

Statement on the Disproportionate Impacts of Climate Change on Children with a Special Focus on the Early Years on Behalf of ECDAN Partners

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Introduction

The global community of scientists, practitioners, policymakers, and advocates for early childhood development call upon all the parties and bodies of the climate conference to recognize that:

The youngest children in all their diversity, (those younger than 6 years of age, and especially those younger than 3 years) are a fundamentally important population that must be given urgent consideration by the climate conference. Three overarching attributes make this population exceptionally relevant:

- **Young children are uniquely vulnerable:** The youngest children are at greater risk and experience negative climate impacts disproportionately more than other demographic groups.
- **Investing in young children is uniquely powerful:** Policies and services focused on the youngest children and their families outperform most other human development policies in promoting community resilience, adaptation, and the proactive capacity to address climate-driven loss and damage ([World Bank, 2022](#); [Ponguta, Cerezo and Scott, 2023](#)).
- **Young children are under-represented and unable to represent themselves:** Young children lack the capacity (cognitive, physiological, emotional, and institutional) to represent themselves at the UNFCCC level. They are dependent on their caregivers to care for and advocate for them. It is therefore necessary for the conference to make space for the voices of the youngest children, in age-appropriate ways, but also the parents, caregivers, and experts that constitute the network of care.

The expert dialogue on the impacts of climate change as part of the SB60 represents an unprecedented opportunity to not only highlight these specific vulnerabilities but to also promote the rights and needs of young children - who are most at risk and cannot represent themselves. Just as important, it is a platform to educate UNFCCC parties, policymakers, climate scientists, and other key stakeholders about the value of early childhood development (ECD) policies and programs to boost the Adaptation and Loss & Damage agendas through evidence-based, high quality, equitable interventions delivered the most consequential stage in life.

This statement shares a synthesis of the state of knowledge regarding the specific risks posed by climate change on the youngest children and their families while also highlighting the exceptional contribution that early childhood policies and services will bring to the global climate community if we are to successfully address the challenges of Mitigation, Adaptation, and Loss & Damage.



We know it will be the youngest children who will bear the brunt of the impacts caused by climate change. Specifically, nearly 90% of the global health burden related to climate change is borne by children under five ([Sheffield and Landrigan, 2011](#)). As a result, the expert dialogue on the disproportionate impacts of climate change on children offers a critical opportunity to not only highlight the unique and specific vulnerabilities of young children to climate change, but also share evidence-based, replicable, and scalable solutions in early childhood development that have already been implemented in countries across the world. These early years interventions will help to build resilience to the climate crisis by helping children reach their full potential and achieve positive development outcomes - but must be adequately and appropriately financed within climate-specific adaptation, mitigation, and loss and damage plans and through climate financing mechanisms. To date, those investments have not been part of the climate agenda.

The unique vulnerabilities of young children to climate change

Climate change represents a fundamental threat to children's rights and compromises their opportunity to grow up safe, healthy, well-nourished, happy, and learning. These threats are becoming increasingly tangible and severe, with more and more children being affected by displacement, disruptions to their education, and lack of access to life-saving health services due to climate change. While all children will bear the brunt of these negative impacts, young children are particularly vulnerable.

The evidence is startling:

- **More than 1.7 million premature deaths** among children under five are caused by pollution and toxic substances annually ([WHO, 2017](#)).
- Children born in 2020 will experience, on average, **twice as many wildfires, 2.8 times as much exposure to crop failure, 2.6 times as many drought events, 2.8 times as many river floods, and 6.8 times more heatwaves across their lifetimes**, compared to a person born in 1960 ([Save the Children, 2021](#)).
- **More than 43 million children have been displaced** due to weather-related disasters over the last six years, causing more humanitarian crises around the world ([UNICEF, 2023](#)).
- **One in three children live in countries that face extremely high temperatures** ([UNICEF, 2022](#)). Extreme weather and disaster events can prevent children from accessing childcare, schools, opportunities for play, and other learning opportunities as well as health services. Every year, 40 million children are having their education disrupted because of disasters exacerbated by climate change ([UNICEF, 2023](#)).
- **Approximately 500 million children live in flood-prone areas, and 920 million are exposed to water scarcity**. In low- and middle-income countries, 2 in 3 children under five - or 478 million - experience food poverty. Climate-related disasters, global warming, and environmental degradation will act as a multiplier that will further compound this situation. ([UNICEF, 2021](#)). ([Tellman, et al., 2021](#)).
- **By 2050, the risk of hunger and malnutrition could rise by 20 percent globally**, and the majority of child deaths expected to occur as a result of climate change will be driven by undernutrition ([World Food Programme, 2021](#)).
- **Higher temperatures and extreme weather events exacerbate lead mobility and toxicity**. Childhood lead poisoning can cause reduced IQ, behavioral problems, and learning difficulties.

