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EDUCATION FINANCE NETWORK EVIDENCE BRIEF

Non-State Sector Engagement in Early Childhood Education: Conditions for Success

What conditions are necessary for non-state pre-primary schools to achieve early learning outcomes for disadvantaged students?

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Early childhood education (ECE) can lead to outsized benefits in children's development and learning outcomes. High quality ECE interventions focus on preparing children for primary school, and can result in improved learning outcomes including school readiness, socio-emotional development, and improved cognitive abilities¹ (Pushparatnam et. al., 2021). Studies show children who receive ECE test almost one year ahead of children without ECE (Shafiq et. al., 2018). Investing in ECE yields a compounding effect by diminishing the likelihood of future achievement gaps and the related costs required to mitigate these gaps. Additionally, ECE sets children on a positive trajectory to advance their learning outcomes and reduces dropout rates (OECD 2020).

Despite the demonstrated impact of ECE, many gaps persist in both access and quality. Globally, ECE remains under-funded and underprioritized compared to other education sub-sectors. In 2017, only 6.6 percent of domestic education budgets globally were dedicated to ECE (UNICEF 2019). Across low- and middle-income countries (LMICs) the issue is heightened, with governments allocating on average just 2 percent of their total education budgets to ECE (UNICEF 2019). More than 78 percent of preschool-aged

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¹Also known as preschool education or pre-primary education, ECE denotes services for children ages three to six years that focus on preparing children for entry into primary school. This is distinct from the concepts Early Childhood Development (ECD) and Early Childhood Care and Development (ECCD), which encompass a broader range of services for children newborn to age six). Sun et al. 2015; Bub 2022.

children are not enrolled in pre-primary education as a result of funding limitations in LMICs. (UNICEF 2019, p.1–2). In sub-Saharan Africa, while ECE enrollment has expanded significantly in the past decade, the enrollment rate only reached 28 percent in 2020 (World Bank 2020). In addition, governments prioritizing rapid expansion of ECE find it challenging to ensure rising demand is met with quality services. In 2019, for example, only half of all ECE teachers in LMICs had received any education and training (UNESCO Institute for Statistics (UIS) global database 2019).²

Non-state actors currently play a significant role in filling gaps by expanding and enhancing ECE provision in LMICs. Recent figures suggest that 46 percent of children in ECE in LMICs are enrolled in private schools (Baum 2020, pg. 9). In Sub-Saharan Africa, private preschools educate 54 percent of pre-primary children in the region (Baum 2020, pg. 7). Other studies show even higher numbers: between 71 and 95 percent of children living in urban slums in Nairobi, Johannesburg, Accra, and Lagos received ECE in private institutions (Bidwell & Watine 2014), and a survey of more than 4,000 families in low-income urban areas of India found that 87 percent chose a private preschool (Jain et. al., 2018). In addition to direct provision of ECE, non-state actors also play a crucial role in quality assurance, including through provision of teacher and pedagogy training and funding of monitoring and evaluation.

This evidence brief surveys the role of non-state actors in expanding access to quality ECE services that contribute to improved learning outcomes for children. The brief presents three case studies showcasing three distinct models of service delivery in three different regions. Each case study focuses on a successful non-state ECE intervention, by analyzing the crosscutting factors that contribute to its success in improving early learning outcomes for disadvantaged children.

Three key factors contributing to the programs' success emerged in analyzing the case studies. These key findings are anchored by practical lessons from real-world case studies where non-state actors have effectively improved ECE quality and access for disadvantaged children:



1 Commitment to community and parental involvement during program design.



2 Investment in teacher training and mentorship to deliver high-quality ECE pedagogy.



3 Development of partnerships across sectors to draw on local expertise and ensure continuous alignment.

Despite the vast evidence available on each of the three case studies, this evidence brief also acknowledges limitations in the available research, particularly around gender and inclusion of children with disabilities. The research presented in this literature review refers primarily to “parents and caregivers” as a key target audience for ECE interventions, but does not provide any broader gender analysis. As such, additional research is needed to examine the deeper implications or outcomes when, it is assumed, most parents engaged in ECE activities are mothers and other female caregivers. Further, research on inclusion of children with disabilities in ECE programming was largely absent from the research on the three case studies. This limitation is important when considering how ECE interventions impact children with disabilities differently, and how to tailor success to these children.

