

# Climate Education Needs Assessment: Zambia and Zimbabwe

Briefing Note, June 2022



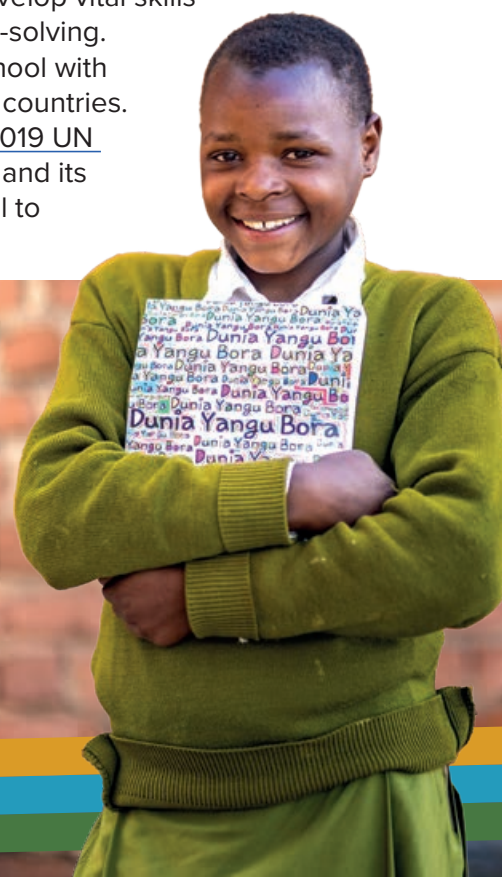
*“Once the programme is introduced, we will be more knowledgeable on climate change and will become climate champions and mentor champions among our students” – CAMFED Association member, Zambia*

## Introduction

In Zambia and Zimbabwe and across sub-Saharan Africa more broadly, climate change is already having a profound impact. Manifesting as late rains, extended droughts, unexpected floods and cyclones, it is claiming lives and damaging infrastructure, homes and schools. It is also undermining livelihoods, especially amongst the poorest rural communities which are largely dependent on farming and fishing.<sup>1</sup> There is a clear gender dimension to climate change: as climate change reduces agricultural yields the resulting resource scarcity particularly affects women and girls who face increased vulnerability to hunger and gender-based violence and being withdrawn from school and pushed into early marriage.<sup>2</sup> Hunger itself makes it difficult for both girls and boys to concentrate in class, and the requirement to spend more time on household chores - fetching increasingly scarce wood and water - reduces girls' ability to safeguard time for home learning.

The importance of education for improving climate resilience is well-documented. Amongst lower income nations, those with higher levels of educated girls suffer fewer injuries and deaths in climate-weather disasters.<sup>3,4</sup> Climate education also equips young people with the critical thinking, problem-solving skills and resilience that are vital for adaptation and for building more sustainable futures.<sup>5</sup> Across sub-Saharan Africa, nations are taking action to increase climate resilience and both Zambia and Zimbabwe have climate strategies in place. However, 2019 research by Afrobarometer finds that: *“only about three in 10 [Africans] are fully “climate change literate,” combining awareness of climate change with basic knowledge about its causes and negative effects. Groups that are less familiar with climate change – and might be good targets for awareness-raising and advocacy in building a popular base for climate-change action – include people working in agriculture, rural residents, women, the poor, and the less-educated”*.<sup>6</sup>

CAMFED (the Campaign for Female Education) already reaches hundreds of thousands of children in secondary schools with our [My Better World Programme](#), delivered by CAMFED alumnae known as [Learner Guides](#) who volunteer their time and expertise. This wellbeing and learning support is endorsed by the Ministry of Education in each country and enables young people to develop vital skills including self-awareness, decision-making, team working and problem-solving. In 2021, nearly 10,000 Learner Guides reached 776,000 children in school with weekly sessions of My Better World over twelve months in five African countries. CAMFED is also recognised for our climate leadership, having won a [2019 UN Global Climate Action Award](#). Urgent action to combat climate change and its impacts is the thirteenth Sustainable Development Goal (SDG) and vital to achieving all the SDGs.



