



Swiss Agency for Development and Cooperation SDC

WHAT is green education? What is the impact of climate change on education?

**WHY** is education important for the green transition? Why do education systems need to build resilience against climate change?

**HOW** can SDC build on existing institutional experience and define further entry points for embedding green education, including VSD, and climate change resilience in its programs? Work stream on Inclusive Green Transition

# Input paper on green education



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## 1. Introduction: Education, Climate Change and Green transition

Sustainable development is the umbrella concept which encompasses a green transition. Within this domain, climate education focuses on aspects regarding both the impact(s) of climate change on education and education's contribution to climate action (efforts to mitigate and adapt to climate change by reducing greenhouse gas emissions, enhancing resilience, and promoting sustainable practices).

All environmental related concepts are interrelated just as the **nine planet boundaries**<sup>1</sup> and the social foundation that ensure that no one is left falling short on life's essentials. The aim is to meet the needs of all people within the means of the planet.

**Green education** is critical for achieving a sustainable future. It equips learners, teachers, citizens and communities, consumers, workers and business owners with the skills and knowledge necessary to navigate and thrive in a world increasingly impacted by climate change.

In addition, education sector demand for green services and products can be driven by the need for environmentally sustainable goods and services within education systems. Examples include green construction for eco-friendly school buildings, renewable energy solutions for schools, sustainable school meal programmes using local and organic products, and eco-friendly learning materials.



Figure 1: Basic education, VSD and economy's contribution to the green transition (source: E+E section, 2024)

<sup>&</sup>lt;sup>1</sup> All you Need to Know about the 9 Planetary Boundaries, Earthy institute, 2024

E+E Economy and Education

The goal is to avoid simplified approaches that risks neglecting green education's transformative potential, reducing it to narrow outcomes rather than addressing systemic and societal changes. For instance:

- ➤ While equipping individuals with skills for a green economy is crucial, it should be part of a holistic approach that also fosters critical thinking and environmental stewardship.
- By focusing exclusively on disaster and risk reduction, green education risks being viewed as a short-term technical fix rather than a comprehensive framework for societal and environmental transformation.

This paper aims to provide actionable insights, experiences and recommendations for enhancing green education in SDC's priority countries, thereby, supporting the broader goals of inclusive, peaceful, and green development for the people and the planet.

## 2. What is Green Education?

### Concepts

Green education equips learners with knowledge, skills, and values to promote environmental sustainability, climate action, and responsible resource use. It encompasses various aspects, including education for sustainable development (ESD), climate education, and the development of green skills. ESD is an overarching concept that integrates environmental, economic, and social dimensions of sustainability. Within ESD, climate education focuses specifically on the impacts of climate change and how education can contribute to climate action.

For UNESCO, "Green skills" are "the knowledge, abilities, values and attitudes needed to live in, develop and support a sustainable and resource-efficient society.

The breadth of green skills includes occupational and technical skills used more intensively in green operations<sup>2</sup>, and transferable skills such as decision-making and teamwork. The skills for green transformation needed to drive the systems change demanded by the 1.5-degree target include disruptive thinking, political agency and coalition-building<sup>13</sup>.

To make this possible, green education systems integrate sustainability principles into curricula, school operations, infrastructure, and policies to foster environmental responsibility and climate resilience.

<sup>&</sup>lt;sup>2</sup> For a more precise definition with a Vocational skills development lens, refer to SDC E+E section's "Input paper on green skills", 2024

<sup>&</sup>lt;sup>3</sup> Greening curriculum guidance: teaching and learning for climate action, p12, UNESCO, 2024

#### Context

Over the past decade, there has been a gradual integration of green education into formal curricula and teacher training in many countries. However, the coverage and depth of these subjects vary significantly across regions and educational institutions. There is a pressing need for comprehensive integration of green education at all levels of education, including in non-formal and informal systems.

At the same time, climate change is already disrupting education systems by causing infrastructure damage, displacing students, and diverting resources, thereby compromising learning environments and access to education<sup>4</sup>. While 40 million children are affected every year by infrastructure damage and displacement<sup>5</sup>, heat waves are disrupting learning for millions of children worldwide<sup>6</sup>.

The table below shows the various direct and indirect impacts of climate changes that erodes education outcome, stressing the need for educational systems to incorporate disaster preparedness and climate resilience into all aspects of education management.

