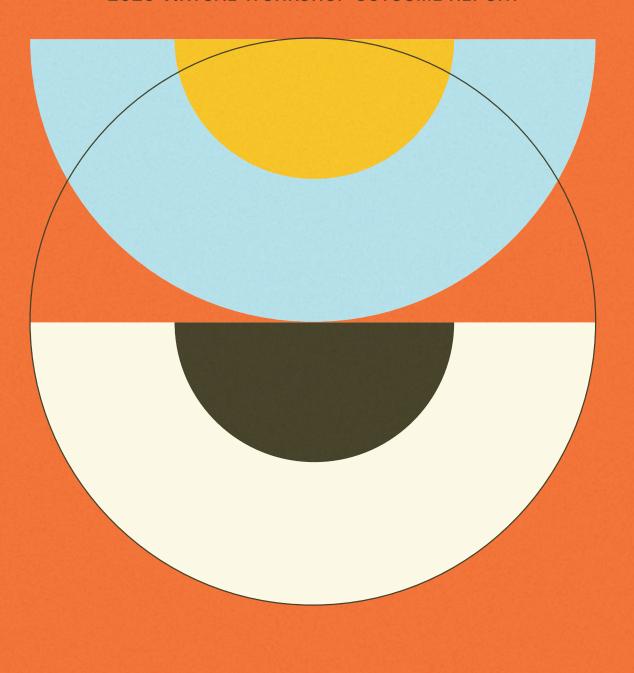
GLOBAL SEARCH FOR SUSTAINABLE SCHOOLS



2020 VIRTUAL WORKSHOP OUTCOME REPORT





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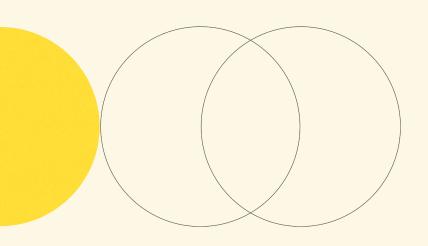
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BACKGROUND

Over four days between 8 - 19 October 2020, the Institute for Global Environmental Strategies convened the first Global Search for Sustainable Schools (GSSS) Virtual Workshop on education for sustainable development and sustainable lifestyles, and the experience to date of participating schools. The GSSS is composed of schools from 9 countries: Brazil, Cambodia, Kyrgyz Republic, Namibia, the Philippines, South Africa, Suriname, Viet Nam, and Uganda.

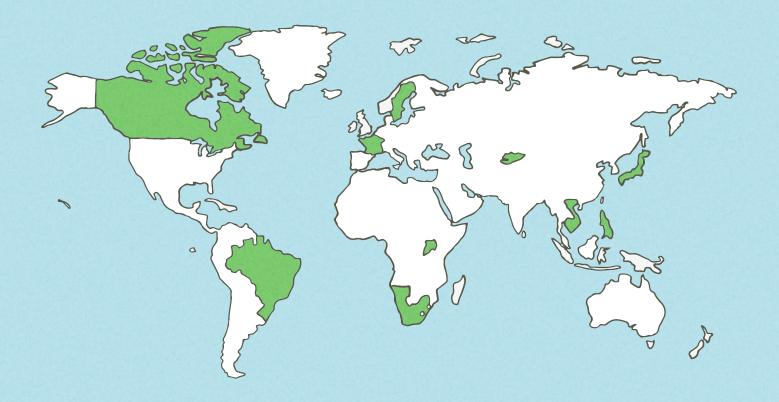
THE WORKSHOP HAD THREE CORE OBJECTIVES:

- First, to present achievements, solutions, and intended impacts on individual schools, local communities, and the potential for systemic change;
- · Second, to facilitate open discussion between geographically distant partners, introducing diverse perspectives on sustainable schools, knowledge integration, and approaches to sustainability; and
- Third, to exchange the experience of COVID-19 related barriers and adaptations.

