Soybean Innovation Lab Newsletter
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Our Mission
The Feed the Future Innovation Lab for Soybean Value Chain Research is USAID’s only comprehensive program dedicated to soybean technical knowledge and innovation. Our international team of tropical soybean experts provides direct technical support to researchers, private sector firms, nongovernmental organizations, extensionists, agronomists, technicians and farmer associations tasked with soybean development.

The Soybean Innovation Lab is building a foundation for soybean production in Africa by developing the knowledge, innovation, and technologies to enable successful soybean production. Our network spans 80 locations, in 21 countries, and on 6 continents.

Click the link to watch our latest video about SIL

Thresher Contest Brings United States and African College Students Together to Improve Food Security in Africa

A thresher designed by a women’s group near Wa, Ghana. (Photo credit: Dr. Kerry Clark)

There is great need in sub-Saharan Africa for an affordable, reliable threshing machine to harvest a new crop in Ghana, soybean.

Dr. Kerry Clark, SIL researcher and University of Missouri soybean specialist, came up with the idea to hold a contest to build an affordable, mass producible soybean thresher for Africa. She was inspired by meeting a local blacksmith who made his own thresher.

The competition, which is open to University students both in the U.S. and Ghana, is to design a thresher that can be built for under $1,000 US dollars in Africa, and serviced locally. Dr. Clark has seen first-hand the struggles small farmers face pulling dry mature plants by hand and then hand threshing to separate the grain from the pods. The work is difficult and time consuming, and the grain losses are high and the resulting grain quality is poor. Low cost mechanized threshing provides a solution.

The thresher design contest is open to university students in Kwame Nkrumah University of Science and Technology, Mississippi State University, University of Ghana, University of Illinois at Urbana-Champaign, University of Development Studies, and the University of Missouri.

The contest closes at the end of May, with the winning design to be put into production this summer (2016). SIL, with its partner Catholic Relief Services, will then train local blacksmiths to build three threshers; which will be delivered for village level testing during this year’s harvest.

Click HERE to see the complete information and rules on the contest.

Dr. Kerry Clark demonstrates how to inoculate soybeans to recipients of Soybean Success Kits in northern Ghana. The kits contained all inputs needed for successful soybean production including improved seed, inoculum, fertilizer and extension information. (Photo credit: Dr. Kerry Clark)

SMART Farm Report Shows Profitability Possible with Good Soybean Yields

SMART Farm soybean plot in Ghana. (Photo credit: Dr. George Awuni)

The two-year report includes scientific and evidence-based data collected on soil analysis, seed germination, phosphorus/inoculant application, soybean yields on ten local soybean varieties, and optimal planting times. The trials took place in northern Ghana, specifically Nyankpala (Tolon District) in the Northern Region, Manga (Bawku East District) in the Upper East Region, and Barnahu (Wa Municipal) in the Upper West Region.

The soil analysis revealed that soil pH was moderately acidic in the Northern and Upper West Regions, and highly acidic in the Upper East Region indicating the need for soil correction. Soil fertility and organic matter are very low. Trials showed that although there seemed to be no clear advantage between applying only phosphorus or only inoculation to a crop, it was the synergy of soybean inoculation and phosphorus application that resulted in significant yield improvement. Seed germination continues to be low, averaging 69% in 2014 and 84% in 2015, and highly variable across varieties in both years. So germination testing prior to planting is critical to achieving high yields and low seed costs. Planting within the first week of July produced the highest yield. Thus, soybean farmers in northern Ghana should plant early, no later than the second week of July.

The SMART Farm (Soybean Management & Appropri ate Research & Technology) provides practitioners with the much needed technical information that is necessary to make evidence-based decisions when growing soybean. Increased soybean productivity will raise incomes for soybean farmers in northern Ghana, spur economic development in the region, and provide the poultry farmers of Ghana the much needed protein inputs to continue expanding their operations.

Click HERE to view the complete report.

From left: Dr. Dan Reynolds, SIL Agronomic Research; Dr. Saaka Buah, Wa Station Manager; and Dr. George Awuni, SIL Co-PI and SMART Farm Manager stand in a SMART Farm research plot near Wa, Ghana. (Photo credit: Dr. George Awuni)

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Meet a SIL Researcher & Collaborator

The Soybean Innovation Lab brings together U.S. and African researchers to address the most challenging issues facing soybean production, adoption and utilization in Sub-Saharan Africa. Here we introduce U.S. and African experts committed to developing the technical knowledge and innovation needed to successfully develop the soybean value chain in Sub-Saharan Africa.

Nina Furstenau is a member of the Soybean Innovation Lab’s socioeconomic research team focused on understanding the economic impact of soybean introduction at the smallholder farmer level. Nina is a journalist and teaches at the University of Missouri (MU) Science and Agriculture Journalism program and the MU School of Journalism. Furstenau received her M.A. in English/Creative Writing from MU in 2006 and her B.J. Degree in 1984. She was in the Peace Corps in Tunisia from 1984 to 1986 and then began working as a journalist and publisher/editor of three construction magazines in 1987. Furstenau, along with her husband, started and published these magazines and two others until 2001. Her recent books include Biting Through the Skin: An Indian Kitchen in the Heartland, a memoir in food, and Savor Missouri: River Hill Country Food and Wine, celebrating the local flavors of food and wine in Missouri. Furstenau is working with SIL to develop a cookbook of Mozambican heritage recipes, many enhanced locally with soybean, entitled Tasty Mozambique.

Fridah Mubichi is a member of the Soybean Innovation Lab’s socioeconomic research team. Her research includes focus group discussions and field studies on bean preferences, climate change and farming practices among men and women in Central and Northwest Mozambique.

Fridah is a PhD student in Sustainable Development at the University of Missouri (MU). Before joining MU, Fridah co-founded the Miriam Kanana Mubichi Foundation (MKMF), a nationally recognized NGO focused on the promotion of sustainable social and economic development projects in Eastern Kenya. She has also taught at Northeastern University (Boston, MA), Kenya Methodist University (Kenya) and the University of Nairobi in the College of Education & External Studies (Meru, Kenya). Fridah also collaborates with SIL researchers on the implementation of the soy-adapted Women’s Empowerment in Agriculture Index (WEAI+) survey in Mozambique.