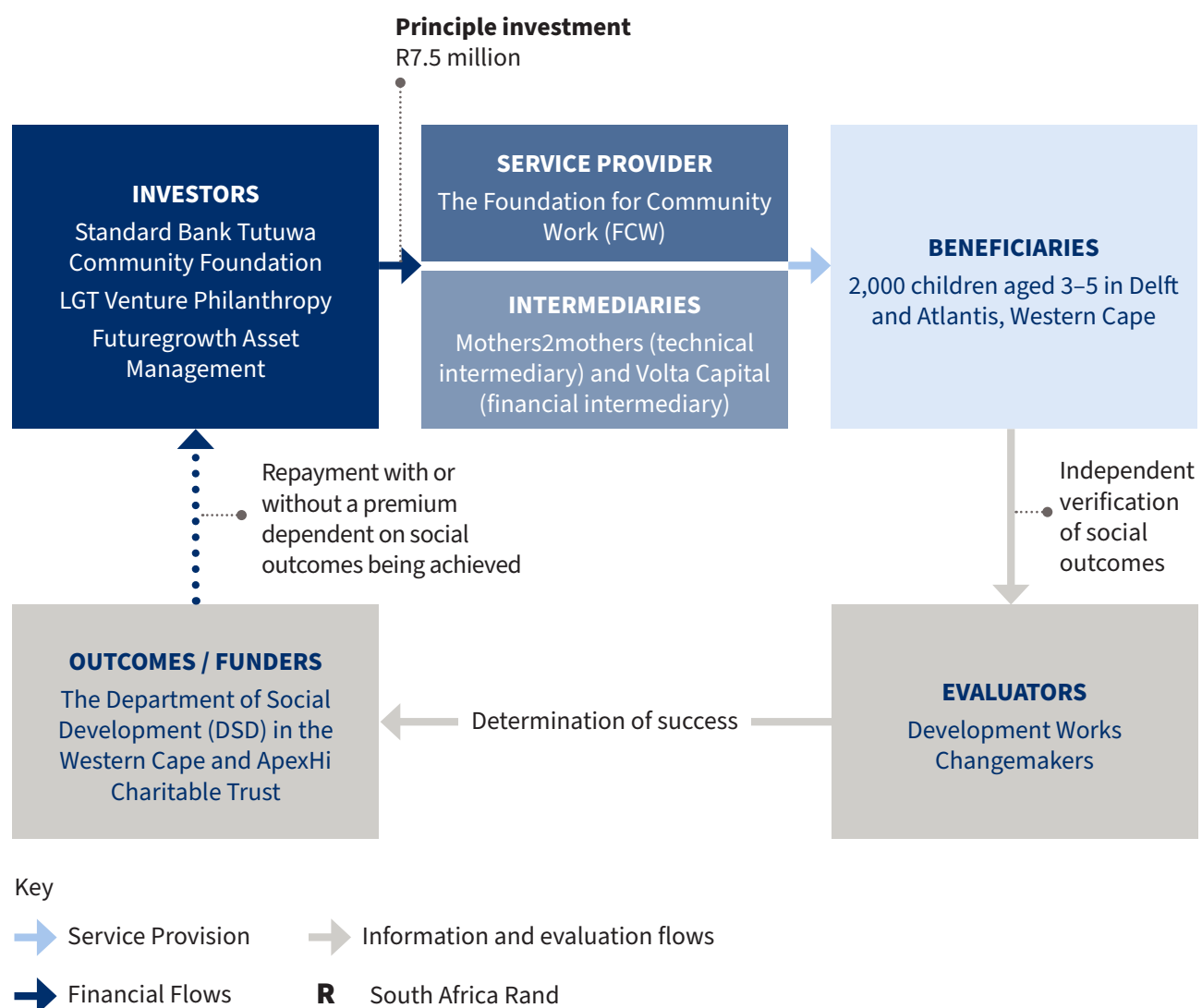
²The indicator is the percentage of teachers, of both sexes, who are trained in pre-primary education

1. Case Study 1: The Impact Bond Innovation Fund (IBIF)

The three-year Impact Bond Innovation Fund (IBIF), a social impact bond in South Africa, launched in 2018 to deliver home-based ECE to improve early learning outcomes, as measured by the Early Learning Outcome Measure (ELOM) standardized assessment tool.

