





Overview of the Climate Crisis and Its Impact on Education

Climate change has evolved into a severe global crisis¹ as many countries and regions are facing more frequent and intense extreme weather events such as heat waves, floods and droughts.² The term "climate change" - no longer considered adequate to accurately reflect the urgency of the overall situation - is increasingly referred to as a "climate crisis" or "climate emergency" as it intersects with gender, education, and other already existing drivers of marginalization (age, caste, ethnicity, language, nomadic livelihoods, displacement, disability) to further increase poverty and vulnerability. The climate crisis is having a devastating impact on the poorest and most marginalized people in developing countries, jeopardizing the progress already made in addressing the injustices brought about by poverty and exacerbating gender inequalities. Climate-related disasters are triggering humanitarian crises and increasing the numbers of internally displaced persons (IDPs), refugees, forced migrants, and dispossessed nomadic groups and Indigenous peoples who, in turn, are less likely to enroll and keep their children in school. It is also increasing the number of disasters that disrupt education.

¹ Birkman, J., Jamshed, A., McMillan, J.A., Feldmeyer, D., Totin, E., Solecki, W., Ibrahim, Z.Z., Roberts, D., Kerr, R.B., Poertner, H-O., Pelling, M., Djalante, R., Garschagen, M., Leal Filho, W., Guha-Sapir, D. & Alegría, A. (2022) Understanding Human Vulnerability to Climate Change: A Global Perspective on Index Validation for Adaptation Planning. Science of the Total Environment, Volume 803, https://doi.org/10.1016/j.scitotenv.2021.150065.

² Chigwanda, E. (2016) A Framework for Building Resilience to Climate Change through Girls' Education Programming.

³ https://www.theguardian.com/environment/2019/oct/16/guardian-language-changes-climate-environment

The climate crisis is directly affecting education outcomes. Extreme weather events destroy or damage schools, learning materials, and vital infrastructure, triggering temporary school closures and teacher and student absenteeism, which in turn reduce contact time with content, affect learning outcomes, and contribute to dropout. Climate change also limits access to water at school and home, increasing illness and menstruation-related absenteeism. Displacement increases the vulnerability of students, particularly female, to dropout; when enrolled, it may expose them to GBV and other forms of violence and discrimination. The loss of livelihoods, especially among the displaced, prevents families from supporting the costs of education, and exacerbates existing

Approximately 1 billion children nearly half of the world's children—live in "extremely high risk" countries for the impacts of climate change. Nearly 40 million children a year have their education interrupted by extreme weather events such as cyclones. floods, and heat waves.

(Global Partnership for Education, 2022)

gender norms resulting in preferential allocation of resources to boys. The climate crisis is increasing food insecurity and malnutrition, affecting students' attentiveness and learning outcomes. Climate-related disasters also affect students' mental health, with a negative impact on learning outcomes and retention: in parallel, the increased stress faced by teachers often exacerbates the use of verbal and physical violence in class. Children living in low- and middleincome countries are especially vulnerable to the climate crisis and will continue to bear the brunt of its worsening impacts.4

Gender. For women and girls, the climate crisis is increasing an already high workload at home, triggered by water scarcity and disease outbreaks. The burden of climate-induced mass displacements is disproportionately affecting women and girls, enhancing the vulnerability to gender-based violence (GBV), exploitation, and early marriage. Climatic and environmental changes exacerbate conflict over access to increasingly scarce natural resources - water, firewood increasing the time spent by women and girls on domestic chores. Limited access to water increases the prevalence of preventable diseases, increasing women's and girls' caregiving burden. Although extreme drought affects all people, adolescent girls and female youth are disproportionately affected due to gendered patterns of household chores; the risk of abuse, particularly when fetching water or collecting firewood; and the inability to address their menstrual hygiene management needs. The gravity of the climate crisis calls for resilience building efforts which support the adaptive capacities of the poorest and most marginalized communities, particularly women and girls.

For displaced boys and girls, the impact of climate change in education is often different. Girls particularly after reaching adolescence - face an increased likelihood of absenteeism and dropout and are less likely to transition into higher education levels. Non-enrolment and dropout trap girls and later on, women, in a cycle of vulnerability, as the lack of foundational skills leaves them especially vulnerable to weather-related disasters and less able to shift into new livelihoods.

Climate change is pushing children (both boys and girls) in the global South into exploitative and hazardous forms of child labor to augment household income, sabotaging their education and development.⁷ At every age, child labor is more prevalent among boys than girls.⁸ Studies have also shown the strong links between climate-related disasters and female mortality, with women, boys and girls more than 14 times more likely than men to die during a disaster. The 2019 UN Framework

⁴ Save the Children (2021) Born into the Climate Crisis: Why We Must Act Now to Safeguard Children's Rights.

⁵ Inter-Agency Network for Education in Emergencies (2022) Mind the Gap 2: Seeking safe and sustainable solutions for girls' education in crises. INEE. New York, NY.

