



## CLIMATE SMART AGRICULTURE YOUTH NETWORK GLOBAL (GCSAYN) SOIL SCIENCE CLUB PROGRAM (SSCP)

### CONCEPT NOTE

## ESTABLISHMENT OF THE SOIL SCIENCE CLUB PROGRAM (SSCP)

MARCH 2026

The British Society of Soil Science (BSSS) is an international professional organization dedicated to advancing soil science research, education, and sustainable soil management through collaboration among scientists, educators, and environmental professionals. The Soil Science Club Programme (SSCP), proposed in March 2026, is an educational initiative designed to strengthen soil literacy and environmental stewardship among secondary and pre-university students. The programme is implemented in collaboration with the British Society of Soil Science and the Global Climate Smart Agriculture Youth Network (GCSAYN).

The initiative responds to the growing challenge of soil degradation across Africa. Soil is a critical natural resource that supports agriculture, biodiversity, and ecosystem services and is responsible for approximately 95% of global food production. However, nearly 65% of Africa's productive land is affected by soil degradation caused by erosion, nutrient depletion, salinization, unsustainable agricultural practices, deforestation, population pressure, and climate variability. These challenges reduce soil fertility and productivity, threatening food security and rural livelihoods. Despite the central role of soil in agriculture and environmental sustainability, awareness of soil science among young people remains limited.

The SSCP addresses this gap by integrating soil education through structured extracurricular activities in selected educational institutions known as Centres of Excellence. The programme aims to build early awareness, develop practical skills, and encourage young people to engage in sustainable land management and environmental protection.

### Aims of the Programme

- Enhance soil literacy among secondary and pre-university students.
- Increase awareness of the importance of soil in agriculture, food security, and ecosystem sustainability.
- Develop practical competencies in soil observation, sampling, and conservation practices.



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- Encourage youth participation in environmental protection and sustainable agriculture initiatives.
- Promote leadership, innovation, and environmental responsibility among young people.
- Establish functional Soil Science Clubs within participating educational institutions.

### Key Programme Activities

- Establish Soil Science Clubs in approved Centres of Excellence.
- Conduct monthly thematic sessions on soil science topics such as soil formation, soil health, and conservation.
- Organize practical demonstrations including soil sampling, composting, and soil texture identification.
- Implement student-led environmental initiatives such as improving soil quality in school gardens.
- Facilitate inter-school knowledge exchange and soil awareness campaigns.
- Celebrate **World Soil Day (5 December)** through educational events and outreach activities.

Each participating institution will appoint a **Teacher Coordinator** and a **Student Leadership Committee** responsible for programme implementation and documentation of activities.

**Achievable Targets:** Establish **at least 20 functional Soil Science Clubs** in participating Centres of Excellence.

- Engage **800–1,000 students** through club membership and programme activities.
- Ensure **gender-inclusive participation** with balanced representation of boys and girls.
- Conduct a **minimum of 8 soil science learning sessions per school annually**.
- Organize **at least 3 practical demonstrations or field activities per school each year**.
- Implement **one soil conservation or soil improvement initiative per school annually**, such as composting or soil erosion control.
- Achieve **at least 60% improvement in soil literacy** among participating students through pre- and post-assessment surveys.

### Expected Outputs

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- Functional Soil Science Clubs established in participating schools.
- Regular educational sessions and practical demonstrations conducted.
- Active student participation in environmental and soil conservation initiatives.
- Increased collaboration and knowledge exchange between schools.
- Greater awareness and understanding of soil science among youth.

In the long term, the programme aims to contribute to the development of environmentally responsible young leaders capable of supporting sustainable agriculture, soil conservation, and climate resilience across Africa. Through institutional coordination under GCSAYN, monitoring and evaluation mechanisms, teacher training, and partnerships with soil scientists and environmental organizations, the SSCP will provide a sustainable platform for strengthening soil education and youth engagement in environmental sustainability.

### Target Group: Secondary and Pre-University Students

| Intervention Logic  | Indicators (OVIs)   | Baseline   | Targets (Year 3)                    | Means of Verification   | Assumptions  |
|---|---|--|-------------------------------------|---|--|
| <b>IMPACT:</b><br>Increased youth contribution to sustainable land management and environmental stewardship | Percentage of participating students demonstrating improved soil literacy and stewardship practices | Baseline survey conducted in Year 1                | ≥ 60% improvement from baseline     | Endline survey; independent evaluation report                   | Sustained national commitment to environmental education |
| <b>OUTCOME 1:</b><br>Soil Science Clubs institutionalized in approved schools / Centres of Excellence (CoE) | Number of officially recognized and operational Soil Science Clubs                                  | 0  | At least 20 schools / CoE           | Approval letters; club charters; annual programme reports       | Continued support from school administrations            |
| <b>OUTCOME 2:</b><br>Enhanced practical soil science competencies among students                            | Percentage of club members achieving ≥70% score in soil competency assessments                      | Baseline competency assessment conducted in Year 1 | ≥ 70% of members achieve ≥70% score | Pre- and post-assessment results; competency evaluation reports | Regular student participation in programme activities    |

