

ADDRESSING INEQUALITIES

The Heart of the Post-2015 Development Agenda and the Future We Want for All

Global Thematic Consultation

Key to Equality: Early Childhood Development

The Consultative Group on Early Childhood Care and Development

Task Force for the Post-2015 Development Agenda*

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ABSTRACT

Social and economic inequalities begin early. Presented in this paper is evidence that Early Childhood Development (ECD) can lead to gender equality and empowerment, better health and education outcomes, improved skills, abilities and productivity, narrow the income, ethnic, and geographic inequality gaps, provide timely intervention for persons with disabilities, and is a cost effective strategy for eliminating disadvantage. Inequity and inequalities are framed with respect to opportunities and outcome across dimensions of gender, income, health, education, ethnicity, language, disability, and geographic residence. ECD, a multifaceted construct, includes the child and the context. Promotive and positive relationships between these two facets can lead to achieving full human developmental potential. Many inequities in this foundational period are accentuated over the lifecycle, and persist throughout adulthood, with serious human, social and economic consequences. ECD evidence demonstrates that this foundational period is a window of opportunity for resolving early inequities, achieving inclusive social and economic development, peace and sustainability. Given that business as usual is no longer an option and transformative and holistic solutions are required to address the post-2015 development challenges, this paper is a call to the development community to pay attention to the compelling, effective and relevant evidence based solutions that emanate from ECD.

The Consultative Group on Early Childhood Care and Development (CG) convenes, mobilises, and engages global ECCD actors in order to generate and disseminate knowledge on early childhood care and development for use in advocacy, policy, planning, capacity building, programming and evaluation research, aimed at improving the development of children, families and communities, especially those living in disadvantaged circumstances in low and middle-income countries.

The CG's post-2015 task team is working to effectively position ECCD as an essential part of the global development agenda. For more information, see ecdgroup.com

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INTRODUCTION

Social and economic inequality and the inequitable distribution of opportunities for development are endemic problems around the world. Responses to inequality are often ineffective, as they address only the symptoms, rather than the cause, of the problem. Focused efforts to identify the foundations of social and economic injustices, and a systematic approach to overcome the underlying mechanisms that perpetuate these circumstances, are required to eradicate inequality in a manner that is effective, equitable and enduring.

A sustainable and systematic response to social and economic inequality can be found in the field of early childhood development (ECD). The evidence is clear: Investing in young children is not only one of the most cost-effective ways to improve the health, nutrition and educational levels of the next generation, it also empowers women, reduces violence, promotes environmental sensitivity, and can break the intergenerational cycle of poverty, creating more productive societies. However, over one third of the world's children under age 5 fail to achieve their full developmental potential due to malnutrition, poverty, disease, neglect, disability, developmental delay, and a lack of early learning opportunities from birth to the transition into primary school. ECD represents a response to these challenges that addresses the root causes of inequality.

With regard to achieving equitable, healthy and productive societies, the importance of ECD has been demonstrated in low-, middle- and high-income countries. A growing body of knowledge, across sectors and disciplines, shows that ECD is also vital to achieving environmental sustainability and for peace building. Furthermore, evidence clearly demonstrates substantial cost savings for families, governments and communities when interventions to improve health, education and nutrition are implemented in early childhood rather than later in life. When such actions are not taken, children's development is irreversibly inhibited resulting in limited skills and poorer health in adulthood, as well as lower lifetime earnings. The juxtaposition of the research supporting ECD and the dire situation faced by the world's young children should spur a call to action to put early childhood first on the global agenda to achieve equitable economic and social progress. With such compelling evidence, the omission of ECD in the post-2015 global agenda would indicate that the world community has ignored a powerful, science-based approach to achieving greater equality.

This paper proposes that global inequality be addressed by taking action to ensure that all children can achieve their full developmental potential. This strategy is presented in two parts:

- Part 1 presents a conceptual framework for the paper in two sections:

- Section 1 outlines the multiple dimensions of inequality, drawing on the Millennium Development Goals and current paradigms for sustainable development; and
 - Section 2 describes the field of ECD and outlines its importance for more equitable socio-economic development.
- Part 2 offers evidence-based and action-oriented recommendations to make ECD an integral part of the post-2015 development agenda, explaining how ECD-based approaches can reduce inequalities related to gender, socio-economic status, ethnicity and language, health, nutrition, education, and the presence or absence of disabilities and developmental delays.

PART 1: CONCEPTUAL FRAMEWORK: UNDERSTANDING INEQUALITY & EARLY CHILDHOOD DEVELOPMENT

Inequality in opportunities and outcomes across a range of socio-economic dimensions exists universally both among and within countries. In 2000, the world community decided to tackle the problem of inequality by articulating eight Millennium Development Goals (MDGs) that address poverty, hunger, education, health, gender and environmental sustainability. Twelve years later, considerable progress has been noted; for each of the eight goals, there are areas of success. For example, poverty rates have decreased,¹ access to safe drinking water has improved² and the vast majority of children enroll in primary school.³ However, a closer examination reveals that, despite these successes, inequalities have worsened. The richest 1 percent of the world's population owns 40 percent of global assets, while the bottom 50 percent own only 1 percent of assets.⁴ A deeper investigation of income inequality shows a clear demonstration of gender disparities, with women earning nearly 23 percent less than men.⁵ With respect to education, inequality is evident for children marginalized due to income, geographic or ethnolinguistic characteristics, and disability, with children from conflict-affected, low-income countries and ethnic minorities accounting for 42 percent of school children.⁶ The MDGs have been a powerful instrument for building awareness of the disparity between the "haves" and the "have-nots;" however, disparities have not been eliminated. Therefore, it is appropriate that the post-2015 development agenda addresses inequality as the key challenge in generating more equitable socio-economic progress. This paper presents the evidence for a potential solution to this challenge through a response rooted in early childhood development.