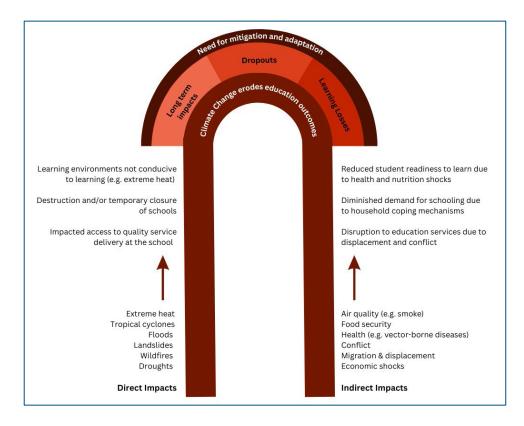


Figure 2: Climate change erodes education outcomes (World Bank, 2024)

<sup>&</sup>lt;sup>4</sup> Leveraging Education in Emergencies for Climate Action, Geneva hub for education in emergencies, 2023

<sup>&</sup>lt;sup>5</sup> The climate crisis disrupts 40 million children's education every year, World economic forum, 2023

<sup>&</sup>lt;sup>6</sup> Too hot to learn: The impact of climate change on education, Global partnership foe education, 2023

Partnerships between governments, NGOs, and sector actors have facilitated development of educational materials, teacher training programs, and community-based initiatives on green education<sup>7</sup>. Key international actors are actively engaged in the field and already developed comprehensive policies8 (UNICEF, UNESCO, the World Bank, USAID, EU). Prospects for green education in developing countries hinge on sustained commitment of education authorities of countries and their partners and collaborative efforts including policy alignment, capacity building, resource mobilization, multi-sector partnerships, and community engagement.

Advancements in technology offer opportunities for innovative educational approaches, such as online platforms to complement face to face learning modalities and various mobile applications. Digital technologies may also serve as powerful tools to collect, monitor, and share important ecological data and trends with students and the broader public through citizen science programs or similar9. However, the persistence of socio-economic disparities and the need for continuous investment in infrastructure, teacher training, and curriculum development will continue to pose challenges.

## 3. Why is Green Education important?

## Global importance

Green education is essential for fostering sustainable development and addressing the multifaceted challenges posed by climate change. It prepares individuals to adopt sustainable practices, promotes environmental stewardship, and equips the workforce with skills needed for green jobs. By integrating sustainability into education, we can cultivate a generation that is not only aware of environmental issues but also empowered to create innovative solutions to transform the way we live, produce, consume, invest and interact with nature <sup>10</sup>.

International commitments, such as the **Paris Agreement** and **SDG 4.7**, underscore the importance of climate change communication and education (CCE). Despite these commitments, there remains a significant gap in climate education. About 70% of young people cannot explain climate change while less than 30% of teachers expressed a readiness to teach it. Only 38% of countries have national plans focused on CCE, and 33% do not include CCE in teacher training or TVET programs<sup>11</sup>.

<sup>&</sup>lt;sup>7</sup> https://www.learning-planet.org/ for instance

<sup>&</sup>lt;sup>8</sup> See list of reference documents in Annex

<sup>&</sup>lt;sup>9</sup> <u>Digital technologies and environmental education</u>, Greg Lowan-Trudeau, 2023

<sup>10</sup> UNESCO urges making environmental education a core curriculum component in all countries by 2025, UNESCO, 2023

<sup>11</sup> Climate change communication and education country profiles: approaches to greening education around the world, - UNESCO, 2023

### Importance for Switzerland

With the **Paris Agreement** (art. 12<sup>12</sup>) and its Statement for the Transforming education summit<sup>13</sup>, Switzerland is committed to support climate change education at home and globally, confirming its emphasis on promoting **SD4.7**<sup>14</sup> at the core of its international engagement.

**Domestically**, Switzerland has integrated green education as a part of the State's educational provision since 2015<sup>15</sup>. This experience provides inspiration for other countries to follow. For instance, the Swiss network for health-promoting and sustainable schools<sup>16</sup> develops resources, guidelines and quality criteria to support ESD while the Eco-school network<sup>17</sup> encourages practical actions and supports to integrate them into school curricula.

One of the ultimate goals of the **Swiss International Cooperation strategy 2025 – 2028**<sup>18</sup> is to contribute to guaranteeing environmentally-friendly development, resilient to climate change and natural disasters for the benefit of the most disadvantaged, in coherence with **SDC's vision** to promote "equal opportunities for all to access and complete relevant quality education that fosters social, economic and political participation" <sup>19</sup>.

This has been translated within the "Programmatic Framework 2025 – 2028" of the Economy and Education Section which overall goal is to "embrace an inclusive, peaceful and green development".