<sup>1</sup> World Meteorological Association (2021). State of the Climate in Africa 2020. [https://library.wmo.int/doc\\_num.php?explnum\\_id=10929](https://library.wmo.int/doc_num.php?explnum_id=10929)

<sup>2</sup> Kwauk, C. (2021, February 10). Why is girls' education important for climate action?. <https://www.brookings.edu/blog/education-plus-development/2021/02/10/why-is-girls-education-important-for-climate-action/>

<sup>3</sup> Blankespoor et al. (2010). Adaptation to Climate Extremes in Developing Countries: The Role of Education. Policy Research working paper; no. WPS 5342. World Bank. <https://openknowledge.worldbank.org/handle/10986/3827>

<sup>4</sup> Striessnig, E., et al. (2013). “Effects of Educational Attainment on Climate Risk Vulnerability.” Ecology and Society 18(1): 16. <https://www.ecologyandsociety.org/vol18/iss1/art16/>

<sup>5</sup> Sims, K. (2021). Education, Girls' Education and Climate Change. K4D Emerging Issues Report 29. Institute of Development Studies. <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/16523>

<sup>6</sup> AfroBarometer (2019, August 19). Climate change in Africa: Survey finds worsening agriculture conditions and quality of life, limited 'climate change literacy'. <https://www.afrobarometer.org/articles/climate-change-africa-survey-finds-worsening-agriculture-conditions-and-quality-life-limited/>

Building on these foundations, CAMFED wanted to understand how we might further support children's "powers" for climate resilience by designing climate education learning resources for young people that complement what they learn through their formal schooling. We therefore organised a needs assessment exercise with children, teachers and young women Learner and [Agriculture Guides](#).

The needs assessment exercise sought to understand what children in rural Zambia and Zimbabwe already know about climate change, how it is affecting their lives and their priorities for learning. It also investigated the priorities of the teachers and young women (CAMFED Learner and Agriculture Guides) who support them and the information and resources they need to increase their support for children's climate resilience. The findings of the needs assessment will inform the development of new learning resources as part of CAMFED's My Better World program that will complement existing climate education curricula. CAMFED conducted the needs assessment with the approval of Ministry of Education partners in both countries and is collaborating with the Ministry of Education and other stakeholders to share emerging findings and develop the learning resources.

## Approach

The needs assessment was undertaken in April 2022 and entailed focus group discussions and key informant interviews. The needs assessment was coordinated by CAMFED's Monitoring, Evaluation and Learning teams in each country with trained CAMFED Association enumerators facilitating the focus group discussions and interviews. The facilitated discussions took place with children, young women, head teachers and other teachers including teacher mentors and subject specialists.

In Zambia, the needs assessment was administered in three secondary schools across three districts: Mansa, Mongu and Mpika districts. Fifty children drawn from grades eight to twelve, twenty-five subject teachers, six head teachers, six teacher mentors and forty-four young women participated. In Zimbabwe, the needs assessment took place in a total of six secondary schools across the three districts of Shurugwi, Guruve and Umzingwane districts. Thirty-one children from forms one to four, thirteen teachers, three head teachers and nineteen young women participated.

## Key Findings

### 1) Secondary school children are feeling the impact of climate change and describe those negative effects on their education, family livelihoods and safety. Urgent action is needed

Children in Zimbabwe and Zambia shared examples of the negative impacts of climate change that they had witnessed and directly experienced. This included extreme droughts, floods, unpredictable rains and cyclones, damage to infrastructure, evolution of new diseases in humans and livestock and crop damage resulting in poor harvest.

Specific examples of climate change causing harm to life, homes and schools were given by all participant groups in both countries. In Zimbabwe, students reported that they have been affected by extreme weather events such as cyclones that have killed people and destroyed livestock, buildings and infrastructure. In Zambia, teachers cited examples of students and community members who had their home roofs blown away in storms and of houses being cut off by floods, causing students to miss classes. Head teachers and students in Guruve and Shurugwi districts in Zimbabwe recalled severe storms causing damage to buildings including schools where classroom and hostel roofs were blown off leaving insufficient space for teaching and learning, and textbooks were destroyed. In Nhema area, Zimbabwe teachers noted that children and their families have been displaced due to cyclones, resulting in dropouts in school.

Children were also able to articulate the effects of climate change on smallholding farming that is the backbone of their communities. For example, students in Zimbabwe perceived a noticeable shift in activities in the agriculture sector with the planting of crops starting later around November-December with the first rains whereas it would have started a month earlier in the past. They reported that in recent years, around January the rainfall has ceased, resulting in crop immaturity and failure because of lack of rain combined with excessive heat.

A student in Mongu district, Zambia recalled, “In 2017 floods were experienced that resulted in homes and crops being washed away causing famine in Western province”. Students in Umzingwane district, Zimbabwe, detailed their experiences of changes to rainfall and average temperatures in the area; particularly that Umzingwane dam is at a much lower level than in the past and they are now regularly recording higher temperatures above 37 degrees centigrade. Children reported that years ago, families in the district used to have higher yields, which enabled them to sell some of their harvests and have money for school fees, however, now the yields are very low and are not even enough for home consumption. A teacher mentor in Zimbabwe highlighted the example of a boy in their school who was suspended for breaking into the school tuck shop, “...when he was asked why he was doing that he said he was hungry”, and a CAMFED alumnae from Guruve district said, “I know 2 learners - a boy and a girl who dropped out of school because of hunger, they were helping their grandparents to do casual jobs for survival”.