Social impact bonds, a form of results-based financing, provide upfront capital to service providers who are evaluated on the outcomes achieved.³ The outcome-funders (in most cases, donors and government agencies) then repay the initial investors only where the outcomes are achieved, thus shifting the financial risk to the private investor and away from the government (Gustafsson-Wright and Gardiner 2016). Figure 1 below outlines the key investors, outcome-funders, service providers, and intermediaries involved in the IBIF. In this case, the consortium of investors provided upfront capital to the service provider, Foundation for Community Work (FCW), to offer its home-based ECE program to two thousand children per year (Rayner and Nkonyeni 2021).

Figure 1: IBIF Key Stakeholders and Structure



Source: Khan et al. 2021

³Government Outcomes Lab (GO Lab) defines impact bonds as “outcome-based contracts that incorporate the use of private funding from investors to cover the upfront capital required for a provider to set up and deliver a service. The service is set out to achieve measurable outcomes established by the outcome payer, and the investor is repaid only if these outcomes are achieved. Impact bonds are different from traditional contracts, such as fee-for-service, or grant-based contracts as they are focused on outcomes rather than inputs.”

Through the FCW program, trained specialists carried out home visits to low-income families to support caregivers in developing their children's cognitive abilities. The target outputs were as follows: (i) recruit and retain two thousand children, ages three to five, (ii) ensure the children attended at least 50 percent of the home visits each year, and (iii) ensure children met target scores on the ELOM assessing school readiness. The target ELOM scores were set based on a benchmark composed of children of a similar socioeconomic status and measured annually across the three years of the project. The IBIF set children's target scores higher (0.2 standard deviations) than the established benchmark (Khan et. al., 2021).

Over the course of the three-year program, the IBIF achieved several key objectives:

- More than doubled its recruitment target, reaching four thousand children per year (Khan et. al., 2021).
- In year 1 (2018), 90 percent of children and their caregivers completed at least 50 percent of planned sessions with the home visitors, reaching 90 percent of the attendance target. This slight shortfall was due to delayed receipt of funding, but in subsequent years (2019-2020), IBIF achieved 100 percent of its attendance target (Khan et. al., 2021).
- Recorded high parent satisfaction, with parents highlighting improvements in numeracy and literacy outcomes, as well as children's social interactions (Khan et. al., 2021; de Witt 2019).
- Succeeded in building strong partnerships between its stakeholders, improving the service provider's monitoring and evaluation capacity, and maintaining high quality financial and monitoring data, all of which established IBIF as a proof-of-concept for the social impact bond mechanism to be replicated in the future (de Witt 2019).

The program also significantly improved ELOM scores for beneficiary children between the baseline and endline. Despite not meeting the target scores on school readiness, research on the program notes the ELOM assessment tool was a relatively new, untested instrument, and the improved ELOM scores still represented a notable success (Khan et. al., 2021; de Witt 2019).

Factors for success identified through the impact evaluation and literature analyzing the IBIF program included:



- **Prioritization of community and parental needs:** The IBIF was designed with local community and parental needs at the forefront, a critical component in its success (Rayner and Nkonyeni 2021). FCW's strong track record and contextual knowledge includes more than 40 years of experience implementing early childhood development (ECD) services in the Western Cape (Khan et. al., 2021). Recognizing that many low-income families in the area cannot afford ECE programs taking place at a school or center and must instead conduct activities at home, FCW designed its home-based program after careful analysis of local community needs. Through home-based visits, trained ECE specialists adapt their approach to individual parents' needs and ensure children receive tailored interventions that accorded with their home environments.



- **Multi-sector partnerships:** Critical to IBIF's early success was the diverse range of interested investors, including foundations, venture philanthropists, and asset management firms (Schmitz et. al., 2018). IBIF brought together resources and know-how from many stakeholders, including a public sector entity (Department of Social Development), a service provider (FCW), intermediaries (Mothers2Mothers, Volta Capital, and Bertha Center), and a range of private sector

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impact investors. By aligning the interests of all its key stakeholders, IBIF drew on the strengths of each organization to achieve its target outcomes. Along with an active donor community, De Witt (2019) cites the importance of facilitating the interest of individual champions for innovative financing within the government.