Young children grow and develop in a context of relationships and a number of social and political influences. The term "early childhood development (ECD)" represents a multifaceted construct that focuses on the child's developmental outcomes, which depend on both the *child* and the *context*. The interaction between child and context determines the trajectory for holistic development.^{7,8,9} This principle emanates from research but is also reflected in human

rights instruments. The Convention on the Rights of the Child (CRC)¹⁰ states that all contexts have an impact on children’s development, from those that are the closest and most direct in their influence (e.g., the family), to those that are further away with a more indirect impact, (e.g., ECD policies).¹¹ Optimal contexts and equitable opportunities for development include good health and nutrition; secure attachment and positive caregiving; early stimulation; nurturing social and emotional interactions with significant caregivers; learning; play; and protection from violence, abuse and neglect.

The following is a brief description of a useful conceptual model, which provides the rationale and structure for presenting ECD-based approaches to achieving equality.

1.1 Understanding Inequality from the Human Development Perspective

The framework for inequality used in this paper is built on two characteristics. First is the equity-based pathway from opportunity to outcomes.^{12,13} Opportunity represents a set of circumstances, access to services and the ability to benefit from them.¹⁴ Outcomes, inextricably linked to opportunity, are defined with respect to the ultimate results of having access to defined services and non-formal supports. If opportunity is equitably distributed—with a focus on providing more access to ECD services and supports to those with greater needs—greater equality in outcomes can be expected.¹⁵ To ensure equity, strategies and measures must be made available to compensate for historical and social disadvantages that prevent people from otherwise operating on a level playing field. More equitable strategies for distribution of services can lead to greater equality, and the foundation for such equitable distribution begins in early childhood.

While there exists an exhaustive list of dimensions of inequality,¹⁶ a human development perspective is taken in this paper. The MDGs primarily recognize income, gender, health and education¹⁷ as dimensions of inequality, and these closely align with the post-2015 development agenda.¹⁸ In addition, important dimensions such as ethnicity, language, disability, rural versus urban status and related elements must be addressed for more equitable opportunities. Therefore, the framework presented in this paper includes these additional dimensions.

An estimated one billion people have a *disability*, at least one in ten of who are children with 80 percent living in developing countries.¹⁹ Disabilities covering a range of physical, mental, intellectual and sensory conditions are a major source of inequality in outcomes. Compare with typically developing children, those with disabilities have generally poorer nutrition and health, lower educational achievements and fewer economic opportunities, as well as higher rates of poverty and greater exposure to violence, abuse and neglect, prejudice, stigma and

discrimination. The lack of early childhood services and the many obstacles these children and their parents face in everyday life is a further source of disadvantage.

A little mentioned, albeit important, area of inequality is *ethnolinguistic (minority) status*. Members of ethnolinguistic groups that are not economically, socially, and politically dominant within a society (even when they represent a majority of the population) must frequently negotiate barriers to accessing education, health, and protection services. Even when these are nominally available, they are often provided in a language that the members of the ethnic group do not easily understand. In schools, for example, children from these groups may find it difficult to understand what is being taught, fail to learn the national language and complete their schooling, and remain marginal to national development. By providing accessible, culturally appropriate and mother tongue-based ECD services, these children will have greater opportunities to achieve their full developmental potential and achieve academic success.

Regarding *geographic location*, the divide between rural and urban populations, with respect to opportunities, greatly favors urban populations. Health, nutrition, education, sanitation and protection services are inequitably distributed with urban populations having far greater access, most of which is often of better quality than that of rural services.²⁰ But it should be noted that significant inequity is also experienced within urban areas due to lack of access to water, sanitation, durable housing, and safe and secure living areas.²¹

Another issue related to geographic location is exposure to natural disaster, conflict, and chronic violence. Young children exposed to such environmental conditions suffer from malnutrition, chronic illnesses, developmental delays, disabilities and toxic stress. It is estimated that 1.5 billion people live in conflict-affected countries. These conditions severely limit the access of children and their mothers to essential health, educational and protection services.^{22,23}

1.2 What is Early Childhood Development?

Early childhood development (ECD) refers to both the developing *child* and the multi-layered *context* that influences the child's development. The three-part definition of ECD that is used in this paper includes the child, the context, and the influence of the context based on the stages of human development. This third element is important to understand because the early years are a period of dynamic growth and plasticity which, when supported by an appropriate environment, can be a window of opportunity for promoting development. In turn, however, when influenced by neglect and deprivation, this period can be a window to vulnerability, thus thwarting development.

With respect to the *child*, the CRC and the developmental science of early childhood define this age period as extending from the prenatal stage through the transition to primary school (i.e., age 8 or 9).^{24,25} With respect to domains of development, a holistic approach includes, but is not limited to, physical, cognitive, linguistic, socio-emotional, and ethical and spiritual development, as well as a sense of national or group identity.^{26,27} The United Nations' *World Fit for Children*²⁸ definition captures this concept by stating that through the process of holistic development, children can “survive, be physically healthy, mentally alert, emotionally secure, socially competent, and able to learn.” The domains encompassed within holistic development are often divided into cognitive and non-cognitive skills (e.g., personality or social capabilities), with the former category being more closely associated with academic achievement and traditional outcomes of success, and the latter being linked to productivity and skills of the twenty-first century.²⁹

Context is also critical to ECD, as children do not grow up in a vacuum. Children's environments influence their development and, in combination with their genetic endowment, inform their abilities, skills and outcomes. Environments are multilayered, with contexts closest to the child—such as caring, safe and stimulating family and home environments—having the most direct impact on development;³⁰ more distal factors—including relevant policies, systems services, and communal and social influences—are less directly influential but still important to consider.^{31,32,33}

There is a myriad of services (of which not all may be available to children and families, especially those from marginalized populations) that can function as entry points for ECD programs, creating different contexts within which children grow and develop (see *Figure 1*). Integration of services across health, nutrition, education, child welfare, and protection sectors, along with attention to the economic well-being of parents and caregivers, is required for optimal child outcomes.^{34,35,36} However, in reality, there is a great diversity in the access that young children and families from different social and geographic contexts have to the basic package of services across these sectors.