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| <b>OUTPUT 1:<br/>Governance<br/>structures<br/>established</b>    | Number of schools adopting a formal Soil Science Club governance structure    | 0  | 20 schools                                    | Teacher coordinator appointment letters; governance documents | Institutional endorsement secured                          |
| <b>OUTPUT 2:<br/>Monthly thematic learning sessions delivered</b> | Number of soil science sessions conducted per school annually                 | 0  | Minimum of 8 sessions per school per year     | Attendance registers; session reports                         | Stable academic calendar                                   |
| <b>OUTPUT 3:<br/>Practical demonstrations conducted</b>           | Number of practical soil science demonstrations conducted per school annually | 0  | At least 3 demonstrations per school per year | Activity reports; photographic documentation                  | Availability of suitable demonstration sites and materials |
| <b>OUTPUT 4:<br/>Annual commemoration of World Soil Day</b>       | Percentage of participating schools commemorating World Soil Day annually     | 0% | 100% of participating schools                 | Event reports; media coverage; activity documentation         | Availability of basic resources for event organisation     |



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**Detailed Gantt Chart – Establishment of Soil Science Club**  
Implementation Period: March 2026 – February 2027 (12 Months)

| Activity   | March | April | May | June | July | August | September | October | November | December | January | February |
|--|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|---------|----------|
| <b>PHASE I: Planning and Institutional Setup<br/>(March – April 2026)</b>                  |       |       |     |      |      |        |           |         |          |          |         |          |
| Final Approval of Concept and Objectives   | █     |       |     |      |      |        |           |         |          |          |         |          |
| Identification of participation schools/CoE  | █     | █     |     |      |      |        |           |         |          |          |         |          |
| Appointment of teacher coordinator   |       | █     |     |      |      |        |           |         |          |          |         |          |
| Orientation meeting  |       | █     |     |      |      |        |           |         |          |          |         |          |
| <b>PHASE II: Club Establishment and Launch<br/>(May – June 2026)</b>                       |       |       |     |      |      |        |           |         |          |          |         |          |
| Club Establishment   |       |       | █   | █    |      |        |           |         |          |          |         |          |
| Formation of student Leadership  |       |       | █   |      |      |        |           |         |          |          |         |          |
| Development of annual activity plan  |       |       | █   | █    |      |        |           |         |          |          |         |          |
| <b>PHASE III: Capacity Building and Activity<br/>Implementation (July – December 2026)</b> |       |       |     |      |      |        |           |         |          |          |         |          |
| Monthly soil science session   |       |       |     |      | █    | █      | █         | █       | █        | █        |         |          |
| Practical demonstrations   |       |       |     |      | █    |        | █         |         |          |          |         |          |



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| Field visits and exposure   |  |  |  |  |  |  |  |  |  |  |  |  |
| Monitoring and Reporting  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>PHASE IV: Consolidation and Evaluation<br/>(January - February 2027)</b> |  |  |  |  |  |  |  |  |  |  |  |  |
| Annual review meeting   |  |  |  |  |  |  |  |  |  |  |  |  |
| Impact Assessment and reporting   |  |  |  |  |  |  |  |  |  |  |  |  |
| Planning for next cycle   |  |  |  |  |  |  |  |  |  |  |  |  |

*Months 1-2: Obtain institutional approvals and establish the coordination and governance structure.*

*Months 3-4: Conduct the formal launch of the project and complete operational setup, including resource mobilization and stakeholder orientation.*

*Months 5-10: Implement the core activities, including monthly sessions and practical engagement activities with participants.*

*Months 11-12: Carry out monitoring and evaluation, document outcomes, and develop a sustainability and continuation plan.*



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### PROJECT TEAM

**Ms. Yuckmila Choonea, Mauritius: Special Adviser to the Executive Director**



Yuckmila Choonea is a volunteer with the Climate Smart Agriculture Youth Network (CSAYN), where she serves as Special Adviser to the Executive Director. Through this role, she collaborates with youth worldwide to promote climate-smart agriculture (CSA), focusing on raising awareness, strengthening the capacity of young people and People Living with Disabilities (PLWD), and encouraging sustainable practices that support climate change adaptation, reduce emissions, and improve food productivity. She has over 15 years of experience in the government sector and holds a Bachelor's degree in Agriscience and Technology from the University of Mauritius and a Master's degree in Agricultural Science (Plant Protection) from The University of Queensland in Australia. She previously worked at the Ministry of Agro-Industry and Food Security under the National Fruit Fly Control Program, where she contributed to pest monitoring and environmentally friendly pest management while supporting farmers through awareness campaigns and advisory visits. Currently posted at the National Plant Protection Office, she works to protect the country's agriculture and natural resources from invasive pests in line with the Plant Protection Act 2006. Her interests include agriculture, food security, plant health, biosecurity, sustainable farming, and climate-smart agriculture.