- **Flexibility and adaptability:** Funding flexibility allowed FCW to navigate some initial start-up challenges, particularly the withdrawal of an outcome funder and IBIF's subsequent restructuring (de Witt, 2019). Further, in response to COVID-19, FCW quickly adapted to remote programming, and was one of the few ECE programs in South Africa to continue throughout the pandemic (Rayner and Nkonyeni 2021).

2. Case Study 2: The Madrasa Early Childhood Development Programme (MECP)

The Madrasa Early Childhood Development Program (MECP), implemented by the Aga Khan Foundation (AKF), works in underserved areas in East Africa to support community teachers, caregivers, and families in establishing community-owned preschools. Interested communities agree to set up and manage their own preschools, and MECP provides mentorship and training courses on community awareness, infrastructure development, and school management (Caerus Capital 2017).

Since its inception in the early 1980s, MECP has demonstrated strong results in expanding access to ECE and improving early learning outcomes for disadvantaged children:

- As of 2019, MECP had expanded from the pilot project in Mombasa, Kenya, to more than 250 communities across Kenya, Zanzibar, and Uganda, serving more than 18,000 children each year (Bandali 2019).
- As of 2021, the program has trained more than 6,000 teachers and supported over 400,000 children (Aga Khan Foundation 2021).
- In 2008, MECP preschool students scored higher in verbal comprehension (by 6.18 percentage points) and number concepts (by 7.19 percentage points) than those in non-MECP preschools (Mwaura et. al., 2008).
- In 2011, MECP students outperformed non-MECP students in non-verbal, verbal, and mathematics abilities. Compared to children in the non-MECP schools, children in MECP schools saw statistically significant increases in their cognitive levels per year, due to the high-quality learning environments, school management, teachers, and pedagogy at MECP preschools. (Mwaura et. al., 2011).
- MECP developed strong government partnerships across all its countries of operation. While MECP was initially established to operate only in low-cost, non-state community schools, in recognition of the experience and quality of MECP, governments from across the region are collaborating with MECP in different ways to support the delivery of high-quality pre-primary education. For example, in Kenya, six county offices currently fund MECP to deliver professional development courses to government officials and pre-primary teachers. In Tanzania, MECP provided the Tanzanian Institute of Education with technical support to develop and deliver the school readiness program, which has reached nearly 3000 communities across the country (Curtiss et. al., 2017).

Factors for Success

Analyses of MECP through impact evaluations, literature reviews, and a video consultation with MECP staff in Kenya, have identified several key factors contributing to its success:



- **Community ownership:** MECP empowers communities to take ownership of their newly established preschools. Each new MECP preschool is established only after extensive engagement with the community, including consulting with community members to understand community priorities and holding activities with parents to encourage greater participation in their children's early education (Sun et. al., 2015; Mwaura and Marfo 2011). AKF highlighted how community ownership is typically associated with better outcomes — their program team has noted that the schools with strongest results are those with the highest levels of community engagement and parents willing to invest time and resources (Bandali 2019; Shekhova, N. and Corbishley, R. through video consultation, May 12th, 2022).



- **Teacher training and mentorship:** Teacher training, mentorship, and professional development are central components of MECP. MECP teachers are supported through ongoing training that combines an introduction to theory with opportunities to apply that theory in the classroom under the regular guidance of a mentor (Aga Khan Development Network 2008). MECP also invests in the long-term professional development of its teachers. Many MECP teachers are promoted to leadership roles within the MECP network, leading to higher retention rates at MECP compared to other ECE programs. The AKF believes their commitment to teacher quality and retention through ongoing mentorship is an important factor contributing to improved early learning outcomes for students. (Shekhova, N. and Corbishley, R. through video consultation, May 12th, 2022).