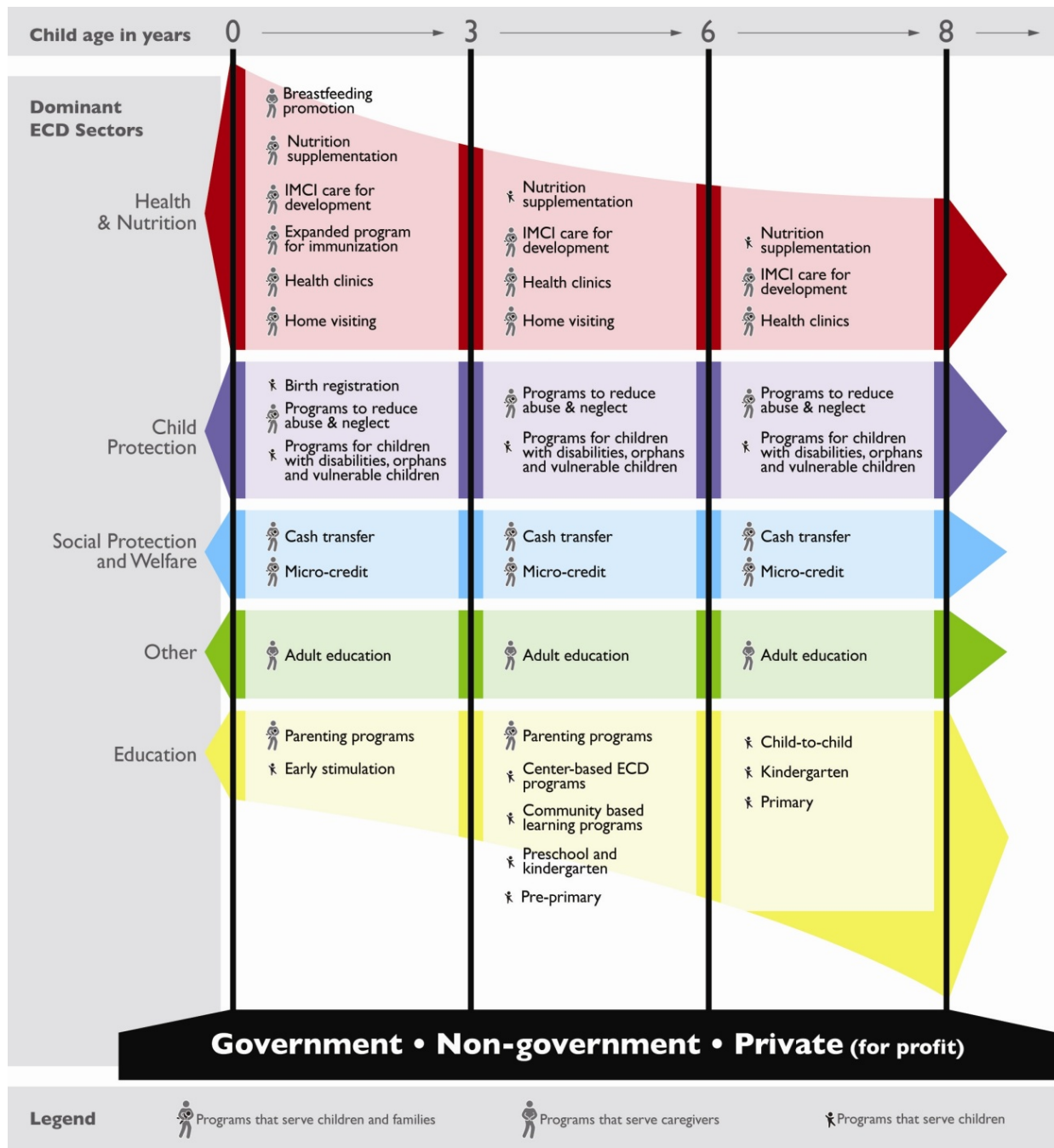


Figure 1. Landscape of Early Childhood Development Programs (Britto, Yoshikawa, & Boller, 2011)

The tapestry of ECD programs can be patterned along the dimensions illustrated (Figure 1) and identified as important in the literature.³⁷ The age of the child is the first critical dimension. In the earliest years, interventions tend to focus on health and nutrition services and systems of support within families and communities³⁸ (often including the education and social protection sectors as well). The sectors involved in providing ECD services are the second dimension to

consider. Although these vary from country to country, involved sectors typically include health, nutrition, sanitation, education and protection.³⁹ The location of the services is also another feature of ECD programs (e.g., programs can be home-based, center- or clinic-based, or community-based). The third dimension is target of the program—some serve a single generation and others serve two or three generations. For example, some pre-primary programs are single generation, only serving the children to the exclusion of the parents.⁴⁰ Finally, governments, non-governmental agencies, and private, for-profit agencies can all implement ECD programs, thereby adding a further layer of complexity with respect to maintenance of quality, adherence to regulations and governance.⁴¹ This array of potential services, as the contextual element of ECD, is important to understand as it demonstrates not only the complex nature of helping children achieve their developmental potential, but also the ability to use multiple entry points to reduce vulnerability, address risk and improve opportunity, and for prevention.

