





This is an abridged version of the scoping study prepared by the University of Wollongong. Leaders: Prof Marc De Rosnay, A/Prof Cathrine Neilsen-Hewett, & Prof Lisa Kervin. Research Team: Snr Prof Anthony Okely, Dr Ellie Taylor, Dr Karel Strooband & Lisa Kilgariff.

This scoping study is commissioned by ARNEC as part of its clean, safe and sustainable environment for young children initiative, in partnership with Save the Children International and UNICEF East Asia and Pacific Regional Office.

This abridged version is subject to review, in consideration of the final scoping study, to be released not later than 30 November 2022.

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Overview and need for this study

As we move steadily into a world affected by climate change and environmental degradation (CC&ED), and the need for adaptation to its increasingly serious and disruptive effects (IPCC, 2022a), there is growing recognition that young children will be the most profoundly affected (Thiery et al., 2021) but they are at the same time the least well represented in the policies and programs designed to respond to current impacts and plan for future consequences (ARNEC, 2022; CCC, 2015; Pegram & Colon, 2020). This Scoping Study, written by the Early Start, University of Wollongong in Australia, is a response by ARNEC and its partners **UNCEF EAPRO** and **Save the Children International** to this situation, designed to put early childhood development (ECD) at the heart of climate actions. This **document is an abridged version of the three main components taken from the scoping study. The full study will be released no later than 30 November 2022 and will be made available in the ARNEC website: https://www.arnec.net/.**

Specifically, this scoping study recognises that there is currently insufficient attention given to the immediate and longer term needs of children in CC&ED actions, and it leverages the nurturing care early childhood development framework (NCF; WHO et al., 2018), a consensus model incorporating both the needs and rights of young children within their caregiving relationships, to better understand and communicate the impacts of CC&ED on ECD. The Study also elaborates a *child-centred approach* for governments, decision makers, development agencies, advocacy groups, and key stakeholders to support the incorporation of young children's needs and rights when considering CC&ED impacts and responses, as well as adaptation and mitigation strategies. Through this process, examples of good practice and areas of innovation and challenges are identified and considered in relation to future planning.

The Scoping Study moves progressively from a global to a regional and local perspective and, in doing so, recommends a *child-centred approach* (CCC, 2015) to better integrate ECD with CC&ED actions, while at the same time attempting to capture current areas of good practice, innovation and opportunity. In conducting the study, priority was given to the identification of and respect for the knowledge and expertise of those involved in CC&ED policy and program development, including those within disaster risk reduction (DRR), across jurisdictions globally but with emphasis on the Asia-Pacific region. The child-centred approach was also informed by the nurturing care for early childhood development framework (NCF; WHO, UNICEF & World Bank Group, 2018) and connections were sought with the Sustainable Development Goals and other relevant frameworks (as appropriate) to situate analyses within existing, internationally recognised agreements, mechanisms, and approaches.

There are three components to the Scoping Study:

- 1. Global Impacts Survey & Desk Review (Chapters 3 to 6)
- 2. Sub-Regional Analysis & Case Studies (Chapters 7 to 9)
- 3. Looking Forward: Recommendations & the Child-Centred Approach (Chapters 10 & 11)

Together, these different approaches illustrate and guide the consideration of ECD in relation to CC&ED. Specifically, these different components show how ECD can be considered and supported at a local or community level using the child-centred approach and a focus on case studies, while at the same time positioning these actions within global and regional contexts or trends. Broad consideration is given to a range of CC&ED responses, including policy development, program initiatives, and financing/funding approaches at different levels (i.e., global, sub-regional, national, local). Through these analyses and the elaboration of the *child-centred approach* (see CCC, 2015), ARNEC and its partners are contributing to awareness and understanding of the need to consider ECD in relation to CC&ED and develop a roadmap for multi-sectoral strategic planning.