THE SUSTAINABLE LIFESTYLES AND EDUCATION PROGRAMME OF THE ONE PLANET NETWORK

The Sustainable Lifestyles and Education (SLE) Programme of the One Planet Network aims to mainstream sustainable lifestyles into formal education; make sustainable lifestyles the guiding principle in every learning environment while mobilizing youth to promote sustainable lifestyles. Building on international frameworks, the SLE Programme has begun the organization and development of a global sustainable school network with the following objectives:

- · Support implementation of regional and national mandates for education for sustainable development and lifestyles;
- Develop a replicable and scalable approach to a healthy and effective search for sustainable schools;
- Develop capacities of schools to design and integrate sustainability in school curricula, infrastructure, and management and administrative practices;
- Engage teachers and young students in the implementation of education for sustainable development and lifestyles in their schools; and
- Encourage participants to foster sustainable practices in everyday life and their communities.



WORKSHOP PARTICIPANTS

The Workshop saw participants join from more than 50 schools, 14 international organisations, and three governments across 13 countries, including:

- Brazil
- Cambodia
- Canada
- France
- Japan
- Kyrgyz Republic
- Namibia

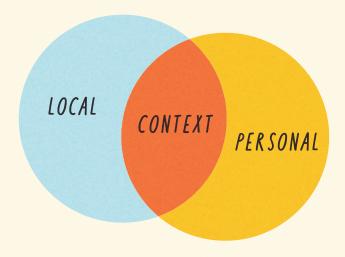
- Philippines
- South Africa
- Sweden
- Suriname
- Viet Nam
- Uganda

EDUCATION FOR SUSTAINABLE DEVELOPMENT AND SUSTAINABLE LIFESTYLES

During the workshop, participants heard from leading experts on the topics of Education for Sustainable Development (ESD) and Education for Sustainable Lifestyles (ESL). Many important themes that linked directly to the GSSS partners' projects were discussed. Below is a summary of the key points raised during the expert presentations.

EDUCATION FOR **SUSTAINABLE DEVELOPMENT**

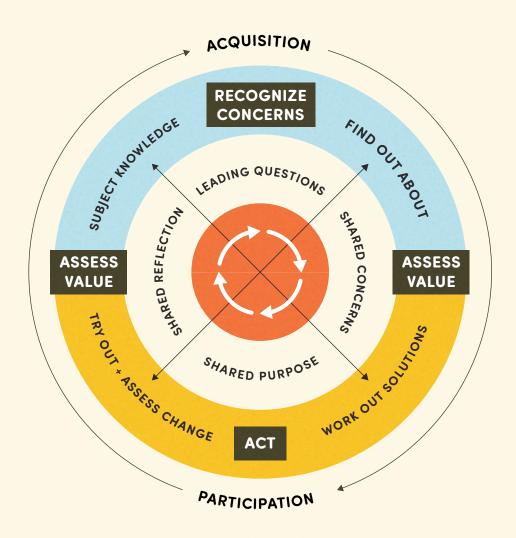
Make subject teaching more relevant to students and their situations by expanding the pedagogical approach. This includes making lessons and subject matter more contextual, locally relevant, and personally relatable in ways that learners can use the knowledge they acquire in the world around them.



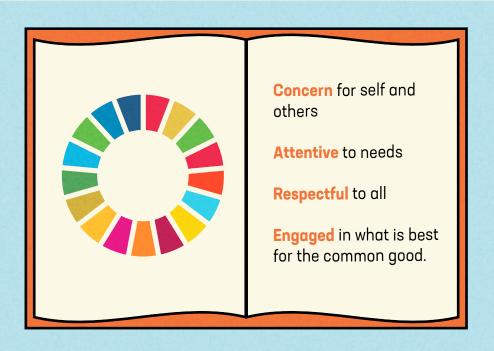
This can be achieved through learning transactions that activate and integrate ESD concepts such as Systems Thinking, Critical Thinking, Problem-solving, Anticipation, Collaboration, and Self-awareness into subject teaching pedagogy to establish an environment where Significant Learning can take place. Significant Learning is key to successful and deep education for sustainable development. This bridges an ethic of care where knowledge acquisition (e.g.: critical systems modelling) enables participatory learning transactions (e.g.: reflexive modes of action) for locally relevant change projects.