⁶ Ibid

https://reliefweb.int/report/world/neglected-link-effects-climate-change-and-environmental-degradation-child-labour

⁸ International Labour Organisation / UNICEF, Child Labour: Global Estimates 2020, Trends, and the Road Forward.

⁹ United Nations Development Programme (2016) Gender, Adaptation, and Climate Risk Reduction.

Convention on Climate Change (UNFCC) references several studies that identified increased vulnerability of men and boys due to gender and social norms and expectations for men to be involved in risky behaviors. Men are expected to be working outdoors during heavy storms and heatwaves and to navigate job losses in extractive industries being phased out in favor of lowcarbon alternatives. Data collected on deaths caused by Hurricane Mitch across parts of Latin America in 1998 found that men had been more vulnerable in this situation due to social and cultural norms that encouraged risky behavior. 10

Education, Climate Change Adaptation, and Action

Education is an undervalued pathway in the response to the climate crisis, which can play a key role in reducing its impacts. 11 According to the World Bank, "education is the single strongest predictor of climate change awareness."12 Mainstreaming climate education has the potential to change mindsets and behaviors on climate among students, parents, caregivers, communities, and governments. Quality, relevant education can increase resilience to the impact of the climate crisis among some of the most affected populations. Investments to safeguard the continuity of education in face of climate-related disasters increase learning outcomes and boost human capital for future adaptation of livelihoods to new conditions.

Infrastructure. Education systems require investments to build climate-smart infrastructure and renovate existing facilities. This includes developing sector standards for climate-smart infrastructure adapted to local conditions, which include locating new school buildings in safer areas, aligned with conservation efforts; the use of environmentally safe materials; structures adapted to mitigate the risk of climate hazards; the use of renewable and clean energy solutions and energy-efficient structures; and improved water, sanitation, hygiene (WASH) and waste management systems, among others. Moreover, investments in climate-smart school infrastructure

need to be aligned with needs-driven community-level climate-smart planning and use, 13 thus increasing the likelihood of local ownership of improved practices and reducing the impact of the climate crisis for all. Therefore, infrastructure investments are also likely to have a broader impact on out-ofschool children and youth. Without urgently adapting education systems to respond to extreme weather events and slower-onset climatic and environmental changes, the ability to meet global education goals will continue to slip further out of reach.

Girls' secondary education has been identified most important socioeconomic determinant in reducing vulnerability to



The use of climate-smart education systems, renewable and clean energy solutions can increase energy efficiency and conservation efforts. A girl in Zimbabwe is pictured to be demonstrating how a solar water pump works for the school's fishpond. © Ellen Chiawanda/ CARE

¹⁰ Differentiated Impacts of Climate Change on Women and Men; The Integration of Gender Considerations in Climate Policies, Plans and Actions; and Progress in Enhancing Gender Balance in National Climate Delegations: Synthesis Report by the Secretariat, June 2019. https://unfccc.int/sites/default/files/resource/sbi2019_inf8.pdf

¹ https://www.globalpartnership.org/blog/multilaterals-climate-change-and-education-emerging-options-action

¹² https://thedocs.worldbank.org/en/doc/523b6ac03f2c643f93b9c043d48eddc1-0200022022/related/WB-education-and-climate-11-08-22-e-version.pdf

¹³ UNICEF (2020) Education Systems: A victim and a Key to the Climate Crisis

climate change. In addition, there is emerging evidence of and growing political interest in the positive role girls' education plays in addressing the climate crisis by increasing their climate resilience and adaptive capacity, empowering women and girls to participate in decision-making forums that address the impact of climate change and providing technical and vocational education and training (TVET) in green skills.15

The international community, including governments, donors, multilateral agencies, and practitioners, collectively recognizes the importance of education and training to address climate change. In addition to prioritizing education (SDG 4), gender equality (SDG 5) and climate justice (SDG 13) the 2030 Agenda for Sustainable Development, the UN Framework Convention on Climate Change, the Paris Agreement and the associated Action for Climate Empowerment (ACE) agenda call on governments to educate, empower and engage all stakeholders and major groups on policies and actions relating to climate change. 16 Increasingly, governments 17 and the donor community are not only elevating the importance of the link between education (especially girls' education) and climate change, but they are also setting the agenda and putting in place strategies to guide the mainstreaming of climate into the education sector.



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Mainstreaming Climate Change into CARE's Education and Adolescent Empowerment Efforts

CARE's Education and Adolescent Empowerment Strategy 2022-2025 has identified climate change as a growing risk factor to the provision of quality and inclusive education to children, especially girls, children with disabilities, and those from extremely vulnerable communities. including pastoralists/nomadic groups populations living in flood-prone areas. CARE's work seeks to boost education outcomes among the most marginalized children while also building resilience and adaptive capacities of households and communities affected by climate disasters.