At the programme level, the SDC places a significant emphasis on green education across its diverse portfolio of educational interventions (multilateral and bilateral). Moreover, Swiss international NGOs actively engage at the country level. Examples of this wide range of innovative projects are given in the section below.

## 4. How can SDC promote Green Education?

The primary focus of SDC's engagement in education will remain on ensuring that all learners achieve foundational skills<sup>20</sup> while simultaneously mainstreaming climate change and green education within the existing portfolio and in the preparation of future interventions.

SDC views green education as both a crosscutting theme and a specific focus area. The decentralized approach allows field offices to tailor their strategies, while headquarters supports mainstreaming efforts and identifying entry points for targeted projects.

<sup>&</sup>lt;sup>12</sup> Paris Agreement, UNFCCC, 2015

<sup>&</sup>lt;sup>13</sup> Switzerland National Statement of Commitment, 2022

<sup>&</sup>lt;sup>14</sup> Switzerland and SDG 4, Switzerland Agenda 2030, Federal Department of Foreign Affairs

<sup>15</sup> Swiss education report 23, p38, Swiss Coordination Centre for Research in Education, 2023

<sup>&</sup>lt;sup>16</sup> Switzerland: health promotion and sustainable development in schools, Schools for health in Europe, 2020

<sup>&</sup>lt;sup>17</sup> Eco schools network

<sup>&</sup>lt;sup>18</sup> International Cooperation: Flexible approaches in an unstable world, Federal Council, 2024

<sup>19</sup> Thematic Guidance on Basic Education and Vocational Skills Development, SDC, 2022

<sup>&</sup>lt;sup>20</sup> **Foundational learning** is defined as basic literacy, numeracy, and transferable skills, such as socio-emotional skills that provide the fundamental building blocks for all other learning, knowledge, and higher-order skills. (<u>Foundational learning: What it takes and what works</u>, Global partnership for education, 2024)

The focus is on collaboration and pragmatism, avoiding top-down imposition and aligning with contextual realities<sup>21</sup>. According to the Global Partnership for Education's climate education systems framework<sup>22</sup>, this can be achieved through 7 dimensions (figure below).

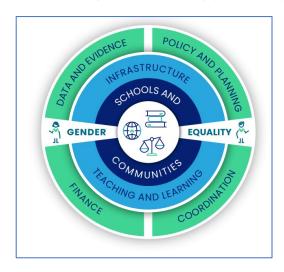


Figure 3: 7 dimensions of a climate-smart education system framework (GPE, 2023)

This is similar to the four core areas proposed by the Green Education Partnership to promote an international quality standard for greening schools and other learning environments and integrating sustainability principles and climate action: 1) school governance, 2) facilities and operation, 3) teaching and learning, and 4) community engagement<sup>23</sup>.

This chapter will explore entry points related to the six strategic orientation lines of SDCs Thematic Guidance on Basic Education and Development<sup>24</sup> Vocational Skills (2022).Depending on the context analysis and emerging opportunities, they can inspire the adaptation of existing interventions as well as the development of new programmes.

The question of education in emergency and protracted crisis is more specifically addressed under point 4 (Inclusion and equity). But all proposed entry points can be adapted in crisis context.

In a similar way, while the question of the continuum between basic education and vocational skills development (VSD) is developed under point 6 (Transition to work), most of the suggestions below can be adapted to VSD programmes and complement the "Input Paper on Green Skills" (E+E section, 2024).

### 4.1 Global and regional agenda

General goal: Enhance international policy dialogue for effective, efficient and resilient national education systems.

SDC will advocate for the integration sustainability into global education agendas. This includes strengthening and broadening the current work with strategic partners mainstream climate resilience within education. including in emergencies and in protracted crisis<sup>25</sup>.

Concrete ways to achieve this could involve:

- Raising green education related questions in the boards and committees where SDC is represented in collaboration with like-minded donors, foundations (e.g. the Aga Khan Foundation<sup>26</sup>) and private sector representatives (e.g. the Global Business Coalition<sup>27</sup> for education).
- Reinforcing synergies between country offices and SDC global partners.
- ► Facilitating links and dialogue between partners at global, regional and national level in view of collaboration and alliance building.
- Establishing regular exchanges between SDC, country offices and global partners ahead of important board meetings of GPE and ECW, UNESCO IIPE and others.
- ► Further explore the involvement of regional organizations such as ECOWAS and donor groups, which could play a role in integrating green education into education policies.

<sup>&</sup>lt;sup>21</sup> For the time being, "environmental markers" (similar to gender markers) are not considered for establishing sensitivity criteria in SDC education programmes.

