

## Learning Brief

# The role of education in addressing climate change

### 1. Introduction

Even without the imposition of climate change, *caring for the environment* is a pre-requisite for survival. While many environmental issues may lie in the domain of government control, communities that are better informed about such matters are more able to adapt to catastrophic environmental events.

The education system - and specifically the SADC *Care and Support for Teaching and Learning* framework – offers an effective vehicle to drive a response to the very real threat of climate change and related anthropogenic impacts on the natural environment. Explicitly, it provides opportunities to raise awareness, increase knowledge, strengthen adaptive capacity and encourage positive action amongst children, youth and school communities to reduce the risks associated with climate change. The purpose of this paper is to stimulate discussion and accelerate action across the SADC Region's education community.

### 2. The climate change challenge

Climate change is one of the most serious crises facing humanity and, as with most socio-economic problems in the world, it poses the greatest risk to those least able to adapt: the poor, the young and old. With much of the world's population residing in developing countries, what occurs in these countries will have a significant bearing on the pursuit for sustainable development in the 21st century. To mitigate against global conflict, political instability, mass migration and depletion of the earth's resources, support must be given to developing countries, especially those that are most vulnerable to climate change.<sup>1</sup>

The effects of climate change are increasingly evident, including in Southern Africa with a high proportion of people residing in the SADC region directly impacted by perturbations in the environment. Increased land and ocean surface temperatures alter precipitation, winds, and weather events, posing a number of risks to SADC's regional economic and social development goals. Increased frequency of floods, cyclones, and droughts damages infrastructure, destroys agricultural crops, disrupts livelihoods, and causes loss of life<sup>2</sup>. Moreover, the ability of developing countries, such as many in the Southern African Development Community (SADC) subregion, to adapt or mitigate is limited.

### 3. Our climate change commitments

Managing the effects of a changing climate requires a multi-pronged approach that includes timely warning, preparedness, adaptation and mitigation. Importantly, any global response must also consider local action, since human activities at a local level collectively have a significant impact on climate change.

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<sup>1</sup> OECD, Sustainable Development: Critical Issues (<http://www.oecd.org/greengrowth/sustainabledevelopmentcriticalissues-freeoverviewofthereport.htm>)

<sup>2</sup> <http://www.sadc.int/themes/meteorology-climate/climate-change-adaptation/>

With its focus of ensuring that ‘no one is left behind’, Agenda 2030 for Sustainable Development embraces 17 Sustainable Development Goals (SDGs); SDG 13: *Take urgent action to combat climate change and its impacts* is a rallying call for us to protect our planet. With the ratification of the Paris Agreement under the United Nations Framework Convention on Climate Change in November 2016, the international community formally accepted quantifiable goals for mitigating climate change and its impacts.

The Economic Commission for Africa cites rural communities in Southern Africa as particularly vulnerable to the impacts of climate change with “extreme poverty, a high pre-existing disease burden, gender inequality, lack of access to resources and services, limited technological means, lack of efficient governance, conflicts and wars, fragmented health services, low levels of education, water and food insecurity, frequent natural disasters such as droughts and floods, and agricultural systems that are heavily dependent on rainfall making the SADC region extremely vulnerable to climate change”<sup>3</sup>.

In response, the SADC region has enacted policies aimed at climate change adaptation, and is also participating in efforts to turn back the effects of rising global temperatures and reducing their potential harm to the region. In this regard, SADC Member States are signatories to several major international conventions, including:

- The UN Framework Convention on Climate Change, which advocates for reduced emissions toward lowering global temperatures and offers guidance on coping with impacts of climate change;
- The Ramsar Convention on Wetlands, which specifically targets the preservation of internationally important wetlands as a primary source of potable water; it also contains a resolution covering climate change impacts, adaptation, and mitigation;
- The Convention on Biological Diversity, which has generated numerous technical papers documenting the links between biodiversity and climate change.

#### 4. Education’s role in addressing climate change

“Education provides the skills people need to thrive in the new sustainable economy, working in areas such as renewable energy, smart agriculture, forest rehabilitation, the design of resource-efficient cities, and sound management of healthy ecosystems. Perhaps most important, education can bring about a fundamental shift in how we think, act, and discharge our responsibilities toward one another and the planet “  
Heads of UNESCO and UNFCCC

SDG 4 on education and SDG 13 on climate change highlight the importance of education’s role in climate change responses. Of particular relevance are Target 4.7 - “by 2030 all learners acquire knowledge and skills needed to promote sustainable development...” - and Target 13.3 – “improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning”.

Other international agreements that highlight the important role of education in addressing climate change and sustainable development include:

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<sup>3</sup> Economic Commission for Africa, *Climate Change and the Rural Economy in Southern Africa: Issues, Challenges and Opportunities*. 2012 (<https://www.uneca.org/sites/default/files/PublicationFiles/climate-change-and-the-rural-economy-in-southern-africa.pdf>).