Building and Strengthening Climate-Resilient Education Systems

To build and strengthen climate-resilient education systems, CARE works with Ministries of Education (MoEs) to identify and address varying levels of risk to vulnerable groups posed by climate change, including pastoralist/nomadic children, the extremely poor, minorities, internally displaced children and refugees, and children with disabilities. CARE provides technical support to MoEs, in coordination with other relevant ministries and government institutions, to accelerate climate justice and mitigate the impact of climate change on education outcomes. This support helps governments to identify and address impacts of climate change on learning, retention, and transition, with a particular focus on girls.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1122368/Addressing_the_cli mate__environment__and_biodiversity_crises_in_and_through_girls__education.pdf

¹⁴ Addressing the Climate, Environment and Biodiversity Crises in and through Girls' Education: An FCDO Position Paper, pg. 9

https://inee.org/sites/default/files/resources/INEE%20Mind%20the%20Gap%202%20v1.2%20LowRes.pdf

¹⁶ https://www.unesco.org/en/education/sustainable-development/climatechange#:~:text=Education%20is%20crucial%20to%20promote,act%20as%20agents%20of%20change.

Global awareness is increasing around the potential of education to contribute to the implementation of nationally determined contributions (NCDs) and climate change adaptation strategies, plans, and commitments made as part of the Paris Agreement. 18 A growing number of Education Sector Strategic Plans are integrating awareness and adaptation to climate change as a cross-cutting thematic areas. For instance, in *Malawi*. CARE contributed to the development of the National Resilience Strategy¹⁹ and the Malawi Growth and Development Strategy (MGDS III, 2017-2022),20 which have identified relevant practical skills development as a key priority area for building a resilient nation, particularly among girls and vulnerable groups. Other actions to achieve this include the provision of



A growing number of Education Sector Strategic Plans are integrating awareness and adaptation to climate change as a cross-cutting thematic areas. © Arno Gasteiger/ CARE

bursaries and scholarships to improve access and retention, enabling children from vulnerable groups to develop these skills. Additionally, the provision of school meals is a strategy to increase access to education and improve nutritional outcomes for climate-affected students.

In **Zimbabwe**, CARE collaborates closely with the Ministry of Primary and Secondary Education (MoPSE) to implement education activities and provide technical support on education sector analyses and strategic planning. CARE is a strategic partner of the Zimbabwe Vulnerability Assessment Committee (ZIMVAC), which collects and disseminates information on food security. including considerations for education outcomes.

In Somalia, CARE provides technical assistance to the Federal Ministry of Education, Culture and Higher Education (MoECHE) and state MoEs in Puntland and Somaliland to implement integrated, gender-focused responses to mitigate the impact of the climate crisis on education. As part of the Global Partnership for Education / GPE-funded ESPIG, CARE supported the MoECHE to implement a large-scale capitation grants program, enabling the enrolment of 104,647 out-of-school children, out of whom 40% had been displaced by drought and conflict.²¹ CARE has also supported the MoECHE to strengthen participatory school governance. As a result, during the 2022-2023 drought, the proportion of Community Education Committees facilitating the enrolment of out-of-school children increased by 17 percentage points, while the proportion tracking student attendance increased by 9 percentage points. These actions have strengthened the education system's capacity to enroll and retain drought-displaced children and increased school resilience.

In *Mali*, CARE worked with the Ministry of Education at the national, regional and district levels to conduct a joint Climate Vulnerability and Capacity Analysis (CVCA) to inform the design of schooland community-based activities to identify and mitigate the potential impacts of climate changerelated hazards on girls' education.²² The project worked at the national level to develop a curriculum aimed at creating awareness about climate change and disaster risk reduction (DRR). The national government adopted the DRR and climate change awareness curriculum for use in school and extracurricular activities.

¹⁸ www.unfccc.int

¹⁹ Malawi National Resilience Strategy (NRS): Breaking the cycle of food insecurity | PreventionWeb

²⁰ https://www.afidep.org/publication/malawi-growth-development-strategy-mgds-iii-2017-

^{2022/#:~:}text=The%20third%20Malawi%20Growth%20and.are%20articulated%20in%20Vision%202020.

²¹ Consilient (2022) Education Sector Program Implementation Grant – Endline Report

²² Education for Change project (2015-2021), funded by the Patsy Collins Trust Fund Initiative (PCTFI)

As part of its systems strengthening work, CARE has also been helping to create sector-wide understanding of the double inequality that climate change-related hazards represent to already vulnerable and marginalized communities and to support capacity building, monitoring, planning, budgeting for climate resilience. This includes:

Tracking the impact of the climate crisis on education and other sectors, particularly for marginalized groups: CARE works with MoEs and local partners to conduct research on the nexus between recurrent climate-related hazards, gender, marginalization, and poor learning outcomes. In **Somalia**, CARE has supported the Ministry of Education and Higher Education of Puntland (MoEHE) to prepare its climate and gender-focused 2022 Education Sector Analysis. which informed the 2022 Education Sector Strategic Plan. Through the FCDO/USAID-funded Somali Girls' Education Promotion Transition (SOMGEP-T) and the Adolescents Girls' Education in Somalia (AGES) initiatives, CARE has been working with the MoECHE and State MOEs Gender and EMIS departments to conduct research on the impact of the climate crisis on girls' education, including the intersection of gender, disability, and minority identities.



