectiveness studies in different contexts and for different types of ECE interventions. Relatedly, the two approaches to aggregating and comparing programme cost-effectiveness described in this section show the possibility of conducting comparative cost-effectiveness analysis at the national and global levels.

Context-specific information on the cost-effectiveness of programme options can be a game changer that can guide decision-makers towards smarter investments in ECE. The availability of standardised costing tools, such as the recently developed Childhood Cost Calculator⁵ by the Brookings Institution and the ECE Accelerator Simulation and Costing Model⁶, make the production of this information more possible than ever. What is needed is a proliferation of cost-effectiveness studies to aggregate and compare results - especially for those categories of interventions where the evidence base is relatively thin yet promising, such as play-based learning and self-regulation strategies. This will only be possible through the concerted efforts of governments, donors, implementors, and researchers.

BOX 3.2:

Smart investments as identified by EEF's Early Years Toolkit

Among the 12 intervention categories put forward in the Early Years Toolkit, the following three categories stand out as being relatively lower cost and more effective in improving learning outcomes while having a strong evidence base:

COMMUNICATION AND LANGUAGE

APPROACHES focus on the importance of spoken language and verbal interaction for young children. These approaches include reading aloud to children and discussing books, extending spoken vocabulary by introducing new words in context, and drawing attention to letters and sounds.

EARLY NUMERACY APPROACHES FOCUS

on developing number skills and improving understanding of early mathematical concepts.

Activities in this category might include age-appropriate mathematics games and pretend play to improve children's understanding of quantity and numbers.

EARLY LITERACY APPROACHES focus on skills, knowledge, or understanding related to reading or writing with common activities, including group reading, introduction to different types of writing, exercises to develop letter knowledge, and early phonics. Early literacy approaches may share components with communication and language approaches (see above).

Two other intervention categories worth highlighting are play-based learning and self-regulation strategies, which are relatively lower cost and more effective. However, they do not have a strong evidence base currently.

5 <https://www.brookings.edu/series/costing-early-childhood-development/>

6 <https://www.ece-accelerator.org/resources/early-childhood-accelerator-simulation-model>

Section 4

Equity, Inclusion, and Role of Households in ECE Financing

All children are raised differently, and many of them do not have the resources or support that provide opportunities to learn and prosper. It is, therefore, critical to know the family life, availability of facilities, and household conditions in the early years and throughout a child's educational journey, for that matter. This helps in providing tailored support to young learners in an effective way and facilitates the successful provision of early-year programmes.

Equity and Inclusion in ECE

ECE has excellent returns, but the benefit is amplified for children with disadvantaged backgrounds (OECD, 2020). For example, Muroga et al. (2020) study highlights an average return of US\$9.25 for every dollar spent on ECE. On the other hand, the benefits are estimated at US\$17 per dollar invested in the case of disadvantaged children (Zubairi & Rose, 2017). However, in countries with wide disparities and marginalisation in access

to ECE, a complementary limitation is often seen in domestic funding available for ECE. Governments are, therefore, increasingly relying on private financing for the early years (e.g., in the case of Saudi Arabia) and focusing on community-driven approaches for providing ECE services to disadvantaged communities.

In many countries, ECE provision and resource allocation are often decentralised at the sub-national level to the local governments. However, the mechanisms to track and monitor outcomes could be more robust at this level. Therefore, in many cases, the national governments maintain a sizable check on funding and monitoring of service delivery. For example, the national government funds the pre-primary level in countries like South Africa. Since the launch of Grade R (pre-primary year in the country) in South Africa in 2001, it has been funded by the national government by providing grants to the provinces. The critical aspect of this funding is the equity consideration through the per capita funding mechanism. Similarly, in the case of Indonesia, dedicated funding is provided to ECE centres that serve marginalised communities and children with disabilities.

Households Contributions to ECE

Households in many contexts must pay for ECE. In some cases, this is a nominal contribution to school expenses, and in other cases, this includes paying for school meals and contributing to extra childcare time in schools. This has a direct impact on ECE access and continuity of education. Parents unable to afford these

costs are often forced to withdraw their children from pre-schools. This also impacts child development and future earnings and furthers inter-generational poverty within such families.

The case of Ethiopia seems relevant as there was a significant increase in ECE enrolment, with gross enrolment in ECE increasing from around 5 per cent in 2010 to 50 per cent in 2016 after the initiation of the fee-free O-class. The country experienced an ECE enrolment surge from 0.5 million in 2011 to 4 million in 2016. Despite government investment, this increase was also supported by significant in-kind contributions from parents, as there was no central budget for O-class and donor funding was also limited (Neuman & Powers, 2021). Such situations create not only sustainability challenges but also negatively impact households that are unable to pay for such out-of-pocket expenses. In many countries, especially those highly dependent on the private sector for ECE services, there is a high burden falling on households. For example, in The Gambia, 67 per cent of total spending on ECE is made by families (Coury, 2021).

ECE during Crises and Emergencies

Around one-quarter of pre-primary-aged children live in countries facing emergencies, and one-third of children in emergency contexts are enrolled in pre-primary education (UNICEF, 2019). Of the funds allocated to crisis-affected countries, ECE receives less than 1 per cent (Moving Minds Alliance, 2020), resulting in poor access to early learning opportunities for children affected by crises and emergencies. One of the primary reasons for this lack of investment is the predominant focus on primary and secondary levels in emergency contexts, while ECE has remained primarily neglected (Ponguta et al., 2022).

Equitable financing for early years education and addressing marginalisation and inclusion issues in ECE is a complex yet worthwhile undertaking. Undoubtedly, the available financing for ECE highly lags behind the needs. To address the funding constraints, many governments require parents to bridge the costs of educating their child in the early years, like fee contributions, school meals etc. This brings severe considerations for parents who are already financially constrained and, in many cases, prompts a withdrawal from school. To make ECE accessible for everyone, finding additional resources to invest in the early years through domestic financing and donor funding, bringing in efficiencies, reducing household contributions, and finding innovative alternate ECE modalities is essential.





Section 5

ECE Financing to Achieve SDG 4.2 Targets

According to the UIS database, the GER at the pre-primary level has increased from 33 per cent in 2000 to 61 per cent in 2020. In 2019, UNESCO Institute for Statistics (UIS) and the Global Education Monitoring (GEM) Report undertook new projections for SDG 4.2. According to the report, the share of children a year younger than the official primary school entry age attending pre-primary education or any other form of organised learning is 69 per cent. It is projected to reach 82 per cent in 2030. This means that 18 per cent of children still would not attend pre-primary education in 2030.

State of ECE Financing

To meet SDG 4.2 targets by 2030, a significant investment is needed from governments, development partners, and the private sector. Ideally, each country should aim to allocate and spend at least 10 per cent of its education budget on pre-primary education. However, given the current financing state, it is acknowledged that many countries will need to find additional domestic resources and external financing to bridge the gap. Also, many countries will progressively achieve the 10 per cent spending benchmark over the years.

There is a considerable variation in the percentage allocation for pre-primary education. On the one hand, some countries spend a meagre portion of their education budgets on pre-primary education. On the other side of the spectrum, countries like Belarus, Bulgaria, Ecuador, Liberia, and Mongolia are spending more than 20 per cent of their education budgets on pre-primary education. It is important to note that pre-primary education indicators have progressed well over the years in all these five countries. For example, the Adjusted Net Enrolment Rate (ANER) one year before primary in all these countries is higher than 78 per cent.

It is also important to point out that ECE data in general, and ECE financing data in specific, remains unavailable for many countries. For these countries, ECE data is either not collected at the national or sub-national levels or sometimes, it is clubbed with primary education. This has significant implications for understanding the state of ECE and its financing, identifying any efficiency and effectiveness challenges, strengthening accountability, and attracting committed support from partners and stakeholders.

