Country of Study: Kenya  
University: Egerton University  
Department: Agricultural Engineering  
Student Position: Graduate Research Assistant — Ph.D.  
Home Country: South Sudan  
Home Institution: Dr. John Garang Memorial University of South Sudan  
Home Position: Lecturer  
Mentored By: South Sudan: Deng Manasa Much

Research Area: Agricultural Engineering (Irrigation)

BHEARD PROGRAM START DATE: August 2014  
HOMETOWN: Juba, South Sudan  
UNDERGRADUATE EDUCATION: University of Gezira, Agricultural Science  
GRADUATE EDUCATION: University of Gezira, Agricultural Engineering

RESEARCH INTERESTS: The effect of supplemental irrigation on growth and yield of maize in Central Equatorial State — South Sudan

Decades of war and conflict have left South Sudan food insecure and dependent on food imports. About 80% of its population live in rural and rely on agriculture for their livelihoods, but years of war destroyed farming skills and traditions, the main challenge is to translate South Sudan’s abundant resources and workforce potential into better human and development outcomes. In this connection agriculture is the green gold of South Sudan.

Much of the agricultural production in South Sudan is dependent on rainfall. The past years have shown a trend of unpredictable rainfall pattern, which is possibly associated with climate change events. This situation is characterized by late onset and erratic rains, and long dry spells leading to crop failures across South Sudan. The production of cereal crops to meet national demands forms a high priority of the government, but the average cereal productivity in South Sudan is quite low (average cereal yield do not exceed 0.8t/ha even in good year). And, due to inadequate agricultural extension service there is limited access to appropriate seed and planting materials and continuous use of rudimentary farm tools. Thus, Sabri will conduct research to determine the effect of
supplementary irrigation on growth and yield of maize; to investigate the effect of supplementary irrigation and fertilization on growth and yield of maize; to determine soil parameters; to investigate the interaction of supplementary irrigation and planting methods on yield of maize; and to evaluate the awareness about supplementary irrigation and appropriateness of possible implementation.

Sabri believes the productivity in rain-fed agriculture will be improved through supplementary irrigation and good crop management coordinated with intervention in soil conservation. The adaptability of the technique (supplementary irrigation) and good management of the soil will contribute to the improvement of productivity and socioeconomic conditions which will lead to an improvement food security.

PERSONAL STATEMENT:
Sabri enjoys writing scientific papers, forming small groups of farmers and training them about water harvesting and small scale irrigation, and helping farmers to better their lives and increase food security.

In his spare time, Sabri reads the Bible, plays the guitar, and watches movies.