Green Schools in Ghana

Project Concept Note to explore partnership collaboration with "Science Action in Schools for Sustainable Development (SAS4SD)," a Swiss project.

"Green Schools" is a vision for a better world for our children. The approach aims at educating the youth on topics that are directly linked to daily issues they face, using action-based learning to raise awareness and create a commitment to sustainable development in their schools and beyond.

This project focuses on promoting a "Green Schools" approach at the secondary school level, engaging teachers and students in after-school activities that are related to current issues such as climate change, sustainable food production, waste management, environmental awareness, and biodiversity promotion. It targets learning, application and practice, so that students become agents of change and ambassadors for sustainable behavior both in their schools and in their communities.

Background

Actions proposed in this project seek to raise awareness about the effect of climate change on agricultural production in Ghana and introduce green solutions to the development challenges faced by communities. Besides poor farming practices and bush fires, poor waste management and indiscriminate disposal of waste are also seriously contributing to soil nutrient depletion, water pollution, diseases, deepening poverty, deforestation, which in turn lead to increased vulnerability of the people. There is a clear need to link education with community-based initiatives so as to highlight the urgent need for sustainable development and positive action today.

Collect local data using Trans-African HydroMeteorological (TAHMO) stations Create linkages between students & communities through actions such as organic gardens, waste collection & tree planting Use action-based learning in school clubs to promote individual understanding of sustainable development

Project description

The goal of this project is to contribute to the achievement of the sustainable development goals through effective practical scientific teaching methods in secondary schools and community interactions. Using gender sensitive, participatory learning and collaborative management approaches (involving GES, MoFA, MST and Innovations, the Ministry of Sanitation and Water Resources, as well as local communities), the project will work in close partnership with selected Senior High Schools in Ghana to:

- i. Establish after-school clubs and train secondary school teachers in the use of teaching materials that were developed based on on-site observed climatic data, creating a link between measurements and actions, i.e. scientific and practical skills related to climate change, natural hazards, sanitation, deforestation, and sustainable agriculture;
- **ii.** Enhance the skills and knowledge of students in water harvesting, conversion of organic waste to fertilisers, and the adoption of climate-smart agriculture for vegetable, tree seedlings, and cocoa production;
- **iii.** Establish demonstration sites (i.e. vegetable gardens, recycling stations) in collaboration with communities.

Project Brief

Project Managers Ghana Richard Kuffour @UEW Evans Dawoe @KNUST

Project Collaborators Switzerland

Darcy Molnar @ETH Zurich Christoph Studer @BFH Bern Christian Zurbrügg @Eawag

Project period

2 years, starting September 2019

Requested preconditions for partnership

- Motivation to collaborate with the project
- Participation in the project's steering board
- Financial contribution to the costs

Expected benefits for partners

- Greater visibility through engagement in the project
- Potential to scale the pilot projects up to a nationwide level
- Possibility to engage with academic experts on topics related to sustainability
- Engagement with youth in Ghana

Contributions by SAS4SD

- Facilitation of pilot project implementation in secondary schools
- Connection to the TAHMO network of secondary school teachers
- Financial support

Contacts

Richard Kuffour University of Education Winneba Mampong, Ghana rakuffour@gmail.com Tel: +233 20 030 4095

Evans Dawoe Kwame Nkrumah University of Science & Technology Kumasi, Ghana <u>elkdawoe.canr@knust.edu.gh</u> Tel: +233 24 492 8115

Darcy Molnar ETH Institute of Environmental Engineering Zurich, Switzerland <u>darcy.molnar@ifu.baug.ethz.ch</u> Tel: +41 76 475 3418

A Green Senior High School (SHS) with TAHMO weather station and key proposed activities



SDGs to be addressed