The countries allocating lower portions of their education budgets to pre-primary education are also lagging behind SDG 4.2 indicators. However, the gap can be filled with commitment and progressive allocations towards pre-primary education. For example, Comoros is currently spending around 7 per cent of its education budget on pre-primary education, which is commendable. However, there are children of pre-primary age in the country who are out of school. To enrol all out-of-school children (one year before primary education), if the country allocation is increased by three percentage points⁷ (to reach 10 per cent benchmark) for the next three years, all these out-of-school children can be provided pre-primary education.

It is important to reiterate that countries are at different levels regarding ECE financing and have different funding requirements to bridge the existing gaps. In the case of India, for example, the current ECE allocation of 2.2 per cent of the education budget can be increased to 2.4 per cent to enrol all out-of-school children (one year before primary education). However, this does not mean the allocations are capped at this level. After the milestone of enrolling these out-of-school children is achieved, the next target should be ensuring access for all pre-primary-

age children. For this, the ECE allocation should be further enhanced by 1.4 percentage points to reach 3.8 per cent of the education budget. The allocation can be progressively increased to 10 per cent in the coming years to achieve the SDG 4.2 targets (including quality and inclusion at the ECE level).

To ensure quality ECE delivery, enhance student learning, and improve school readiness, additional investments would be needed to achieve SDG 4.2.2.

It is also essential to consider the inequitable allocation of ECE budgets even within the countries. For example, in India, the overall average ECE allocation per child is INR8,297 but varies across states from INR3,792 in Meghalaya to INR34,758 in Himachal Pradesh (Save the Children & CGBA, 2021).

ECE Costing and Financing

According to analyses undertaken for this report using the UIS data, low-income and lower-middle-income countries are spending US\$325 per student enrolled in public pre-primary education per year on average⁸. The unit cost of delivering ECE varies per country based on various factors. These include, but are not limited to, the current state of ECE systems in the country, teacher and caregiver salary structures, implementation and operational costs per unit, and additional support mechanisms attached to ECE (daycare, meals etc.).

Low-income and lower-middle-income countries spend an average of 3.3 per cent of their education budgets on pre-primary education. To achieve SDG 4.2.2 (enrolling all OOSC 1-year before primary), an additional resource allocation of 0.6 per cent of the education budget is needed. To ensure access for all pre-primary age children⁹, an additional resource allocation of 3 per cent of the education budget is required. This will provide access to the entire pre-primary age population. However, to ensure quality ECE delivery, enhance student learning, and improve school readiness, additional investments would be needed that go beyond the percentages mentioned above.

7 This is calculated by multiplying the per student pre-primary cost in Comoros by the number of OOSC children (1 year before primary) and comparing it with the current pre-primary budget allocation.

8 Based on available country-level data in the UIS database accessed on 8 August 2022.

9 This refers to all children of pre-primary age rather than just one-year before primary age children.



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To achieve the SDG 4.2 targets, the overall expenditure on ECE in low-income and lower-middle-income countries should rise from approximately US\$21.7 billion annually in 2022 to an average of US\$48.6 billion during the 2023-2030 period¹⁰. According to the GEM model, the financing gap for the pre-primary level is currently US\$8 billion, which will increase to US\$17 billion annually between 2023 and 2030. External funding will be needed if domestic resources do not fill the critical financing gaps.

ECE Costing Tools

While we see that huge efforts are needed at the country level to achieve SDG 4.2 targets, it is essential to know what resources (human, infrastructure, and financial) are needed to achieve these targets. This allows the countries to know the requirements and plan their way forward by mobilising adequate domestic and partner financing. Costing and simulation models help understand the resources at hand, financing gaps and plan how to deliver quality ECE services.

Several costing and simulation models for ECE are used in different contexts and developed during different periods. Gustafsson-Wright and Boggild-Jones (2018) discuss these models in detail. Some well-known models include the instrument developed by the UNICEF regional office in West and Central

Africa, focusing on pre-primary education and covering parental programmes. The Caribbean Community (CARICOM) costing model incorporates daycare centres, home visiting programmes, and special education services alongside regular preschools. Another cost estimation model is the one developed by Van Ravens & Aggio (2008) called the Interactive Cost Estimation Model (ICEM). ICEM focuses on early childhood care and education. USAID's cost calculator costs early-grade reading. The Brookings Institution and World Bank developed a Standardized ECD Costing Tool (SECT) and, more recently, the Childhood Cost Calculator. However, the focus of these tools extends beyond ECE and includes ECD.

More recently, UNICEF has added the ECE Accelerator Simulation Model to the collection. The Accelerator Model uses an MS-Excel-based platform to estimate infrastructure, human, and financial resources required for education sector planning and facilitating ECE subsector planning processes. This model is easy to contextualise as per the country's needs and is currently being used by several countries to support their education and ECE sector planning processes.

Whilst all the above-listed simulation and costing models operate differently and may also provide slightly different results, the underlying inference is the insufficient funding for ECE, especially in view of achieving the SDG 4.2 targets.

¹⁰ The values quoted in this paragraph are based on UNESCO GEM SDG costing model. Costs are in 2012 constant US\$.



Section 6

Innovative Financing for ECE

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ECE has a massive space for innovative financing, both in sources of finance (e.g., earmarked taxes and corporate social responsibility etc.) and delivery mechanisms (e.g., results-based financing (RBF) and multilateral partnerships etc.). Many of these methods are already in use, and the task is to scale up these measures without sacrificing quality or outcomes. Emerging trends in innovative financing for education point towards a shift from innovative sources of finance and towards innovative delivery mechanisms for positive results, i.e., results-based financing (Joynes, 2019).

On the other hand, other innovative financing methods still need to be utilised in ECE and should be considered as we move forward. These approaches include using crypto fundraising and climate finance and tying debt swaps for education to ECE programming and interventions. This section provides an overview of ECE's current and potential innovative financing mechanisms.

Current State of Innovative Financing for ECE

A common challenge for public education projects is to get resources on the ground and adequately allocate them to the areas and schools that need them the most. The concept of Public-Private Partnerships (PPPs) can serve as a solution to this by utilising the local expertise of private entities to conduct situational analyses and then act as implementing partners with more localised experience and knowledge and supplied with public capital. This localised partnership ensures that resources and money get to the neediest areas, as governments tend to be somewhat disconnected from local issues, particularly centralised ones.

Although PPPs can be viewed as traditional sources of financing, what sets some cases apart is when the intervention elicits direct community participation and views it as an integral part of the initiative. This was

the case with Eritrea in the form of a focused grant from the GPE¹¹. A similar case is when new initiatives are established directly from the ECE policies or enacted projects. This is the case with Indonesia¹² (through block grants) and Thailand¹³ (setting up the Equitable Education Association).

Another innovative source of financing is through Corporate Social Responsibility (CSR), as demonstrated by Hemas Holdings' implementation of the Piyawara project, which establishes and funds pre-schools in Sri Lanka (UNESCO, 2019). CSR is when a corporation or company engages in or supports projects as a charity. CSR is often undertaken as part of a business strategy to gain support from employees and consumers by incorporating non-economic factors into their competitive edge in the market and supporting various causes to better shape their current or future workforce. Hence, many companies are driven to support education initiatives when pursuing a CSR strategy (Lindgreen & Swaen, 2010).

Governments can play an active role in channelling the "social responsibility" to ECE. For example, a 3 per cent payroll tax in Colombia is collected from all public and private institutions to fund the Colombian Institute for Family Welfare (Putcha et al., 2016). Also, the government of Fiji has launched the Adopt-a-Preschool initiative to allow anyone around the world (including charity groups, companies, and individuals) to invest in ECE (UNESCO, 2019).