During the focus group discussions, children spoke directly to their fears and worries about climate change. Anxieties expressed include: “I feel worried thinking that it might affect my education and my future” and “It worries me, I ask myself how could be like in the next five years?”. Another secondary school student reported: “Climate change has worried us...because it made us to struggle to get food since we could not produce well in farming as climate change caused crop failure”.

Young women also described some of the physical challenges climate change was causing and the impact on children’s ability to attend school. They described how flooding, particularly in the plains which affected the journey to school, would cause students to miss class, creating a higher risk of dropping out. Students in Zambia further indicated that droughts and high temperatures affected their ability to concentrate in class.

## **2) Children and stakeholders recognise that climate change results in additional challenges for girls, child-headed households and children living with disabilities**

In Zambia, there was consensus amongst stakeholders interviewed that girls were facing additional challenges. Climate change is affecting basic household chores, increasing the burden put on girls and creating safety issues which directly affect girls’ attendance at school. Two students in Mansa district explained, “Vulnerable girls, for instance orphans, are made to do more house chores due to climate change effects such as drought which causes various challenges such as the need to draw water from far places due to dry wells and tap water outages, taking away study time”, “Us girls are more affected because we are the ones who do the house chores, during drought when the water levels are low you find that instead of us drawing water just from home, we have to walk a kilometre away which takes a lot of time taking away our study time”.

Girls not only need to collect more firewood and water, and walk further away to collect them, they are also having difficulties accessing them as the bridges and roads are being washed away. In these situations, logs are often improvised to replace bridges and roads which creates a safety issue and risk to life. Participants in both countries also noted that children with disabilities were especially impacted by structural damage caused by climate change; if the roads to school are destroyed by floods and they have difficulty crossing flooded rivers or using improvised log bridges, this leads to them dropping out of school. In Zimbabwe, it was noted that people with Albinism are particularly affected during heat waves. In Zambia, street children were also highlighted as being adversely affected, as their access to shelter and food has become even more difficult than before, and child-headed households were mentioned as being particularly impacted in Zimbabwe.

Climate change has increased barriers to education in both countries, particularly affecting girls and increasing their vulnerability to early marriage. A teacher from Zambia’s Mansa district explained, “Most students farm to support themselves or supplement their guardian efforts in providing school prerequisites and food, but due to the drought and floods that are experienced at times, they have short supply of food, which causes them to miss classes..., ultimately affecting their performance and even dropping out of school”. A student from the same district reflected how this impacted her personally, “Here in Mansa district, we had a drought, my mother who is a farmer planted maize, but it did not grow well which affected our food supply and income at home, thereby making it difficult for her to pay my school fees”. In Zimbabwe’s Guruve district meanwhile, an example was given of a girl who dropped out of school because of inability to pay school fees. Her family relied on dairy production, but the family cattle died after the cyclone.

### **3) Children, teachers and young people expressed their enthusiasm for additional climate education to build their resilience**

The needs assessment identified existing knowledge about climate change amongst many of the stakeholders consulted. Review of national curricula in both countries and discussion with teachers also demonstrated that the subject is addressed, with varying approaches, in the Geography, Science and Agriculture subject curricula. Nevertheless all stakeholder groups identified some knowledge gaps and, beyond acquiring knowledge itself, indicated that they were keen to expand their climate skills and climate resilience. This is in line with CAMFED's approach to My Better World which focuses on cultivating children's skills and "powers" to build a better future for themselves and their communities. Examples of powers nurtured through CAMFED's existing My Better World resources that already support climate resilience include critical thinking, problem solving and team work. The needs assessments found unanimous enthusiasm and universal support to take further action for children's climate resilience amongst all the stakeholders in both Zambia and Zimbabwe. Young women CAMFED Association members welcomed the opportunity to volunteer their time to help children. They explained how it would be highly valuable for children themselves and also a role that they would benefit from, as they believe it will enhance their knowledge and their standing and impact in the community.

Student participants in both Zambia and Zimbabwe explained how they would welcome increased climate education themselves and also share their knowledge with the wider community. They emphasised their own role in this 'chain of knowledge share' whereby each person in the chain must fulfil the principle of telling at least five people until the message reaches everyone. One student expressed their aspirations for climate leadership in a future role as "Agricultural Extension Officer- I will be a leader educating people about climate change in my community, helping them to practice climate smart activities".

Teachers in Zimbabwe expressed how critical it is for both young people and community members to know about climate change and to have skills to respond to it. Head teachers in Zimbabwe were unanimous that children can become youth climate champions in their communities, for example, through raising awareness of tree planting days and making use of drama and music to communicate the key messages of climate change adaptation. According to the teachers, the vast majority of parents within their communities rely on subsistence farming and they emphasised the importance of climate change education for ensuring sustainable farming solutions are effectively implemented.