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**Ms Veronica Ekpiwre Edeki, Advisor to the Executive Director**



Veronica Ekpiwre Edeki is a Nigerian microbiologist, researcher, and education professional with expertise in microbiology, infectious diseases, and public health research. Her work focuses on the epidemiology of pathogens affecting vulnerable populations. She is actively involved in teaching, mentoring students, and promoting scientific research in the University of Jos. In addition to her academic career, she serves as a school proprietress, contributing to educational development and youth empowerment in her community. She is committed to advancing global health, strengthening research capacity, and supporting evidence-based policies that improve maternal and child health outcomes.



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**Mr. Auldridge Chibbwalu, Zambia: Global Technical Adviser**



Auldridge Chibbwalu, a non-profit organization leader, a youth leader, a community development worker and passionate environmentalist who has trained in development studies, general and smart agriculture principles and practices, youth empowerment and environment issues.

I have worked for more than 15 years with a number of youth movement and organizations such as Global Climate Smart Agriculture Youth Network, Earth Charter Youth, RESCOPE, Good Deeds, 350.org, NAVO, Service Civil International, Erasmus+plus EU co-funded programs for capacity building of youth, Intercultural Exchange through a number of platforms, Project COPE is a business incubator model based in Zambia and also worked with schools, learning institutions and other NGOs in the world.

Auldridge Chibbwalu, formed and running a non-profit organization in 2015 working with 312 youth and their communities (orphaned and vulnerable young people) addressing the needs and challenges with interventions through provision of vocational skills, micro grants, loans, start-kits, agricultural support for food security, permaculture, education, shelter and housing, sports and recreational, climate change actions programs, non-formal education, mentoring and health and hygiene, child rights and youth empowerment programs.



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### Project Team Leaders

**Mr. Vernyuy Verla Usama, Cameroon: Program Coordinator**



Vernyuy Verla Usama is a Crop Production Technician from the Northwest Region of Cameroon and a graduate of the College of Technology at the University of Bamenda, Cameroon. Passionate about sustainable agriculture, soil restoration, and community development, he combines academic research with practical field experience in seed multiplication and crop production. He is committed to restoring soil health, empowering young scientists, and serving humanity through knowledge and integrity. Beyond academics, Usama values faith-driven service, leadership, and initiatives that inspire growth, resilience, and generational impact.

**Ms. Rumaila N. Tahir, Nigeria: Advocacy and Outreach Lead**





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Rumaila Nuru Tahir is a passionate youth advocate and emerging professional committed to sustainable development, climate action, and youth empowerment. She is actively engaged with the Global Climate-Smart Agriculture Youth Network (GCSAYN), where she contributes to program coordination, communication, and youth-driven initiatives. With a background in biotechnology and a strong interest in agriculture, food systems, and environmental sustainability, Rumaila works to promote innovative solutions that support resilient communities. She is dedicated to learning, leadership, and creating opportunities for young people to participate in climate-smart and sustainable development efforts.

### Mr. Nathaniel A. David, Nigeria: Extension Officer



David Nathaniel Adeyemo is driving youth engagement in climate-smart agriculture and environmental protection across communities in Nigeria. He contributes to GCSAYN's research, reporting, and programme activities, supporting initiatives that promote sustainable food systems and biodiversity conservation. He is a GCSAYN Mentee & Team Member. He is based at the Ladoké Akintola University of Technology (LAUTECH), Nigeria.



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### Mr. Emmanuel Udoh, Nigeria: Global Communication Lead



Udoh Emmanuel is a communications professional with a strong commitment to youth empowerment, sustainable development, and knowledge sharing. At the Climate-Smart Agriculture Youth Network Global (GCSAYN), he works to amplify youth voices and strengthen the visibility of climate-smart agriculture initiatives across global platforms. He supports the development and implementation of the network's communication strategy, manages digital engagement, and promotes youth-led programs through strategic storytelling and coordinated social media communication. His work focuses on connecting young people with information, ideas, and opportunities that contribute to resilient and sustainable food systems.

Udoh Emmanuel has a background in office technology and corporate communication, with professional experience in institutional communication and public engagement. He previously served as a Communication Officer at the Center for French Training and Documentation (CFTD) in Ibadan, Nigeria, and has also worked with IITA/AfricaRice in Ibadan. Passionate about development communication, he is dedicated to using communication as a tool to foster collaboration, strengthen youth participation, and support innovative solutions that advance sustainable development.



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