



Project Title:	Testing the efficacy of hay/molasses/Chalbi salt for finishing sheep in ASAL areas of northern Kenya		
Annual Report	Period Covered: Oct 2020 to Sept 2021		
KCSAP livestock Applied	Value chain: Meat sheep (Red meat)	Duration: 18 Months	Start Date: Oct 2020
Lead Institution:	KALRO-Marsabit		
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Collaborators and their contacts:			
<ol style="list-style-type: none"> 1. County Government of Isiolo 2. County Government of Marsabit 			
<p>Background: In Kenya, the livestock sector contributes nearly 50% of the agricultural GDP. The demand for red meat has been reported to increase every year. In Isiolo and Marsabit Counties, goats/sheep value chain is of particular importance since it provides about 90%, 85% and 60% of the households with food, income and employment opportunities respectively. In these Counties, goats/sheep production potential is limited by depleted rangelands & lack of purposed business-oriented production practices. This work is expounding the ability of finishing sheep using pasture enclosures/grazing reserves or reseeded areas. Pasture enclosures or grazing reserves are expected to lead to profitable sheep/goats production.</p>			
Objectives:			
<ol style="list-style-type: none"> 1. To characterize the existing pasture enclosures in Marsabit and Isiolo Counties. 2. To test the ability of improved pasture enclosures for finishing sheep in readiness for sale and use them to orient traditional pastoral production system to business-oriented production system. 3. To determine the gross margin (profitability) of using enclosures for finishing sheep 4. To document the lessons learnt. 			
Expected Outputs			
<ol style="list-style-type: none"> 1. Pasture enclosures in ASAL areas of Marsabit and Isiolo counties characterized. This includes vegetation structure, variability, management practices, ecological characteristics, diversity, resilience and other attributes of the enclosures. 2. Ability of pasture enclosures for finishing sheep determined in ASALs areas of Marsabit and Isiolo counties. 3. Gross margins and profitability of using enclosures identified. 			

4. Dissemination materials produced.

I ACHIEVEMENTS

Objective 1: To characterize the existing pasture enclosures in Marsabit and Isiolo counties.

Activity 1.1: Identify knowledgeable herders and elders & map various grazing units and pasture enclosures in Marsabit and Isiolo counties.

Achievement 1.1: Participatory mapping involving local knowledgeable elders was used. Lists of grazing units and maps were produced. Mapping was conducted and key grazing units and enclosures identified. In Isiolo County, grazing units were mapped in Oldonyiro and Cherab wards. In Marsabit County, mapping was done in Uran, Golbo and Obbu wards.

Activity 1.2: - Determine the management practices of enclosures/grazing reserves & identify the socio-ecological characteristics

Achievement 1.2: - Rangeland study protocols including transect walk, and key interviews were used to characterize grazing units. Hence, characteristics of enclosures/grazing reserves were documented. This involves bio-physical characteristics and management practices.

Summary of achievements under objective 1

The achievements of objective 1 include the following;

- a) The pasture enclosures were identified and mapped
 - b) Management practices and ecology of enclosures characterized
- This objective was met and there is no deviation from what was planned.

Objective 2: To test the ability of improved pasture enclosures for finishing sheep in readiness for sale. Pasture enclosures will be used to orient traditional pastoral production system to business-oriented production system.

Activity 2.1: In consultation with local communities, select 6 pasture enclosures in each of the two study counties by 5th month of the project

Achievement 2.1

Pasture enclosures in each study counties were selected and mapped in consultation with local communities.

Activity 2.2: Plant 3 pasture enclosures with improved forage varieties, while allowing 3 other enclosures to regenerate with natural pastures, in each county.

Achievement 2.2

Cenchrus ciliaris forage species was planted for the following Community Interest Groups (CIGs).

Sub-county	CIG/Group Name	Males	Females	Total
Isiolo North (Kipsing)	Sieku Kipsing Women Group	-	12	12
Isiolo Central (Burat)	Amoru Hawo	-	20	20

Saku	Tokkuma Goro Rukessa	27	13	40
Saku	Goro Mato Dakabaricha	4	44	48
Saku	Khanuyaza Women group	-	22	22
		31	111	142

Activity 2.3: Allow the experimental sheep (of same age) to feed on the pasture enclosures for 3 months (for finishing them) by 9th month of the project.

This activity is not implemented yet.

Activity 2.4: Take the weight of experimental sheep before and after finishing them in enclosures by 11th month of the project.

This activity is not implemented yet.

Activity 2.5: Sell the finished sheep by 13th month of the project

This activity is not implemented yet.

Activity 2.6: Compare the selling price of sheep sold from communal grazing lands and sheep sold from enclosures by 15th month of the project

This activity is not implemented yet.

Summary of achievements under objective 2:

The following were achieved under objective 2:

Cenchrus ciliaris forage species was planted for 5 Community Interest Groups (CIGs) - Two groups in Isiolo County and three groups in Marsabit County.

However, the experiment on finishing sheep in enclosures has not started. The procurement office is in the process of purchasing the experimental animals.

Objective 3: To determine the gross margin (profitability) of using enclosures for finishing goats/sheep

Activities under this objective are planned for the following Quarters.

Objective 4: To document the lessons learnt

Activities under this objective are planned for the following Quarters.

II Other achievements (e.g., patents, publications such as journal papers, technical reports, presentations in workshops and conferences etc.). List them with proper citations

None

III Constraints and how they were overcome

Temporal variability of rainfall (seasonality). The finishing of livestock is dependent on rain-fed pasture. The unreliable rainfall affects availability of pasture, and hence finishing of experimental sheep.

To overcome this, we are planning to use KALRO-Marsabit Institute ranch for the experiment.

IV Summary of funds received, accounted for and balance

Project Amount (KES)	Amount Received (KES)	Amount accounted for (KES)	Balance (KES)
4,963,500	3,128,500	2,135,500	2,828,000

IV Way Forward

Activities planned for the period Oct 2021-Dec 2022

- Purchase of experimental animals
- Finishing experimental animals in enclosures (Institute ranch)
- Reporting