Rebuilding Higher Education in Agriculture in South Sudan

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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

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
- Distance learning
- Training of support staff
- Improve student advising

II. IMPROVING LOCAL RESEARCH CAPACITY
- Secure resources for quality research
- Collaborative research programs
- On-farm research programs
- Experimental field stations
- Postgraduate research programs
- Short-term training programs

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

Diploma Program

South Sudan Situation:
- Became Independent State on July 9, 2011
- Immense agricultural potential:
  - Fertile soils and adequate rainfall
  - Diverse agroecosystems
  - Vast grasslands
- BUT:
  - >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)
- Recovering from 50+ years of war
- UofJ and CUofSS infrastructure deficiencies

Why Diploma Programs?
- BSc graduates often lack practical knowledge and skills required for farming.
- Diploma programs provide skilled workers quicker.
- Diploma programs may provide a path for less prepared students to progress to BSc programs.
- 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.

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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)

Anticipated Outcomes
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