Developmentally, the early childhood phase is the period in which the most rapid gains are made in all aspects of growth and development. Neurobiology has clearly demonstrated the rapid proliferation of neuronal development in the first few years of life (see *Figure 2*), which sets the foundation for future skill and competency attainment.^{42,43,44,45,46} Brain architecture is built in a “bottom up” sequence, with each stage requiring the adequate development of earlier capacities. However, given that the early childhood period covers nearly a decade, each set of ages within it offers windows of opportunity and vulnerability. Most importantly, if children do not receive adequate stimulation, support and protection during the critical windows of growth, they can lose the opportunity to develop specific skills and abilities associated with that stage of development. Intensive remediation later in childhood is needed to obtain these missed skills or abilities, an exercise that is very costly and often unsuccessful.

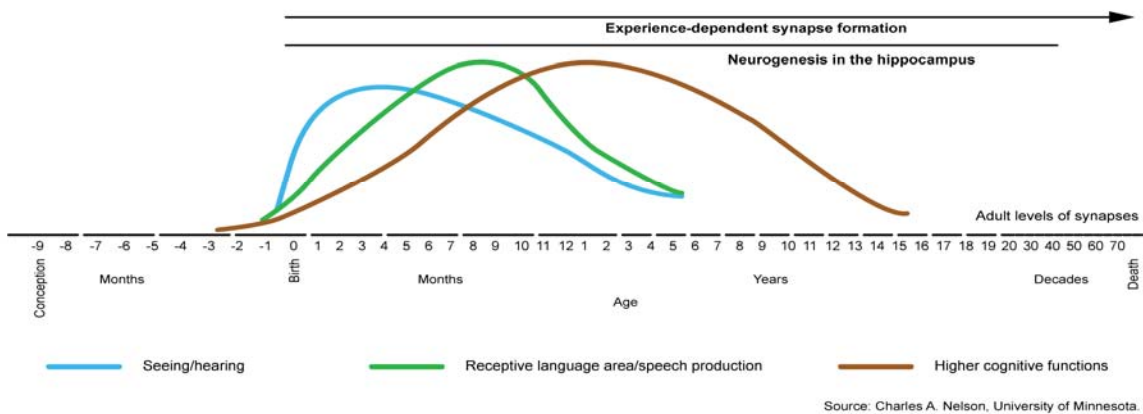


Figure 2. Early Neuronal Development (From *Neurons to Neighborhoods*, 2000)

Conception to age 3 is identified as the stage of greatest development and it is also a period greatly influenced by environment.⁴⁷ Neuronal development and brain circuitry are stimulated through the provision of positive experiences that shape brain capacity and inform the ability to process complex information, skills and tasks.⁴⁸ This development begins during the fetal stage then accelerates rapidly upon birth. Infants and young children benefit from positive and responsive interactions with at least one consistent caregiver, including exposure to language and opportunities for exploration and learning.^{49,50} For example, verbal engagement between parents and young children is one of the strongest influences on subsequent language development.⁵¹ Between ages 3 and 5 there is a second window for opportunity, but also some vulnerabilities. In addition to continuing growth and development, which require disease prevention; basic healthcare; cognitive and language stimulation; and social and emotional responsiveness, children become more mobile and are able to explore their environments. Therefore, issues of protection and safety become critical.⁵² Parent-child language interaction, home literacy environments, exposure to mother tongue, and cultural aspects of family functioning are critical influences on the development of linguistic, cognitive and social competencies.^{53,54,55} During this developmental stage, influential contexts expand beyond the home to include interactions with peers and the community. Children establish new friendships, and begin to understand and appreciate diversity, both human and non-human (e.g., plants, animals).^{56,57}

From approximately age 6 up to age 8 or 9, after which the transition to primary school is complete, child development and learning have a symbiotic relationship. For example; cognition and language are used to learn new numeracy and literacy skills. This is also the stage in which socialization, tolerance and respect, regulation of emotions, and positive learning are reinforced through new behaviors and interactions. School readiness is vital for school completion, later skill development, and acquiring academic competencies as well as non-academic success.^{58,59,60,61,62,63,64} Children who enter school “ready to learn” are more likely to succeed at school, stay in school, and achieve life-long learning and productivity as adults. At this stage, the foundation for human capital can be easily measured and returns calculated.

In summary, inequality across several dimensions is a complex problem that requires deliberate and innovative solutions. ECD is described in this section as a long-term and systematic pathway to achieve greater equity and reduce inequality. Although an ECD-based response to reducing inequality is not the most obvious, it has the potential to be both successful and sustainable. Using this conceptual framework as a foundation, Part 2 of the paper provides a set of recommendations for an ECD-based approach to social justice and equality.

PART 2: EARLY CHILDHOOD DEVELOPMENT: AN INTEGRAL PART OF THE POST-2015 EQUALITY AGENDA

In Part 1 of the paper the conceptual framework distinguishes opportunities (e.g., access to educational services) from outcomes (e.g., reading achievement) because children are born into circumstances with unequal opportunity. This initial disparity predicts the probability of gaining access to basic services and the right to education, health, protection and participation. However, Sen (2001)⁶⁵ notes that individuals, even in the face of unequal opportunity, have the ability to improve their own outcomes, and, thus, argues for doing everything possible to improve the capabilities of infants and children. This should begin with expanded preconception and prenatal education and healthcare. Early intervention programs for marginalized and disadvantaged children have demonstrated remarkable results with respect to improving the outcomes for children and families to the level of their more-advantaged peers.⁶⁶ These interventions have been successful in areas of health, education, environmental sustainability and protection.^{67,68,69} Greater equality can be achieved through the more equitable distribution of opportunities. Investing in ECD can lead to improvements in a range of critical outcomes, such as birth outcomes, early developmental levels, improved health and nutrition, learning and social development, and environmental sensitivity.

The following are a series of evidence-based and action-oriented recommendations using ECD to achieve the equality agenda.

