

Climate Change and Young Children

Climate Change Awareness, Perspectives, and Lived Experiences in Typhoon-Affected Communities: Implications to ECCD Program delivery in the Philippines

Authored by: Maria Rita D. Lucas, Professor, Centro Escolar University Manila – in collaboration with the ECCD Council, Philippines



Overview

Since 2019, ARNEC has been advocating for clean, safe and sustainable environments for early childhood. Through a joint scoping study, we have been building foundational work linking early childhood and climate change with University of Wollongong-Early Start Australia in partnership with Save the Children, UNICEF EAPRO and Bernard van Leer Foundation. Our pioneering scoping study highlighted that climate change and environmental degradation undermine all nurturing care areas affecting young children, families, and their abilities to survive and thrive. Young children who have emitted the least amount of greenhouse gases are paying the heaviest price.

ARNEC's ECD-Climate framework for action recognizes research and evidence generation as a key action pillar in elevating the needs of young children to inspire collective actions in addressing the impact of climate change and environmental degradation. Building on the joint scoping study with support from Early Opportunities, we have since supported micro research 4 countries in Bhutan, India, Pakistan, and the Philippines. These studies have provided empirical evidence to support the participation of young children in climate and environmental discourse and actions. This is one of a series of four micro research reports that summarize findings, lessons learned, and recommendations requiring urgent actions.

Background

The study examined perceptions and attitudes of local leaders, parents, and teachers on climate change, as well as their preparedness in responding to crises. Implications for the delivery of ECCD services, particularly those focusing on children's development and learning in the context of climate change, were drawn.

Methodology

The research sites were Arteche in Eastern Samar and Nabunturan in Davao Del Sur, two areas in the Philippines that have experienced different levels of exposure to typhoons as a result of climate change. Descriptive research was conducted for this micro research, integrating both qualitative and quantitative data collection methods. These data collection methods include questionnaires, observations, documents analysis, interviews, and focused group discussions (FGDs).

To assess the level of awareness and attitudes towards climate change, the questionnaires were administered to a total of 45 parents, child development teachers, and local leaders in Arteche, Eastern Samar, and Nabunturan, Davao Del Sur. The use of survey allows for quantitative analysis, providing numerical data that can be statistically analysed while observation and document analysis of the local government's plans and projects related to climate change were also conducted. Furthermore, a series of interviews were done to key stakeholders, including Local Government Unit (LGU) staff and local leaders to gain a deeper understanding of their perspectives and experiences in their respective jurisdictions. To gather in-depth insights, FGDs were also facilitated with representatives from the various stakeholder groups.

The combination of qualitative and quantitative methods ensures a comprehensive understanding of the complexities surrounding climate change readiness in the country's most affected localities.

Limitations

One limitation is the small sample size, as the study only included 14 parents, 18 day-care workers, and 15 local government leaders and staff in the selected areas. This limited sample size may not fully represent the diversity of perspectives and experiences within the LGUs. The study was also conducted in specific locations in the Philippines, which does not represent the diversity of other regions in the country and therefore limits the generalisation of research findings.

Another limitation arises from the reliance on self-report measures within the questionnaires and interviews. Self-report data can be subject to biases and inaccuracies due to respondents' perceptions and willingness to disclose certain information. Additionally, the micro research study primarily focused on the perspectives of parents, daycare workers, and LGU staff, neglecting viewpoints from other relevant stakeholders, such as children and other community members.

Given these limitations, readers should interpret the results with caution and recognize the need for further research with larger and more diverse key informants.

Results

1. Variation in attitudes on climate change among parents, child development teachers, local leaders

- Most believe that climate change is brought about by human activities.
- While most scored high on the basic facts, **95.56% of the respondents indicated that they still needed more information on climate change.**
- **66.67% get these pieces of information from the news on TV and radio**, and 22.22% search for more information elsewhere, like through social media on the internet.
- In terms of sources that respondents trust, **62.22% consider scientists and experts as credible sources of information**, while 20.22%

found government information reliable. Another 15.56% believed information from social media is trustworthy.