Key Messages from the Scoping Study

Despite the diversity of information sources, expert views, and insights from Focus Group Discussion participants, and despite the richness of context specific information deriving from case studies and different regional settings, there were very consistent messages emerging from the Scoping Study. These include, but are not limited to:

- The nurturing care needs of young children need to be put at the heart of CC&ED actions; the current lack of focus on young children is causing them additional harms
- To adequately respond to the nurturing care needs of young children and deliver on the commitments on the SDGs, it is necessary to differentiate meaningful differences in developmental stages and child characteristics, and to be specific about the ways in which young children's nurturing care needs are impacted by current and anticipated CC&ED conditions; a systematic child-centred tool that incorporates the NCF and integrates ECD with CC&ED can potentially assist in this endeavour
- Young children need to be seen as valuable participants in our environmental and climate response, and their education and knowledge needs to be cultivated and supported so that they build a strong sense of individual and collective agency to meet future challenges
- Leadership is needed to re-conceptualise funding mechanisms and multisectoral collaboration so that financing and service delivery can be better coordinated to respond to contextual needs and variation, as well as anticipating future needs or challenges
- Recognition that there is currently inadequate data to understand and document the impacts of CC&ED on young children or to form the basis for future data driven evaluation of policies and programs

The findings and recommendations of this study represent a starting point to improve the ways in which we incorporate the needs and rights of children into our climate change and environmental actions. Future changes and innovation in practice, policy and programs should be shared to engender excellence in upholding young children's rights.

Section 1: Global Impacts Survey and Desk Review

The Global impacts survey and desk review is presented in four chapters, beginning with a high-level survey of children's rights within the key international frameworks, and an acknowledgment of the threats to their wellbeing posed by CC&ED in **Chapter 3**. Importantly, Chapter 3 seeks to re-define early childhood in terms of meaningful developmental stages — conception to birth, infancy, and toddlerhood (1 to 3 years), preschool age (3-5 years), and early school age (5-8 years) — and provide a high-level global summary of the existing research literature that speaks to the vulnerabilities, challenges, and opportunities facing children and their caregivers in these different stages of development in relation to CC&ED. Chapter 3 shows that, within the early childhood period, there are profound differences between developmental stages, thereby providing a foundation and rationale for adopting a child-centred approach to integrating ECD with CC&ED.

Young children are vulnerable, but ECD is a key building block in sustainable development. By considering the impacts of CC&ED on today's children, there is the opportunity to not only improve their lives now, but also to secure a stronger future for a whole community. Building resilience through ECD is not merely a response to our most vulnerable citizens, it is also an act of empowerment

In **Chapter 4** a rationale is presented for using the NCF (WHO et al., 2018) to elaborate the child-centred approach and bring focus to the nurturing care needs of children. The structure and logic of the NCF is leveraged to engender more differentiated thinking about how CC&ED impacts young children. A high-level mapping of CC&ED effects on the different domains within the NCF – good health, adequate nutrition, responsive caregiving, opportunities for early learning, and security and safety – is presented in an illustrative manner.

Against the backdrop of the child-centred approach and the differentiated lens it provides, **Chapter 5** contrasts the global call to action on ECD and CC&ED (ECDAN, 2021a) with a global snapshot of current policies, programs, and funding, describing how children currently feature within global policy agreements and frameworks and the SDGs. Whilst there is a clear gap between current status quo and the focus required to integrate ECD into CC&ED responding and planning, there is also growing recognition that there is insufficient attention given to ECD in current policies and frameworks. Encouragingly, even though current guiding policy frameworks are not child-centred and Nationally Determined Contributions (NDCs; specified under the Paris Agreement) have insufficient recognition of young children's rights and needs (UNICEF, 2021c), there is emerging evidence globally and within the Asia Pacific region of initiatives that take a child-centred approach to integrating ECD with CC&ED within policies and programs.

The final section of the global impacts survey and desk review leverages expert insights to identify the principles and strategies needed to put ECD at the heart of CC&ED responding and planning (**Chapter 6**). Prominent themes emerging from the expert panel included (i) a lack data that speaks to the impacts of CC&ED on children, and young children specifically; (ii) the need to elevate children's voices and reposition them as our most valuable asset for future mitigation and adaption; (iii) the need to advocate strongly for better recognition of children and caregivers in the first 1000 days of life; and (iv) a recognition that there will need to be concerted effort from leaders and decision makers to change existing systems so that the child-centred approach is positioned more prominently within our guiding frameworks and within the development of policy and programs at all levels.