- **Strong government partnerships:** In Kenya, MECP's long-standing partnership with the government has enabled it to adeptly navigate the ECE policy environment. In recent years, the government began introducing new policies and regulations for ECE provision and invited MECP to play a key role, including contributing to standardized ECE curriculum design and teacher certification programs (Bandali 2019). This successful partnership came about as the Government of Kenya began recognizing MECP as a high-quality provider with proven success and significant experience and presence in the region (Curtiss et. al., 2017). According to the AKF, this partnership has allowed MECP to navigate new government regulations while continuing its community-based approach. (Shekhova, N. and Corbishley, R., video consultation, May 12th, 2022).

3. Case Study 3: Program to Improve Private Early Education (PIPE):

Launched in 2015, PIPE is an ongoing initiative that aims to introduce activity-based learning through low-cost preschools in India. Implemented by FSG Advisory Services, PIPE partners with high-end ECE service providers and supports them in implementing activity-based learning solutions (i.e., curriculum design and teacher training) in low-cost preschools. PIPE advises its partners in adapting their internal business structure and teacher training approach to operate effectively in the low-cost market (Jain

et. al., 2018). PIPE also works with parents to raise awareness around the benefits of activity-based learning and helps them more effectively assess their children's cognitive skills through play (FSG 2021). PIPE has achieved many positive results in enhancing the quality of low-cost preschools and improving children's early learning outcomes:

- Since its inception, PIPE has partnered with eight service providers to offer activity-based learning to more than 102,000 children in 690 affordable preschools (FSG 2020).
- A 2020 evaluation found that children in PIPE preschools scored 48 percent higher in literacy, numeracy, and cognition as compared to their peers in preschools without the PIPE intervention (FSG 2020).
- Further, test scores for children in PIPE preschools improved 38 percent from the 2018 baseline to 2020, indicating positive and sustained results in learning outcomes (FSG 2020).

Factors for Success

Impact evaluations and literature analyzing the PIPE program identified several key factors that led to its success:



- **Teacher training adapted to the low-cost context:** PIPE tailored training to teachers' level of knowledge and experience with activity-based learning (Irfan et. al., 2017). Many teachers in low-cost private schools in India had no previous experience with activity-based learning. Rather than requiring teachers to drastically change their current teaching methods, PIPE's teacher training focused on gradually introducing practical aspects of applying activity-based learning and building on teachers' current practices (Irfan et. al., 2017). This gradual and practical approach ensured teachers had a thorough understanding of activity-based learning and could successfully apply these methods in their classrooms, ultimately leading to improvements in student learning.



- **Parent engagement and awareness-raising:** An equally critical component of PIPE's approach is the focus on parent involvement and awareness-raising. PIPE educates parents on key markers of learning (e.g., cognitive and socioemotional skills rather than rote memorization) and has developed tools for parents to use in effectively assessing how much their child is learning (Jain et. al., 2018). Fostering parental engagement is critical to the program's success because it ensures children continue to practice activity-based learning outside the classroom.



- **Use of high-quality data to build partnerships:** PIPE successfully leveraged high-quality, rigorous data to establish the business case, convincing high-end service providers to invest in the low-cost preschool market. Service providers were initially hesitant to engage in the low-cost market, citing concerns around profitability and sustainable business models. To respond to their concerns, PIPE conducted a study of more than four thousand low-income parents to build accurate market projections for prospective partners. The baseline showed that parents were able and willing to pay for private ECE. It found that 87 percent of parents used private preschools and invested an average of 6 percent of household income on ECE (Jain et. al., 2018).

4. Conditions for Success

The case studies discussed above represent distinct models of non-state actor engagement in ECE provision. Despite their differences in design, the literature highlights three common attributes that factored into successes. The following section discusses these crosscutting success factors and gleans practical lessons that can be applied to other regions and program models.

Success factor 1: Commit to community and parental involvement during program design

Non-state ECE interventions should be grounded in the needs of parents and of the local community, and these priorities should be factored into program design. Parent involvement plays an important role in improving learning outcomes, particularly for preschool-aged children, by enhancing socioemotional development and contributing to children's school readiness. Non-state actors are better able to deliver successful programs when these stakeholders' inputs are considered in the initial design of ECE initiatives.

Evidence from case studies

While each of the case studies discussed above implemented a different approach to parental and community involvement, this initial engagement at the design stage was critical for all three programs. For example, active community engagement was crucial to the design of the MECP program, as communities were expected to take full ownership over their local preschools. This required significant awareness-raising and training for communities as well as a clear understanding of local needs and priorities.

