Ensuring continuous access to education despite climate crises: Colombia Education Cluster's proactive climate resilience

Context

Colombia is increasingly affected by climate change, particularly through the intensification of El Niño and La Niña events. These climate phenomena are worsening droughts and floods, which in turn disrupt education services by damaging infrastructure, limiting access to clean water in schools, and increasing displacement. Although these seasonal events have long occurred, climate change has made them more extreme and less predictable, placing added pressure on the education system already strained by conflict and displacement. Traditional emergency responses are no longer adequate. In response, the Education Cluster in Colombia has begun using climate monitoring tools and predictive mapping to assess risks to schools and prioritize preparedness with the aim to shift the focus from reactive crisis management to proactive climate resilience in the education sector.

STEPS FOR TRANSFORMATION

Turning point: A first step for transformation to resilience

The severe El Niño drought in 2023, which caused widespread school closures and critical water shortages, made the Education Cluster in Colombia realize that traditional education interventions were no longer viable without accounting for climate risks. This wake-up call was reinforced by recurring La Niña events, which brought heavy rains, flooding, and landslides that damaged school infrastructure and disrupted learning, particularly in vulnerable and conflict-affected regions. These experiences prompted internal reflection and discussions among Education Cluster partners, leading to a shift from reactive emergency response to proactive, risk-informed planning. The cluster began **integrating climate-sensitive indicators into its People in Need (PIN)** calculations and broader humanitarian planning. The momentum for this transition was further strengthened by Colombia's hosting of COP16 in 2024, which elevated climate resilience as a national policy priority. In response, the Education Cluster began using **climate forecasting tools, risk maps, and emergency dashboards** to guide preparedness planning, ensuring that education responses are increasingly hazard-specific and climate-resilient.

> *"Before, climate was seen as a background issue. Now, **it's front and centre** because of the direct impacts on school operations during droughts and floods." (UNICEF Education cluster coordinator.)*

Key highlights of the Colombia Education Cluster's coordination

- Uses climate risk dashboards, emergency mapping tools, and school-level data to identify educational institutions most vulnerable to climate hazards.
- Embeds climate-sensitive indicator into humanitarian planning and the PIN to ensure climate risks are systematically addressed.
- Supports proactive planning through school-level preparedness plans, and pre-positioned learning materials while collaborating with the local governments.
- Advocates for stronger integration of climate risks into education infrastructure policies and long-term planning.
- Builds local capacity by training subnational authorities to interpret forecasts, update school emergency plans, and coordinate across sectors such as WASH.

Second step: Proactive implementation through anticipatory actions

The Education Cluster began implementing anticipatory actions in response to forecasts of heavy rains and La Niña-related flooding. Using climate risk dashboards and emergency mapping tools, the cluster identified high-risk schools and supported local authorities in updating preparedness plans. These included pre-positioning educational materials, coordinating rapid infrastructure repairs, and developing evacuation and shelter strategies. This marked a strategic shift from reactive emergency response to proactive, risk-informed planning.

Current: Institutionalising resilience

By 2025, climate preparedness has become a recognized pillar of the Education Cluster's work. Efforts are underway to institutionalize climate resilience through regular use of early warning systems, integration of climate data into school safety planning, and cross-sectoral coordination with WASH and DRR partners. Although climate mitigation is still limited, the cluster is advocating for stronger infrastructure standards and localized risk reduction strategies to embed long-term resilience across Colombia's education system.

Examples of anticipatory climate actions, climate adaptation actions, and climate mitigation actions taken by the Education cluster:

Anticipatory climate actions:

El Niño 2023 and ongoing climate events: In anticipation of droughts and floods linked to El Niño and La Niña, the Education Cluster supported local authorities and schools by updating emergency preparedness plans, pre-positioning educational materials, and identifying schools most at risk through climate impact mapping. Tools such as risk dashboards and predictive data were used to target the most vulnerable municipalities. These actions helped ensure that resources could be mobilized quickly and that schools had basic contingency measures in place, reinforcing the importance of preparedness as a foundation for effective anticipatory action.

Climate adaptation actions:

The Education Cluster in Colombia aims to ensure continued access to safe, quality education in the face of climate risks like droughts, floods, landslides, and displacement. As such, adaptation efforts are gradually shifting from reactive infrastructure repair to proactive and risk-informed design:

- Droughts: In drought-prone regions impacted by El Niño, the Cluster is collaborating with WASH actors to improve school water access through water storage tanks and coordinated emergency supplies. Schools that historically lacked water are now being prioritized for long-term water infrastructure improvements to reduce closure risks during dry seasons.
- Floods and landslides: In areas at high risk of flooding and landslides—particularly in coastal and mountainous departments—the Cluster is identifying schools most exposed through climate risk mapping. This data is being used to advocate for safer school locations, reinforce existing infrastructure, and integrate risk reduction into educational facility design guidelines. In some municipalities, evacuation route planning and temporary classroom strategies are being tested.
- Cross-cutting: Adaptation is also taking shape through capacity building. The local education authorities are being trained to integrate climate risks into emergency preparedness and response plans. The Cluster is promoting more climate-resilient school planning at the municipal level and linking its work with disaster risk reduction and anticipatory action systems.