Good subject teaching commonly develops as a Teach-Task-Assess progression that can be expanded into a 4-quadrant process that includes both knowledge acquisition and learner-led participatory action learning. Task sequences enable learners to recognise matters of concern together, assess value and act within a culturally situated and ethics-led deliberative learning process to explore more just and sustainable lifestyles.



The Hand-Print CARE materials provide an innovative model for subject learning that incorporates ESD principles and engages participants with the Sustainable Development Goals. The model centres on four key principles: Concern for self and others; being Attentive to needs; being Respectful to all; and being Engaged in what is best for the common good.



A Hand-Print CARE teacher education handbook will be released by the Centre for Environmental Education (CEE) Ahmedabad, India in early 2021. This has been designed to support teachers in their ESD lesson planning work as a design research intervention process that can be undertaken with learners as a co-engaged process in conventional subject teaching settings.

More information can be found here: https://www.handprint.in/handprint_care

EDUCATION FOR SUSTAINABLE LIFESTYLES

Education for Sustainable Lifestyles is a subset of ESD. The deep objective of Education for Sustainable Lifestyles is learning for transformation, preparing learners by creating the conditions for life-long learning and continuous engagement in the pursuit of sustainable daily living.

KEY TO ACHIEVING THESE OBJECTIVES ARE FOUR METHODOLOGIES

Actively engaging learners and creating personal connections between them and sustainable development.

Building connections across subjects (interdisciplinarity) and between the classroom and the real world, as well as strengthening cooperation and collaboration in learning.

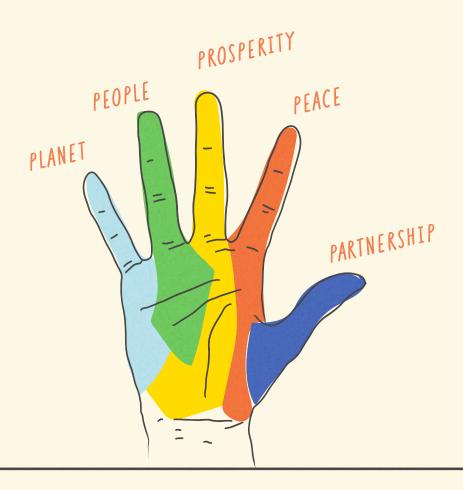
Creating an enabling learning environment and learning approaches for change and transformation.

Developing life-long learning and sustainability competencies that help learners actively engage with sustainable development throughout their lives.

The integration of ESD and ESL into curricula should include rich content, clear learning methodologies and progressive learning goals with local relevance and cultural appropriateness.

To promote transformative and life-long learning, classroom materials and approaches should include the important elements of progressive pedagogies, including active, experience-based, student-centred learning, and collective inquiry that is always aimed at strengthening the capacity for life-long learning.

The life-long learning skillset at the heart of Education for Sustainable Lifestyles can be understood in terms of the Five Ps of the sustainable development agenda: Planet, People, Prosperity, Peace, and Partnership. Each of these suggests a set of goals that together create the framework of life-long learning.





Planet encourages a holistic, integrated interpretations of knowledge and whole-systems thinking.

People emphasizes developing students' critical awareness and reflexivity to create personal knowledge constructs.

Prosperity means learning that is oriented towards problem solving, practical experience, and the search for new knowledge and innovations.

Peace is about empowering socially aware and responsible citizens who appreciate interdependent relationships between themselves, society, and ecosystems.

Partnership underlines the importance of developing cooperative learning relationship through deliberation, democratic dialogue, group meaning making, and social learning.

INTEGRATION OF ESD AND ESL INTO SCHOOLS

Many challenges exist for integrating Education for Sustainable Development and Sustainable Lifestyles into school operations and curricula. During the Workshop, participants learned about and discussed several of these challenges.

The first major challenge is one of access to resources. For many schools in rural settings, access to adequate resources presents a barrier to integrating ESD and ESL. As such, in many cases schools may require supplemental funding to ensure that curricula can be expanded and adapted to fulfil the goals of ESD and ESL.

The second major challenge to be identified was one of accessibility for students with physical or mental impairments. In many ways, these students have been neglected by environmental policies and sustainability initiatives. Inclusive educational environments, as well as curricula that can adapt to the needs of the learner, are essential to achieving desired outcomes such as climate justice and sustainable development for all.