<sup>&</sup>lt;sup>22</sup> Toward climate-smart education systems: A 7-dimension framework for action, Global partnership for education, 2023

<sup>&</sup>lt;sup>23</sup> Green school quality standard Greening every learning environment, UNESCO, 2024

<sup>&</sup>lt;sup>24</sup> Many times, programmes may work on different complementary entry points at the same time.

<sup>&</sup>lt;sup>25</sup> Following the orientations of the Geneva's hub for EiE 2023 report (See <u>Key messages</u> here)

<sup>&</sup>lt;sup>26</sup> Climate resilience, Aga Khan Foundation

<sup>&</sup>lt;sup>27</sup> The business coalition for education

Additionally, Switzerland could consider increased engagement in international mechanisms like **UNESCO greening education partnership**<sup>28</sup> or **COP commitment**<sup>29</sup> to climate change education and communication.

#### SDC's on-going support to global level strategic partners

- ▶ GPE and ECW: Supporting the Global Partnership for Education<sup>30</sup> and Education Cannot Wait<sup>31</sup> in addressing climate and environmental challenges.
- ▶ UNESCO/GEMR: In 2016, the first Global Education Monitoring Report was focused on "education for environmental sustainability and green growth"<sup>32</sup>.
- ► Geneva Global Hub for Education in Emergencies: Supporting the development of the Leveraging Education in Emergencies for Climate Action report<sup>33</sup>, and contributing to the message ahead of COP 29<sup>34</sup>.
- ▶ UN Climate Change Learning partnership<sup>35</sup> (financed by the climate section): Supporting countries in developing national strategies and designs and promotes learning materials to strengthen human resources and skills for climate resilient-development and climate literacy.
- ▶ NORRAG: As the Global Education Centre of the Geneva Graduate Institute, NORRAG publishes various research papers. Recently (oct. 2022), its 7th "NORRAG Special Issue, Education in Times of Climate Change<sup>36</sup>" addressed the question of how education is to equip learners to participate in climate action that would fundamentally disrupt existing problematic systems.

### 4.2 Education system governance

**General goal:** Contribute to effective, inclusive and equitable education systems through strengthened governance and institutional capacities at national and decentralised level.

At the country level SDC can promote the integration of green education into national education strategies. This involves providing technical assistance, sharing best practices from Switzerland, and supporting the development of comprehensive policies. Focus will be on:

Contributing to mainstream climate change in education policies area, especially in GPE partner countries where education stakeholders can refer to the policy tool designed to promote climate smart education system<sup>37</sup>.

- Embedding Education into Climate Policies: Collaborating various with governmental ministries to integrate education and education in emergencies into national strategies, such as Adaptation Plans (NAPs), is crucial. This ensures that educational considerations are part of broader climate resilience and adaptation efforts.
- ▶ Addressing the challenges of education data collection and management<sup>38</sup>, which are often hindered by the absence of relevant national policies and the existence of parallel data systems<sup>39</sup>.

<sup>&</sup>lt;sup>28</sup> Greening Education Partnership, UNESCO

<sup>&</sup>lt;sup>29</sup> Declaration on the common agenda for education and climate change at COP28, UNESCO, 2023

<sup>&</sup>lt;sup>30</sup> Blog series: Climate change and education, Global partnership for education

Greening statement, Education cannot wait, 2024

<sup>&</sup>lt;sup>32</sup> Planet: education for environmental sustainability and green growth, GEM-UNESCO, 2016

<sup>&</sup>lt;sup>33</sup> Leveraging Education in Emergencies for Climate Action report, Geneva Global Hub for Education in Emergencies, 2023

<sup>&</sup>lt;sup>34</sup> A Message Ahead of COP29, Geneva Global Hub for Education in Emergencies, 2024

<sup>&</sup>lt;sup>35</sup> UN Climate Change Learning partnership, SDC project database

NORRAG Special Issue, Education in Times of Climate Change, NORRAG, 2022

Policy dialogue tool: Mainstreaming climate change in education policy areas, Global Partnership for Education, 2023

<sup>38</sup> Strengthening systems and institutionalising education in emergency data, UNESCO, 2023

<sup>&</sup>lt;sup>39</sup> Learning about the importance of using education data in emergencies, UNESCO, 2023

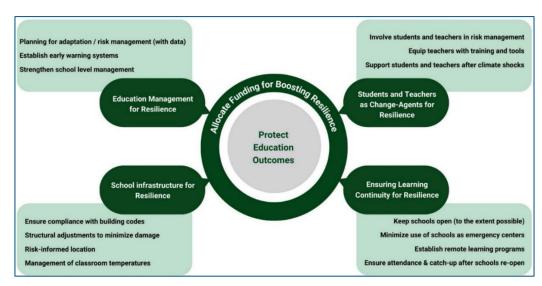


Figure 4: Approach to adapt education systems to climate change (World Bank 2024)

- ▶ Promoting the leadership of ministries of of education<sup>40</sup>, which necessitates political will at the highest levels, robust and resilient information systems, and strengthened human resources and organizational structures.
- Aligning efforts to promote gender equality and social inclusion with initiatives aimed at advancing climate resilience.