- **Climate change significantly affects children's mental health and well-being** ([Ahdoot et al., 2015](#)). Stress and trauma are likely to disrupt the way a child and caregiver interact. Instability associated with displacement from severe or chronic disasters presents challenges to responsive caregiving ([Moore, et al., 2007](#)).
- The impact of climate change **will exacerbate gender inequality**. Girls and women parents/caregivers are particularly at risk, including because of the increased burden of unpaid care work (which starts early for young girls), increased risk of gender-based violence, and families resorting to negative coping mechanisms such as female genital mutilation and child, early and forced marriage and unions, the inter-generational impacts of stunting linked to food and water shortages, and poorer maternal physical and mental health outcomes. The systemic disadvantages girls and women face throughout their lifetimes begin in early childhood ([UNDP, 2016](#); [PLAN, 2023](#)).

As shown above, all children are vulnerable to climate change, but the youngest children (particularly those aged 0-3) are exceptionally vulnerable and susceptible due to physiological, social-emotional, and cognitive characteristics that are distinct from any other moment in life, and which make young children fully reliant on their caregivers. Specifically, young children:

- Breathe twice as fast, which, when combined with their still-developing pulmonary system, puts them at greater risk of respiratory illnesses from air pollution, including pneumonia, which is the leading cause of death of children under five.
- Have a higher metabolism and sweat less, exposing them to a uniquely increased risk of heat stress, potentially causing dehydration, illness, and death.
- Have immune systems that are not fully developed and struggle to fend off diseases and infections, contributing to children accounting for over 75 percent of global malaria fatalities. Climate change-induced shifts in disease patterns like Zika and Dengue therefore pose severe risks for this group. ([United Nations Inter-Agency Group for Child Mortality Estimation, 2023](#))
- Drink more than adults compared to their body mass, which means the impact of droughts is heightened and includes malnutrition, diarrhea, and death due to food insecurity or water scarcity.
- Are particularly susceptible to the dangers of extreme weather events because of their reliance on others for their safety and well-being. If they survive, they bear the physical and mental consequences for a lifetime, including the potential for post-traumatic stress and related adverse psychosocial outcomes and developmental delays ([Barkin et al., 2021](#)).
- Will be more affected by climate-related changes in agricultural productivity, which will impact the availability of essential micronutrients in the diet of young children, exacerbating conditions including anemia and stunting ([Harvard, 2024](#)).
- Are at increased risk of exposure to environmental toxins (such as lead) because of their sensory development (i.e., more hand-to-mouth activities/exploration) and size (i.e., closer to the ground where metals tend to accumulate) ([Pure Earth](#)).

The first thousand days are the most critical time in a child's development. Missing the opportunity to provide [nurturing care](#) during this consequential period - including protection from toxic stress, clean air, potable water, adequate stimulation, proper nutrition, and safeguarding against abuse and neglect - can lead to irreparable harm.

The risks to human rights are heightened for the youngest children. The Convention on the Rights of the Child makes special mention of young children in [General Comment No. 7](#) to underscore the risks and vulnerabilities of the first years of childhood. “For the exercise of their rights, young children have particular requirements for physical nurturance, emotional care and sensitive guidance, as well as for time and space for social play, exploration and learning” ([UN, 2006](#)). Furthermore, it states that “young children are especially vulnerable to the harm caused by unreliable, inconsistent relationships with parents and caregivers, or growing up in extreme poverty and deprivation, or being surrounded by conflict and violence or displaced from their homes as refugees, or any number of other adversities prejudicial to their well-being”([UN, 2006](#)).

It is therefore incumbent upon the UNFCCC to recognize and address the acute vulnerabilities of young children in the context of climate change, as a part of its intergenerational responsibilities and duty to uphold human rights. We call on the conference to leverage more than a century of scientific evidence and practical experience in this field to implement proven, high-quality early childhood development (ECD) policies and services.

Evidence-based solutions to address the challenges posed by climate change: building resilience by investing in early childhood development.

Investing in the early years offers a multitude of evidence-based solutions to addressing the climate crisis. We know, from decades of experience and research, that high-quality early childhood development services and support are one of the best investments a country can make by laying the foundation for future success and yielding improved outcomes in health, education, and economic development ([Black, Behrman, Daelmans, et al, 2021](#), [Heckman, 2012](#)). Therefore, high-quality ECD service provision built on nurturing care principles offers a ready-made pathway for building climate resilience ([ARNEC, 2022](#); [Ponguta, Cerezo, and Scott, 2023](#)).