The third challenge for integration is making ESD and ESL implementation inclusive. While much work has been done to ensure access and participation for traditionally disadvantaged groups such as rural populations, indigenous peoples, lower income families, and persons living with impairments, more can be done. This is a critical part of making ESD and ESL a success, and furthers their methodology of making learning personal, locally relevant, and student-centred.

MEASURING IMPACT

Ideally, sustainability interventions would include comprehensive measurement and assessment of GHG emission reductions across the product-services lifecycle as a core part of programming. For small-scale interventions such as those undertaken by the GSSS schools, such measurement presents both a challenge of resources and capacity.

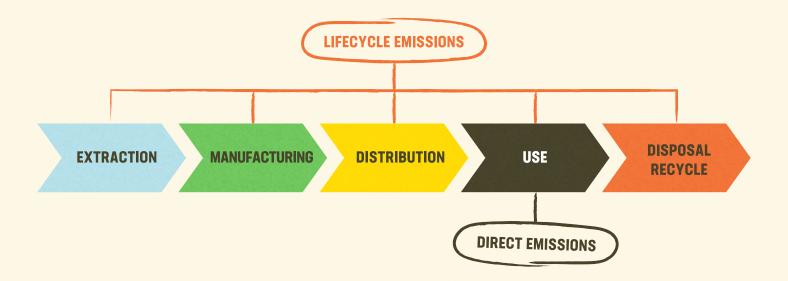
Measurement can meet multiple purposes: progress check, understanding impacts and reporting to donors; however, in smallcall participatory projects, another objective is essential, i.e.: to engage with all actors through sharing the contexts, implications of behaviours, purposes of activities, and capacities for bringing about change. To this end, it is vital to work with the participants at all stages and focus on a few emission sources that can be easily measured.

MEASUREMENT METHODS

To adapt to this context, the GSSS has implemented two measurement methodologies for participating schools to estimate their GHG reductions without placing undue strain on school capacity.

Bottom-up Estimation identifies the total reduction by multiplying the GHG reduction per unit (e.g. energy-saving appliance) with the amount (e.g. the number of the appliances replaced) and time (hours of use per day or per year).

Before-and-after Comparison multiplies the GHG emissions per unit items (e.g. waste, water/energy use) with the amount of these items reduced through the project activities (e.g. kg of waste reduction per month).



Projects can identify the method which works best for their particular context and plan their measurement processes. To do so, projects can use the Excel sheet designed by the SLE Coordination Desk. Steps include: selection of the measurement method; identifying GHG intensity (emissions per unit item); pre-estimating the amount or number of items installed or reduced; and planning data collection.

The Excel sheet allows projects to input many items in detail but it is not recommended to try to cover all potential emissions.

PROJECTS AND SUSTAINABILITY NEEDS

Each school participating in the GSSS has worked hard to identify critical needs facing its community and to craft locally relevant projects to address those needs in a way that advances sustainability and supports a lifelong pursuit of sustainability goals. The schools took a multilayered approach to addressing the combination of school and community needs. They valued physical and systemic changes to campus facilities and curriculum, as well as linking school actions to community needs, specifically with regards to food production, revenue generation, and deepening local knowledge and capabilities. As such, many of the school projects can be categorized into three broad categories: food and nutrition; waste; and ecology.

FOOD AND NUTRITION

Most schools in the GSSS have developed a school gardening programme as part of their projects.

- Gardens serve to supplement fresh produce into school lunch programmes, and in some cases are linked to local markets or support take-home food programmes.
- Gardens are linked into school curricula through science and nutrition classes, highlighting the importance of traditional species, balanced nutrition, ecological lifecycles, and the impacts of climate change.
- Schools developed a diversity of garden models, including standard open beds, greenhouses, garden tunnels, and have supported students and their families in starting home gardens - taking learning beyond the classroom and out into the community.