Of the various innovative financing mechanisms used in ECE, RBF is notable for its particular focus on results. RBF encompasses a broad range of financing approaches, including the widely utilised performance-based loans and grants to governments (e.g., World Bank's Program-for-Results (PforR) financing instrument and GPE variable tranche funding), incentives to teachers through performance pay systems¹⁴ or parents through conditional cash transfer programmes¹⁵, as well as more innovative approaches that tie funding to beneficiary outcomes, such as impact bonds and outcomes funds. RBF incentivises all partners to achieve the pre-agreed and independently verified results. Doing so aims to improve performance

management, promote results-monitoring and evaluation, and decrease overall investment risk (Gustafsson-Wright & Gardiner, 2016b).

For innovative financing mechanisms (see Table 1 for a summary) to be used successfully in different contexts, their design and implementation must consider the particular economic, political, and social conditions. It is also crucial that equity is kept at the forefront while using innovative financing sources and mechanisms.

Innovative Financing with potential in ECE

There is also potential for other sources of innovative financing that have not yet been utilised for ECE initiatives but have been successful for other cases in and outside the education sector. For example,

- + In 2021, the Giga Initiative raised US\$550,000 for school connectivity through the sale of artwork in the form of non-fungible tokens (NFTs) (UNICEF, 2022). Future NFT fundraisers can be enacted to support other education-related initiatives, including for ECE.
- + In Bangladesh, climate finance has been used to build climate-resilient infrastructure for primary schools, and in Turkey, to strengthen the education system's capacity for e-learning¹⁶. The need for less vulnerable school infrastructure should apply to all educational levels, including ECE.
- + Finally, debt swaps and debt buy-downs have long been used for education development but are yet to be utilised to support ECE programming (UNESCO, 2011). Although this type of debt elimination is generally sought after and used for more general education development, it can be channelled to ECE initiatives once the money is received.

It is also essential to highlight the currently under-utilized potential of innovative financing sources and mechanisms to increase and improve investments in ECE and encourage stakeholders to collaborate to use these sources and mechanisms effectively.

11 For more information, visit the GPE blog on the link: <https://www.globalpartnership.org/blog/eritrea-building-new-foundation-its-education-system-gpe-support>

12 Nakajima (2020)

13 UNESCO (2019)

14 Mbiti et al. (2018)

15 For more information, visit <https://www.unicef.org/turkiye/en/conditional-cash-transfer-education-ccte-programme>

16 For more information on climate finance in both Bangladesh and Turkey, please visit <https://blogs.worldbank.org/climatechange/education-and-climate-change-are-we-addressing-linkages>

TABLE 1.
Major Innovative Financing Mechanisms for ECE

INNOVATIVE FINANCE MECHANISM	POTENTIAL BENEFITS	POTENTIAL DRAWBACKS	EXAMPLE CASE(S)
Block Grants – allocation of funding by the government (national or local) to schools based on student enrolment	+ Consolidates categorical funding and promotes flexibility in planning and decision-making at the school level	+ Can incentivize schools to exaggerate enrolment numbers for more funding + Equity considerations are sometimes ignored in grant disbursement	Global Partnership for Education (GPE) Block Grant (Lao PDR)
Conditional Cash Transfer (CCT) – families receive a cash transfer if they fulfil certain conditions, such as ensuring their children attend a school or health visits	+ Documented success in increasing enrolment numbers and decreasing dropout rates when transfers are contingent on school attendance	+ Requires significant government investment + Has limited evidence in improving student learning outcomes	Bolsa Familia (Brazil) Oportunidades (Mexico)
Corporate Social Responsibility (CSR) – the concept that companies and corporations should give back to their community through funding or implementation of projects	+ Costs the government nothing + Improves the public image of corporations	+ Relies on the willingness and generosity of corporations	Piyawara Project (Sri Lanka)
Earmarked Taxes – a tax is implemented and allotted to public services, e.g., sin taxes on goods or payroll taxes on corporations	+ Cost-effective measure as implementing additional taxes does not cost the government anything	+ Unreliable and uncertain source of funding as consumption patterns or labour market patterns fluctuate often	Sin tax (The Philippines) ECD Payroll tax (Colombia)
Impact Bond – a form of results-based financing that incorporates the use of private funding from investors to cover the upfront capital required for a provider to set up and deliver a service	+ Focuses on outcomes and drives performance management and evaluation from all involved parties + Reduced risk for the outcome funder	+ Requires measurable outcomes within a timeframe that is suitable for outcome funder + Can be costly and time-consuming to design and implement due to complexity and multiplicity of partners and funders	Quality Education India DIB (India) Impact Bond ECD Innovation Fund (South Africa)
Outcome Funds – a type of RBF that pools funding from one or more funders and contracts multiple implementers to achieve a set of pre-defined results. Payments from the fund only occur when those results are achieved. It builds on the precedent of impact bonds but contracts multiple implementers under a common funding framework	+ Focuses on outcomes and drives performance management + Reduced risk for the outcome funder + Increased scale reduces transaction costs associated with design and implementation	+ Requires measurable outcomes within a timeframe that is suitable for outcome funder + Can be costly and time-consuming to design and implement due to complexity and multiplicity of partners and funders	Education Innovation Challenge (Sierra Leone)
Public-Private Partnership (PPP) – a form of partnership model that involves the government collaborating with a private entity in a mutually beneficial partnership to provide services for the public	+ Brings localized and on-the-ground experience to service delivery + Accounts for equity in service delivery + Creates competition in the private sector which can improve quality	+ Requires a well-functioning regulatory framework and capacity for monitoring and evaluation + Sometimes does not account for equity in service provision	Education Equity Fund (Thailand)
Vouchers – a form of PPP where a voucher is given to generally low-income or marginalized students and represents a monetary value so that once the student is enrolled in a school, the school is reimbursed the cost of fees from the government	+ Improves access and equity by enabling all children to receive affordable ECE + Strengthens parental choice + Can create competition among schools to improve quality and attract more students	+ Requires significant government investment + Can cause private schools to deny access to specific groups or charge top-up fees for students using vouchers	Kindergarten vouchers (Hong Kong)

Section 7

Country Case Studies

Countries across the globe have used traditional and innovative modes of ECE provision to improve access to quality early learning experiences for children. Such experiences provide rich learnings for other countries to replicate, move forward, and sometimes take strides with caution. This section outlines some successful ECE country cases showing positive shifts in ECE outputs and outcomes through more and better investments in the early years.

BHUTAN

Bhutan has institutionalised and invested significantly in ECCD over the last decade. Since the 9th Five-Year Plan (2002-2007), ECCD has become a state-supported and led program rather than a private sector-focused intervention. There has been a consistent increase in the enrolment of children aged 3-5 years in early learning programs. This is mainly because the centre-based ECE/D program prioritises community-based centres in rural and remote locations. These government-funded centres have grown significantly since 2010, with about 30-50 centres added each year. Because of this, Bhutan has made noteworthy progress in ECCD participation rates.

In Bhutan, the ECCD programme is provided through a mix of centre-based community centres funded by the government and private schools. In 2021, there were 492 ECCD centres (including public and private)¹⁷

The Chief Programme Officer, ECCD & SEN Division, MoE, Mr. Sherab Phuntshok, said Bhutan's commitment to education, particularly for the youngest learners, is commendable, which will improve quality education by ensuring that more children receive a solid foundation for their schooling and lifelong development.



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in the country with an enrolment of 10,662 children (Annual Education Statistics, 2021). From 2016 to 2021, the number of publicly funded preschool institutions in Bhutan increased from 231 to 432 centres (Annual Education Statistics, 2021). While significant, the support from the private sector has not grown at the same pace as the government community centres, which are increasing by around 30-50 centres per year. The centre-based program uses the existing under-utilized structures (like health clinics, community halls, empty classrooms etc.) as public ECE/D centres. This results in improved program sustainability as new structures are resource heavy. In comparison with regular ECE centres, these community centres are saving around US\$9,000 per centre annually.