Section 2: Sub-Regional Analysis & Case Studies

The sub-regional analysis and case studies present the synthesis of various data gathering and information sharing mechanisms that are central to the Scoping Study. Guiding these chapters are the findings of the questionnaire developed by ARNEC to identify prominent CC&ED issues facing the sub-regions of the Asia Pacific (Oceania & Pacific, East Asia, South Asia, and Southeast Asia), and the key impacts on young children. In addition to the questionnaire, representatives from key government bodies and organisations with early childhood and/or climate change expertise were invited to participate in sub-regional focused group discussions (FGDs) or interviews, depending on their availability. Representatives were selected in consultation with the ARNEC secretariat and based on their responses to the questionnaire. Interviews and FGDs presented an opportunity to share and discuss insights, key learnings, opportunities, challenges, and recommendations. The responses of the interviewees and FDGs were subjected to qualitative analysis and are largely integrated into Chapter 8. Finally, learnings from the ARNEC sub-regional conference sessions (2022, July) were also integrated into the sub-regional analysis and case studies.

The sub-regional analysis and case studies are organised so that the sub-regional profiles are presented first to orient the reader and provide a clear structure for subsequent analysis (**Chapter 7**). **Chapter 8** provides a full treatment of the findings based on the themes which emerged from the qualitative analysis. The most prominent theme was the need for more knowledge and advocacy about the challenges of integrating ECD with CC&ED, which includes advocacy for the rights of children to be recognised as

stakeholders in their futures and to participate in the responses to and planning for CC&ED. Thematic analysis also revealed strong agreement about the siloed nature of responding to CC&ED challenges within government, service providers and other agencies. Respondents agreed that improved inter-sectorial collaboration promises to improve planning and responding but also that there is considerable inertia in existing systems to bring about such changes. Further, it was noted that collaboration between health and education was paramount. Respondents were also keen to bring attention to the profound impacts on the wellbeing of young children and their caregivers and relatively poor availability of resources and support mechanisms to address such issues, and the persistent challenges of air pollution in many sub-regions of the Asia Pacific.

The case studies in **Chapter 9** present a varied range of experiences from across the region (Mongolia, India, Vietnam, and Fiji) and provide a description of good practices, opportunities, and areas of innovation, as well as considering challenges. These case studies provide tangible examples of the complexities facing different countries and a range of initiatives that are making a difference through very different mechanisms and approaches. Such case studies bring to life on-the-ground responses and planning for ECD in the context of CC&ED and may suggest ways forward within other jurisdictions.

Section 3: Recommendations and the Child-Centred Approach

The final chapters of the Scoping Study draw on the previous information sources (research evidence, policy frameworks, case studies, the questionnaire, etc.) and expert views to chart a path for the immediate future and medium term. There are many areas in which concrete recommendations can be provided based on current knowledge, and where the principles of a child-centred approach to CC&ED responding and planning can be realised. Whilst there are abundant recommendations (**Chapter 10**) at many levels – home, community, schools and ECE/ECCD services, programs, services – this approach is designed to provide many possible starting or entry points. It is clearly not appropriate to advocate for all these recommendations simultaneously, and some will be more relevant to specific contexts, but the comprehensive approach taken in Chapter 10 is designed to facilitate flexible adaptation and to make the challenges and opportunities of integrating ECD into CC&ED more concrete.

The work presented in this document – the global impacts survey and desk review, the sub-regional analysis and case studies – represents and initial attempt to bring together evidence and practices that will allow government and communities to better consider and incorporate the needs of children when planning for and responding to CC&ED. We anticipate that the recommendations identified, which reflect the insights and perspectives gathered from a consideration of the current evidence base, practices, and leaders in the sector, will continue to evolve as wider stakeholder groups are engaged, practices evolve, and evidence improves.

It should be acknowledged that there are clear gaps in evidence base that limit the ability to provide comprehensive recommendations across all areas of need or all sub-regions. A key recommendation, therefore, is that additional research is needed to investigate the impact of CC&ED on ECD, specifically looking at the age groups identified and explored in this paper and effective responses to their needs. Research into engaging young children's voices and on the needs of vulnerable groups, such as children with disabilities or low-income families, will also greatly improve the ability to respond and plan in effective and impactful ways.