2.1 Investing in Comprehensive Services for Young Children, Especially the Most Disadvantaged, Contributes to Enhanced Gender Equality Across the Life Course

Inequality for the female child often begins at birth (and sometimes, as in the case of sex-selective abortions, even before birth). Sometimes she receives less food or is denied basic healthcare and education. Although women comprise half of the world's population, they are in the majority for every indicator of disadvantage. For example, 70 percent of the world's poor are women; two of three illiterate adults are women; and women have unequal access to economic assets and credit. Essentially, across all indicators of health, education, mortality, earnings, participation, governance and social development, women's disadvantage and inequality are ubiquitous among and within countries.⁷⁰ Globally, equality cannot be achieved unless gender equality is attained in all development areas. Furthermore, as mothers, women have a primary influence on their children. Unless gender equality is achieved, women's status will continue to have a negative impact on future generations, especially young girls.

ECD offers several pathways through which gender equality can be achieved. The first pathway is through programs that directly serve the child, such as childcare and development, early learning, and preschool programs (formal and non-formal). This pathway improves outcomes

for the girl child herself. A large body of evidence suggests that disadvantaged girl students are those making the most dramatic gains from ECD programs and, in turn, from school-readiness programs.⁷¹ In Brazil, girls from low-income families who attend community-based preschool programs are twice as likely to reach Grade 5 and three times more likely to reach Grade 8 compared to girls who do not attend preschool. In Nepal, the implementation of an early childhood and care education (ECCE) initiative increased the female-to-male student ratio in Grade 1.⁷² These early achievements are strong predictors of later success and equality in outcomes.

A second pathway is through the benefits of ECD programs for the other female members of the family. When mothers are at work or otherwise unavailable, older sisters are often substitute parents for younger siblings. Evaluation data from several communities with ECD programs has demonstrated an improvement in girls' enrollment in primary school, as the existence of the program enables older sisters to attend school.^{73,74} Furthermore, mothers benefit economically from the provision of ECD services. For example, studies in communities in East Africa have shown an increase in mothers' income due to the presence of ECD programs in the community.⁷⁵ ECD programs have also been shown to generate employment and income opportunities for women, given the high rates of female participation in the labor force in early health, education and protection services.

A third pathway by which ECD can promote gender equality is through support and education programs for parents. These single or two-generation programs improve parenting skills, knowledge and attitudes. They are delivered in the home or implemented in community spaces and have an impact on multiple gender equality outcomes. Parenting programs, such as the Mother-Child Education Program in Turkey, greatly improve mothers' self-esteem, confidence and knowledge of parenting behaviors, leading to greater empowerment to achieve goals for their children.⁷⁶ These programs also encourage greater participation by fathers in parenting, which not only leads to a sharing of tasks but also to greater equality in decision-making in the home.⁷⁷ The programs also improve outcomes for female children in the areas of health, nutrition, education, and lower incidence of abuse, thereby yielding a double dividend.⁷⁸

2.2 Early Childhood Development Can Help Achieve Income Equality by Breaking the Cycle of Intergenerational Poverty

One of the most studied and addressed aspects of inequality is income poverty, which is traditionally conceptualized in terms of consumption (i.e., what are estimated family expenditures and do individuals/families have the income and resources to meet those expenditures?).⁷⁹ One of the greatest risk factors for young children around the world, including those in high-income countries, is poverty,⁸⁰ due to its profound ability to potentially,

and often irreversibly, pervert development.^{81,82,83} Inequity in opportunity due to chronic and severe income poverty has toxic, negative effects on all aspects of human development and on the contexts of family, community and society.^{84,85} Children who experience poverty early in life often have poorer nutritional outcomes; demonstrate lower cognitive development, language skills, learning achievement in school, and self-esteem; and have greater anxiety and more behavioral problems, including increased aggression.^{86,87.}

The primary national and international strategies to reduce the incidence of income poverty involve economic growth measures and social assistance mechanisms^{88,89,90} aimed at either the general population or children specifically; the latter usual focus on survival or health and nutrition outcomes.^{91,92,93,94,95} This limited focus omits investments in children's developing capabilities (e.g., non-cognitive abilities) that are essential to enhancing equity and improving equality in development outcomes.

Investment in ECD is one of the most effective economic actions leading to the mitigation of poverty and the development of more productive societies. Breaking of the intergenerational cycle of poverty with respect to improving income later in life has been demonstrated by several longitudinal evaluations in both developed and developing countries.^{96,97} In these studies, controlling for all other influences across life, children who participated in ECD programs had better educational outcomes and earning potential compared to children who lacked these early enriching experiences. However, conducting long-term studies is difficult, and policy makers are unable to wait a generation for results. Therefore, use of economic models to stitch together findings from multiple studies, and thereby showing the same or a similar impact, is a common practice prevalent in the literature in this field. In addition, income gains from higher levels of education have been demonstrated. Findings from studies in fifty-one countries show, on average, a 9.7-percent increase in wages for each year of schooling,^{98,99} and also conclude that early childhood learning and development outcomes is one of the primary predictors of later educational outcomes.¹⁰⁰