17 432 public centres and 60 private centres.

While COVID-19 had an unprecedented impact on schooling and learning losses, it has also created some opportunities for improving ECCD in Bhutan. COVID-19 has highlighted the importance of child protection and psycho-social support in the early years. Plans are underway to support these areas in the upcoming years. Additionally, the nationwide rollout of parental education through ECE centres has been a significant success leading to improved child developmental outcomes. This program has opened that gateway to community-based parenting on a national scale.

In recent years, the ECE participation rates have significantly increased in Bhutan. According to the Ministry of Education's Annual Statistics, the GER (one year before the official primary entry age) has increased from 23.4 per cent in 2018 to 31.81 per cent in 2021. Although low in aggregate terms, the Ministry of Education aims to increase participation in ECCD programmes and services to half of all children aged 3 to 5 by 2024 and 100 per cent coverage by 2030.

Government leadership and ownership of investing in the early years have significantly improved ECE indicators. Also, rather than allocating greater resources for establishing new ECE structures, the government has focused on using the existing spaces for creating community-based centres. This has resulted in

reaching out to even the marginalised and vulnerable communities in remote rural areas. The government plans to further strengthen community-based ECE by establishing more centres each year. Parenting education and increased focus on child protection and psycho-social support in the early years are higher on the government's agenda moving forward.

The successful implementation of ECE in Bhutan using community schooling as a facilitating vehicle has several lessons for other countries. A few of these lessons are outlined below.

- + The government's leadership in building ECCD systems, diversifying the interventions and learning from other contexts can bring about significant improvements in ECCD outcomes.
- + Using community centres for ECE is a good mechanism to improve ECCD service delivery. These centres allow reaching out to neglected communities and are less resource intensive.
- + Rather than targeting ambitious targets, planning the way forward and recognising system gaps whilst resource limitations is essential. The approach taken by Bhutan is reflective of this as slowly, but steadily access to ECCD is improving in the country.

CAMBODIA

Cambodia has improved access to and quality of ECE over the years. The country has witnessed higher levels of participation in the early years, and the ECE service delivery has significantly improved. The community-based programmes for early years have proven to be game-changing as community-based pre-schools have expanded from 780 in 2006 to 3,100 in 2022. Because of these joint efforts by governments, development partners, and the private sector, the pre-primary enrolment in 2022 has grown by 154 per cent since 2008¹⁸. Cambodia has witnessed a massive improvement in ECE participation rates as ANER (one year before the official primary entry age) has increased from 41.89 per cent in 2015 to 70.47 per cent in 2020, according to UNESCO Institute for Statistics data. Although low in aggregate terms, the GER at the pre-primary level has also improved from 18.01 per cent in 2015 to 27.33 per cent in 2020.

In Cambodia, ECE services are available to all children from birth to six years of age. The country prioritises home-based care programmes and community pre-schooling. In 2022, ECE will be offered through 211 dedicated public preschools, and preschool classes are available in 58 per cent of the country's 7,304 primary schools. In addition, the pre-schoolers are also engaged through community-based programmes. These programmes evolved from UNICEF initiated early childhood care centres in the 1990s. The government is in the process of endorsing community-based preschools, with the number of currently endorsed preschools reaching 1,250. This endorsement results in the preschool's qualification to receive monthly financial incentives from the government.

Strategic focus, ownership of the government and strong political will have highly facilitated

18 This has been calculated using the country-level data through the Cambodia Education Sector Plan Implementation Programme document 2018-2021 (GPE) and UNESCO UIS data.

Cambodia ... is striving to reach the final 40% who cannot benefit from the life-changing impact of pre-school learning. Community pre-schools contribute enormously to our efforts since they reach even the most disadvantaged children. We also encourage parents to get involved, as pre-school teachers are responsible for delivering parenting programmes that help caregivers understand and support their children's learning.

- H.E Dr. Hang Chuon Naron, Minister of Education, Youth and Sport

improvements in ECE in Cambodia. Given the resource limitations, the community-based pre-schooling model has supported quality ECE expansion across the country. A key reason for the successful implementation of ECE programmes in Cambodia has been political ownership at the highest level. The country's technical working group for ECE meets every quarter and is chaired by the Minister for Education, Youth and Sports. Any issues and challenges are presented at the group meeting and resolved. The results of the ECE programme in the country are also presented during these meetings, with the forum resolving any disputes over the results.

In collaboration with the development partners and stakeholders, the government plans to support the expansion of equitable and inclusive ECE for all children throughout the country, intensify the quality of ECE standards, and focus on ECE management and governance¹⁹. While the government endorses 40

per cent of existing community-based pre-schools, the remaining 60 per cent will also be supported by the government and partners to achieve the national quality standards through system strengthening and results-based funding mechanisms.

There are important lessons to be drawn from looking at the successful implementation of ECE services in Cambodia. A key lesson from ECE implementation and scale-up in Cambodia is setting realistic targets. This helps meaningful engagement by the partners and effective coordination and monitoring of service delivery by the government. Recognising system gaps and seeking support from private partners and stakeholders is also essential. Various modalities can be explored in this regard, including results-based financing and public-private partnerships. Lastly, government ownership and political will can go a long way in sustaining the ECE services and the results achieved through them.



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JORDAN

Enrolment in ECE across the Middle East and North Africa (MENA) region is among the lowest in the world²⁰. This low enrolment is for various reasons, including poverty, societal instability, and war (UNICEF MENA, 2009). The Kingdom of Jordan faces a distinctive challenge to educational provision due to the large numbers of refugees from surrounding countries, namely from Palestine and Syria, which has led to a strain on resources and infrastructure for all children (National Committee for Human Resource Development Jordan, 2016). However, this also poses a unique opportunity to gain funding for ECE from many actors for development and humanitarian aid. In the last decade, Jordan has made substantial improvements towards increasing enrolment and quality of ECE services. Thus, Jordan serves as an example for the MENA region and other developing country contexts of how governmental support and focus on ECE can transform the situation.

In Jordan, ECE is disaggregated into three categories: the first two are nursery and kindergarten KG1 (ages 4 to 5 years) which are the responsibility of the Ministry of Social Development and the private sector. The

third is KG2 (ages 5 to 6 years) which is the primary responsibility of the Ministry of Education (Ministry of Education Jordan, 2018; Al-Hassan, 2018). Although the Ministry of Education (MoE) focuses its ECE efforts on KG2, it only accounts for around 58 per cent of educational provision across the Kingdom (as per national EMIS data for 2021-22). In addition, the private sector also provides ECE services, including religious-affiliated organisations (Ministry of Education Jordan, 2018; UNICEF, 2020).

In 2009, the MOE began implementing a kindergarten education programme focused on Aqaba, Ma'an, Al Mafraq, and Irbid governorates. The programme's objective was to increase enrolment in kindergarten with a particular emphasis on poor and underserved communities (General Budget Department Jordan, 2009). Over the years, ECE has been a top priority of the Jordanian government, with a large-scale kindergarten education programme at the forefront (General Budget Department Jordan, 2009; General Budget Department Jordan, 2022). In 2010, total expenditures for the MoE in kindergarten education reached approximately US\$3.5 million, which was 0.5 per cent of the total public expenditures on education for that year (MoE targets 2010). In



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20 Around 30 per cent as of 2020, according to [World Bank data](#) accessed on 2 October 2022

ECE can be weaved into many programmes across various sectors, including social protection, health education and others; however, an unwavering national commitment to improving ECE access and quality contributes most to a change on the ground.

comparison, these expenditures reached approximately US\$10.7 million and accounted for 0.7 per cent of total public expenditures on education in 2022 (General Budget Department Jordan, 2022). Alongside the surge in funds, multisectoral commitment and cooperative approach between the public and private sector have contributed towards Jordan's ultimate improvement in enrolment numbers and quality of ECE provision.