IBIF and PIPE's approaches focused more directly on parent engagement and the child's home environment. Both programs know that a child's home environment is central to their learning. Without informed and engaged parents, the progress a child makes at preschool may be hindered if their home environment is not conducive to development (Yang et. al., 2021). In cases where parents could not afford to enroll their children in ECE centers, the IBIF facilitated the program via home visits. This allowed ECE specialists to tailor their interventions to meet local community needs by incorporating individual parents' capacity. Similarly, PIPE's approach recognized that many parents had little prior knowledge of activity-based learning; its practitioners thus worked actively to educate parents in these topics so they could reinforce the concepts their children were learning in school.



Success factor 2: Invest in teacher training and mentorship to deliver high-quality Early Childhood Education (ECE) pedagogy.

Investing in ongoing teacher training, mentorship, and professional development is a key component of all non-state ECE initiatives. ECE interventions that impact classroom activities ultimately rely on teachers' ability to effectively deliver content. For program delivery to succeed, it is essential that preschool teachers understand and implement effective ECE pedagogical methods while also adapting the lessons to children's developmental levels. Interventions providing on-the-job teacher training and mentorship should focus on developing appropriate ECE teaching practices, fostering play-based pedagogy, and introducing inclusive education principles. Teacher training activities should be tailored to the teacher's current level of knowledge, and content may therefore differ depending on the training cohort's background.

Evidence from case studies

Across the two classroom-based case studies (MECP and PIPE), an ongoing commitment to empowering and training teachers contributed to their success and supported the long-term sustainability of these non-state ECE programs. MECP's approach led to higher retention rates among MECP teachers, which improved the program's long-term sustainability. Both PIPE and MECP prioritized a tailored approach to ensure training content was adapted specifically to teachers' current level of knowledge. Rather than introducing unfamiliar new concepts, the training focused on applying teachers' current methods to other age groups or pedagogical techniques. For example, many MECP teachers had primary education experience but required training to adapt their methods to preschool-aged children. Likewise, many PIPE teachers had prior ECE experience but little prior knowledge of activity-based learning. In both cases, the training content recognized, and built on, teachers' prior knowledge.

Success factor 3: Develop partnerships across sectors that draw on local expertise to ensure continuous alignment

Strong multi-sector partnerships involving a range of expertise are critical to the engagement of non-state actors in the ECE space.

The success of ECE interventions relies on many factors, including funding, qualified teachers, buildings for classrooms, and specialists in ECE pedagogical methods. Further, early education outcomes are inextricably linked to other sectors, such as child nutrition, health, and pre- and post-natal care. Therefore, successful non-state ECE interventions benefit from multi-sector partnerships that address each element of a successful ECE intervention. Developing strong partnerships with aligned incentives and buy-in among actors



Photo source: Opportunity International



Photo source: Opportunity International



Photo source: Opportunity International

requires a strong commitment of time and resources from the outset. In the case of the three case studies, early emphasis on rigorous data and evidence was especially useful for building and maintaining partnerships.

Evidence from case studies

Each of the programs relied heavily on expertise and support from numerous partners, and each invested time and resources to respond to these partners' needs. For example, strong partnerships were a critical element of IBIF, as the success of a social impact bond mechanism requires commitment and accountability from every stakeholder involved, including investors, outcome-funders, service providers, and numerous intermediaries. The IBIF responded to investor needs by building the monitoring and evaluation capacity of the service provider to collect quality data and better showcase its impact to its investors. Likewise, PIPE invested in rigorous market assessments to develop tailored business cases and solicit buy-in from each of their prospective partners. Finally, MECP's success highlights how building partnerships with country governments can aid non-state actors in navigating decision making on how their work can best complement the public system. MECP's technical experience and demonstrated success ultimately led to its technical contributions when Kenya's ECE policy was created.