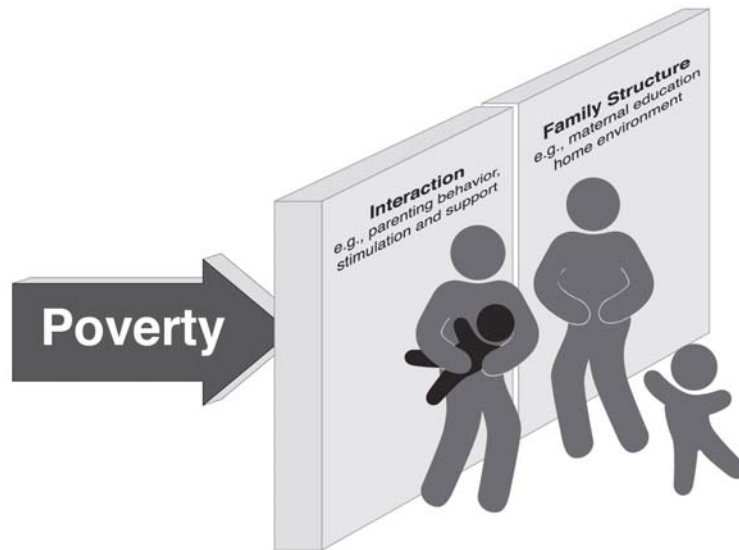


Figure 3. Home and Family Buffer Poverty Impact

A second way in which ECD interventions can break the cycle of poverty is by providing a buffer against the negative influence of poverty (see *Figure 3*). The impact of unequal income opportunities on child outcomes is not direct, but rather is mediated through several pathways, such as poorer housing conditions and less access to clean water, sanitation and stimulating environments.¹⁰¹ Results of evaluations of ECD programs have demonstrated that when parents are provided with education, skills and support—through home-based, individual services or group support—child health, education, nutrition and development outcomes improve, and greater school success and increased income are achieved later in life.¹⁰² Social assistance programs also account for families, primarily through social protection services (e.g., cash transfers, conditional cash transfers, vouchers, subsidies and other types of income supplementation) and service support; these programs can also help reduce poverty. Such programs, which mainly link conditionality of receipt of income to ensuring better immunization compliance, diet diversity and school enrolment, have been successful in improving some child outcomes (e.g., nutritional status, education enrolment cognitive development).^{103,104} However, it should be noted that the positive effects of cash transfers are likely to be enhanced when accompanied by parenting education and other related ECD services needed by the participating children and families.

The results are compelling: investing in ECD programs can break the cycle of poverty by both improving child outcomes and by mitigating the impact of poverty through strengthening parenting and home environments, which, in turn, improve a child’s holistic development.

Health and wellbeing are improved, leading to an upward trajectory of positive earning outcomes and greater equality in society.

2.3 Early Childhood Development Promotes an Equitable Start to a Healthy Life and Lowers Healthcare Costs Later in Life

Human capital is primarily expressed through the combination of two factors—health and education—that are closely linked to each other and to dimensions of inequality. Concern over health inequality is addressed through several aspects of the MDGs, including child health and nutrition, maternal health, and combating HIV/AIDS. Health is understood as a state of complete physical, mental and social wellbeing and not merely as the absence of disease or infirmity. Furthermore, health is not simply the ability to survive; rather, it is a fundamental human right. The current rates of inequality in maternal, infant and under-5 mortality are stark, as are the rates of disease and malnutrition.¹⁰⁵ These circumstances demonstrate the need for more equitable opportunities for the most marginalized population groups to access health services—an approach that has also proven to be cost effective.¹⁰⁶

An important challenge to health equity is the almost epidemic rise in non-communicable diseases (e.g., cardiovascular disease, diabetes, chronic lung disease and cancer) in virtually every country; these conditions are now the leading causes of premature morbidity, disability and death across the world. Although the symptoms of such diseases present in adulthood, evidence has clearly demonstrated that nutrition and other environmental factors acting during early development (i.e., fetal life, infancy and childhood) influence susceptibility to these illnesses.^{107,108,109,110} The health of mothers before and during pregnancy, and nutrition and growth in fetal and early post-natal life, determine the structure, function and adaptive capacities of key organ systems.¹¹¹ A review of related literature shows that ECD is recognized as a critical social determinant of health.¹¹²

According to the 2011 Global Monitoring Report, only nineteen of the sixty-eight countries with high child mortality rates are likely meet the MDG child mortality target of 2015, and one-third of all children in developing countries under age 5 suffer from stunting, a sign of poor nutritional status. A robust body of research demonstrates the contribution of nutrition to child survival, development and educational achievement. Evidence has demonstrated that improved nutrition during early childhood enhances lifetime learning and earnings. The evidence in support of improved early health and nutrition services for the most disadvantaged, leading to more equitable learning outcomes, has been gathered from several low- and middle-income countries (LMIC).^{113,114} The importance of these interventions has been recognized by global economists who, at the Copenhagen Consensus in 2008, listed early nutrition and micronutrient supplementation in the top ten investments for global economic

development.¹¹⁵ An important conclusion across a series of interdisciplinary studies is that, if equality is the preeminent goal of development, it is critically important to extend the health agenda beyond survival and to integrate nutrition and child development.

2.4 Early Childhood Development is the Essential Foundation to Achieve Learning for All

Education, similar to health, is considered a primary building block of society. Education For All (EFA) is the world's leading approach to defining and achieving comprehensive global education goals for the world. The MDGs also address education through promoting universal primary education. Education is a basic right and, in this age of knowledge economies, it is a basic necessity for achieving equality. O'Gara (in press)¹¹⁶ states, "A child born today must master skills and knowledge that were needed only by elites a century ago." However, while progress has been made in enrollment rates, great inequality has been found in educational achievement, with high rates of grade repetition and drop out in the primary grades and children reading at levels far below their grade.^{117,118} A key aspect of achieving more equal learning outcomes is the quality of the educational services provided.^{119,120}

Monitoring access to early education is very difficult because of the myriad of programs that fall into this category; many of the programs are either non-formal or receive non-governmental support. The clearest data available on education access are for pre-primary education provided by ministries of education, usually for children between 4 and 6 years of age. Although more than 50 percent of children access a pre-primary program, this average is misleading in that it is driven by high enrollment rates in a handful of countries and within the highest income brackets. Data from the Multiple Indicator Cluster Survey for early education program enrollment demonstrate that, for one-third of countries in the sample, pre-primary school enrollment is less than 10 percent.¹²¹ There is a 60 percent-point disparity in enrollment, favoring the richest 20 percent in a country, compared to the poorest 20 percent, in terms of access to ECD services.¹²² These data point to the pervasive negative influence of poverty on inequitable access, but they also indicate that access to early education is both limited and unequal.