CASE STUDY

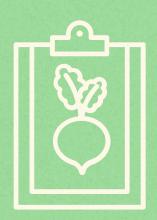
FOOD: PHILIPPINES



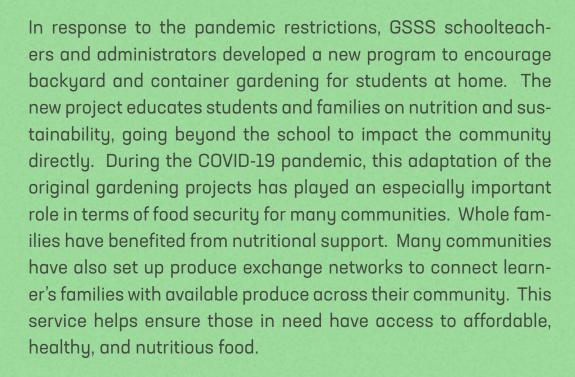
In the Philippines, GSSS schools have placed an emphasis on projects related to ecological restoration and gardening. These projects teach the importance of growing things for the health of learners' bodies and their communities. Schools in the Philippines carry out a government mandate to grow and harvest food from on-site gardens and incorporate the produce into school meal programs. Originally intended to support these important school nutrition and food programs while providing learning opportunities for science subject teaching, the GSSS garden projects were placed on hold when schools entered lockdown.























ENERGY

All schools agreed that addressing energy consumption is foundational to achieving sustainable ways of living.

- Almost all schools have made provisions for energy efficient infrastructure such as LED lighting and awareness campaigns to encourage responsible energy consumption.
- Several schools are implementing on-site solar energy generation infrastructure, such as small-scale solar panels, to supply the school and local community with zero-emission energy.
- Some schools are also addressing their energy footprints from cooking by implementing more fuel-efficient stoves that use less fuel wood and produce less smoke or introducing new ovens and cleaner fuel briquettes as an alternative to charcoal and wood.





CASE STUDY

DISTANCED LEARING: BRAZIL

Brazil's large landmass and provincial infrastructure differences have presented challenges in responding to the COVID-19 pandemic. In response to local conditions, different regions of the country have implemented different regulations and adaptations to COVID-19, including how and when schools continue classes. The country shifted to mostly distanced, online education delivery; however, many students have no internet access at home, or can only access the internet via mobile phone. This has presented an acute challenge for GSSS schools seeking to continue engaging students around sustainable development and project implementation.









GSSS schools in Brazil have adapted to their local conditions, implementing education delivery through a variety of means such as printed materials for pick up, and hosting classes and exchanging documents via WhatsApp. These methods allowed more students to continue to access education despite a lack of local infrastructure or economic hardships. Despite these innovations, it is estimated that at least half of students all over the country did not attend distanced classes, resulting in a feared "lost year" for many students. Moving into the next school year, many schools in Brazil, including GSSS schools, will implement a hybrid system of in-person and distance learning models and have plans for the fulfilment of the educational gaps generated by the large absenteeism of students during 2020.



WASTE

Most schools in the GSSS developed some form of waste management programme.

- Nearly all the schools developed or expanded on existing recycling schemes.
- Similarly, many schools are implementing composting programmes, which compliment school gardens.
- Waste management programmes have also been developed in many schools to support recycling and composting efforts by teaching the value of sorting and separating waste into different channels.



WATER

Many GSSS schools have begun projects to better manage their water resources.

- Water harvesting projects have been developed in many GSSS schools to supplement water used to irrigate school gardens.
- Others have begun monitoring the amounts of water used on campus and have plans to implement education and awareness campaigns to help reduce water consumption at school and in the community.
- Several schools have also linked water usage into hygiene and sanitation programmes, taking the opportunity to draw the links between health, water, and sustainability.





CASE STUDY

WATER: SOUTH AFRICA

Water conservation is a topic South African GSSS schools have integrated into classroom teaching. This issue is particularly important for South Africa, as the country has experienced a 5-year drought. This pattern of events has contributed to increased water insecurity across the region and will continue to do so as cli-









mate change impacts unfold. GSSS schools have implemented projects around wetland rehabilitation, rainwater harvesting, water auditing, estimating daily to yearly water use at schools and instituting grey water collection. Beyond direct water savings, they have also focussed on improving school grounds by planting water-wise indigenous plants and eradicating water-thirsty alien invasive plant species.