To build and strengthen "climateresilient" education systems, CARE works with Ministries of Education (MoEs) to identify and address varying levels of risk to vulnerable groups posed by climate change. © CARE France

Zimbabwe, through the START4Girls initiative, CARE has supported the MoPSE to collect data on schools' readiness to respond to climate-induced disasters as part of quarterly joint

monitoring.

During the severe 2022-2023 drought, schools managed to retain 92% of the students enrolled through the **EAC-funded Educate** Your Children II project due to improved planning and systematic tracking of attendance and dropout.

Strengthening planning and response to climaterelated emergencies at school and national education system levels: CARE is supporting MoEs to develop and roll out contingency plans as part of our engagement in education in emergency clusters. This includes working with decentralized MoE offices to support school communities to identify potential climate change hazards and integrate gender-responsive mitigation actions into their school improvement plans. In Zimbabwe, CARE has worked with schools to train learners, teachers and community leaders on community risk mapping and participatory scenario planning. At the community level, CARE engages local, traditional, and religious leaders and community volunteers to advocate for education, climate justice, and equality rights, among others. In Somalia, through the GPE-funded ESPIG, CARE supported the Federal MoECHE to train 4,235 Community Education Committee members on participatory school management, including the preparation of climate

and gender-responsive School Improvement Plans and conducting School Safety Dialogues. Through the Educate A Child-funded Educate Your Children II project, CARE is supporting the Federal MoECHE and six state MoEs to improve attendance and retention tracking, particularly benefitting disaster-affected students.

- Addressing the intersectionality of education, youth empowerment, and climate change: In Mali, CARE's Education for Change (EFC) project worked with the MoE to develop standardized DRR and climate change awareness curriculum materials, which integrated climate change issues, information on types of disasters, and adaptation and mitigation strategies for individuals and communities. The curriculum emphasizes the importance of student-led civic engagement in DRR and climate resilience as part of the learning process. These materials were integrated into the national curriculum framework. EFC trained 451 school principals, teachers, and inspectors on the rollout of the curriculum. As a result, 200 student-led DRR Brigades were formed, mobilizing 1,027 students as peer leaders of DRR actions in Mopti and Bandiagara. The Brigades engaged 57% of the all students in targeted areas - over 49,000 in student-led climate and DRR-focused activities.23 In Somalia, the USAID/ FCDO-funded AGES project trained 3,450 adolescent girls and female youth as peer mentors for Girls' **Empowerment Forums.** Through the forums, girls are mobilizing their communities to address issues related to sanitation, waste management, and environmental conservation.
- Building climate resilient schools: CARE works with MoEs to increase school resilience to climate-related emergencies, including through preparedness plans incorporating student feedback and action, ensuring permanent access to improved water sources, and improved management of WASH systems. This also includes reducing the disruption of schooling time in periods of crisis as in many countries schools are used as shelters for the victims of floodings and other climate related hazards. CARE work with MOEs across Somalia to strengthen climate-resilient school infrastructure; improve WASH standards and management in school communities; and restore services in areas affected by disasters.
- Improving standard designs of school infrastructure to mitigate vulnerability to climate change and reduce carbon footprint of the school system: In Somalia, CARE supported MoEs to improve school infrastructure through several system strengthening projects, including the EU-funded Education Is Light and the FCDO/USAID-funded SOMGEP-T project. SOMGEP-T supported three state MoEs in joint design and validation of climate-smart school infrastructure, including the use of heat resistant construction materials, minimum standards around classroom size, and ventilation, informed by environmental impact assessment studies. Through the African Development Bank-funded Water Infrastructure Development Programme for Resilience in Somaliland, CARE supported the Ministry of Water Resources Department to set up solar-powered water points and sanitation facilities serving schools and communities, managed by local committees, benefiting over 187,000 people. In Madagascar, where recurrent droughts are a key reason for absenteeism and dropout, CARE implemented the USAID-funded RANO WASH program, which built/renovated WASH infrastructure in 259 schools and improved their management.

²³ Daouna Developpement Conseils (2021) Evaluation Finale du Projet Education pour le Changement.

Providing alternative education opportunities for the most affected: In Malawi, Somalia, and **Zambia**, CARE supported MoEs to develop accelerated/ non-formal education courses to enable out-of-school adolescents, particularly girls, to resume their education. This approach is particularly critical for displaced adolescents and those who were forced to drop out of school due to the impact of climate disasters. In Somalia, under the USAID/FCDOfunded AGES program, CARE worked with the MoECHE to develop a national adult education curriculum framework to provide enable adolescents and youth who have missed out on education because of recurrent climate crises to develop literacy, numeracy, financial literacy, and business management skills, contributing to diversify livelihoods in response to evolving conditions on the ground. To date, AGES has enabled 54,778 adolescent girls and female youth to catch up on their education in drought and conflict-affected areas of South Somalia.