An examination of outcomes from almost every country shows that children who participate in quality early education programs outperform their peers who did not attend such programs with respect to any measure of cognitive and non-cognitive development. These data are from every world region and a range of programs, from center-based preschools to community-based early learning programs.

Individual outcomes regarding skills and knowledge gained through early education are strong predictors of later achievement and success.¹²³ Research shows that early childhood

development and learning outcomes are linked to improved learning in primary school, a reduction of repetition and attrition rates, increased rates of school completion, skills development in adulthood, and acquisition of academic competencies and non-academic success.^{124,125,126,127,128,129} The results of the Program for International Student Assessment of the OECD (PISA) survey, conducted in sixty-five countries in 2009, demonstrate that in fifty-eight countries, 15-year-old students who attended one year of pre-primary school outperformed their peers who lacked early educational enrichment. With respect to primary school outcomes, a reduction in attrition rates and increased academic achievement and engagement are linked with better early learning and development outcomes.^{130,131,132} Similar results are seen in secondary schooling and young adulthood.^{133,134,135,136}

At the system level, ECD can equalize educational outcomes. Investment in pre-primary education has been linked to increasing the internal efficiency of primary school education through lowering its costs.¹³⁷ Because children who attend preschool are less likely to repeat grades, drop out or require special education, significant cost reductions are realized in education budgets.¹³⁸ Social returns on investment for primary school education (i.e., benefits to society resulting from public costs of education) are 24 percent for sub-Saharan Africa, 20 percent for Asia and 18 percent for Latin America, compared to 14 percent for developed regions.¹³⁹ ECD education, learning and care programs have the potential to reduce inequality in outcomes for individuals and society not only through improved cognitive and non-cognitive skills, but also through a reduction in the wastage of scarce resources in the education system.

Learning is a result of a sequential and cumulative process of skills acquisition, featuring a hierarchy of achievement that is based on mastering earlier skills (i.e., later learning builds on earlier learned skills and behaviors).¹⁴⁰ Children entering primary school, for example, need to be familiar with print (e.g., books) and to have a working vocabulary and a variety of other pre-literacy skills, preferably in their mother tongue, in order to later gain the reading skills required to master literacy. Early education, learning and care programs can help build foundational skills required for equalizing learning outcomes. A smooth transition from home, to pre-primary and then primary school is a strong predictor of later school success, with attention given to using the home language in the early years of primary school. Effective early education programs feature teaching-learning environments with positive, stimulating and supportive interactions between teachers and children. If implemented with quality, early education programs have the potential to drastically improve learning outcomes, especially for the most disadvantaged and marginalized children.

2.5 Early Childhood Development is one of the Most Cost-Efficient Human Capital Investments and Can Lead to Greater National Productivity

ECD is considered one of the smartest investments in human capital development for several reasons. The economic exposition of the return on investment in programs that build human capital starting at birth, commonly known as the “Heckman Curve” (see *Figure 4*),^{141,142} demonstrates the steepest gradient in the early years leading to primary school. Thereafter, it levels out during the secondary and tertiary education years. The decline in returns after primary school as calculated for the person, system and society has been a powerful economic argument for increasing investment in ECD. Although the data used to compute the return on investment in the original charts were primarily from the United States, more recent work has focused on low- and middle-income countries.¹⁴³ Increasing enrollment in just one type of ECD program (e.g., preschool) in a LMIC can result in a benefit to society of between US \$10 and \$34 billion and a benefit-to-cost ratio of 6.4 to 17.6, depending on the percentage of children enrolled.¹⁴⁴ The conclusions across this research are clear. ECD is the smartest investment with respect to sustained returns in the form of individual learning and earning potential, internal efficiencies in the system, and a lesser burden on society, especially with respect to the health, justice and social protection systems.

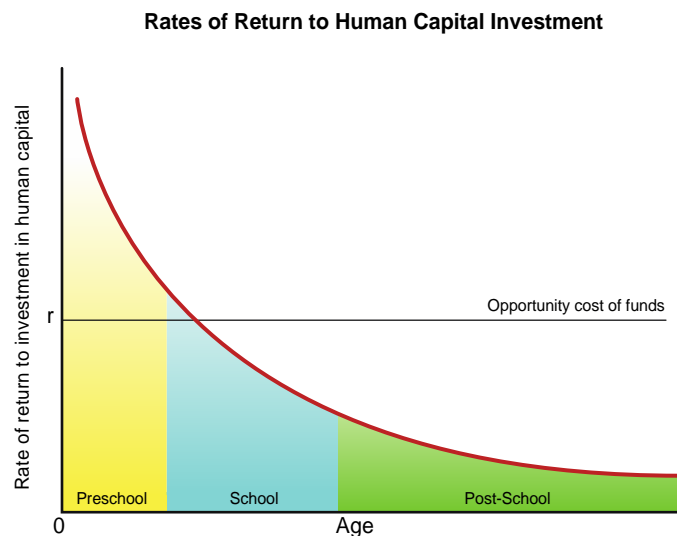


Figure 4. “Heckman Curve” (Heckman & Carneiro, 2003)