Support from the government as well as other donors and stakeholders has resulted in an increase of KG1 and KG2 enrolments in rural and poor areas from 38 per cent in 2009 to approximately 48 per cent in 2021²¹ (General Budget Department Jordan 2010; General Budget Department Jordan, 2022). In August 2018, UNICEF and partners conducted data analysis and mapping of KG services which indicated that 84 per cent²² of children aged 5 to 6 have access to KG services (UNICEF Jordan, 2019). Quality standards, both administrative and technical, have also been implemented across all education levels, with 78 per cent of public KGs achieving total quality (as per defined standards) in the school year 2013, whereas in 2016, 95 per cent reached total quality (Ministry of Education Jordan, 2018).

ECE can be weaved into many programmes across various sectors, including social protection, health, education and others; however, an unwavering national commitment to improving ECE access and quality contributes most to a change on the ground. A national strategy can set clear goals and integrate initiatives across the different sectors and ministries. This is precisely what has been done in Jordan, beginning with a comprehensive ECD strategy in 2000, followed by a Plan of Action for Children 2004-2013, and most recently, the National Human Resource Development Strategy for 2016-2025. These strategies and plans emphasise ECE's critical role in children's physical wellness, social competence, and future schooling (El-Kogali & Krafft, 2015; National Committee for Human Resource Development Jordan, 2016).

The current national education strategy includes ambitious targets such as 100 per cent KG2 enrolment by 2025, which arguably is challenging to achieve with less than 1 per cent of the education budget directed towards ECE services (National Committee for Human Resource Development Jordan, 2016). The strategy also outlines objectives linked to increased access and quality, accountability, innovation, and a change in mindset towards early education of families and caregivers. The kindergarten education programme from the MoE continues until today, with services and projects including teacher training, material provision for classrooms and schools, parental and community awareness campaigns, and the establishment of more classrooms and schools (General Budget Department Jordan, 2022). Alongside other partners, UNICEF has also been involved in providing services through direct support to KG centres as well as by supporting services through material contributions and financing for individual families and schools (UNICEF MENA, 2009; UNICEF & Hall, 2022; UNICEF, 2021).

During the 2017-18 school year, UNICEF launched the cash transfer programme called Hajati²³ to support children's school participation and well-being. In the school year 2018-19, the programme was extended to families with KG children (UNICEF Jordan, 2021). Since the Hajati cash transfer programme was unconditional, families could direct the funds towards their child's education. In fact, 74 per cent of beneficiary families used at least part of the funds on their child's KG educational expenses, with 56 per cent spending the full amount (UNICEF Jordan, 2021). Although the Hajati-KG pilot cash distribution ended in the school year 2020-21, it offers valuable lessons around the development of social protection measures to promote access to ECE services.

21 Despite a drop to as low as 35 per cent in 2017 (General Budget Department Jordan, 2017)

22 This figure includes unlicensed centres and other informal KG learning opportunities

23 [Hajati](#) provides a cash transfer of 25 Jordanian Dinar (~US\$35) per child to each beneficiary family

KENYA

The Constitution of Kenya (2010) recognises the right to education for every Kenyan citizen, including the right to free and compulsory Basic Education and affordable Tertiary Education, training and skills development. It also calls for affirmative action in favour of minorities and marginalised groups and values, transparency and accountability in education governance. Regarding ECE, the Fourth Schedule of the Constitution assigns county governments the role of providing frontline services to sectors that are important and responsive to children's needs. These include health and nutrition, pre-primary education, water and sanitation, education, childcare, and protection. The National Government is assigned to develop national policies, implement standards, and provide capacity support.

County governments have improved access to pre-primary education by investing substantially in ECE infrastructure. There has been a steady increase in the number of Early Childhood Development and Education (ECDE) centres, procurement of curriculum support materials and teaching guides, and integration of learning through play materials and digital learning to ECE. Counties have increasingly invested in human resource management in the education sector by recruiting teachers. In the ECDE centres, the number of ECDE teachers has steadily increased from 73,012 in 2010 to 112,703 in 2021. To continuously improve the quality of teaching and learning, the Council of Governors supported the County Governments with an ECDE Scheme of Service for County Governments in 2020. The Scheme has professionalised the teaching profession in the sub-sector by phasing out teachers who do not meet the prescribed qualifications.



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A significant emphasis for ECDE in Kenya has been on access, illustrated by investing primarily in the construction of facilities and hiring teachers. While improving access, this has put the quality of ECDE provision in Kenya at risk. This is because limited resources are then left for factors that may improve quality, such as teaching and learning materials or teacher training and support. Access to ECE has increased in the past decade. The GER for pre-primary education is currently at 109.4 per cent in 2019²⁴. It should be noted that consistency in the pre-primary level data is affected by the reporting of ages 4 to 5 years and inadequate data capturing systems by the county governments. The GER of 109.4 per cent also implies high rates of grade repetition and overage children in the pre-primary education sector.

One example of an initiative that has contributed to the improvement of ECE in the country is the Kenyan Tayari preschool programme, implemented from 2014-2018. While much focus has been on access to education, few interventions and investments, like the

Former President of the Republic of Kenya, Uhuru Kenyatta, during the official opening of ECD International conference held in Nairobi in 2018 reiterated Government's commitment to ensuring a strong start for all young children. He emphasized the critical role that ECE/D plays in building sustainable economies and further called upon government ministries and key sectors to strengthen collaboration and ensure that all children have access to the services required for their holistic development.

Tayari programme, have also focused on improving the quality of education. Through this programme, investment was focused on ongoing professional development and coaching. Findings from the intervention suggest that teacher training and instructional support – two of the most cost-effective components of the intervention – along with feedback provided by ECE officers, cost US\$2 per child to increase the average school score by 1 per cent. Another promising low-cost intervention in Kenya is training parents on dialogic book sharing to improve young children’s vocabulary.

According to Kenya’s National Education Sector Strategic Plan 2018-2022, pre-primary education is an essential foundation for primary education and lifelong learning. In this area, three main policy

priorities outline the programmes and activities to enhance pre-primary education: access and participation in quality and inclusive pre-primary education (universal pre-primary education; improved health, nutrition, and protection of learners), enhancing the quality and relevance of pre-primary education (implementing competency-based curriculum; improving assessment of learning; strengthening the capacity of the ECDE workforce; improving standards and quality assurance), and enhancing governance and accountability in pre-primary education (multi-sectoral collaborations and linkages in the management of pre-primary education). Future work in strengthening pre-primary education to achieve the goals and objectives highlighted in the plan will likely build on these priorities and areas of work.

RWANDA

ECE in Rwanda primarily targets students aged 3-5 years and is divided into three age-based nursery or pre-primary education levels. The private sector and communities have traditionally dominated the ECE sub-sector in Rwanda with support from non-governmental organisations. However, public investment has significantly increased public ECE infrastructure and offerings in the last ten years. According to the Ministry of Education’s Statistical Yearbooks, in 2012, there were only two public pre-primary schools, in contrast to 1,868 private ones. By 2020, the numbers show a dramatic improvement, with 2,715 public and government-aided schools and 1,026 private pre-primary schools. The gender makeup of enrolment slightly favours girls, with the GER at 29.1 per cent for boys and 30.6 per cent for girls.

Interestingly, the COVID-19 pandemic has further contributed to increased funding for ECE in Rwanda. COVID-19 has, in many ways, revealed the vulnerability that young children might face when health and education services are compromised. As such, various initiatives have been supported by government policies during the pandemic, such as the Rwanda Quality Basic Education for Human Capital Development Project AF (IPF, EDU-DD-HNP), which supports the implementation of remote approaches for continuous learning during COVID-19 and provides grants to schools in support of safe school re-opening.

