Rebuilding Higher Education in Agriculture in South Sudan Dr. Jim McKenna and Dr. Pavli Mykerezi, Virginia Tech

THE PARTNERSHIP

PARTNERS:

- Virginia Tech Colleges of Agriculture and Life Sciences and Natural Resources and Environment
- University of Juba College of Natural Resources and Environmental Studies
- Catholic University of South Sudan Faculty of Agriculture and Environmental Science
- Virginia State University School of Agriculture



Univ. of Juba, approximate extent of main campus



Catholic University of South Sudan, Wau,



UofJ Experiential Learning Farm



- Distance learning
- Training of support staff

- Collaborative research programs
- On-farm research programs
- Experimental field stations
- Postgraduate research programs

III.QUALITY OUTREACH PROGRAMS TO ADDRESS NEEDS OF THE SOUTH SUDAN







KEY GOALS & OBJECTIVES (10-YEAR PLAN)

I. HIGH QUALITY GRADUATES TO DEVELOP

THE SOUTH SUDAN

• Secure resources for quality teaching

Restructure curricula

• Establish a Diploma Program

 Faculty exchanges and advanced degree training • Improve quality of teaching & learning

Improve student advising

- **II.IMPROVING LOCAL RESEARCH CAPACITY** • Secure resources for quality research
 - Short-term training programs

• Food security program (training and production information)

 Infrastructure for quality outreach programs Partnerships linking universities, government, IARCs and NGOs

 On-farm demonstration dissemination programs Postgraduate extension science program

> Deans Grant (VT) & Mersie (VSU) inspecting Striga infested field near UofJ farm





University of Juba

SOUTH SUDAN SITUATION:

- Became Independent State on July 9, 2011 • Immense agricultural potential:
- Fertile soils and adequate rainfall
- Diverse agroecosystems
- Vast grasslands
- >20% food insecurity
- No commercial agriculture
- No agricultural market system
- Lack of infrastructure (roads, electricity, broadband,)
- Lack of skilled manpower (shortages of all professionals, skilled workers, teachers)
- UofJ and CUofSS infrastructure deficiencies

- BSc graduates often lack practical knowledge and skills required for farming.
- Diploma programs provide skilled workers quicker.
- prepared students to progress to BSc programs.
- Diploma programs may provide a path for less • Diploma programs may be a productive way
- out for less successful BSc students.

DIPLOMA PROGRAM GOALS

- To provide a hands-on technical education in agriculture and related areas within 2-3 years. • To prepare graduates to be productive agricultural leaders with the ability to adapt to an ever-changing agricultural sector.

At Catholic University

farm in Wau

DIPLOMA PROGRAM

BUT:

• Recovering from 50+ years of war

WHY DIPLOMA PROGRAMS?





ANTICIPATED OUTCOMES



APPROACH

• 2-3 year diploma programs in Agricultural Technology (AT) with 50% practical training • Graduates/year:

• University of Juba – 100/year

• Catholic University of South Sudan – 25/year

• Integration of practical training components of diploma and BSc programs.

• Articulation agreement to allow outstanding diploma students to enter BSc program.

CURRICULUM

1.Broad-based applied curriculum:

Animal production

Crop production

Agribusiness

2. Supporting courses/training in:

• Applied Agricultural Math

Computer Applications

Communication Skills

3. Farming/agribusiness internship (10 to 12 weeks)

1. First students August 2013 2. First graduates June 2015

CHALLENGES

• Current faculty and staff lack practical experience Program will require new faculty/staff and they are in very short supply

• Facilities, farming equipment, classrooms and laboratories are poor or non-existent

 Hands-on experiential learning farms must be established and equipped

South Sudan is a new country and trying to build everything at once



Jim McKenna and Father Mike in Wau

