Micro Research Study
Idara-e-Taleem-o-Aagahi (ITA), Pakistan supported by Asia-Pacific Regional Network for Early Childhood (ARNEC) Limited

Research Study to support knowledge generation on early childhood development, climate change and environmental degradation

In Pakistan, the National Climate Change Policy (NCCP) is the main policy framework for climate change but unfortunately education in scope of its impact and how to develop awareness through curriculum is not integrated in it. ¹

Local Groups are putting efforts in protecting young and vulnerable children from climate calamities such as heat stock, Covid-19 and flooding; along with displacement due to urbanization or seasonal migration through programs promoting education on climate crises. The need to address climate change in also reported in UNICEF survey “THE HEAT IS ON!”, ² which depicts the need in Pakistani content to consult with relevant stakeholders to develop 1) climate change impact and vulnerability indicators 2) subsequently integrate the indicators with the Minimum Standards for Quality Education in Pakistan and the Pakistan School Safety Framework. This will impactfully serve to achieve milestones to address the climate crises needs through education and development.

Micro Research Grant Concept Note

This research will generate empirical evidence from Pakistan’s one of the most flood/rains affected districts of Shikarpur in Sindh, a province that has been most adversely affected in 23 districts out of 29. In Pakistan the sheer volume of people are affected, leaving the whole villages destroyed and communities displaced. This survey will be conducted in displaced communities were

- Flood directly affected the community
- Schools are destroyed or damaged
- Displaced students are engaged in education emergency response through Temporary Learning Centers

Research Objective:
The objective of this educational research is to analyses two main objectives as following:

a) the understanding of climate change and environmental degradation in flood affected people through current trends in household (especially in mothers) coping with climate crises and their level of understanding towards sustainable living

b) Current trends in schools towards climate change education in young children and how thoughtful teachers are towards use of sustainable material is used in learning activities and integration of climate change and crises conversations in syllabus.

Research Questions:

Approach:
ITA will collect primary data on the impact of Climate Change/heat and floods to cover the following areas of information and practices:

1. **Climate Change and its impact on Food and Nutrition Patterns on young children and mothers**, leading to aggravating malnutrition among children aged under 6 years and burden on mothers
2. **Impact of Climate Change in Education** and early years learning loses and delayed learning milestones
3. **Emerging Trends and Climate Change Strategies towards promoting Sustainable Education Approach & Low-Cost/Low-Cost Education Material Activities** and see emerging through classroom practices and learning activities
4. **Promoting Collective Consciousness on Climate Change** through Education from very early age in both schools through teachers and education approach and in communicates through mothers
5. **Knowledge and Perception about climate change and young children**: a baseline survey among communities and caregivers on their knowledge and perception about CC and its impact on young children.
6. **Including young children's voices so they can be agents of change - with the support of caring and concerned adults**: involving young children as participants with legitimate ideas, perspectives and creative responses (ideally aligned with STEAM and curriculum) in authentic learning and action around meaningful environmental issues as agents of change from communities
7. **What are the impacts of climate change/environmental degradation on the caregivers of young children?** Climate change factors cause vulnerabilities in young children and the needs specific to children and caregivers in emergency and disaster situations such as pregnant women, breastfeeding mothers, nutrient needs and WASH needs.
8. **Community based innovations**: Available data on survey on any grassroots/local existing level on initiatives (programming or advocacy) to address and cope with the climate and environmental crisis for young children
9. **Preparedness of ECD services**: How prepared is our education sector ECD service providers are in providing support to young children and their families during climate crises
10. **Children and families facing the impact of climate and environmental crises** at both physical and emotional level and its direct impact on young children
11. **Community surveys**: Household surveys of child parent/caregiver, community and ECD service providers to identify ways they want to address the climate and environmental crisis
12. **Local policy analysis**: To what extent do local policies such as disaster risk reduction (DRR) and disaster risk reduction and management (DRRM) strategies recognize the
vulnerabilities and needs of the youngest children and their caregivers? What are the gaps and opportunities for strengthening related local laws, policies and strategies?

**Aim and Target Group:**

The research focuses on how young children (ages 0 and 6), their caregivers and communities are affected and coping with climate change and environmental degradation at homes and how integrated is the climate change aspect in school syllabus and activities.

**Geography:**
The Research will be conducted in flood affected district of Sindh

**Province:** Sindh  
**District:** Shikarpur  
**Total District:** 1  
**Villages:** 2

**Research Methodology:**

A rapid survey will be conducted through a mixed methods approach of Qualitative and Quantitative Research.

**Data Collection Methods and Survey Tools**
The data will be collected through the following sources:

1. Secondary Data Collection/Policy Review  
2. Primary Data Collection (Qualitative) through Focus Group of Government Officials  
3. Primary Data Collection (Qualitative) through Teachers’ Focus Group  
4. Household Survey Data Collection (Quantitative)

**Sampling:**

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<th>Sampling Figures</th>
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<tbody>
<tr>
<td>No. of districts</td>
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<td>Number of Villages</td>
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<td>Number of enumerators</td>
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<td>Identified Schools</td>
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<td>Households/Parents/Caregiver</td>
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<td>Number of Teachers</td>
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<td>Number of Head Teachers</td>
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**Research Need and Possible Impact:**
The ARNEC research with the help of ITA in Pakistan, will assist education groups working in Pakistan in their ongoing work in the field with young children such as through Government initiated Temporary Learning Centers. Through this research government policy makers will get emerging trends from the indicators to identify and contribute towards providing support to young children and their families facing the climate and environmental crises related in context
to education, child development and nutrition. The research findings will be used to develop context-specific advocacies and interventions for young children, their families and caregivers at the sub-regional and regional levels to develop sector plans, roadmap and policies suggesting impact strategic actions leveled from the home, community to ECE centers and preschools level.