To adapt to the needs of the COVID-19 pandemic, while continuing to push for water conservation, the GSSS schools in South Africa implemented Tippy Tap stations in response to water access and scarcity issues, apart from the fact that using alcohol-based sanitizers are detrimental to skin health and are costly. Tippy Taps, a system of 2 litre bottles with drainage holes, is a proven, simple, cost effective and water saving way to provide more opportunities for learners to wash their hands. Students in pairs wash their hands, one student holding the bottle upside down while the other washes their hands. Teachers integrated the Tippy Taps into mathematics and science subject teaching, engaging students to calculate the amount of water saved by using Tippy Taps when compared to traditional sinks and faucets.





ECOLOGY

For many GSSS schools, ecological conservation and restoration are critical concerns. From mangrove restoration in the Philippines to topsoil retention in Namibia, efforts toward ecological stewardship are an important part of building a sustainable way of life.

- Several schools are implementing projects to rehabilitate areas of their schools with indigenous plants to help stabilise and reverse topsoil erosion, and to build resilience to natural disasters such as typhoons. These efforts are often combined with school gardens and provide a great opportunity to teach ecology in a systemic manner.
- Many schools have included habitat restoration as a central activity in their projects. Restoring sensitive ecological niches, such as local wetlands, provides deep educational opportunities that link local and global issues such as climate change.



THE COVID-19 PANDEMIC

Around the world education delivery has stalled significantly due to the COVID-19 pandemic. National lockdowns and quarantines have separated many learners from the school environment with more than 90% of learners being affected by school closures over the course of 2020. Governments have taken a variety of approaches to mitigating the spread of COVID-19, but no consensus model has emerged - even within countries - for how best to manage the delivery of education during the pandemic. Mask mandates, enhanced sanitation and hygiene, and social distancing are found in some form in almost all jurisdictions. However, in several countries, regulations have differed greatly across municipal and provincial jurisdictions, presenting a challenge for GSSS national coordination.

PANDEMIC IMPACTS

SCHOOL CLOSURES

School closures have had the largest impact on GSSS project implementation, preventing schools in every country from beginning their projects as planned. In some cases, implementers have been able to adapt projects to an at-home model, but in most cases, projects have simply been delayed until schools reopen.

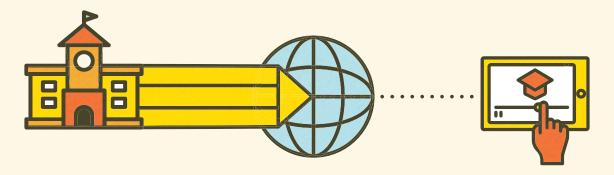
DISTANCED LEARNING

While many regions were able to adopt distanced learning with relatively few problems, for many others this was either not an option or presented serious challenges. The availability and affordability of local internet infrastructure has played a significant enabling or limiting role in the move to distanced education models.

COMMUNITY IMPACT

Across all GSSS participating countries, the economic impacts of COVID-19 have deepened pre-existing challenges. In many countries, the sharp downturn in economic activity and the loss of livelihoods have worsened the challenge of hunger. Many families rely on school lunch programmes as an essential part of family nutrition planning, and school closures have meant that students lose access to those meals

ADAPTING PROJECT IMPLEMENTATION **DURING THE PANDEMIC**



During school closures, schools were forced to adapt their projects, where possible, to meet the needs of distanced learning and closed campuses. As schools have reopened around the world, adaptation and innovation has remained key for maintaining both the delivery of education and implementation of school projects under shifting health and regulatory conditions.

Many project innovations undertaken by GSSS schools have been developed to meet a specific need in the community that has emerged because of the COVID-19 pandemic. Such innovations have often integrated deeper traditional or indigenous knowledge, ensuring that projects remain culturally relevant while maintaining a focus on sustainable ways of living.

GSSS schools have made many significant adaptations to help their students and communities to better cope with the pandemic. Among these adaptations have been several innovations around distanced learning, food programmes, and information sessions for teachers and the local community.

ADAPTATIONS FOR **DISTANCED LEARNING**



Each GSSS school faced a period of closure at some point during 2020. In most cases, schools needed to adapt to digital or distanced learning models introduced on short notice. Schools faced different challenges depending on their relative level of resources and access to affordable internet infrastructure.



