SHARE:

Join Our Email List

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

FEED THE FUTURE INNOVATION LAB FOR LEGUME SYSTEMS RESEARCH

May 2023

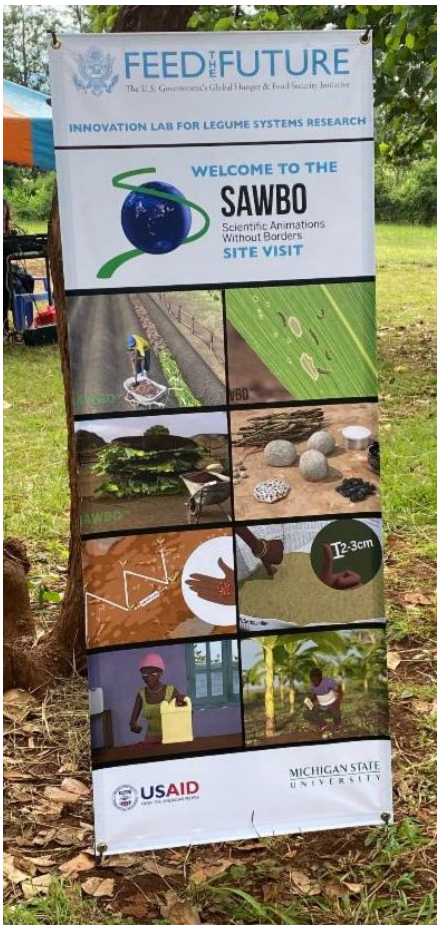
The Feed the Future Innovation Lab for Legume Systems Research fosters dynamic, profitable, and environmentally sustainable approaches that contribute to resilience, productivity, and better nutrition and economic opportunities. The lab is managed by Michigan State University.

From the Management Office

Legume Systems Innovation Lab Associate Award, SAWBO *RAPID* Featured During Innovation Lab Site Visit in Kenya

The Innovation Lab Council Directors Meeting held recently in Nairobi, Kenya provided the Legume Systems Innovation Lab an opportunity to showcase SAWBO *RAPID,* an associate award of the program, during a site visit to a Murang'a County farm.

Scientific Animations Without Borders (SAWBO) is a university-based program, currently at Purdue, which uses a systems approach to transform research



innovations on key topics such as agronomics, pest management, and post-harvest storage into animations that are translated into a diversity of languages from around the world and disseminated globally.

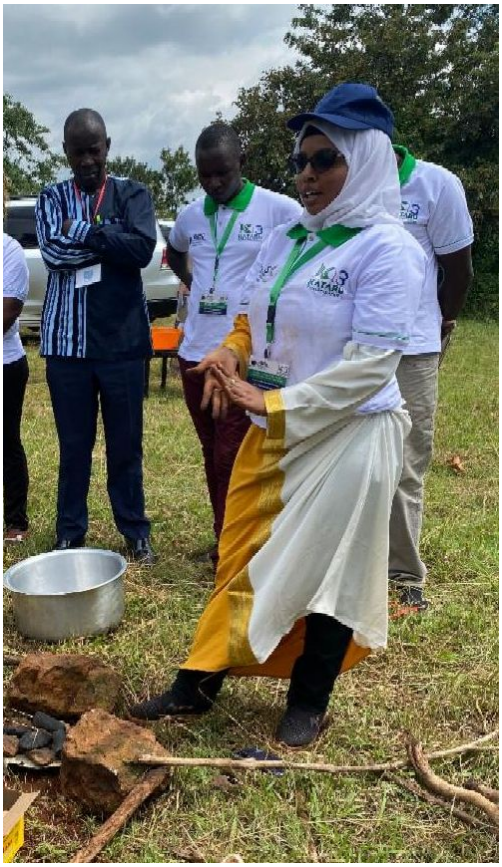
Feed the Future SAWBO Responsive Adaptive Participatory Information Dissemination Scaling Program (*RAPID*) was awarded to the Legume Systems Innovation Lab to create and disseminate SAWBO animations designed to mitigate the secondary effects of COVID-19.

In addition to the SAWBO *RAPID* animations on reducing post-harvest loss by storing legumes in air tight jerrycans and how to store sweet potato roots after harvest to create planting vines at the onset of the rains, the visit featured seven other SAWBO animations which educate farmers and communities on easy to deploy innovations using locally sourced materials.

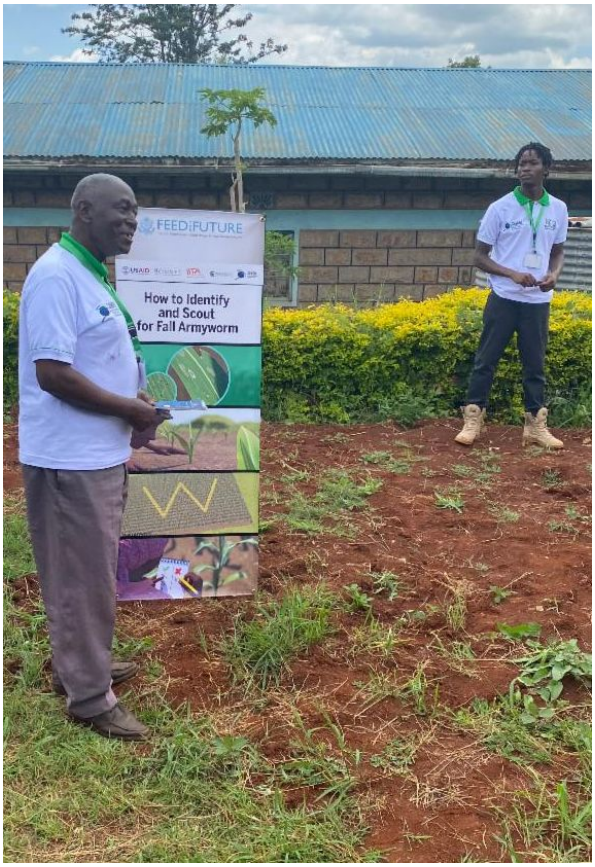
The visit was attended by, members of SAWBO management, the Legume Systems Innovation Lab as well as leadership from other Feed the Future Innovation Labs, USAID Washington, USAID Missions from across the African region, and CGIAR centers. The visit also welcomed local honored guests and the community to participate in the event.