References

- Aga Khan Development Network. (2008). The Madrasa Early Childhood Programme: 25 Years of Experience. A Project of the Aga Khan Foundation. Available at: https://akdn.imgix.net/53832/1641850542-2008_12-akf-the_madrasa_early_childhood_programme-high_res.pdf
- Aga Khan Foundation. (2021). Programme Spotlight: Responding to COVID-19 in Kenya. Available at: <https://www.akf.org.uk/programme-spotlight-ecd-covid-response-kenya/>
- Bandali, H. (2019). Madrasa Early Childhood Programme (MECP): Unlocking Doors of Opportunity Through Inclusive Early Childhood Development. In: Kachra, A. & Azim Nanji, A. (Eds.), AKDN In the World of Development: A Case Book (Vol. 1, pp. 272-292). The Aga Khan University.
- Baum, D.R. (2020). Non-State Actors in Early Childhood Education: Implications for Education Equity and Quality. Paper commissioned as part of the GEM Report Fellowship Programme in 2019. Available at: <https://gem-report-2020.unesco.org/wp-content/uploads/2021/06/01-Baum.pdf>
- Bidwell, K., & Watine, L. (2014). Exploring Early Education Programs In Peri-Urban Settings In Africa: Final Report Summary. UBS Optimus Foundation.
- Bub, K. (2022). What Works in Pre-Primary Education Pedagogical Practices? USAID Data and Evidence for Education Programs (DEEP). Accessed: <https://www.edu-links.org/resources/evidence-summary-what-works-pre-primary-education-pedagogical-practices>
- Caerus Capital. (2017). The Business of Education in Africa. Accessed: <https://edafricareport.caeruscapiatal.co/thebusinessofeducationinafrica.pdf>
- De Witt, S. (2019). South Africa Impact Bond Innovation Fund. Bertha Centre. Accessed: <https://golab.bsg.ox.ac.uk/knowledge-bank/case-studies/south-africa-impact-bond-innovation-fund/>
- FSG. (2018). Program to Improve Private Early Education (PIPE). Accessed: <https://www.fsg.org/initiatives-programs/program-to-improve-private-early-education-pipe/>
- FSG. (2020). Impact Assessment Report 2019-20. Available at: <https://www.fsg.org/initiatives-programs/program-to-improve-private-early-education-pipe/children-in-pipe-apss-increase-scores/>
- FSG. (2021). Approach to Development the Right Markers. Accessed: https://www.fsg.org/wp-content/uploads/2021/10/Approach-to-developing-the-right-markers_1013.pdf
- Curtiss, M., Bouchane, K., Kilgore, J., and Ellis, B. (2017). Investing Smart, Investing Early: A Business Guide to Early Childhood Development in Kenya. Global Business Coalition for Education and Theirworld. Accessed: https://gbc-education.org/wp-content/uploads/sites/2/2022/03/Investing-Smart-Investing-Early_ECD_Kenya.pdf
- Government Outcomes Lab. (2022). Impact Bonds. Available at: <https://golab.bsg.ox.ac.uk/the-basics/impact-bonds/#:~:text=A%20more%20nuanced%20definition%20as,up%20and%20deliver%20a%20service.>
- Gustafsson-Wright, E. and Gardiner, S. (2016). Using Impact Bonds to Achieve Early Childhood Development Outcomes in Low- and Middle-Income Countries. Brookings. Accessed: <https://www.brookings.edu/wp-content/uploads/2016/07/Impact-Bonds-for-ECDweb.pdf>
- Irfan, A., Karamchandani, A., Kohli, A., and Jain, V. (2017). The Preschool Promise: The Opportunity to Transform Learning Outcomes for India's Working Poor. A PIPE Publication. Accessed: <https://www.fsg.org/resource/preschool-promise/>
- Jain, V., Irfan, A., and Vanikar, G.K., (2018). Program to Improve Private Early Education (PIPE): a Case Study of a Systems Approach For Scaling Quality Early Education Solutions. *Annals of the New York Academy of Sciences Special Issue: Implementation Research and Practice for Early Childhood Development*. Volume 1419, Issue 1, 38-56. doi: 10.1111/nyas.13695

