

EFFECT OF BUCK SELECTION ON COMMUNITY BASED GOAT BREEDING PROGRAMME ON PERFORMANCE OF PROGENY UNDER FARMERS MANAGEMENT IN MALAWI

Rachael Soko¹, Timothy Gondwe², Dr Liveness Banda³

Lilongwe University of Agriculture and Natural Resources (LUANAR) Dept. of Animal Science.

INTRODUCTION

CBBP is a breeding programme that aims to develop, improve and preserve indigenous livestock with involvement of communities

- The aim of the study was to evaluate the effect of buck selection on the performance of the progeny (offspring)

MATERIALS AND METHODS

The study used three approaches

1. Evaluated performance from the records collected during project period
2. Conducted household survey of communities that participated in CBBP.
3. Monitored the offspring that were born from selected bucks



Figure2. Focus group discussions and monitoring of offspring through measurements



Figure1. Goat selection process

CONCLUSION

- A trend of growth and body weight improvement in kids as a result of selection process gives farmers more economic importance of keeping goats
- Improvement in genetic and phenotypic parameters shows the importance of the breeding process



RESULTS

- 94.4% of hh in the project areas used the selected bucks
- Kids born from the selected bucks had superior body weight 15kg versus 11kg preweaning ($p < 0.001$)



Figure3. Kids born from selected bucks

- There was positive phenotypic and genetic correlations between growth traits 0.1-0.8 ($p < 0.001$)
- Heritability ranged from low to medium (0.15-0.30)

Table1 .Heritability of growth traits

Section	Traits	Sire	h^2
Zombwe	Birth wt	0.03	0.17 ± 0.06
	2 months wt	0.13	0.19 ± 0.12
	4 months wt	1.15	0.20 ± 0.09
Bande	Birth wt	0.03	0.19 ± 0.04
	2 months wt	0.14	0.21 ± 0.13
	4 months wt	1.21	0.25 ± 0.25