- Article 12 of the Paris Agreement stresses that “Parties shall cooperate in taking measures... to enhance climate change education, training, public awareness, public participation and public access to information...”
- The Lima Ministerial Declaration on Education and Awareness-raising stresses the importance of including climate change in school curricula and development plans.
- Article 6 of the UN Framework Convention on Climate Change focuses on education, training, public awareness and access to information related to climate change.

The Global Action Programme (GAP) on Education for Sustainable Development (ESD), launched by UNESCO at the World Conference on ESD in 2014, aims “to generate and scale up action in all levels and areas of education and learning to accelerate progress towards sustainable development”. It focuses on five priority action areas:

- Advancing policy support for mainstreaming ESD into both education and sustainable development policies;
- Transforming learning and training environments through whole-institution approaches; building capacities of teachers, educators and trainers;
- Empowering and mobilizing youth;
- Accelerating sustainable solutions at local level in communities<sup>4</sup>.

### The negative impact of climate change on education

The relationship between education and climate change is dualistic: whilst education is important for combatting the impacts of climate change, the effects of climate change pose a threat to educational access and provision.

Children are often the hardest hit by the effects of climate change, with increased levels of absenteeism or interrupted access to education having a detrimental effect on their educational attainment. More severe weather events such as drought, flooding and hurricanes can impact negatively on educational provision, impeding school attendance or destroying schools altogether. While some environmental change, such as sea level changes, changes in weather patterns, desertification and soil erosion may seem to have subtle impacts, their long term inter-generational implications are severe and will negatively influence livelihoods and socio-economic fabric of life. Additionally, national education budgets are often cut because of the financial burden of reconstruction and rehabilitation costs associated with severe weather events, decreasing the investment directed towards achieving quality education.

### The advantage of addressing climate change through schools

The education system has several comparative advantages over other services when it comes to addressing challenges that affect schools and their communities:

- The education sector reaches thousands of learners nearly every day of the year;
- Today’s learners are tomorrow’s governors of the earth – and will inherit the impacts of climate change;
- Schools are places of learning, with the capacity to provide children and youth with opportunities to acquire the requisite knowledge and skills to manage life’s challenges;
- Schools are relatively accessible, and they often provide a physical infrastructure in communities where it is otherwise lacking;

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<sup>4</sup> <http://en.unesco.org/gap>

- Schools comprise human capacity, including school staff, learners, their caregivers, and the broader school community;
- Schools are permanent institutions which can help to sustain support and services in the long term;
- School-based support allows for the early identification of children and communities at risk;
- Schools provide resources and are service conduits, not just for learners, but also for their families and the communities in which they live.

### Care and Support for Teaching and Learning (CSTL) - a framework for addressing climate change

Care and Support for Teaching and Learning (CSTL) is a successful example of a systemic approach to sustainable development. Developed in the early 2000's, CSTL is an innovative approach to strengthening the education sector's ability to respond to the exponential numbers of children and youth in the region made vulnerable through socio-economic, health, environmental and other challenges.

There are several reasons why CSTL provides an effective platform to address the many pressing issues – climate change being one – that impact the lives of children, youth and families in the SADC region. Key amongst these are:

- Whilst the provision of quality education remains the primary purpose of the education sector, the CSTL approach facilitates the concept of schools as sites of integrated support where a wide range of challenges can be addressed, including those related to climate change.
- Through CSTL, schools are strengthened to facilitate the delivery of a comprehensive package of support comprising 12 essential pillars: curriculum development; teacher development and support; infrastructure; extra-curricular support; psychosocial support; health; nutrition; social welfare support; material support; water and sanitation; safety and protection; governance and leadership. Applying a climate change lens to each of these pillars can make a significant contribution towards achieving education for sustainable development.
- CSTL strengthens the implementation of the many development programmes delivered through schools in the region, such as those addressing health, HIV, and food security. Similarly, programmes tackling climate change and environmental sustainability can benefit from this coordinating support framework.

Aligned with the global commitment to ensure that 'no-one is left behind', it is our obligation to use platforms such as CSTL to advance the region's priority development goals and commitments – including those related to climate change and environmental sustainability. By raising awareness, building capacity and improving environmental literacy, children and youth will be encouraged to *lead local* action towards sustainable development.

## 5. Conclusion

Our joint responsibility for achieving Sustainable Development Goal 13: 'Take urgent action to combat climate change and its impacts', compels us to forge a better understanding and awareness of the relationship between humans and their natural environment – especially in the context of climate change and young people in a disadvantaged region. By bringing together two critical elements for human development - education and environmental sustainability – we can better equip our youth in mitigating, adapting and confronting the impacts of climate change.

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