



2014 BHEARD Scholar Samuel Abin

Profile **Country of Study:** South Africa **University:** University of Pretoria Animal and Wildlife Sciences **Department: Student Position:** Graduate Research Assistant — MSc South Sudan Home Country: **Home Institution:** University of Juba Home Position: **Teaching Assistant** SOUTH AFRICA: Prof. VanMarle-Köster Esté **Mentored By:** Department of Animal and Wildlife Sciences University of Pretoria

Research Area: Animal Breeding and Genetics

BHEARD PROGRAM START DATE: 2014

HOMETOWN: Juba, South Sudan

UNDERGRADUATE EDUCATION: University of Juba, SOUTH SUDAN

RESEARCH INTERESTS: Indigenous Livestock Breeding

Samuel's focus for his master's degree is to investigate different African indigenous beef cattle breeds of larger and smaller population numbers in South Africa that are subjected to animal recording and assess the potential of animal recording in genetic improvement and maintenance of genetic diversity. He believes this will help in monitoring the dynamics within population structure of livestock under selection and assist in their genetic management. "Indigenous African livestock breeds constitute part of the prestigious inherited resources that largely contribute to agriculture, economic, socio-cultural and spiritual aspects of most African people on the continent," says Samuel. "They are adapted and have potential to produce under harsh and disease prone local production environment of Africa. Proper management and genetic improvement of these indigenous African livestock breeds is thus far critically important."

Samuel says his research interests evolved from the need to use quantitative and molecular genetics to understand the fundamental aspects of phenotypic and genotypic characteristics of livestock for sound genetic management and sustainable improvement programs. Sustainable genetic improvements of livestock however depend on genetic variation and methods use to exploit these variation.

For his proposed PhD study, Samuel plans to focus on the quantitative and molecular characterization of African Indigenous livestock populations that he says is crucial to understand their evolution and genetic structures. "This will guide the researchers, farmers, policy makers and the concerned NGOs in decision making that aimed for genetic management for livestock improvement and conservation of biodiversity."

PERSONAL STATEMENT:

Samuel is from South Sudan, "the world's youngest nation" (created in 2011) and describes his country as, "mostly underdeveloped in term of human and natural resources." "Since the population of South Sudan is mostly farmers owning huge livestock population, it was imperative to consider national development from this prospective and I joined University of Juba College of Natural Resources and Environmental Studies," he says. After graduating from the University of Juba, Samuel joined State Ministry of Agriculture. Samuel aspires to build on his research and teaching foundations which he says are "motivated by the immense developmental needs of livestock resources as well as various measures that are needed to stimulate livestock sector across Africa and South Sudan in particular."

When Samuel joined the University of Juba, he "got the chance to do MSc at the University of Pretoria with USAID-scholarship funding under RHEA program which later handed over to BHEARD program." "These endeavors made me a responsible, hardworking and proactive researcher able to work well both independently and in a team environment," says Samuel. Samuel sincerely believes that the knowledge and experiences he acquired especially while doing his MSc study were very beneficial and that his interests outlined above will make him a competitive candidate for any funding given to pursue PhD study immediately after finishing MSc. "Because with such magnificent knowledge I would be in a position to continuously conduct my research, work as competent academia teaching and advising students in the field of Animal Breeding and Genetics as well as participating in extension work to help livestock farmers."

Samuel describes himself as humble, keen to learn more, and with a love to experience new challenges. "I enjoy reading, jogging, watching football games and staying with my family."