#### SDC's experience

- ▶ UNESCO/IIEP Support: Assisting ministries of education in enhancing their capacities for crisissensitive educational planning<sup>41</sup> and collecting and analyzing data on climate change education implementation<sup>42</sup>.
- ▶ Support to resilient decentralized governance: In rural areas of Ukraine, (DECIDE project<sup>43</sup>), Switzerland support the development of efficient, transparent and participatory education governance citizens through improved education service and greater civic engagement of youth, including around environmental related issues.
- ➤ System Strengthening Partnership Programme of the Ministry of Education Jordan and through UNESCO<sup>44</sup>: This multi-partner project supports Jordan's education authorities and UNESCO in enhancing inclusive, quality education for vulnerable youth affected by crises. It focuses on policy development, capacity building, and resource management to improve educational outcomes.

<sup>&</sup>lt;sup>40</sup> Strengthening Ministry of Education engagement and leadership in rapid education in emergency response: policy brief, UNESCO, 2022

<sup>41</sup> Crisis-sensitive educational planning, IIEP-UNESCO

<sup>&</sup>lt;sup>42</sup> Getting every school climate-ready: how countries are integrating climate change issues in education, UNESCO, 2021

<sup>&</sup>lt;sup>43</sup> Decentralization for Improved Democratic Education project, SDC project database (implementing partner: Zurich University of Teacher Education)

<sup>&</sup>lt;sup>14</sup> System Strengthening Partnership Programme of the Ministry of Education Jordan and through UNESCO, SDC project database

### 4.3 Quality and relevance<sup>45</sup>

General goal: Enable relevant quality learning that provides competencies for life and work and transformative impact on human development.

To enhance the quality and relevance of education, the following entry points aim to integrate green and climate education into curricula<sup>46</sup> and teaching practices:

- ▶ Embed climate change and environmental sustainability topics into teaching and learning materials raise awareness understanding among learners, making sure that it addresses locally pertinent climate **issues**, ensuring relevance and engagement.
- Provide training and professional development opportunities for teachers to effectively integrate climate topics into their teaching practices<sup>47</sup>.
- Incorporate experimental and project-based learning focused on environmental sustainability and climate resilience to provide hands-on opportunities for students to apply knowledge in real-world contexts, deepening both understanding and relevance.

- ► Encourage interdisciplinary approaches by integrating climate-related topics across different subjects (e.g., linking geography, science, and economics) to foster a more holistic understanding of climate change and sustainability.
- Develop assessment frameworks measure both academic performance and practical competencies related to green skills and climate awareness, ensuring that quality education includes the ability to apply knowledge real-world environmental to challenges.
- ► Integrate digital and multimedia resources that highlight climate change impacts, sustainable practices, and environmental protection into curricula. This could include virtual field trips, interactive modules, or case studies tailored to local environmental challenges<sup>48</sup>.

#### SDC's experience

- ▶ Curriculum Integration: In Chad (ProQEB)<sup>49</sup> and Benin (PAEFE), green education content is integrated into competency-based learning, linking lessons to real-life challenges. It emphasizes active, participatory learning, community projects, and teacher training to embed sustainability across subjects, making it more holistic and action-oriented than traditional methods.
- Integrating green education into alternative education: In Niger, Alternative Education Centers for Youth (PEAJ) offer a second chance to young people excluded from the formal system, particularly those in transhumance situations. These centers integrate green education content in line with local realities to strengthen young people's skills in sustainability and responsible resource management.