In Zambia, teachers perceived that delivering climate education to students at an early age would equip them with the knowledge to ensure they protect the environment, adapt and become more resilient in the face of climate change. Head teachers in Zambia also fully supported and welcomed the creation of new climate education content. They welcomed an approach where this content would be delivered by the Learner Guides and Agriculture Guides, extending the existing My Better World Program in schools.

### **4) Agreement on four focal areas for CAMFED's climate education and resilience approach**

The needs assessments revealed agreement across both countries that the scope of the complementary climate education should be broad and framed within the four focal areas. These are:

- 1.** Enabling children to understand climate change and how it affects them in their own context, including interconnections with livelihoods, food, and equity, including gender equity, and issues of climate justice. Ensuring that children can apply critical thinking to the issues, debunk myths and misconceptions and be open to new ways of doing things. Building understanding of local and national policies and strategies for climate resilience and how young people can be part of these.
- 2.** Equipping young people with essential, practical information and skills to identify risks, to help keep themselves safer in the face of climate impacts and emergencies. For example, guidance on how to stay safer in the face of a cyclone or floods and how to access government information and support in an emergency. Support should include information and practical support to address the challenges children already face, such as how to access food relief for marginalised children experiencing hunger exacerbated by climate change.
- 3.** Enabling young people to develop core skills - or "powers" in CAMFED's My Better World language - to improve their personal and community climate resilience. These powers should support robust mental health, problem-solving, empathy and collaboration. They should also help young people to step-up as climate champions and advocates in age-appropriate ways. This might entail demonstrating climate leadership through tree planting and raising awareness of the issues in their households and communities.

4. Helping young people to embed climate resilience through their daily lives and careers. In the short term this might entail learning about relevant climate-smart techniques that can help relieve the burden of the household chores that children, especially girls, already undertake. This is likely to include climate-smart techniques to preserve water, soil nutrition and yields on the family smallholder plot that children work on before and after school; information about sound nutrition in a context of food scarcity and simple food preservation techniques. Responding to young people's aspirations to build a brighter future; it should also help them identify and cultivate the skills and career pathways towards rewarding climate-smart careers, broadly defined; showcasing the breadth of opportunities and women's equal potential to play leadership roles. This might include, for example, climate-smart micro-enterprises, women's ability to thrive in STEM subjects, and sustainable and profitable farming.

The content, which will be delivered by CAMFED Learner Guides and Agriculture Guides, should complement the climate education focus in the formal curriculum and focus on young people's "powers" for climate resilience.

## 5) The learning style should be fun and interactive

Across both countries, there was agreement among all stakeholders that the learning experience should be fun and interactive. Practical demonstrations and educational school trips were emphasised. Suggestions included: using school gardens for students to practise climate-smart techniques and school trips to advance learning.

Suggestions for activities and media to share information about climate change included: debates, drama, role plays, student climate clubs and music groups, songs, poems, pictorial posters, peer-to-peer sharing of information, quizzes and debates. Suggestions of activities that would involve local communities included: roadshows, discussion programs on community radio stations, national television and social media. Celebrating role models and climate activism, such as annual awards for climate champions, were also highlighted as important.

In terms of the resources required, it was suggested that teaching guides and fliers should be provided to the Learner Guides and Agriculture Guides, supported by Teacher Mentors, to assist effective delivery of climate education. The use of accessible language when teaching climate education is important and could take the form of a glossary of terms and learning material produced in local languages as well as English. CAMFED Association Guides also indicated that a climate education application on their phones would be a valuable resource to enable them to better support children.

Participants agreed that ongoing multi-stakeholder engagement; including heads of departments, subject teachers, school heads, parents and communities, would be vital for both planning and delivery of the climate education content.



## Acting on the findings of the needs assessment

These findings will inform our collaborative work with stakeholders, especially young people based in rural Africa, to define the “learning journey” and learning objectives for the target client - a 15 year old girl or boy in a rural secondary school - and be guided by that to create learning resources for Learner and Agriculture Guides to deploy with children. Every step forward will be informed by consultation with the Technical Working Group in each country which includes CAMFED Association leaders, subject specialists and Ministry of Education Curriculum Development representatives. CAMFED’s National Advisory Committees, which include education leaders and expert partners, in Zambia and Zimbabwe will provide guidance and oversight. Young women — CAMFED Association members — from both countries will have a leading role in the design and creation of content and testing it with children in school.

We look forward to continuing to share insights and evidence with learning communities in the climate education space and collaborating locally and globally to improve climate resilience.

w: [camfed.org](http://camfed.org) | e: [info@camfed.org](mailto:info@camfed.org)

 [@Camfed](https://twitter.com/Camfed)  [/camfed](https://www.facebook.com/camfed)  [/camfed](https://www.instagram.com/camfed)