- **None of the respondents chose teachers as trusted sources of information.**

2. Climate change response depends on readiness and capacities of local stakeholders

Local Leaders (LGUs): For the National Climate Action Plan’s priority on Human Security, LGUs focus on integrated and disaster risk assessment, the results of which are the basis for activities, such as the need for 1) housing relocation based on disaster risk assessment. Baranggay LGU officials monitor incoming typhoons and low-pressure areas while informing their constituents. 2) As part of preparedness efforts for those affected, LGU officials coordinate with daycare workers to pack food, ensure other needs of the families, and provide socio-emotional debriefing interventions, including story-telling sessions for children. 3) LGUs work on information dissemination to ensure that the community is informed about impending typhoons or other emergencies through community education and public awareness programs, barangay or village-level assemblies, purok (or neighbourhood or small cluster) meetings, and other sessions. They translate technical terms into local language for climate change education, as well as share strategies with the community, such as waste segregation and preparation of family disaster plans for climate resilience.

Local Leaders	Child Development Workers
Relocation	Need to teach children about climate change
Support for those affected	Not confident enough
Knowledge and capability building	Lack resources
	Need more content knowledge
	Need to learn instructional strategies effective for climate change education

About 83 % of the **Child Development Workers (CDWs)** believe they must teach children about climate change. However, only 28% are confident that they have enough knowledge and skills to do it well, while 72% expressed the need for more content knowledge. They reported lacking resources and the need to learn effective instructional strategies for climate change education.

3. As children are under stress from disasters, ECCD program delivery is essential to climate resilience strategy at the local level

- The teacher respondents have good knowledge of the basic concepts of climate change; however, they still need more information.
- Concerning perspective, the respondents believe that human activities cause climate change, and its effects are already being felt.
- Respondents believed that climate change worsened the effects of natural disasters and that its impending effects make them worried and anxious, resulting in them being more vigilant in disaster preparation.
- Respondents explained that children showed changes in their behavior after experiencing extreme natural calamities - children panicking, crying, and hiding in fear.
- Respondents believe that schools should prioritize teaching climate change and that parents must be educated more about climate change to be able to teach their children as well.
- Respondents engaged in activities to help lessen the effects of climate change, such as cleaning canals, lessening the use of appliances, and tree-planting.
- Barangay official respondents demonstrated vigilance by making families prepare their family disaster plan, fortifying their houses, and advising them to remain tuned to the news.
- CDWs appeared not to be ready to teach about climate change to young children. They need more content knowledge and skills to use strategies to effectively teach about climate change.

Lessons Learned:

Several key findings and lessons were drawn from the study.

First, there is a need for **increased awareness and knowledge about climate change among parents, teachers, and local leaders in the communities.**

While there is a general understanding of the basic concepts of climate change, there is a desire for more information and resources for the teachers and parents to teach children about climate change and for the local leaders to lead the community in preparing for and mitigating the occurrence of natural disasters.

Second, the study highlights the **importance of integrating climate change education into early childhood programs.** Child development teachers and workers expressed willingness to teach children about climate change, but many felt they lacked the necessary knowledge and skills to do so effectively. Since they claimed that they are at the forefront of climate change education to children, child development workers need training and support to enhance their capacity in teaching climate change topics.

In closing, the study also revealed that **climate change impacts, such as extreme natural disasters, have a significant effect on children's behaviour and well-being.** There is a need for stress debriefing and support services to help children cope with the emotional and psychological impacts of climate change-related events. Similarly, educators should be well-equipped with the right knowledge and training in stress debriefing for young children and also to look after their own mental and overall health.