The recommendations identified in the study refer to components of the Nurturing Care Framework (NCF) for Early Childhood Development (WHO, United Nations Children's Fund, World Bank Group, 2018). This approach is designed to draw attention to the need to operationalise considerations for young children facing the impact of CC&ED through the design and delivery of services and programs, the development of policy, and the support of more direct community action. The NCF framework is applicable across multiple sectors and highlights key considerations for young children and caregivers, including nurturing care, appreciation of caregivers' efforts, enhancing caregivers' skills and knowledge, and addressing the challenges facing caregivers.

Climate change and environmental degradation presents a significant impediment to meeting these rights for all humans but impacts the youngest members of our communities most profoundly. When considering these recommendations, it is important to note that the full value of ECD is contingent upon advocating for ECD systems and services to become climate-sensitive, better integrated, and better financed so that high-quality, inclusive, and equitable ECD outcomes can be realised.

Recommendation 1: Building resilience within families and homes

The home environment is complex, and any changes can be a sensitive area of discussion for parents, caregivers, and the wider family group. All recommendations implemented in the home environment should consider cultural structures and behaviours and be respectful to the needs of individual families. As the home takes such a central role in the early years of a child's life, and directly impacts a child's development and growth in all ways, it is essential to consider how changes can be made to address gaps most effectively by empowering parents and caregivers to enact nurturing care. When these structures are strong, the capacity to be resilient and respond positively during times of climate crisis and disaster will be improved. In considering the impacts of CC&ED on the family and home, consideration should be given to what *home* may look like in times of disruption as a result of extreme weather events and/or displacement, and how recommendations can be viably implemented to address these changing needs at times of crisis. Coordination with those responsible for DRR policies, services, and mechanisms is critical to ensure that acute responses are sensitive to the needs and rights of young children, and the importance of their family and *home* environment is fully integrated and central to planning. Recommendations that specifically address or respond to CC&ED within the context of the home include:

- a. Empower parents and caregivers to create climate resilient homes including caregiver wellbeing mechanisms during times of environmental crisis
- b. Enable safer home environments by supporting caregiver understanding of dangers posed by CC&ED
- c. Provide guidance and support for responsive caregiving in practice
- d. Child-sensitive risk assessment to identify and reduce dangers within the household
- e. Data collection of current child health data including caregivers/communities can access and understand data

Recommendation 2: Supporting and enabling communities to be engaged

Members of the community itself are a community's greatest resource. Engaging community members, including young children, provides an opportunity to reposition individuals as experts in their own lives and the spaces in which they live. It also models collective agency and action to children within the community. Planning should consider strategies for the harnessing of this immense resource through local awareness campaigns, local stakeholder groups, and citizen science programs to ensure that larger infrastructure and preparedness work reflects the needs and wants of the community. This requires

funding for the provision of physical resources and child sensitive localised DRR and adaptation strategies. Recommendations are as follows:

- a. Raise local awareness and support action campaigns via community networks e.g., childcare centres and schools.
- b. Create community stakeholder groups including local stakeholders alongside community leaders and representatives with knowledge of CC&ED
- c. Promote and support citizen science programs
- d. Provide safe and healthy community environments to support safe, outdoor play
- e. Identify and act on community-based child-sensitive adaptation strategies
- f. Provide targeted resources for child-sensitive disaster risk reduction (DRR).

Recommendation 3: Schools and ECE/ECCD settings

Consistency and continuity are key in ensuring that children's access to high-quality education is retained during periods of climate crisis and natural disaster. Pre-existing frameworks will support the widespread implementation of flexible learning strategies under challenging conditions, while additional funding will allow for the adaptation of existing infrastructure to reduce disruption wherever possible. All education programming should be child-centred, and children should have the opportunity to advocate for their own needs, and to be heard. Children must receive targeted, appropriate CC&ED education to increase their resilience moving forwards. Recommendations are as follows:

- a. Provision of safe and secure physical environments
- b. Provision of consistent access to high-quality early childhood education
- c. Efforts to provide continuity of education in times of crisis
- d. The development of child-centred climate and environmental curricula and advocacy programming
- e. Privileging and amplifying children's voices individually and collectively

Recommendation 4: Programs

Programs or interventions for young children that focus on the CC&ED issues must be thoughtfully designed and implemented to impact children and their environment successfully. Firstly, there is a need for more sustainable financial support for new programs and already existing programs to continue to impact the most vulnerable children effectively in the Asia-Pacific region. This will require awareness raising and advocacy at higher levels, such as COP27, on the importance of CC&ED impacts on the youngest children. Secondly, to specifically address the children's needs, programs should incorporate strong methodological approaches, including situation analyses, monitoring, evaluations, and facilitator training. Recommendations are as follows:

- a. Increase financial support to ensure high quality support can be provided to young children
- b. Incorporation of situation analysis to guide program design
- c. Monitoring of programs across various sectors including the provision, coverage and quality of services provided to young children and caregivers
- **d.** Evaluate program impacts to ensure they are meeting the evolving needs of young children and caregivers, alongside the evolving landscape of CC&ED in their country/region
- e. Enhancing facilitator knowledge of ECD to support young children facing the impact of CC&ED

Recommendation 5: Services

There are many exceptional services throughout the Asia-Pacific region and beyond that support young children's rights and needs in relations to CC&ED, yet there is much work to be done in service design, implementation, and collaboration to ensure that all young children in the Asia-Pacific region are reached successfully. This includes increasing the accessibility, coverage, integration, and continuity of services across the whole region, and concerted efforts to understand the needs and perspectives of children within the contexts of their everyday lives and with respect for their different stages of development, particularly in the early years. It is also important that information and knowledge gets shared efficiently within and between services – locally, nationally, and regionally – to establish high-quality evidence-based practices. Recommendations for services include:

- a. Strengthen intersectoral cooperation e.g., between health and ECD services
- b. Work to make services genuinely accessible and plan for adequate coverage
- c. Plan for the integration of CC&ED perspectives in service delivery design and implementation
- d. Identifying and ensuring continuity of effective ECD service provision
- e. Building and re-evaluating the evidence base on the impact of CC&ED on young children to ensure continuous service improvements
- f. Striving for high-quality service provision and ECD workforce development
- g. Understanding and responding to the needs of young children and the voices of their caregivers

The Child-Centred Approach to inform responses to and planning for CC&ED

The scoping study documents broad recognition that the effects of CC&ED on children are profound, while at the same time reflecting the fact that children have been given relatively little direct or privileged consideration in relation to planning for and responding to the impacts of CC&ED. In fact, there are no child-neutral policies; all policies must very clearly include the needs of children, or they are causing harm by grouping children's needs in with the needs of adults, or homogenising children's needs without elaborating on specific needs of young children, especially in the first 1000 days. In chapter 11, a child-centred approach to inform responses and planning for CC&ED is discussed and elaborated (CCC, 2015), first in terms of the top-down mechanisms that can facilitate, support, and operationalise the inclusion of children's nurturing care needs in CC&ED responding and planning, and second in terms of the bottom-up principles and mechanisms that can engender young children's participation and agency in responding to CC&ED. In the third section, opportunities to influence CC&ED policies and programs related to young children and ECD are highlighted based on the preceding Chapters of the scoping study, and the fourth section discusses a way forward to raise awareness and progress a child-centred approach to CC&ED responding and planning.

Chapter 11 provides a summary and reflection on the main issues and approaches identified through the Scoping Study. An overview of the child-centred approach is given emphasising *top-down* mechanisms to ensure that the process of responding to and planning for young children can be factored into other complex decision-making and planning processes so that they are implemented in ways that adequately reflect the needs and rights of young children as described in the previous chapters. By contrast, the child-centred approach can be described in terms of the *bottom-up* processes and actions that are needed to ensure that young children's views, voices, and perspectives are heard and responded to. This distinction between top-down and bottom-up mechanisms and processes can also be described, respectively, in terms of doing things *for* and *with* children (CCCC, 2015). An important feature of Chapter 11 is the

articulation of the need to develop a tool so that the nurturing care needs of children can be understood and differentiated in ways that are appropriate for the early years when integrating ECD with CC&ED.

To raise awareness and progress on a child-centred approach to CC&ED responding and planning, a way forward has been framed in relation to the four interrelated strategic action areas identified by ARNEC through the regional initiative (2022). These focus areas are identified below and linked to themes and insights that have emerged in the scoping study:

- Building and sharing knowledge through future research
- Increasing awareness through targeted communication and strategic work with governments
- Building capacity of ECD stakeholders through the development of resources and training, and the provision of targeted funding
- Strengthening partnerships across sectors beyond ECD through advocacy and impactful relationships

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