Simply put, timely, high-quality early childhood interventions will build individual and community resilience, strengthen well-being, drive human potential, and boost the achievement of sustainable development outcomes. These evidence-based solutions are currently available and ready to be supported by a global network of scientific experts, advocates, and practitioners. But to garner the benefits that early childhood programs can deliver for the Mitigation, Adaptation, and Loss & Damage agendas, these programs must be appropriately financed, so they can be of the highest quality, delivered at the right time, shared equitably, and targeted at the most vulnerable populations ([Ponguta, Cerezo, and Scott, 2023](#)).

Closer ties must be developed between the early childhood development community and climate change experts and policymakers to allow for the integration of agendas with climate change policies and financing mechanisms. By adopting and integrating early childhood interventions and climate-resilient interventions into the systems that support young children and their caregivers, countries can ensure good health, adequate nutrition, safety and security, responsive caregiving, and richer learning opportunities while reducing exposure to climate and environmental hazards ([UNICEF, 2021](#)).

Recommendations

To effectively adapt to and mitigate the climate crisis, we must build resilience within our children and communities by ensuring all children are properly equipped to reach their full potential. That starts with targeted, high-quality early childhood development interventions during the first 1,000 days of life.

As parties discuss the disproportionate impacts of climate change on children in Bonn this June, we offer these general recommendations to inform the agenda and discussion:

- Highlight and recognize the unique and specific impacts of climate change on young children and their caregivers, who are typically girls and women.
- Integrate early childhood development policies and programs into strategies for Adaptation, Mitigation, and Loss and Damage and ensure these are prioritized within climate financing plans with reporting and accountability mechanisms.
- Promote early child development policies and services as an evidence-based intervention for countries to adopt within Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs), the greening education agenda, and other policy processes as means of building individual and community preparedness, resilience, and responsiveness to climate change.

However, this dialogue must move from discussion to action. Specifically, we would like to see the expert dialogue recommend:

- The development of [child-sensitive metrics](#) under the UAE Framework for Global Climate Resilience, particularly in relation to its thematic targets for climate-resilient social sectors.
- Creating inclusive spaces for the age-appropriate participation of young children as well as the parents, caregivers, and experts who support them.
- The urgent provision of new and additional climate finance, placing children and child-critical social services at the forefront of such efforts - particularly those that target the early years. Climate finance should be new and additional and delivered primarily in the form of grants, particularly for adaptation and loss and damage. To ensure transparency and effectiveness in the allocation of climate financing, data should be disaggregated with an accountability and monitoring mechanism to track funding specifically targeting early childhood development.
- Urgently and equitably phasing-out fossil fuels and investing in renewable energy and energy storage, based on the best available science. Doing so will reduce climate-related health, education, and economic risks that have become increasingly prevalent among young children that endanger our future and future generations.
- Incorporating a qualitative goal within the new collective quantified goal (NCQG) on delivering child- and gender-responsive climate finance at the scale required.
- That just transition pathways include specific provisions for protecting and promoting children's rights, focusing on the socio-economic impacts of climate policies on

children, particularly those from marginalized and disadvantaged groups, including girls.

- Integrating children's climate change education into all curricula and teacher training - including early childhood care and education - to increase children's awareness of and preparedness for climate change as well as their agency and ability to contribute to the just transition.

We urge the UN Climate Change Secretariat to leverage this expert dialogue to ensure the unique and specific impacts of climate change on the world's youngest children are better understood and recognized and early childhood policies and services are integrated into adaptation, mitigation, loss, and climate financing strategies. We must leverage this opportunity to build bridges between the early childhood and climate sectors so we can learn from one another, share best practices in policies and service delivery, and develop a shared agenda that will ensure the world's youngest children survive and thrive amidst the changing climate.

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About ECDAN

The Early Childhood Development Action Network's (ECDAN's) mission is to catalyze collective action with and for young children and their caregivers by connecting and aligning partners, sharing knowledge and good practice, and advocating for better policies, more resources, and accountability for results.

ECDAN has formed a working group of partners engaged at the intersection of early childhood and climate change. Through this working group, ECDAN partners seek to elevate the needs of young children within the global climate discourse, offer evidence-based policy solutions to decision-makers working to address the climate crisis at the global and country levels, and support local partners to advocate for the integration of early childhood interventions into national climate action plans.