<sup>&</sup>lt;sup>45</sup> See also Input Paper on Green Skills", E+E section, 2024, p15 for suggestions on entry points around teachers and trainers in VSD projects

<sup>&</sup>lt;sup>46</sup> The Green education partnership aims at supporting 90% of countries to green their national curriculum. For this purpose, UNESCO developed the "Greening curriculum guidance: teaching and learning for climate action"

See the "Teachers for the planet" working group of the Learning planet alliance for resources and communities

<sup>&</sup>lt;sup>48</sup> Recent example: Sustainability from the scratch app at Edchild

<sup>&</sup>lt;sup>49</sup> Teaching and learning to live better with the effects of climate change in elementary school in Chad, SDC EDU network newsletter, 2021 and Promotion de la qualité de l'éducation de base au Tchad, ProQEB, SDC project database (implementation partner: Enfants du monde)

### 4.4 Inclusion and equity

**General goal:** Enhance equitable access to quality BE for all and to expanded VSD options, with special attention to the disadvantaged and marginalised, including crisis-affected societies.

To ensure that green and climate education promotes inclusion and equity, especially for those who are excluded from traditional education systems, interventions could consider the suggested strategies below:

- Integrate disaster risk reduction (DRR) education into the curriculum to build resilience in schools and communities, helping students and their families prepare for and respond to climate-related risks such as floods, droughts, and extreme weather events<sup>50</sup>, taking into account the unique profiles of all children, including those with special needs.
- Develop inclusive climate education programs that address the specific needs of marginalized and disadvantaged groups, ensuring that all learners - regardless of language<sup>51</sup>, socio-economic status, gender, disability, or geographic location - can access and benefit from green education opportunities.
- ▶ Design tailored teaching and learning materials that are accessible to diverse learners, including those with disabilities, by using adaptive and inclusive methodologies (for instance multimedia contents facilitating learning for deaf students) ensuring that climate and environmental education reaches every student in a meaningful way.
- Provide community-based climate education initiatives in underserved areas, allowing local populations - particularly those affected by climate-related crises - to access green education through non-formal channels, such as adult literacy programs or community workshops.

- ▶ Offer targeted scholarships and financial support for disadvantaged learners to access education and vocational training in green sectors, helping them overcome financial barriers and providing them with opportunities in climate-resilient industries.
- ► Focus on **gender-responsive climate education**, ensuring that girls and women, who are disproportionately affected by climate change, are empowered with the skills and knowledge to participate in green sectors and contribute to climate solutions.
- ▶ Promote the use of **mobile and digital learning platforms** to deliver green education to hard-to-reach communities, ensuring that even those in remote areas or crisis-affected regions have equitable access to climate education.
- ▶ Develop resilience-focused teacher training programs, enabling educators to incorporate resilience-building strategies into their teaching, particularly in regions vulnerable to climate change impacts.

<sup>&</sup>lt;sup>50</sup> For better coherence with global actors, SDC could consider engaging with the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (<u>GADRRES</u>) and support the promotion of the "<u>Comprehensive School Safety Framework</u>"

<sup>&</sup>lt;sup>51</sup> For instance, <u>Climate cardinals</u> "make the climate movement more accessible to those who don't speak English" by translating information into more than 100 languages.

#### SDC's experience

- ► SDC already collaborates with local governments and organizations to enhance educational infrastructure and integrates **disaster risk reduction (DRR)** into education systems<sup>52</sup>.
- ► Haiti<sup>53</sup>: SDC supported the Ministry of Education in rebuilding schools to comply with appropriate architectural standards and anti-earthquake norms, ensuring the safety and resilience of educational infrastructure in the face of natural disasters.
- ▶ **Myanmar**: To address safety standards, SDC collaborated with the Department of Basic Education to develop the Safe and Child-Friendly School Construction Guidelines<sup>54</sup>, promoting secure and conducive learning environments for children.
- ▶ **Nicaragua**: SDC worked with the Ministry of Education, municipalities, and civil defense units to develop safety guidelines and incorporate DRR into the curriculum. Educational booklets were created to inform children about concrete risks in their environment, knowledge that is then disseminated to parents and communities, enhancing overall resilience.

### 4.5 Sustainability, cohesion and resilience

**General goal:** Make use of the transformative role of education for sustainable development, civic participation, social cohesion and resilience.

The following entry points can be integrated to ensure that learners are both empowered and equipped to contribute to long-term societal transformation<sup>55</sup>:

- ▶ Promote student-led sustainability initiatives such as school eco-clubs, green campaigns, and sustainability audits within schools, enabling learners to take an active role in improving their communities while reinforcing key environmental concepts.
- ► Fostering youth empowerment through climate education means equipping them with leadership, advocacy, and green job skills while engaging them in hands-on environmental projects. It includes mentorship, peer learning, and community action, ensuring they can drive real change. 56
- ➤ Collaborate with **youth-led organizations** that focus on environmental sustainability to leverage their energy, innovation, and community engagement.