Recommendations

Based on the findings of the study, the following recommendations are proposed:

- **Climate Change Education:** Strengthen climate change education and awareness programs for parents, teachers, and local leaders. Provide access to curated compilation of resources and materials about climate change that are accurate and up to date.
- **Curriculum Integration:** Enhance the integration of climate change topics into the ECCD curriculum and learning plans, ensuring that children are exposed to climate-related concepts early in their education giving premium on developing the love for nature since it is a pre-requisite to genuine concern for the environment.
- **Professional Development:** Provide support and resources, such as seminars, training, and contextualized instructional materials, such as storybooks, to educators, thus, empowering them to effectively teach climate change concepts. Further, the training for educators should provide content knowledge on relevant pedagogical approaches and affective instructional strategies that can encourage strategic thinking and active participation among learners.
- **Collaboration and Partnerships:** Encourage and widen collaboration and coordination between LGUs, schools, and community organizations to foster a holistic approach to climate change readiness within the local context. This, in return, can prevent further damages in all forms that can be caused by these natural disasters.
- **Climate-Sensitive Planning:** Incorporate climate change considerations into local government plans, projects, and policies particularly those related to child development and early education. This includes developing climate-sensitive infrastructure and programs that can help alleviate the effects and aftermath of natural disasters in the lives of the people in the communities, most especially, young children.

References

- ARNEC Secretariat. (2022). ARNEC statement on the recent IPCC report. Asia-Pacific Regional Network for Early Childhood. Retrieved from: <https://arnec.net/static/uploads/ARNEC%20Reaction%20to%20the%202022%20IPCC%20Report-Impacts,%20Adaptation,%20and%20Vulnerability%2028Mar2022-Final%20Version.pdf>
- Arteche, Province of Eastern Samar. PhilAtlas. (2020). Retrieved from <https://www.philatlas.com/visayas/r08/eastern-samar/arteche.html>
- Currie, J., & Deschênes, O. (2016). Children and Climate Change: Introducing the Issue. *The Future of Children*, 26(1), 3–9. <http://www.jstor.org/stable/43755227>
- DILG-LGA. (2014). LGU Guidebook on the formulation of Local Climate Change Action Plan Book 1. <http://www.lga.gov.ph>
- DILG-LGA. (2014). LGU Guidebook on the formulation of Local Climate Change Action Plan Book 2. <http://www.lga.gov.ph>
- Mias-Cea, M. A. A., Mejillano, P., Gentoral, F. E., & Borlon-Aparicio, J. A. (2017). Enhanced LGU Guidebook on the Formulation of Local Climate Change Action Plan (LCCAP) Book 3 (Issue 632). <https://lga.gov.ph/uploads/publication/attachments/1590498028.pdf>
- Nabunturan, Province of Davao de Oro. PhilAtlas. (2020). Retrieved from <https://www.philatlas.com/mindanao/r11/davao-de-oro/nabunturan.html>
- Republic Act 9512. (2008). An Act to Promote Environmental Awareness through Environmental Education and for Other Purposes. Republic Act 9512, 4381. <https://www.officialgazette.gov.ph/2008/12/12/republic-act-no-9512/>
- Republic, A. 9729. (2009). An Act Mainstreaming Climate Change into Government Policy Formulations, Establishing the Framework Strategy and Program on Climate Change, Creating for this Purpose the Climate Change Commission, and for Other Purposes. 9729. <https://www.officialgazette.gov.ph/2009/10/23/republic-act-no-9729/>
- Republic Act 10174. (n.d.). An Act Establishing the People's Survival Fund to Provide Long-Term Finance Streams to Enable the Government to Effectively Address the Problem of Climate Change, Amending for the Purpose Republic Act no. 9729, otherwise known as the "Climate Change Act of. <https://www.officialgazette.gov.ph/2012/08/16/republic-act-no-10174/>
- UNICEF. (2021). Investment Case for Child-Centred Climate Actions in the Context of COVID-19 in East Asia and the Pacific.
- Vergunst, F., & Berry, H. L. (2022). Climate change and children's mental health: a developmental perspective. *Clinical Psychological Science*, 10(4), 767-785.
- United Nations Children's Fund and United Nations Development Program. (2011). Knowledge, Attitudes, and Practices survey on children and climate change, Prepared by Climate, Energy, Environment, & Disaster Risk Reduction Team, Retrieved from: https://www.unicef.org/montenegro/sites/unicef.org/montenegro/files/2019-06/KAP_Survey_on_children_and_climate_change.pdf



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