With good internet infrastructure, digital remote learning has been adopted utilizing tools such as Google Classroom, Zoom, and Skype.



Where access to internet infrastructure is challenging, teachers have innovated, using phonebased platforms for delivery such as WhatsApp.



Additionally, education delivery models have been created that do not rely on digital technology at all. For example, pick-up and drop-off systems for schoolwork have been implemented in some countries.

ADAPTATIONS FOR FOOD PROGRAMMES







For many GSSS participating schools and communities, the food programmes provided to students are an essential part of childhood and family nutrition. These programmes often link school gardening to meals programmes. They teach children about nutrition, plant lifecycles and local ecology, while providing healthy, secure meals for learners. During the pandemic, with schools closed, food programmes were disrupted, presenting a challenge for food security for learners and their families.

GSSS schools rapidly adapted their school garden and food programmes to meet the changing needs of their learners and communities, recognizing that the economic impacts of the pandemic meant increased food insecurity for many households. Some ways in which GSSS schools adapted to support their learners and communities include:



Finding safe ways to continue school gardens to support learners and their families and developing new garden at home programmes to supplement household dietary needs.

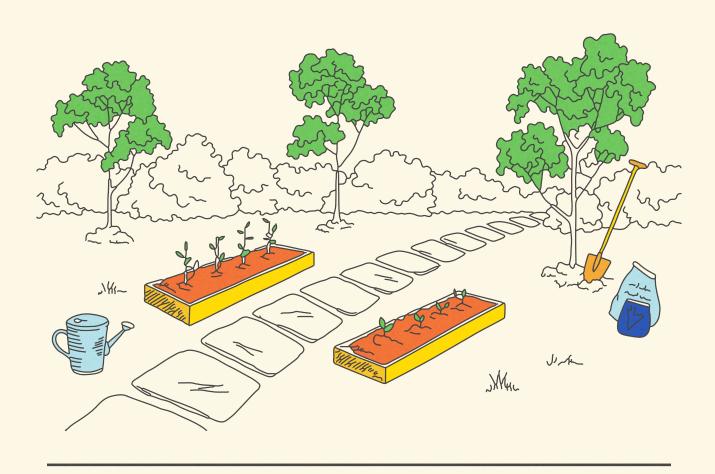


Establishing food exchanges and barter systems in the community to ensure food get to those who need it most.



Encourage the use of indigenous and seasonal plants species as dietary supplements.

Additionally, several schools were able to implement pre-existing plans for energy-efficient stoves to support the continuance of school lunch programmes. The stoves burn cleaner fuels, resulting in better health outcomes for kitchen workers and lowered carbon emissions for the schools.



TEACHER AND COMMUNITY SUPPORT



During the pandemic, GSSS schools listened closely to their teachers and the families of learners and developed socially distanced information sessions and trainings on how to cope with the many impacts and changes associated with the pandemic.

In some cases, community members and teachers wanted to know more about the origin and spread of pathogens like the novel coronavirus. Of specific interest was prevention and mitigation in classroom and community settings. GSSS facilitators hosted workshops to discuss the risk factors that contribute to the emergence of viruses, like the one responsible for COVID-19, including changes in ecology and human encroachment on animal habitats. Workshop dialogues included information about hygiene, sanitation, and resource conservation (especially water), as well as information on managing the increase of medical waste in communities that has accompanied the pandemic.

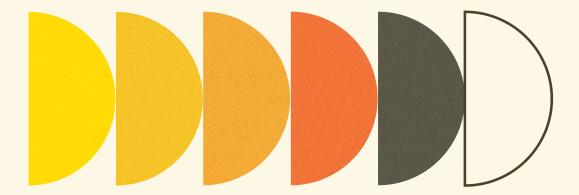
Several GSSS schools identified a real need for increased mental health supports in their learners, teaching staff, and in the broader community. As a response, information packages were created and shared outlining available support systems and recommendations for how to relieve the anxiety and stress associated with the pandemic lockdowns.