- Develop curricula focused on circular economy principles, teaching students how to minimize waste, reuse resources, and promote sustainable production and consumption practices, reinforcing resilience and cohesion at both community and national levels.
- ▶ Engage local governments and civil society in school sustainability initiatives, creating opportunities for public-private partnerships that enhance community-based resilience projects. This collaboration strengthens the role of education in broader sustainability and civic participation efforts.
- ▶ Support intergenerational learning programs, where older community members share traditional knowledge related to sustainable land use, water management, and natural resource conservation with younger generations, building social cohesion and environmental resilience.

<sup>&</sup>lt;sup>52</sup> Thematic Spotlight: Climate Change, Disaster Risk Reduction and the Role of Education, SDC EDU network newsletter, 2021

<sup>&</sup>lt;sup>53</sup> Improve access to good quality education through building safe, permanent and comfortable school infrastructure, SDC project database (project partner: Swiss Humanitarian Aid Unit)

<sup>&</sup>lt;sup>4</sup> Safe and Child-Friendly School Construction Guidelines, Department of Basic Education – Myanmar, 2018

<sup>&</sup>lt;sup>55</sup> See the <u>Foundation for environmental education</u> or the <u>Office for climate education</u> for resources, networks and events

<sup>&</sup>lt;sup>56</sup> NORRAG Special Issue, Education in Times of Climate Change, NORRAG, 2022

▶ Use green education as a vector for community resilience and social cohesion by training young people in sustainable practices related to land, water and natural resource management. In contexts such as the Sahel, where conflicts over pastoralism, gold panning and access to resources exacerbate tensions, this approach strengthens community cohesion while providing concrete responses to local environmental challenges.

In **crisis context**, this may require dedicated efforts such as conducting targeted awareness campaigns in disadvantaged communities to promote the value of green education and raise awareness of the opportunities available for marginalized learners, ensuring that they are encouraged to participate.

#### SDC's experience

- ▶ Blue and Green Schools<sup>57</sup>: Implemented in various contexts, from Cambodia to West Africa and Mongolia, these schools link water usage, environmental stewardship, and health. They promote appropriate hygiene practices and ensure the availability of sanitation infrastructure and equipment.
- ▶ Mongolia ESD Project<sup>58</sup>: This project supported Education for Sustainable Development through capacity building at all levels, development of materials and curricula, and fostering management and community involvement in "model green schools."
- Agroecology in Niger (GWANI): Agroecology is promoted through integrated agricultural training centers integrated into vocational training. These centers train young people in sustainable agricultural practices, product processing and the rational use of inputs, thereby strengthening the quality of training and the local anchoring of green skills.
- **EQUIPE project in Burkina Faso**: Aimed at areas affected by insecurity, the project promotes inclusion and educational equity through the integration of ecological classrooms. These green infrastructures improve learning conditions while raising community awareness of climate issues.

#### 4.6 Transition to work<sup>59</sup>

**General goal:** Enhance labour market outcomes through informed choices, improved matching, entrepreneurship support and facilitated access to gainful employment.

A combination of basic education and vocational skills is needed for the most vulnerable to access decent work and contribute to an inclusive and sustainable economic development. At the same time, supply-side interventions will not be sufficient, and interventions are needed on the demand side to increase the proportion of green employment and entrepreneurship opportunities available to young people<sup>60</sup>.

Interventions need to boost both the supply of green skills, young worker's use of their skills and the labour market demand for green skills.

The suggestions below are especially relevant for programmes that focus on students that don't have the minimum foundational skills to access existing VSD training<sup>61</sup>:

Establish partnerships with local environmental organizations and ecofocused businesses to co-develop locally relevant curricula, ensuring that basic and prevocational education is directly tied to the environmental and economic context of the region.

<sup>&</sup>lt;sup>57</sup> Blue schools, Linking WASH and schools, Swiss water consortium, supported by SDC

<sup>&</sup>lt;sup>58</sup> Education for Sustainable Development (ESD) project, SDC project database (implementing partner: GIZ)

<sup>&</sup>lt;sup>59</sup> See also Input Paper on Green Skills", E+E section, 2024, p11 for suggestions on entry points around labour market integration in VSD projects

<sup>60</sup> Accelerating 'Green' School-to-Work Transitions, UNICEF, 2023

<sup>&</sup>lt;sup>61</sup> Refer to the SDC How to note and learning journey on Interlinking Basic Education and Vocational Skills Development.