Rwanda has demonstrated a strong commitment to ECE over the last ten years and recognises early childhood development as one of the pillars

of human capital development and sustainable development. The Government of Rwanda developed a comprehensive ECD Policy (2016), Food and Nutrition Policy (2013-2018) and other child development-related policies, offering government orientation on interventions to support children’s full physical, cognitive, language, social, emotional, and psychological development. These policies have mainly contributed to the spike in the public provision of ECE since 2011, which saw a significant rise in the number of public ECE schools in the country.

COVID-19 has, in many ways, revealed the vulnerability that young children might face when health and education services are compromised.

While participation in ECE in Rwanda is much lower than that of primary education, it has been steadily increasing over the last decade. The overall enrolment at the pre-primary level has increased from 130,403 students in 2012 to 293,823 in 2020, with GER in pre-primary education increasing from 12.9 per cent to 30.0 per cent over the same period. Despite these improvements, access to pre-primary education has fallen short of the Education Sector Plan target set for 2019. Although Rwanda has shown a strong political will toward ECE, the budget allocation for ECE has remained marginal compared with other education sub-sectors. A major constraint in understanding financial contributions to ECE is the available data. Most budget information compresses

the ECE budget into the primary education budget; therefore, it is difficult to track expenditure and its change over time.

Since the policy prioritisation of ECE in 2011, there have been multiple policy changes and infrastructural developments in the provision of ECE. For example, achievements of the Education Sector Strategic Plan (ESSP) 2013-2018 included the construction of 1,107 pre-primary classrooms, with 400 renovated. Competency-based curriculum (CBC) was also developed for pre-primary and basic education, with new teacher training modules emphasising play-based learning. Furthermore, the Government delivered a national school feeding programme benefiting all pre-primary students with a minor contribution from parents. The government has increased teachers' salaries, including for ECE teachers, and full inclusion of ECE teachers in in-service training. During the sector plan implementation period, there was also an improvement in the pupil-teacher ratio in pre-primary education (from 40:1 to 32:1). These significant achievements were in part due to an increased commitment by the government to the sub-sector and followed similar achievements for other education levels.

The ESSP for the period 2018-19 to 2023-24 sets ambitious goals to expand ECE in the coming years.

The objectives of the ESSP are all underpinned by the government's primary goal of increasing preparedness for primary school. To achieve this, the ESSP focuses on a few specific activities and objectives, including increasing teacher qualifications and training, enhancing the use of Information and Communication Technology (ICT) in teaching and learning, increasing the number and quality of pre-primary centres, strengthening infrastructure, and strengthening governance and accountability. To further realize these objectives, the recently approved Ministerial Guidelines on Pre-primary expansion highlight specific strategies including in the area of teacher training and welfare, district management and private partnership engagement, as well as coordination between the Ministry of Education (school-based ECE) and the National Child Development Agency (NCDCA), dealing with ECD.

In August 2022, the Ministerial Guidelines on Pre-primary expansion were approved. These highlight different objectives and strategies to expand pre-primary education over the coming years, including in the area of teacher training and welfare, district management and private partnership engagement, as well as coordination between the Ministry of Education (school-based ECE) and the National Child Development Agency (NCDCA), dealing with ECD.



SOUTH AFRICA

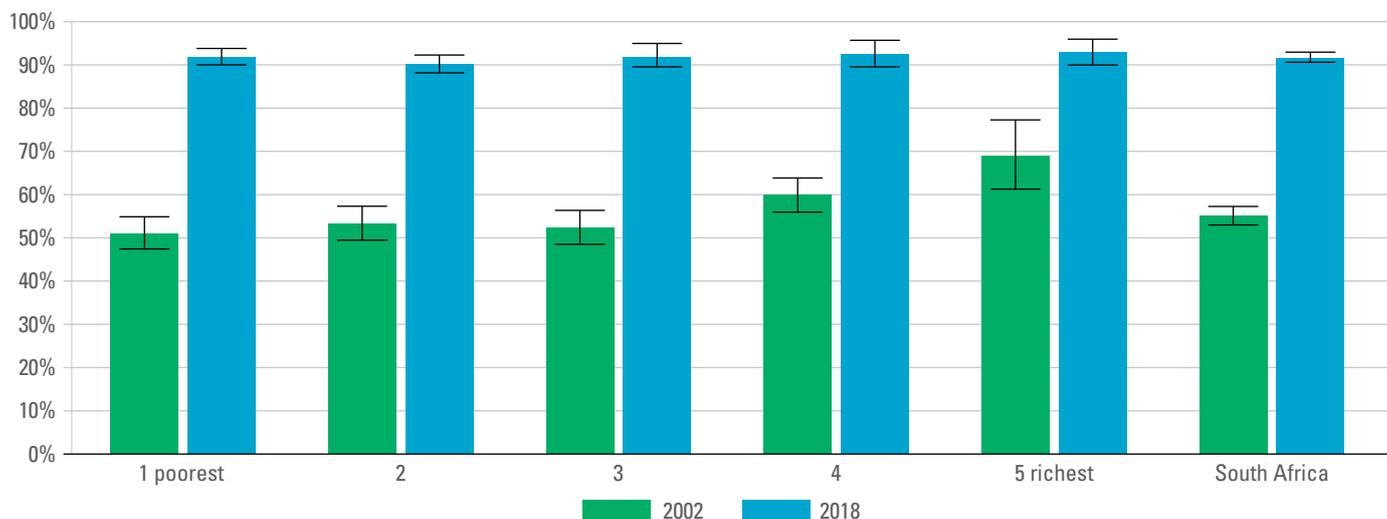
South Africa has significantly improved ECE assessment, attendance, and the development of a pedagogically aligned early years curriculum. Three significant South African achievements include an ECD Census and Thrive by Five (TB5) Index, which have comprehensively assessed the ECE sector landscape and child development outcomes in South Africa (Department of Basic Education, 2021). Secondly, a promising increase in reception year (compulsory pre-primary year for children aged five years) attendance is seen from the early 2000s. Thirdly, there has been a transition of ECE/D responsibility from the Department of Social Development to the Department of Basic Education (DBE). The departmental transition will help improve the alignment of the foundational education phase and ensure a stronger focus on learning outcomes. In South Africa, most ECE centres are independently managed, although monitored by the government if registered. ECE providers can apply to receive a subsidy from the government if the centre meets the required standards of care and programming and is officially registered.

The emphasis South Africa has placed on the reception year, Grade R, in the year prior to the start of formal Grade 1 schooling is noteworthy. Grade R classes are located within public primary schools,

ECD centres, or independent sites. South Africa has seen attendance increase from 55.2 per cent to the near-universal level of 91.6 per cent for 5-6 years old children during the 2010-2018 period²⁵. Figure 5 demonstrates that attendance rates have increased for all income quintiles, particularly the poorest.

Improvements in ECE have been supported by strong political commitment, policy development and financial allocations. The National Development Plan (2030) includes ECE as a key priority to improve the prospects for future generations. The DBE has proactively aimed to improve ECE quality by developing the National Early Learning and Development Standards (2009) and the National Curriculum Framework for children from birth to four (2015). The DBE has further supported the development of the National Integrated Early Childhood Development Policy (2015) to help ensure equitable access to ECE and improved monitoring and coordination of relevant stakeholders (Department of Basic Education, 2015). On the financing side, the government has allocated SAR3.7 billion (US\$229 million) towards the ECD sector from 2022 to 2025 (National Treasury, 2022). This is an increase of 1.7 per cent from the earlier allocation. A key contributor to increases in attendance has been the ECE subsidy provided by the government for registered ECD centres (Harrison, 2020). These subsidies have helped

FIGURE 5. Attendance of 5-6-year-old Children in ECE, based on Income Quintile, 2002 and 2018



Source: Statistics South Africa (2003 - 2019) General Household Survey 2002 - 2018. Pretoria, Cape Town: Statistics South Africa. Analysis by Katharine Hall & Winnie Sambu, Children’s Institute, University of Cape Town.