Strengthening community resilience to support education costs: CARE's Village Savings and Loans Association (VSLA) approach helps communities (especially women and youth) to build financial autonomy through diversified income-generating activities, strengthening resilience to climate-related shocks. VSLAs also allow communities to set up "social funds" aside to cater for times of crisis and this helps build communities resilience especially in countries where communities livelihoods are regularly impacted by climate change related hazards. A recent report on the impact of the VSLA approach on building community resilience to the economic shocks during the COVID-19 pandemic found out that compared to non-VSLA members, VSLA members were less likely to report that the COVID-19 pandemic was impacting their livelihoods (42% compared to 87% for non VSLA members) and their food security (23% against 68% for non-members).24

Cross-Sectoral Coordination on Education and Climate Change

In parallel to our support to build climate-smart education systems, CARE works in partnership with governments to strengthen food and water systems, diversify livelihoods, and mainstream climate justice in governance processes, contributing to national climate change adaptation strategies and plans. For instance, in *Malawi*, CARE has supported the development of an Education Recovery Plan following the devastating impacts of cyclones Ana and Gombe in 2022, which left 680,000 (23% of the population) in need of humanitarian support and disrupted health and education services. The cyclones severely damaged school infrastructure and materials, while many families and community members, including teachers, lost their homes and assets. CARE supported recovery not only through humanitarian responses, but also through approaches such as CVCA to identify areas for gender responsive adaptation activities and CARE's Community Based Adaptation (CBA) methodology to facilitate collaboration between communities and government to better understand and adapt to climate change vulnerabilities. Those activities improved the effectiveness of services and responsiveness to climate and gender issues.

Two FCDO/USAID-funded projects in **Somalia** (SOMGEP-T and AGES) have worked cross-sectorally with MoEs and other government actors to respond to disasters. Both projects supported MOEs and Communities Education Committees to strengthen attendance and retention tracking and enroll displaced out-of-school children, particularly girls, during droughts. In parallel, both projects supported student-led actions on environmental conservation (such as training on improved practices on livestock feeding using invasive species to mitigate the impact of drought for nomadic

^{24 2022}_VSLA_Report_EN.pdf (care.org)

communities), sanitation, and waste management. AGES trained 7,570 adolescent girls and female youth on VSLAs, financial literacy, and business management, enabling diversification of livelihoods and reducing the risk of dropout.

Developing Green Skills for Adolescent-Led Climate Leadership and Action

CARE's education and adolescent empowerment programs facilitate local platforms for student-led climate action, such as girls' and boys' clubs, extracurricular activities, and empowerment forums. Those platforms provide spaces for girls and boys severely affected by climate change to identify critical issues and jointly develop solutions, considering differences in needs due to gender, disability, and minority identity. In **Somalia**, CARE supported Gender Units within MoEs to train Girls' and Boys' Empowerment Forums (adolescent leadership groups) who are applying leadership and life skills to implement adolescent-led climate-focused civic engagement.

In **Zimbabwe**, girls who participated leadership skills training planned and implemented an integrated intervention using solar energy to obtain water for menstrual hygiene management (MHM) and to maintain school gardens and supporting their communities to develop an improved water management system In **Mali**, CARE worked with schoolteachers, mentors to support students. teachers, and peer mentors to implement school-driven and community-responsive DRR and climate change awareness activities through the establishment of 200 "school brigades" aimed at identifying climate-related risks and undertaking activities on reforestation, improvement of water drainage systems to prevent flooding, and adolescent-led advocacy actions to mitigate the combined impacts of climate change, insecurity and economic crises on adolescents' education.

In addition to the above locally led initiatives to empower adolescents to take action to mitigate the impact of climate change on their lives and education, CARE in collaboration with World Wildlife Fund (WWF) Alliance is piloting a new global initiative, Sowing Change for Women and the World, aimed at equipping young girls and women with climate resilient entrepreneurship skills. This initiative follows a long-standing and successful partnership between CARE and the WWF and aims to bring together the wide range of skills, resources and expertise needed to tackle complex challenges like climate change. As a part of Sowing Change, young women will gain access to the skills, resources, and connections to be able to develop nature-based enterprises, that support landscape restoration as a climate strategy. These women will then be a part of the Women's Climate Leadership Collaborative to participate in different kinds of leadership programs, as desired. They will also be connected to each other to build a strong network of young women, using their collective power to engage in and (when desired) lead the climate discussions and decisions that affect their lives. The new initiative will be piloted across Latin America (Amazon) and Southern Africa with the possibility to be scaled up to other regions.²⁵

Developing Green Skills and Access to Information

CARE is working with MoEs, donors, and communities to strengthen skilling for "green" jobs like solar and wind energy and launching micro-enterprises and franchises for producing and distributing environmentally friendly products and services, including reusable sanitary pads, water testing, and

²⁵ SOWING CHANGE FOR WOMEN AND THE WORLD: A global movement of women restoring landscapes and forging a powerful collective voice for climate action CARE-WWF Alliance, Concept, Fall 2022 https://www.care.org/wp-content/uploads/2022/11/CARE-WWF-Alliance-Concept-Sowing-Change-Nov-15-2022.pdf

water management. In Somalia, the CARE implemented the EU-funded THE BRIDGES with state MoEs to develop a TVET curricula for two levels of courses focused on installation and maintenance of solar energy systems. CARE partnered with private sector companies to maximize market alignment and worked with Eindhoven University of Technology to build the capacity of three local training providers. The training curriculum was tailored to enable larger enrolment of female youth.

