

SBAE READY: Equipping developing countries with a usable guide to implement School-Based Agricultural Education

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Introduction/Need for Innovation or Idea

School-Based Agricultural Education (SBAE) has proven to be a practical and cost-effective educational system (State University, 1969; Park, 2014; Schlutt, 1957; Wessel & Wessel, 1982), fostering youth empowerment as change agents and early adopters of agricultural innovations (Okiro et al., 2011). With successful implementations in Ghana and Liberia (Dado et al., 2023) by AgriCorps since 2015 and positive results from Northwestern University's randomly controlled trial, interest from other developing countries is growing. Over the past year, AgriCorps has fielded requests from various organizations seeking practical and technical guidance to implement SBAE in their respective communities and countries. These organizations include but are not limited to the Liberian Vice President, the Liberian Minister of Agriculture, the Liberian Minister of Education, the President of the Rwandan Development Bank, representatives from the World Bank, USAID's Feed the Future team, the Swedish Development Corporation, and the French Development Agency (AFD). There is currently a lack of comprehensive resources for developing countries to effectively implement SBAE. In response, the SBAE READY project aimed to fill this void by developing a user-friendly, open-access technical guide for developing countries, NGOs, and agencies. The guide fills the current dearth of resources and supports both the sustaining of existing SBAE programs and initiating of new ones.

How it Works

SBAE READY, fully titled *SBAE Ready: A Practical Guide to Launching School-Based Agricultural Education in Developing Countries*, is a complete technical guide, or book, that guides readers on how to begin SBAE in their country. Its primary audience is government bodies, non-governmental organizations (NGOs), development agencies, and individuals keen on promoting SBAE initiatives globally. This guide, organized into four main sections, spans a broad spectrum, from the national to the local levels, covering the entire implementation process. Section 1 introduces SBAE's four components: classroom instruction, school demonstration farms, home entrepreneurship projects, and leadership development. It emphasizes youth empowerment in transforming agricultural communities (Sumberg & Okali, 2013) and outlines phases for national and local SBAE introduction. Section 2 details key steps for national SBAE implementation, such as securing government support, hiring staff, and identifying suitable schools and communities. Section 3 covers essential curriculum and training aspects (Smalley, et al., 2019) specifying recommendations for training and offering best practices for practical sessions. Section 4 guides SBAE launch in schools and communities, providing practical recommendations for strengthening components like student-centered teaching (Madende & Jordaan, 2023; Mukembo et al., 2014), effective farms, home projects, and leadership development through agricultural student organizations like 4-H clubs at different levels. Embedded throughout the document are case studies, examples, and stories of Liberian 4-H Clubs, Field Officer (similar to 4-H Extension Agents) advice, and student stories showcasing the experiences and outcomes of SBAE engagement in developing countries, specifically Ghana and Liberia.

Results to Date

Beginning from summer to fall of 2023, SBAE READY was cowritten by Haley Traini and Trent McKnight of AgriCorps while KJ Josph spearheaded Field Officers interviews, transcription, and writing of success stories. After engaging several experts to review and provide feedback on the tone, content, and usability of our writing, an undergraduate intern, Deborah Miller was hired to format the document into a beautiful book using InDesign. The completed document is 86 pages and in the form of a visually appealing guide. The SBAE READY project has created opportunities for international graduate students to be involved in research projects exploring the experiences of change agents implementing SBAE in developing countries. It is projected to alleviate food insecurity in Sub-Saharan Africa through clearly outlined technical guidance for SBAE implementation, informed by extensive research. We consider this a springboard for securing funding for SBAE READY 2.0 as student-led international agricultural education initiatives are birthed through this project.

Future Plans

AgriCorps will facilitate the circulation of the guide across its network by presenting it to Liberia's Vice President and Minister of Agriculture, the Rwandan Development Bank, the World Bank, USAID, the Swedish Development Corporation and the French Development Agency (FDA) before the end of 2024. Also, it will be freely accessible through the Movement for SBAE website and widely distributed to institutions with a vested interest in community transformation in low to middle-income countries. Considering the project scope, the written guide is just the start. We look forward to developing a suite of open-access resources for facilitating SBAE implementation. These resources include self-paced online modules, comprehensive and instructional videos, curriculum, instructional guides for specific SBAE activities (e.g., electing 4-H officers), and guidance and tips for home entrepreneurship projects, school demonstration farms, and other agricultural innovations.

Our interactions with Field Officers and agriculture teachers will open up research opportunities as ample data is collected via interviews, surveys, direct observation, and other instruments to enable continuous refinement in the face of a dynamic agri-food system (Kabasa et al., 2015). In order to scale up SBAE Ready, significant funding is required to incorporate feedbacks in reiterations of the written document while also embarking on the development of more open-access resources. The feedback from partners and users will strengthen grant proposals to enable recruitment and support of more international graduate students to facilitate the other components of SBAE Ready project.

Costs/Resources Needed

Three partners funded this project including the College of Agricultural Sciences Global Seed Grant, a grant through our college with a goal to support faculty with emerging projects and startup funds for international projects. The college grant amount was \$8,000 and additional funding of \$3,700 from the Agricultural Education and Agricultural Sciences and \$400 from AgriCorps. These funds totaled \$12,100 and was used to hire the writers and design intern. However, additional costs for printing a few copies for our partners was omitted from the budget. We intend to solicit other departmental funds to enable us make copies available for key partners.

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