²⁵ Statistics South Africa (2003 - 2019) General Household Survey 2002 - 2018. Analysis by Katharine Hall & Winnie Sambu, Children’s Institute, University of Cape Town.

I commit myself and all officials of Basic Education to work closely with other State Departments, NGO's, civil society and other entities to ensure that all children, including those with disabilities, are provided with access to quality ECD.

- Minister Motshekga, DBE

to reduce the cost of ECD services for parents and caregivers. However, the DBE has acknowledged that the process for registering and applying for the subsidy needs to be streamlined to widen access, as only a third of ECE programmes currently receive the subsidy (ECD Census, 2021).

In time, progressively expanding the provision, two years of ECE is set to become compulsory for all children before they enter the formal school system in Grade 1. The ECD Census (2021) and TB5 Index are huge achievements for ECE in South Africa as the findings can guide the allocation of resources and help to improve registration processes. These projects have also provided vital data to show where the most significant improvements are needed. For example, TB5 showed that children were particularly struggling with fine motor skills, emergent numeracy, and mathematics. Similarly, the ECD Census showed the need to upskill the ECD workforce, register more centres, and improve basic infrastructure. There is a considerable variation in the quality of ECE centres as there is limited standardisation since many centres are unregistered (Harrison, 2020). The ECD census will help the government to improve the monitoring and supervision of all ECE centres.

Over the next three years, the government has allocated SAR3.7 billion (US\$229 million) towards the ECD sector from 2022 to 2025 (National Treasury, 2022). This is an increase of 1.7 per cent from the earlier allocation. Future developments in the pipeline for ECE in South Africa include a new management information system to monitor curriculum implementation and track improvements made in registration, child outcomes and other components (Manona et al., 2022). The TB5 Index will continue to assess the proportion of children who are developmentally on track every three years.

The improvements in South Africa can provide key lessons for further ECE development in other countries. The first lesson is the importance of government ownership to drive and manage the ECE agenda, as seen in South Africa. The second lesson is the value of PPPs, which have enabled improved assessment and monitoring of ECE services. In South Africa, the government has partnered with donors and non-governmental organisations to bring about positive change in ECE. Thirdly, a strong focus on improved assessment of both children and ECE centres has been impactful in guiding appropriate resource allocation and will assist with effective tracking of future progress.



TANZANIA

In Tanzania, the Ministry of Education, Science and Technology (MoEST) is responsible for planning pre-primary education. At the same time, the President's Office, Regional Administration and Local Government (PO-RALG) is responsible for the delivery and implementation of pre-primary education, complemented by the non-government provision of education. Under the MoEST, the Tanzania Institute of Education (TIE) develops and monitors curricula and conducts teacher training, while the Basic Education Office oversees policy development and quality assurance. Under the PO-RALG, the Basic Education Coordination oversees education delivery and implementation through the Pre-Primary Education Section.

ECE enrolment in Tanzania has substantially increased over the last decade, with significant gains in quality. In 2010, the GER for pre-primary education was just 33 per cent and soared to 78 per cent in 2020²⁶. In 2010, 18 per cent of all pre-primary teachers were adequately trained, jumping to 52 per cent in 2017²⁷. The Education and Training policy (ETP) 2014 aims to increase opportunities and quality of all levels of education in the country. As per ETP, the entry age to Standard-I was lowered from seven to six years, and pre-primary education for children ages three to five was made compulsory for one year. The ETP emphasises the quality of pre-primary education through adequate teaching and learning methods and materials, relevant curricula, teacher training, and strengthened quality control and assurance.

In 2014, one-third of five to six years old children were enrolled in pre-primary education (95 per cent in government classes). During this time, 14,719 pre-primary institutions were operating in Tanzania.

The ETP emphasises the quality of pre-primary education through adequate teaching and learning methods and materials, relevant curricula, teacher training, and strengthened quality control and assurance.



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While there has been a focus on access and quality, no specific monitoring and evaluation mechanisms existed for pre-primary education, as features of the primary education system were also applied to pre-primary classrooms. In the new ETP, the government considered updating and improving the system for monitoring and evaluation to ensure the quality of pre-primary education.

Tanzania's National Development Vision for 2025 highlights education and training as a critical priority, including concrete goals that promote the success of ECE, such as universal access to education (including pre-primary education) and eradicating illiteracy. Furthermore, the Government has placed a greater emphasis on the quality of pre-primary education, early learning skills for mastery of the 3Rs (reading, writing, and arithmetic), increasing enrolment levels, teacher training for specific skills for teaching at the ECE level and construction of classrooms. Overall, learning improvement in the early grades of primary education is a major political priority for the Government of Tanzania.

In line with the Tanzania Development Vision for 2025, the National Five-Year Development Plan, and the Sustainable Development Goals, Tanzania's Education Sector Development Plan (ESDP) (2016-17 to 2020-

26 World Bank Development Indicators, accessed on 2nd August 2022.

27 *ibid*

21) ESDP vision aimed at an enriched education sector, focused on improving teaching and learning. Specifically, ESDP called for increased investments in an outcomes-oriented education system, thinking and problem-solving skills, fostering self-confidence and respect among all learners, and enhancing knowledge and vocational skills development. Recognizing the foundational role of ECE for gains in primary outcomes, another objective of the plan was universal participation in one year of pre-primary education, with a key performance indicator of increasing the proportion of children enrolled in Standard-I with at least one year of pre-primary education to 87.5 per cent in 2020. To achieve this objective and improve access to pre-primary education, Tanzania initiated satellite centres for far-to-reach children to ensure that even disadvantaged children residing in remote rural and far from schools are enrolled.

According to a qualitative case study on understanding perceptions of quality among ECE stakeholders in Tanzania (Davis et al., 2021), some lessons that may be useful for other countries can be derived. Firstly, supporting teachers is highlighted in improving the quality of teaching and learning at the ECE level. This includes providing adequate materials, training, and support for teachers to deliver quality education. Secondly, the study also highlights that to strengthen ECE; stakeholders must align what stakeholders perceive as priorities, the resources to implement these aspects, and accountability measures to ensure effectiveness. In this regard, governments, administrators, families, and teachers all have a role to play in enriching the quality of ECE. Community efforts can be vital in strengthening relations between these various stakeholders.

UZBEKISTAN

Uzbekistan has invested in system strengthening for ECE over the years. A significant milestone in this regard came with the formation of a dedicated ministry for ECE called the Ministry for Preschool Education (MOPSE) in 2017 and the passing of legislative acts for preschool education. The country also recognised the need to benefit from the PPP model for ECE, as it has been experimenting with other social sectors. The efforts from the government and support from donors and stakeholders resulted in a significant upsurge in pre-primary enrolment as GER in pre-primary education has sharply increased from 28 per cent in 2018 to 41 per cent in 2020²⁸, an increase of 23 percentage points in two years.

In Uzbekistan, pre-primary education is provided through a mix of governmental institutes, non-government facilities, short-stay groups, and, more recently, mobile schooling. From 2017 to 2021, the number of preschool institutions in Uzbekistan increased more than five fold from 5,211 to 27,656²⁹. The support from the private sector has also been overwhelming, as more than 16,000 preschools were established between 2019 and 2021 under the broader PPP umbrella.

During COVID-19, the MOPSE developed an online kindergarten programme with support from the national television and radio company to support parents in providing education continuation opportunities to



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preschool children. The programme consisted of 25-minute videos based on the state programmes and covered preschool child development areas.