Effective dissemination of information on climate change, DRR, and risk factors is critical to keep students and teachers up to date in a fast-evolving landscape. Lessons learned from the COVID-19 pandemic can be leveraged to support information sharing, awareness raising about climate change, and disaster risk prevention. For instance, early warning systems about drought, flooding, and risks of landslides can be developed and shared with learners. In Mali, CARE's Education for Change project developed a mobile platform to allow learners to access reliable and up-to-date information about climate change. The project established 4,029 friendship circles (mixed groups of in- and out-



In Mali, access to DRR information through a mobile platform supported students to learn about climate change and plan for climate-focused actions in their communities.

of-school boys and girls) with a total of 25,031 members (56% of girls) reached. Each group was provided with a mobile phone to facilitate easy access to DRR messages disseminated through the platform and was able to send questions related to these areas as needed. Overall, 38% of the students supported by the project - over 32,800 - reported using the messages.²⁶ In **Zimbabwe**, the Ministry of Primary Secondary Education developed disseminated a circular instructing all day scholars in areas likely to be affected by Cyclone Freddy to stay home.²⁷

Our Results

In **Mali**, CARE worked with 1,027 adolescent leaders who conducted activities to mitigate the impact of climate change, including reforestation, demonstrating drought-adapted agriculture techniques, and improving water management and sanitation in their communities. As previously mentioned, adolescent leaders also used a mobile platform to receive and exchange information on DRR. Overall, 57% of the students and OOSC in targeted areas participated in peer-led activities. By the end of the project, 76% of the girls affirmed having received information via phone on the risk of drought, 72% on the risk of flooding, 42% had contacted the project's mobile platform to request information on climate change-related events, and 40% had requested information on natural disasters. The proportion of girls who recognized improved agricultural techniques as an important tool to address climate change had increased from 45% to 73% by the end of the project.²⁸

In **Somalia**, 46% of the girls supported by the SOMGEP-T project participated in the activities led by peer leaders in the Girls' Empowerment Forums. Over a three-year period, grade progression increased by 12 percentage points among pastoralist girls affected by drought and displacement in intervention sites, while decreasing by 22 percentage points in comparison areas. ²⁹ Under SOMGEP-T, pastoralist girls improved their literacy scores by 24.5 percentage points, vis a vis 14 percentage

²⁶ Daouna Developpement Conseils (2021) Evaluation Finale du Projet Education pour le Changement.

²⁷ https://allafrica.com/stories/202302240018.html

²⁸ Daouna Developpement Conseils (2021) Evaluation Finale du Projet Education pour le Changement.

²⁹ Miettunen, J., Peterson, B. & Robert, S. (2020) Somali Girls' Education Promotion Project – Transition: Second Midline

CARE's work on reducing climatic adverse effects in communities



Mali

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Collaboration with MoEs on:

- -Climate-smart school infrastructure
- Climate- and gender-responsive School Improvement Plans
- -Alternative education opportunities for displaced adolescents & vouth
- -Student-led climate action

Malawi

CARE has supported the development of an Education Recovery Plan following the devastating impacts of cyclones Ana and Gombe which both severely impacted the country in 2022, leaving 680,000 (23% of the population) in need of humanitarian support and disrupting health and education services.

Zimbabwe

The Building Climate Resilient Schools pilot project supported 620 drought-affected students (50% girls). Girl-led implementation of an integrated intervention using solar energy to obtain water for menstrual hygiene management (MHM) and to maintain school gardens, supporting their communities to develop an improved water management system.

In **Somalia**, the USAID/FCDO-funded AGES project enrolled 76,406 girls severely affected by climate disasters to date, out of whom 54.778 in accelerated/ non-formal education courses and 7.570 participated in VSLAs. AGES's midline evaluation found that the highest learning gains on literacy – 27 percentage points - were registered amongst girls particularly affected by drought, showing the effectiveness of its integrated approach.31 Adaptations to mitigate the impact of climate-related absenteeism – remote /remedial learning – and the participation in girl-led action were particularly effective in increasing girls' learning outcomes. The participation in VSLAs and the diversified skills are contributing to reduce girls/ female youth's vulnerability to drought-related food insecurity. Even though 69% of the girls of the AGES girls were impacted by the drought, less than 9% at midline reported food insecurity.32

In **Zimbabwe**, the Building Climate Resilient Schools pilot project was conducted in Chivi district of Masvingo Province, supporting 620 drought-affected students (50% girls).