Kataru Concepts SAWBO volunteers, based in Kenya, participated by demonstrating technologies featured in SAWBO animations which they work to deploy to farmers and communities in their networks throughout Kenya.

The SAWBO library contains over 150 animations in over 300 languages and dialects. The videos have reached over 50 million people in 130+ countries. The award winning program has measurable impact through peer reviewed research with over 50 published articles. Learn more by visiting the SAWBO website.



SAWBO volunteer demonstrates how to save up to half of firewood and charcoal simply by adding rocks and a grate to cooking fires. This technique is featured in the SAWBO animation titled, How to Reduce Firewood and Fuel in Cooking: Using Rocks and a Grate.



The visit was held on the family farm of Mwalimu Swaleh in Murang'a County, Kenya. Mwalimu (above left) explains how he learned to scout for fall armyworm in his maize field and then demonstrated the process. Mwalimu learned this technique by watching the SAWBO animation titled, How to Indentify and Scout for Fall Armyworm in Swahili language.

James Kamuye Kataru (far right) introduces his team of SAWBO volunteers who traveled from across Kenya to participate in the event.

In the Field

Legume Lab Projects Begin Close-Out Meetings

As the Legume Systems Innovation Labs begins to wind down program activities many of the projects are holding close-out meetings to share their successes.

One project led by Robert Fungo from Alliance Bioversity/CIAT titled **"Improving incomes and nutrition security through development and commercialization of consumer preferred processed legume-based products in Malawi and Zambia"** recently held their close-out meeting in Lusaka, Zambia.

The project which worked to support the development of legume-based agro-processing operations through understanding factors that drive and constrain the demand for nutrient rich legumes, as well as identifying relevant interventions to alleviate these constraints, in Malawi and Zambia enjoyed many accomplishments during a very short project period of just 18 months.

Advanced degrees for six students were supported by the project at the University of Zambia (UNZA) and the Lilongwe University of Agriculture and Natural Resources (LUANAR). The research led by these students was integral in understanding the existing market, consumer awareness and demand for processed bean products, safe product formulations and nutritional content, product optimization, and product traits most important to consumers.

The students presented their research findings during the closeout meeting which was attended by project management, academia, government, bean stakeholders, and private sector bean processors from both Malawi and Zambia.

Food processors shared how the data generated and workshops held by the project assisted to bring them together for collaboration and learning which will strength the market segment as well as the individual private sector companies.

Attendees of the Legume Systems Innovation Lab project, "Improving incomes and nutrition security through development and commercialization of consumer preferred processed legume-based products in Malawi and Zambia" close-out meeting in Lusaka, Zambia

Featured Legume of the Month

BAMBARA BEANS

Many outside of Africa may never heard of the bambara bean. This legume grows underground and is often called bambara groundnut, earth pea, or njugo bean.

Bambaras grow well in dry areas and in poor soil. They are drought tolerant and are nitrogen fixing making them a good choice for crop rotation. West Africa produces about half the world's crop, often grown by women for consumption in the home.

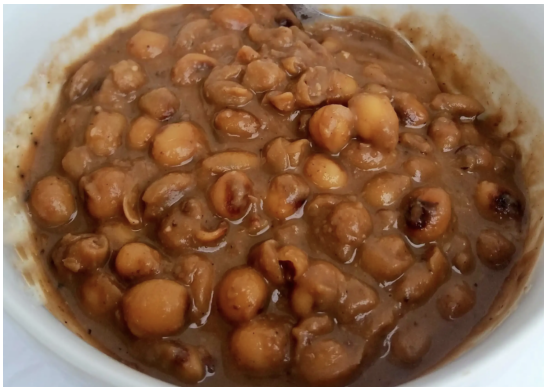
Recent studies have found it is high in protein and a complete food, providing all of the daily nutritional requirements for protein, carbohydrate and fat/oil of an adult human.

Seeds can be many different colors from cream to red to black-eyed and variants in between. Early varieties can be harvested in as little as 50 days while other varieties maturing in up to 100 days. The greens of the plant are often used for livestock fodder.

Cooking with Bambara Beans...

Creamy Bambara Beans

Bambara beans can be eaten fresh or soaked and boiled after being dried.



This recipe for **Creamy Bambara Beans** from Juliet@biscuitsandladles uses dried bambara beans and flavorful ingredients like shrimp powder, scotch bonnet peppers, and ground grain of paradise to make a tasty and satisfying dish that can be served as a side or main feature.

Get recipe here

For More Information on the
Feed the Future Innovation Lab for Legume Systems Research

Visit our website

This newsletter is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the Feed the Future initiative. The contents are the responsibility of Michigan State University and do not necessarily reflect the views of USAID or the United States Government.

USAID FROM THE AMERICAN PEOPLE

MICHIGAN STATE UNIVERSITY

Feed the Future Innovation Lab for Legume Systems Research | Michigan State University,
Justin S. Morrill Hall, 446 West Circle Dr. Room 321, East Lansing, MI 48824