Another initiative taken during the pandemic by MOPSE and UNICEF was the adoption of the Learning Passport for preschool education. Learning passport has been used at primary and secondary levels but was innovated at the preschool level in Uzbekistan. The learning passport supported ECE teachers through professional courses, lesson plans, and readings aligned with the national curriculum and Early Learning and Development Standards (ELDS).

28 World Bank Development Indicators, accessed on 2nd August 2022.

29 Ministry for Preschool Education, Government of Uzbekistan.

ECE participation rates have considerably increased in Uzbekistan over the last few years. According to UNESCO Institute for Statistics data, ANER (one year before the official primary entry age) has increased from 31.33 per cent in 2015 to 62.84 per cent in 2020. Although low in aggregate terms, the GER at the pre-primary level has also improved from 25.18 per cent in 2015 to 41.44 per cent in 2020. The government is spending around 0.81 per cent of GDP on pre-primary education.

The introduction of a dedicated ministry for preschool education and a strategic focus on PPPs has significantly improved various ECE indicators over the last few years. More than 16,000 preschools have been established in the country during the 2019-2021 period under the broader PPPs umbrella. MOPSE has primarily resorted to results-based financing while working with the private sector through PPP arrangements.

One of the primary reasons for the successful implementation of ECE programmes in Uzbekistan, particularly PPP programmes, is government ownership of the processes. The establishment of MOPSE in 2017 was a crucial decision in this regard. The MOPSE has taken the lead on ECE prioritisation and implementation through direct engagement and working with development partners. The introduction of a dedicated ministry for preschool education and a strategic focus on PPPs has significantly improved various ECE indicators over the last few years. More than 16,000 preschools have been established in the country during the 2019-2021 period under the broader PPPs umbrella. MOPSE has primarily resorted to results-based financing while working with the private sector through PPP arrangements.

The government is planning to strengthen PPPs at the pre-primary level further. For this, frameworks and policies have been developed and implemented in collaboration with the development partners and stakeholders. The focus on results-based financing for ECE is also a higher priority for the government to move forward with the PPPs agenda at the ECE level.

The successful implementation of ECE in Uzbekistan using PPP as a facilitating vehicle has many lessons for other countries as they embark on similar journeys. A few of these lessons are outlined below.

- + The government's ownership and leadership in building ECE systems and facilitating innovations can facilitate quick wins regarding enrolment, financing, and achieving broader ECE outcomes.
- + PPPs widen the benefits of ECE for children, especially in resource-constrained situations and for areas facing marginalisation.
- + For innovations like consideration of specific PPP modalities, weighing different options, engaging in meaningful dialogue at the country level, learning from successes and failures of these options, and taking joint implementation decisions are essential. This allows the best value for money and extracts the most from the available resources.
- + Before implementing ambitious strategies, the government and partners must recognise system gaps and limitations. A situation analysis should be undertaken, and relevant system diagnostics conducted before implementation to seek alignment with ECE systems. All groundwork, including frameworks, policies, quality assurance mechanisms, implementation modalities, and other details, must be sorted out before initiating such programmes.





Section 8

Way Forward

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Quality ECE supports the learning and development of children with all types of abilities and in all contexts. It is a key building block for future economic participation and growth. Sound investments in the early years of a child are known to be beneficial for the child, community, and society at large. Because of this, governments and partners are expanding their investments significantly towards ECE. These opportunities and investments, however, have been severely impacted by the COVID-19 pandemic and other global challenges (i.e., economic conditions, humanitarian crises and conflict, and climate change).

The extended school closures from COVID-19 and other challenges are expected to have resulted in at least US\$1.6 trillion loss in lifetime earnings globally. With such a high cost of inaction, it is vital to plan and invest further in ECE. Given the enormity of the challenge, building partnerships will be a critical

factor in determining a closer reach to the SDG 4.2 targets. Making more and smarter investments now will ensure that we can ensure more children are in preschools and learning well.

In the following, we have outlined some critical actions for national governments, donors, regional organisations, multilateral, and researchers to catalyse the needed investments in ECE:

National governments should allocate (and expend) at least 10 per cent of their education budgets on pre-primary education. This level of investment will help curtail the losses imposed by COVID-19 and enhance access to quality education in the early years. For high returns of ECE, ECE programmes and interventions must be of high quality. Quality must be a priority for budgetary allocation, dedicating at least 25 per cent of recurrent pre-primary budgets to non-salary

expenditures. This enables key quality investments, such as teacher training and on-the-job support, curriculum development, teaching and learning materials, quality assurance mechanisms, and data systems to be prioritised.

Governments and donors should support the progressive universalism of ECE services by gradually expanding the provision of quality ECE for everyone while prioritising the needs of the poor and disadvantaged. These prioritised investments should target those who are too often left behind, including children from the lowest-income households, girls, children with disabilities, and children affected by conflict, crisis, and climate change.

Good planning is the cornerstone of effective implementation. Tools like the ECE Accelerator Toolkit (a planning tool for governments that includes an ECE Accelerator Simulation Model) can be starting points for countries to plan their investments and track outcomes as part of their roadmap towards 2030. The capability-strengthening support of partners will remain essential to guide and facilitate the planning processes. The importance and need for reliable and robust data cannot be overemphasised, as better data can support more equitable planning and budget allocation for the ECE sub-sector. Significant investments should be made to improve the availability and reliability of ECE data, including financing data, through financial management systems and national education management information and monitoring systems.

Governments and donors should commit to tracking and reporting ECE expenditures by both governments and donors. This can ensure value for money and boost stakeholders' confidence in investing in ECE. Tracking and reporting will strengthen accountability, improve budgeting and planning processes, and pinpoint areas needing the most improvement, including efficiency, cost-effectiveness, and financing gaps.

Donors - bilateral, philanthropic, multilateral, and private sector - should follow the evidence and invest in interventions having more significant benefits and value. Investments should also be made in more evidence-gathering around investments with potential and their contextual relevance. Donors should also ensure that the funds target the most marginalised, including young children affected by crisis and conflict.

There are an increasing number of innovative financing approaches to ECE. Public-private

The importance and need for reliable and robust data cannot be overemphasised, as better data can support more equitable planning and budget allocation for the ECE sub-sector.

partnerships, earmarked taxes, corporate social responsibility, and outcome funds are ways innovative financing is brought into the ECE sub-sector. Additionally, the multi-sectoral nature of services to young children makes it a natural fit to bring in other sectors, such as climate, health, nutrition, child protection, and Water, Sanitation and Hygiene (WASH) to strengthen ECE financing.

Regional organisations and multilateral institutions can support governments to strengthen capabilities and guide and facilitate planning using the available ECE resources. Regional and multilateral organisations can also play a convening role. Many countries have shown significant headway towards improved ECE policy environment, governance, participation, and financing over the years. Going forward, it will be essential to facilitate these developments so that countries' commitments and investments remain intact and serve as role models for other countries to follow.

Researchers and evaluators should support more rigorous documentation and evaluation of ECE programmes and interventions. Given the higher level of challenges facing ECE systems and the limited resources, the learnings from one context must be communicated widely so that other countries can also benefit from them. Such learnings should include the costs of programmes, outputs/outcomes, implementation indicators, and the cost-effectiveness and efficiency proposition. This way, the governments and partners can sense which interventions to prioritise for investment.

All actors working on behalf of children, in the education sector and beyond, need to work together to support and advocate for the target allocation (and expenditure) of at least 10 per cent of education budgets progressively allocated for and spent on ECE.

One solution cannot fit the ECE challenge at hand. A blend of targeted support and interventions will help in addressing the challenge. Countries must plan well to achieve the SDG 4.2 targets and ensure the incorporation of emergency responses in ECE service delivery to avoid future pitfalls.

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