Recommendations

CARE believes that education can empower and build resilience, support adaptation, and help to mitigate the effects of climatic and environmental crises on marginalized communities. With these aims in mind, CARE's work in education will continue to contribute to the development and strengthening of climate resilient education systems, policies, and practices for climate change resiliency and adaptation. CARE will continue to build a strong body of evidence and collaborate with key stakeholders to support the development of climate-smart education systems. To achieve

³⁰ Consilient (2022) Somali Girls' Education Promotion Project – Transition: Endline Evaluation Report

³¹ Madden, P., Vasilyeva, A., Peterson, B. & Wicaksono, N. (2022) Adolescent Girls' Education in Somalia: Midline Evaluation

³² Ibid

For governments/donors interested in supporting climate-smart education systems:

- Ensure future Education Sector Analyses (ESAs), Education Sector Strategic Plans (ESSP), and budget allocations consider issues related to the intersectionality of education, gender, and climate change to ensure a climate resilient and crisis sensitive planning approach is mainstreamed across the education system. This will require ensuring that the ESA process is inclusive of a comprehensive climate change vulnerability and capacity assessment process and gender analysis. It also will entail ensuring specific climate change mitigation and adaptation measures are identified and included in the ESSP and associated budget. Some of those measures may include the development of contingency plans; the introduction of policies around climate-smart and resilient school infrastructures inclusive of the needs of girls and students with disabilities; remedial actions to mitigate climaterelated absenteeism, particularly in the case of girls; and tailored opportunities to enable adolescents driven out of school by climate-related disasters to develop skills for diversified livelihoods. Policy actions may also include the development of safety and safeguarding school guidelines to mitigate risks associated to climate hazards as well as the identification of temporary learning centres and the development of alternative modes of teaching (distance learning, radio, TV programs or home based learning) in severely affected contexts.
- Ensure proper costing for the climate change and disaster risk management approaches/policies/contingency plans to ensure education continuity in case of shocks, stresses, hazards, and threats of all kinds.
- Monitor the implementation of climate change adaptation and DRR measures and ensure evidence gathered is used to inform contingency planning and adaptive management.
- Synchronize school-based climate change adaptation approaches with cross-sectoral community-led climate change adaptation approaches. This can be done through the use and adaptation of tested and validated tools and methodologies to support communities develop and deepen awareness around climate change concepts and challenges and to plan for locally-led climate change adaptation plans. These tools could include CVCAs33 and community-based and locally led adaptation plans (LAPA). The use of these tools can help to ensure consistency between what children are learning at school and what is happening in their communities and sustain new practices and behaviors related to climate change adaptation. Through the use of CVCA, communities will be able to identify how climate change is impacting women and girls differently from men and boys. It also can help to identify the most marginalized groups (like female headed households, widows, children with disabilities, pastoralist groups, girls). This information can be leveraged when designing contextually relevant and responsive education interventions.
- Ensure LAPAs are funded through cross-sectoral collaboration to mitigate climate change impacts on schools. For instance, there is the need to ensure that the provision of water and climate-smart infrastructure at the school level is accompanied by the provision of water to

³³ https://careclimatechange.org/wp-content/uploads/2016/06/CARE-CVCA-Handbook-EN-v0.8-web.pdf

communities to avoid communities having to rely on the only water point provided to the school.

- Review existing teacher training curricula and learning assessment frameworks (for both pre- and in-service teachers) to integrate approaches to equip teachers with the necessary skills and knowledge on how to deliver content around climate change and environmental sustainability, cultivate a range of life skills related to climate change, and engage learners in becoming change agents in their communities/schools around issues related to climate change and disaster risk reduction.
- Identify and integrate critical green life skills in national curriculum and teacher professional development that serve technical, adaptive, and transformative ends. These should include "traditional" life skills such as adaptability, collaboration, communication, creativity, problem-solving, team-work, and strategic thinking as well as adaptive skills aimed at transforming unjust social and economic structures (e.g., collective action, coalition building, respect for diverse viewpoints, and valuing traditional and indigenous knowledge, among others). 34
- Open new training pathways for youth (on green energy, solar panel repairs, harvesting wind and solar energy to produce electricity, local initiatives for recycling, etc.) as part of the technical and vocational training for OOS adolescents/youth and for those who cannot participate in higher education to learn new skills that will allow them to play an active role in the implementation of LAPAs.
- Engage in cross-sectoral collaboration with other key ministries, stakeholders and experts in climate change adaptation, DRR and prevention to develop child-friendly (age, contextand disability-friendly) content and training materials around climate change, key concepts of climate change and potential hazards/disasters as recommended by the UN Office for Disaster Risk Reduction (UNDRR) through the 2020 guidelines on engaging children and youth in DRR and resilience building.35
- Introduce school gardens and plots within school areas to serve as open laboratories to mainstream awareness raising about climate change and its potential impacts on human beings and the natural environment.
- Encourage investment in open and distance teaching and learning and the adoption of technologies for blended and alternative learning to reduce school disruption and learning losses resulting from cyclical/prolonged school closures or lack of in-person contact time with learning content.
- Integrate school feeding and nutrition programs to mitigate dropout as well as the cognitive impact of no/low protein diets on children's learning outcomes.