For many communities and schools, the continuation of food provision through schools was a critical concern. As such, many GSSS schools hosted socially distanced workshops on nutrition and how to continue the supply of produce from school gardens during lockdown.



NEXT STEPS

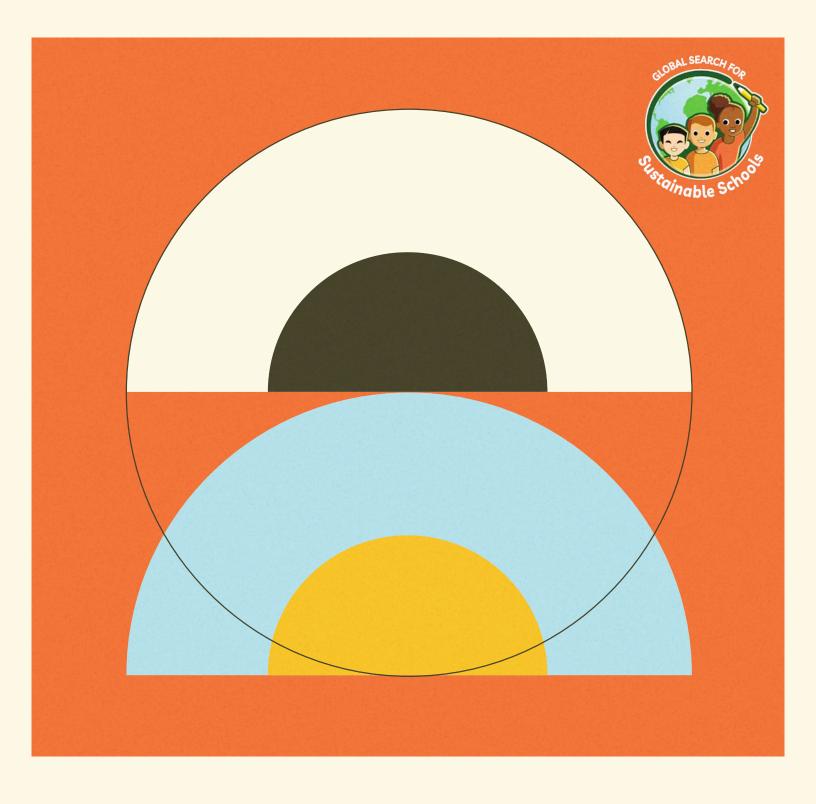
As the Global Search for Sustainable Schools enters the final year of implementation, which is set to end in July 2021, there are several important milestones still ahead. COVID-19 has delayed implementation in many regions, and further disruptions are likely on the horizon. However, the GSSS schools, in partnership with the Institute for Global Environmental Strategies, the Stockholm Environment Institute and United Nations Environment are committed to working together to continue the programme and support one another in adapting to the emerging global solution.



As such, the final year of implementation will focus on six main activities to bring the school projects to a successful close. The schedule of activities for 2021 will include:

- Project Implementation project implementers will begin and complete their projects as outlined in their implementation plans. Further adaptation of these plans may be necessary as the corona virus pandemic continues.
- **Measurement of Impact** utilizing the tools developed through the programme activities, implementers will assess the impact of their projects in terms of greenhouse gas and carbon emissions. The SLE Coordination Desk will support country Focal Points in facilitating this process.

- Greenhouse Gas Measurement Workshop in late Spring, the GSSS Programme will host a small workshop on measuring greenhouse gas reductions in micro- and small-scale projects. This workshop will be help virtually and will support country Focal Points in preparing for final project reporting.
- Project Reporting early in 2021, country Focal Points will report on the progress within their country. This reporting will occur through two channels: the SLE online reporting, and the UNEP reporting process.
- Second Virtual Workshop the second workshop for the GSSS Programme will take place during early Summer of 2021. Due to the uncertainties of the pandemic, this workshop will occur online to ensure the safety of all participants.
- Final Reporting In collaboration with country Focal Points, the Institute for Global Environmental Strategies will produce a report that reflects on the experience of the GSSS. This report will emphasize the impact of the school projects and lessons learned along the way, as well as highlight the incredible adaptability and resourcefulness of the Programme's on the ground implementers.



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