- ▶ Develop green career pathways within education systems, linking the relevance of learning to future opportunities in the green economy. In prevocational training, this can include guidance on green jobs and mentorship from professionals in climate-resilient industries.
- ► Involve the private agricultural and industrial sector in educational governance so that they integrate green skills into their practices and support vocational training, thereby strengthening the economic relevance of green education.
- Create climate-focused prevocational programs for crisis-affected societies, helping displaced populations and communities recovering from climate-related disasters to develop skills that contribute to both their livelihoods and their resilience to future climate risks.
- ► Establish post-training follow-up and traceability surveys to assess the impact of agroecological training and green skills on youth integration and the development of environmental practices within communities.

For information and concrete examples on how to develop professional green skills see SDC's "Input Paper on Green Skills", E+E section (2024).

## 5. Complementarity between education, VSD, and economy<sup>62</sup>

Intersectoral coordination is crucial for leveraging the synergies and make the best of SDC's complementary expertise in education, vocational skills development, private sector development and inclusive finance:

- ▶ Education is a precondition for green and inclusive transition by facilitating the development of green skills, acting as a catalyst for innovation, and serving as a prerequisite for people's participation in sustainable practices. It also supports necessary behavioral changes and political and cultural shifts towards sustainability.
- ➤ The education sector can increase demand for environmentally friendly products and practices. By promoting green learning environments, implementing sustainable school nutrition programs, or positioning the teacher workforce as consumers of green financial products<sup>63</sup>, education can drive broader environmental change.

There are significant opportunities to support education sector's access international green finance funds<sup>64</sup>. This includes financing for infrastructure improvements and climate education materials. These funds can enhance the capacity of education service providers to climate resilience contribute sustainability<sup>65</sup>.

64 What aspects of education are eligible for climate finance?, Global partnership for education, 2022

<sup>&</sup>lt;sup>62</sup> See also Input Papers on "Inclusive Green Economy", E+E section, 2024

<sup>63</sup> See SDC's "Input Paper on Green Finance", E+E section, 2024

<sup>&</sup>lt;sup>65</sup> For instance, the Green Climate Fund (GCF), the Global Partnership for Education (GPE) and Save the Children launched the Building the Climate Resilience of Children and Communities through the Education Sector (BRACE) during COP28.

## 6. Policy coherence and complementarity with other instruments

E+E section should also build stronger complementarities with the climate and humanitarian sectors:

- Ensuring that educational initiatives are integral to climate change programmes, particularly in areas such as water management, food security, and migration.
- ▶ Integrating climate sensitivity into the Triple Nexus approach, which encompasses preparedness, response, and system strengthening, creates a conducive learning environment.
- ▶ Aligning advocacy efforts to highlight and leverage the contributions of education to climate change policies, in collaboration with the climate section.

#### **Resources on Green education**

#### General reference from main donors

- Climate Change Action Plan (2021-2025), World Bank, 2021
- ► The UNICEF Sustainability and Climate Change Action Plan 2023-2030, UNICEF, 2022
- Cooperation on Climate Change, JICA, 2023
- Greening EU International Cooperation Toolbox, EU Commission, 2025

#### **Education and climate change**

- Education in Times of Climate Change, NORRAG, 2022
- ▶ Blog series: The role of education in addressing climate change, GPE, 2022
- ▶ Toward climate-smart education systems: A 7-dimension framework for action, GPE, 2023
- ▶ The Impact of Climate Change on Education and what to do about it, World Bank, 2024
- ► Education for climate action: Integrating education into nationally determined contributions, GPE, 2025

#### Green education: entry points

- Advancing climate-resilient education Technical guidance, USAID, 2023
- ▶ Policy Dialogue Tool: Mainstreaming climate change in education policy areas, GPE, 2023
- Greening curriculum guidance: teaching and learning for climate action, UNESCO, 2024
- Greening every school: Quality Standard for Green Schools, UNESCO, 2024
- Choosing our future: Education for Climate Action, World Bank, 2024

#### Green education in emergencies and crisis

- Leveraging Education in Emergencies for Climate Action, Geneva Hub for EiE, 2023
- Greening statement, Education cannot wait, 2024

#### Green education and VSD

- Greening guidelines for TVET institutes, ILO, 2020
- Accelerating 'Green' School-to-Work Transitions, UNICEF, 2023

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Eichenweg 5, 3003 Berne-Zollikofen

eenetwork@eda.admin.ch

www.sdc-economy-education.ch

www.sdc.admin.ch

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Authors Backstopping Team to the E+E Section. Nicolas Cacciuttolo with

support of Martina Ramming.

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