³⁴ Kwuak, C. & O. Casey. A New Green Learning Agenda: Approaches to Quality Education for Climate Action. Center for Universal Education at Brookings, pp. 7-10. Brookings-Green-Learning-FINAL.pdf

³⁵ Words into action guidelines: Engaging children and youth in disaster risk reduction and resilience building" https://www.undrr.org/publication/words-action-guidelines-engaging-children-and-youth-disaster-risk-reductionand?utm_source=Twitter&utm_campaign=PreventionSavesLives

- Build adolescent and youth "climate literacy" and mainstreaming adolescent-led advocacy through school- and community-based groups that will lead on identifying locally relevant solutions.
- Build in cross-sectoral collaboration with the health system to provide capacity building to teachers, mentors and other education stakeholders around psychosocial support and the potential impact of climate change on teachers' and learners' mental (including anxiety, stress, depression).
- Ensure safety nets are in place to support affected communities, teachers, and learners.

For civil society organizations: CARE recommends the following to civil society organizations engaged in education and climate change/resilience building:

- Lead advocacy efforts at the national and global levels to share evidence on best practices and to create awareness on the importance of the role of policy making and resource allocation to address the (short- and long-term) impacts of climate change on education. For instance, CARE's Education and Adolescent Empowerment and Climate Justice units are increasingly working together to prepare for key advocacy and influencing moments such as the annual Conference of Parties (COP) meetings.
- Advocate that governments and key stakeholders provide meaningful spaces/opportunities for education stakeholders to include education in the UN Framework Convention on Climate Change (UNFCCC), including through Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs), as well as climate/environment programs and projects as per the UNFCCC call for action around climate change and education which has identified education as a key to addressing climate change.³⁶
- Provide technical support to MOEs to enhance their capacity to develop sector-specific education NAPs that integrate climate change considerations and practices to respond to the climate crisis. 37

³⁶ " Education is a critical agent in addressing the issue of climate change. The UN Framework Convention on Climate Change (UNFCCC) assigns responsibility to Parties of the Convention to undertake educational and public awareness campaigns on climate change, and to ensure public participation in programmes and information access on the issue" https://www.un.org/en/climatechange/climate-solutions/education-key-addressing-climate-change

³⁷ As recommended by the FCDO' 2022 position paper : "Addressing the climate, environment and biodiversity crisis in and through girls' education: An FCDO position paper"

About CARE

Well known for placing gender at the center of our work, CARE implements focused work in six impact areas: food and water systems; women's economic justice; climate justice; health, equity and rights; humanitarian assistance and gender equality. CARE views education as a pathway not only to climate justice and gender equality but also to all the other impact areas. More specifically, ensuring the right to education for all marginalized children, we focus on gender and inclusive education systems, pathways to formal education and/or employment, leadership, life and other skills, improved household relations, shifted gender norms and engaged men and boys³⁸ In addition, we see girls' education as a key pathway to climate justice in addition to girl/adolescent/vouth led participatory action, green skills for work and entrepreneurship and engagement of migratory and nomadic populations in particular.

CARE's portfolio of education initiatives is designed to address the key barriers to education for the most marginalized adolescents, especially girls, with a strong focus on access, relevance, quality, gender transformation, and social inclusion. CARE has a track record of partnering with as well as supporting country missions, governments, and other actors in the education sector across different contexts and countries including Somalia, Mali, India, Haiti, Nepal, Timor-Leste, Papua New Guinea, Cambodia, Malawi, Rwanda, Zambia, and Zimbabwe to identify the root causes of poverty as well as the barriers to education and of implementing a wide range of initiatives aimed at creating quality equitable and inclusive education systems for all children. More specifically, CARE invests in understanding how threats and stresses, including the climate crisis, affect the delivery of quality, inclusive and transformative formal and non-formal education as part of building more resilient education systems.39

For CARE, climate justice means a future where the poorest and most marginalized have improved their well-being significantly and can enjoy their human rights due to increased resilience to climate change and increased equality. Internally, CARE's Climate Justice Center⁴⁰ leads and coordinates the integration of climate justice and resilience across both development and humanitarian work. Externally, CARE supports and strengthens the ability of its partners to increase resilience and to tackle the causes and consequences of climate change. Building resilience goes beyond the ability to recover from shocks and includes addressing context-specific challenges that make people vulnerable.

³⁸ https://careinternational.sharepoint.com/sites/Global-Education-

<u>Hub/Shared%20Documents/Forms/AllItems.aspx?id=%2Fsites%2FGlobal%2DEducation%2DHub%2FShared%20Documents%2FStrate</u> gies%2FEAE%20Strategy%20FY%2022%2D25%2DDecember%202021%2DFinal%2Epdf&viewid=d5e899e4%2Dd526%2D42fb%2D9a7e%2 D83498c1df1de&parent=%2Fsites%2FGlobal%2DEducation%2DHub%2FShared%20Documents%2FStrategies

³⁹ https://www.ukfiet.org/conference/ukfiet-conference-2023/conference-themes/conflict-crisis-climate-and-migration/

⁴⁰ https://careclimatechange.org/

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