Project Title: Red Maasai Sheep: Breeding and Conservation Strategies as a Pathway out of Poverty in Kenya

Institute: Veterinary Research Institute
Center(s): KALRO Muguga North
Principal Investigator: Samuel M Mbuku;
Other investigators: Okeyo Mwai (ILRI); Thomas Mwaura Magothe (MoALF);

Problem Statement: Today, there is an increasing intensification trend in which medium to large-scale production systems utilizes a narrow range of commercial livestock breeds. However, given the fact the climate change is real, there is need to keep and promote more resilient breeds, especially if their productivity can be improved. Red Maasai (RM) sheep hold promise. However, over the years, indiscriminate and generally uncontrolled crossbreeding prevailed, thus eroding the integrity of pure RM populations. The threat to this valuable sheep genetic resource persists. Currently, there is no accurate population information (i.e., numbers, trends and production data) for the RM sheep, at national level. Urgent and transformative strategies aimed at sustainably improving the genetic potential (i.e., both production and resilience) of the sheep and, its’ closely related populations and strains, are therefore needed.

Objective(s): Development of breeding and conservation strategies for improvement of the genetic potential and population of the pure Red Maasai sheep

Planned Activities: Kenya Livestock Breeders Organization (KLBO) will work closely with Kenya Agricultural and Livestock Research Organization (KALRO) and International Livestock Research Institute (ILRI) so that breeding values can be predicted and young rams ranked. This will lead to selection of rams from existing flock and, retain and agree on their expanded use, while limiting the use of unselected rams in order to begin walking a common productivity and genetic gain pathways at community/ village levels.

Outputs: With the scaled-up community/ village based breeding programs integrated with optimal use of natural resources and better husbandry practices, pastoralists will access genetically improved RM sheep with high growth and reproductive performance. Besides being a source of quality replacement young rams and ewes, established nucleus flock and multiplication Centres will form strategic in situ conservation units for the RM sheep. Pastoral household and other consumers will also access mutton which is adequate in quantity and quality (protein source) and, this will improve on food and nutritional security of pastoral communities.

Outcomes: The increased resilience and productivity at both animal and flock levels will translate into increased household incomes and environmental health, given that smaller but more productive flocks will be kept, thus, ultimately leading to enhanced food and nutritional security as well as poverty reduction.

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