While these initiatives are still being scaled up, they mark a clear shift toward embedding climate adaptation into both emergency education response and long-term system resilience.

LESSONS LEARNED

The experience of the Education Cluster in Colombia shows that integrating climate resilience into education programming requires holistic systems that connect early warning, local planning, and inter-sectoral coordination. The following lessons have emerged from their ongoing climate-related work:

- Use climate data to guide decisions: The Cluster's use of predictive dashboards, hazard mapping, and risk profiles helped move from generic preparedness to more targeted, data-driven interventions. Investing in information systems and local capacity to interpret climate forecasts has been essential to anticipating where schools are most at risk.
- Promote decentralized and localized risk-informed planning: Rather than rely solely on national directives, the Education Cluster has supported subnational governments and school communities to develop their own emergency preparedness plans that reflect local climate risks. This bottom-up planning increases ownership and relevance of climate actions.
- Coordinate across sectors for continuous access to education: Since school closures are often triggered by WASH or infrastructure failures, the Education Cluster learned that building resilience requires strong coordination with WASH actors, shelter actors and local communities. Joint planning around water access, relocation, and infrastructure repair can prevent learning disruptions during climate shocks.
- Leverage national momentum for policy alignment: The visibility of COP16 in Colombia helped mainstream climate into broader education and humanitarian planning. Linking cluster efforts to national climate policy priorities and frameworks can open political and financial space for resilience funds.
- Leverage country-level and global climate expertise: Identifying and collaborating with climate experts—whether from the coordinator's organization, within partner organizations, government institutions, or academic networks—can significantly strengthen the Cluster's climate-related capacities. The coordinator's personal connection with climate experts often improves the quality of collaboration. The coordinators can also request targeted technical support from global clusters to bridge expertise.
- Translate cluster data into locally relevant climate education materials: Using data gathered through cluster tools—such as vulnerability maps, risk assessments, and seasonal forecasts—education partners can develop climate scenarios tailored to specific territories. These scenarios can be adapted into educational materials for teachers, helping students understand how climate risks affect their own environment. When children engage with locally relevant content, they are more likely to absorb and share it. This approach empowers children to bring climate knowledge into their homes and communities, encouraging household-level awareness and advocacy.
- Advocating for cross-sectoral integration: One significant challenge identified is that other more prominent or visible areas on the agenda, such as armed conflict and migration, often overshadow or marginalize the issue of climate crisis. This presents both a challenge and an opportunity. The challenge lies in ensuring that climate change receives the necessary attention and resources. However, it also provides an opportunity for advocacy by gradually integrating climate change considerations into other critical areas of interest for government and humanitarian actors. By leveraging the visibility of these prominent issues, we can advocate for the inclusion of climate change in broader policy discussions and actions.

ANNEX I. COLOMBIA EDUCATION CLUSTER'S KEYS TO SUCCESS (ALIGNED WITH THE 6 + 1 CLUSTER COORDINATOR FUNCTIONS)

The Colombia Education Cluster's experience demonstrates how the six core cluster coordination functions—plus the seventh cross-cutting priority of accountability—can be leveraged to embed climate resilience into practice. The table below provides an overview of how these functions were applied:

Function	How it was applied
Supporting service delivery	Coordinated over 35 partners to ensure joint planning, avoid duplication, and reach underserved areas, using tools like the 5W dashboard to guide efficient resource use.
Informing strategic decisions	Used data from assessments and partner reports to guide Cluster priorities and planning, as well as sharing it with HCT and ICCG to support strategic and access-related decisions.
Strategic planning and implementation	Led the HNO and HRP processes, such as setting targets, priorities, and response areas, as well as supporting implementation through planning, technical guidance, and alignment with national frameworks.
Monitoring and performance	Monitored response activities via 5Ws and partner reports, and led HRP reviews, produced analysis, and identified gaps to improve coordination and accountability.
Building national capacity	Trained national NGOs, MoE staff, and sub-national actors on EiE, coordination, and safeguarding.
Advocacy	Made an emerging effort to raise awareness among donors and government actors about the need for climate-resilient education systems, particularly in disaster-prone areas.
Accountability to affected populations	Promoted feedback systems, consultations with children and caregivers, and gender- and child-sensitive planning.

ANNEX II. A LIST OF RESOURCES USED AND CREATED IN COLOMBIA

- Purace Volcano Monitoring Dashboard: Monitoreo Volcán Puracé (Cauca) › Sector educación.
- The document of the public policy in education in emergencies from the National Ministry of Education, where we as Education Cluster supported through advocacy in all the technical discussions. Worth mentioning this is a previous version which CANNOT be externally shared or published.
- The latest version of the prediction of hydro metrological impacts in Colombia.