- Khan, et al. (2021). The Impact Bond Innovation Fund Investment Research Report. Intellidex. Accessed: <https://www.intellidex.co.za/reports/impact-bond-innovation-fund-report/>
- Mwaura, P., & Marfo, K. 2011. Bridging Culture, Research, and Practice in Early Childhood Development: The Madrasa Resource Centers in East Africa. *Child Development Perspectives*. 5. 134-139. 10.1111/j.1750-8606.2011.00168.x.
- Mwaura, P., Malmberg, L.E., & Sylva, K. (2011). Effects of a Pre-School Intervention On Cognitive Development Among East-African Pre-School Children: A Flexibly Time-Coded Growth Model. *Early Childhood Research Quarterly*, Vol. 26, pp. 124-133.
- Mwaura, P., Sylva, K., & Malmberg, L. (2008). Evaluating the Madrasa preschool programme in East Africa: a quasi-experimental study. *International Journal of Early Years Education*, Vol. 16, No. 3, pp. 237–255. doi:10.1080/09669760802357121
- OECD. (2020). Early Childhood Education: Equity, Quality and Transitions Report for the G20 Education Working Group. Available at: <https://www.oecd.org/education/school/early-childhood-education-equity-quality-transitions-G20.pdf>
- Pushparatnam, A., Armando, D., Bazaldua, L., Holla, A., Azevedo, J.P., Clarke, M and Devercelli, A. (2021). Measuring Early Childhood Development Among 4–6 Year Olds: The Identification of Psychometrically Robust Items Across Diverse Contexts. *Frontiers in Public Health*, 03 February 2021 Sec. Children and Health. <https://doi.org/10.3389/fpubh.2021.569448>
- Rayner, C. and Nkonyeni, N. (2021). Financing Early Childhood Development: The Impact Bond Innovation Fund, South Africa. NORAGG Innovative Finance for Education. Accessed: <https://www.noragg.org/financing-early-childhood-development-the-impact-bond-innovation-fund-south-africa/>
- Schmitz, K., Green, M., & Burt, F. (2018). Lessons From a Social Impact Bond: The Good, Bad, and Ugly. *Mothers2mothers*. Accessed: <https://skoll.org/2018/11/01/mothers2mothers-deconstructs-their-social-impact-bond-experience/>
- Shafiq, M. N., Devercelli, A., & Valerio, A. (2018). Are There Long-Term Benefits From Early Childhood Education In Low- And Middle-Income Countries? *Education Policy Analysis Archives*, 26(122). <http://dx.doi.org/10.14507/epaa.26.3239>
- Shekhova, N. and Corbishley, R., video consultation, May 12th, 2022
- Sun, J., Rao, N., and Pearson, E. (2015). Policies and Strategies to Enhance the Quality of Early Childhood Educators. Paper commissioned for the EFA Global Monitoring Report 2015, Education for All 2000-2015: Achievements and Challenges. Accessed: <https://unesdoc.unesco.org/ark:/48223/pf0000232453>
- UIS Global Database. (2019). The indicator is percentage of teachers in pre-primary education who are trained, both sexes.
- UNESCO. (2015). Pricing the right to education: The Cost Of Reaching New Targets by 2030 (No. 18; Education for All Global Monitoring Report Policy Paper).
- UNICEF. (2019). A World Ready to Learn: Prioritizing Quality Early Childhood Education. Available At: <https://data.unicef.org/resources/a-world-ready-to-learn-report/>
- World Bank. (2020). School enrollment, pre-primary (%gross) – Sub-Saharan Africa. Data as of June 2022. Accessed: <https://data.worldbank.org/indicator/SE.PRE.ENRR?locations=ZG>
- Yang Q, Yang J, Zheng L, Song W, Yi L. (2021). Impact of Home Parenting Environment on Cognitive and Psychomotor Development in Children Under 5 Years Old: A Meta-Analysis. *Frontiers in Pediatrics*, 9:658094. doi: 10.3389/fped.2021.658094. PMID: 34650937; PMCID: PMC8505983.

About the Education Finance Network

The Education Finance Network convenes diverse education stakeholders with a focus on directing non-state resources toward creating inclusive, high-quality education in low- and middle-income countries globally.

The Network is open to a broad range of organizations, including foundations and family offices, donors, impact investors, practitioner networks and research and advisory orgs. It provides members with opportunities to network, engage the public sector through policy forums, work on technical issues and trends affecting the sector through focused working groups, access members' only research, and participate in professional development.

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