



KCSAP COLLABORATIVE SEED SYSTEM RESEARCH GRANTS

AWARDED SUMMARY PROPOSALS

Project No. & Title:	SS02/2/2: Multiplication and delivery of improved Sahiwal cattle, selected exotics and their crosses for dairy production in low to medium potential areas
Lead Institution:	Kenya Agricultural and Livestock Research Organization (KALRO)
Value Chain	Dairy
Team leader:	Dr. Evans D. Ilatsia - Evans.ilatsia@kalro.org) evansilatsia@yahoo.com
Key Partners;	Maseno University, Egerton University, KAGRC, Keiyan Group Ranch, Keiyan Group Ranch, Orkiu Le Muny Farm, Nasikuta Pastoral Training Centre, KAGRC
Project Team Member:	Ruth Waineina (KALRO), Dr. Kamidi (KALRO), Robert Serem (KALRO) Winfred Mutisya (KALRO), Samson Mwangi (KALRO), Dr. Wasike (Maseno University), Dr. Okeno (Egerton University), Jamleck Anampiu (KAGRC),
Project Amount	25,584,960
Project Duration:	24 months

Summary

Sahiwal is the largest single dual purpose cattle breed mostly kept by the pastoral communities in the South rangelands where it is the main driver of food and nutrition security, a source of income and insurance against unforeseen risks. It is also the most widely used in crossbreeding programmes for production of intermediate genotypes that fit in a wide range of production systems and agro-ecological zones. To ensure continued role of Sahiwal cattle and their crosses to socio-economic welfare of producers, KALRO has continuously provided technical backstopping and capacity building programs for producers on breeding and husbandry support systems to improve productivity. These efforts have resulted in desirable attributes of the Sahiwal and their crosses and have seen their demand grow tremendously in the recent past, creating a huge deficit that has exerted a lot of pressure on the existing breeding programme and

other infrastructural arrangements. Currently the demand stands at 900 Sahiwal breeding bulls and heifers per year against production capacity of 90 pure and 40 crossbred bulls respectively. This reality warrants deliberate interventions to expand Sahiwal pure breeding and crossbreeding program to meet the demand. This project purposes to expand Sahiwal cattle and their crossbred germplasm multiplication and dissemination programme to increase production of superior breeding bulls and heifers. This will be achieved through; (1) Support to infrastructure to enhance breeding and multiplication, (2) Expansion of pasture and forage production and alternative supplementary feeding systems to increase overall reproductive and functional performance, (3) Use of planned natural mating and A.I. services to improve on conception rates (4) Use of assisted reproductive techniques to enhance superior germplasm development and multiplication, (5) Deployment of elaborate animal identification, performance recording and evaluation systems to aid in accurate breeding decision making, (6) Creating strong private sector involvement in commercial Sahiwal germplasm production and distribution and (7) Support to International Sahiwal germplasm exchange programmes to enrich the local genetic base for further selection and breeding. The overall output of the proposed activities will lead to progressive delivery of at least 400 young bulls and heifers to farmers in addition to at least 15,000 doses of semen from superior sires annually. The programme will be anchored on a multi-sectorial structure involving private Sahiwal ranches and primary producer groups in Kajiado, Bomet, Baringo, West Pokot, Taita Taveta and Machakos.