Another aspect of calculating cost efficiency is in the equalization of outcomes for children who might be at risk of disability. Neurobiological evidence shows that the foundation for skills and competencies is laid in early childhood. Furthermore, early intervention programs for

marginalized and disadvantaged children have been able to demonstrate remarkable effects in improving outcomes for children and families to the level of their more advantaged peers.¹⁴⁵ Disadvantaged children enrolled in quality early childhood education make greater gains than their more advantaged peers, reducing gaps in readiness for school and reducing racial and ethnic inequalities.¹⁴⁶ These interventions have been implemented in areas of health, education, environmental sustainability and protection.^{147,148,149} Meta-reviews of early interventions have indicated that one reason for their effectiveness is that as children grow, the disparity between an average growth trajectory and a delayed trajectory widens (see *Figure 5*). Intervening earlier requires fewer resources and less effort with greater effectiveness. These early identification and intervention programs are vital to assist children with disabilities to achieve to their fullest potential and, to the greatest degree possible, eliminate later disparities and inequalities.¹⁵⁰ The national agenda of Chile includes an integrated social protection system for early childhood, “Chile Crece Contigo,”¹⁵¹ with the stated aim of providing equal opportunities for all from the earliest stages of life. In addition to education, health, psychosocial development, nutrition, and child protection, the program has additional mechanisms to support parents of children born with disabilities.

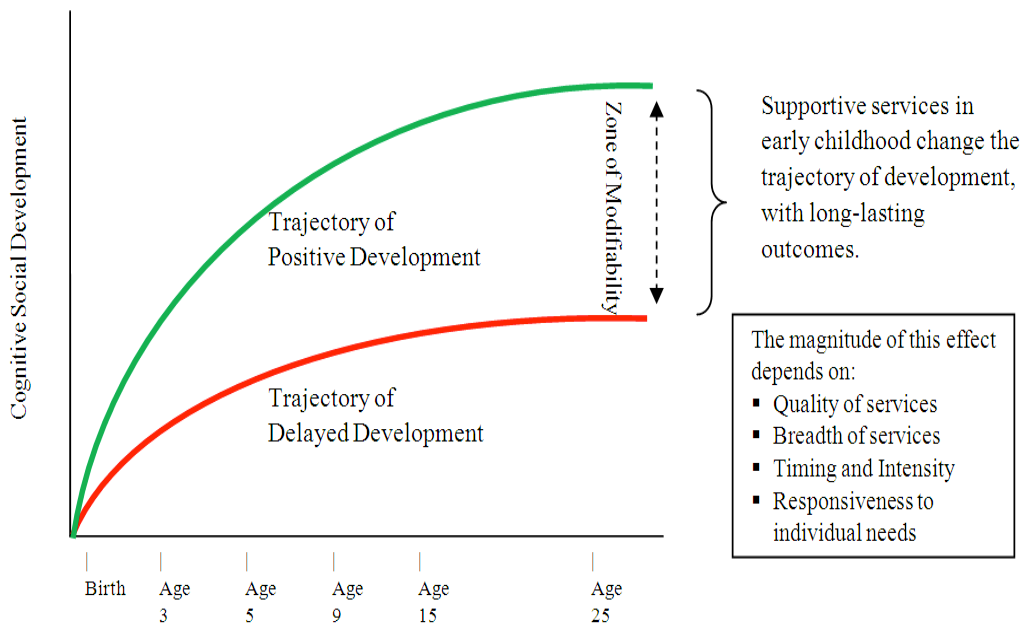


Figure 5. Case for Early Intervention (Ramey & Ramey, 1999)

2.6 Early Childhood Development is the Right Start for Creating a Sustainable World

The U.N. System Task Team on the post-2015 agenda has clearly stated that business as usual cannot be an option moving forward and a significant transformative change is required because the challenges to development are both interdependent and holistic ¹⁵². ECD, is a central dimension that is part of this interdependency because it lays the foundation for development and by dint of its nature, is holistic. If significant and meaningful change is the order of new business, then attention to the evidence that supports it is important. Compelling evidence, presented in this paper, demonstrates the potential for ECD to significantly reduce the inequality of a wide range of individual and socio-economic outcomes. The evidence is clear, investing in ECD leads to gender equality and empowerment, better health and education outcomes, improved skills, abilities and productivity, narrows the income, ethnic, and geographic inequality gaps, provides timely intervention for persons with disabilities, and is a cost effective strategy for eliminating disadvantage. ECD provides a viable strategy for inclusive social and economic development. The newest body of evidence that is just starting to emerge is also providing support for the role of ECD in environmental sustainability and peacebuilding. This nascent body of work has shown that young children have an innate tendency to be sensitive to nature ¹⁵³ and if that tendency is nurtured, then children develop basic values, attitudes, habits and behaviors that promote environmental protection and sustainability ¹⁵⁴. Inherent in early childhood education are traditions of pedagogy and learning that incorporate local relevance and focus on sustainability. ECD and peacebuilding is potentially facilitated by the neuropeptide Oxytocin ¹⁵⁵, which if set in place in early attachment and bonding can set the state for positive and non-aggressive interactions in later life ¹⁵⁶. There have been multiple evaluations of ECD conflict reduction efforts in families and communities that have been effective in reducing violence, promoting protection, peace and security ¹⁵⁷. In closing, ECD evidence has come of age and provides answers to the challenges of the post-2015 agenda.

The following concrete recommendations based on ECD evidence promote equality, sustainable development and uphold human rights of the present and future generations.

1. Establish a goal to expand and improve ECD as a strategy to reduce inequalities and promote inclusive social and economic development.
2. Include four indicators for this goal pertaining to the following key areas of ECD:
 - a. Improve birth outcomes and neonatal care through prenatal education and care;

- b. Improve parenting skills and early child nutrition, health, and development through the provision of integrated parenting programs for parents of children aged 0 to 3 with specialized services for children with disabilities;
- c. Improve learning, cognitive and non-cognitive, outcomes through ensuring access to at least two years of good-quality, pre-primary education using local languages, with an emphasis on conflict and fragile contexts; and
- d. Improve the quality of learning environments and processes in lower primary school through training teachers to effectively address young learners' needs and use of child-centered approaches to teach basic skills in local languages

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