Improvement of fodder autonomy of livestock in the North-Sudanian zone of Burkina Faso

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INTRODUCTION

- A major challenge of the livestock sector in Burkina Faso is to meet the feed needs of livestock to improve their productivity. This situation becomes even more critical when correlated with frequent security crises in certain areas, limiting pastoral transhumance and leading herders to settle down.
- ➤ This study aimed to contribute to the improvement in quantity and quality of fodder availability in Korsimore community (Contro North Degion: Fig. 1)

CONCLUSION

- The adoption of dual purpose fodder crops constitutes a resilient solution to the nutritional demands of livestock and people.
- Farmers are open to adopting these improved crop varieties; therefore their introduction constitutes the best strategy for the development of livestock farming in Burkina Faso.



Korsimoro community (Centre-North Region; Fig.1) to ensure feed autonomy for livestock.



Fig. 1. Study site: Area of Korsimoro in the Centre-Nord of Burkina Faso

RESULTS AND DISCUSSION

1. Survey of farmers

- Four main feed types: natural pasture, woody fodder, crop residues, concentrate feed
- Crop residues (sorghum straw & legume tops): main dry season feeds
- Availability varies with season; shortage prevails over a long period (dry season)
- Inappropriate storage (exposure to sun on sheds, trees and house roofs; Tab.1, Fig.3) leads to loss of nutritional value

Tab. 1: Use of storage infrastructures	(% of farmers)
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	Store	Tree branches	Hayloft	Shed	House	Roof
Legume haulms	6.7	7.7	2.1	59.3	1.0	22.7
Cereal straws	1.0	18.7	1.0	62.1	0.5	15.8
Нау	22.7	0.0	4.6	70.5	0.0	2.3
Legume pods	25.2	0.0	0.8	2.4	70.8	0.8
Concentrate	20.3	0.0	0.0	0.8	78.9	0.0

MATERIALS and METHODS

- 1. Survey of 135 agropastoralists from 5 villages: general characteristics of agriculture and livestock; inventory of feed resources and their conservation techniques
- 2. On farm testing of dual purpose varieties of sorghum (Sariaso 14) and cowpea (KVX 745-11P), the main crops in the area, with 30 target farmers:
 - Training farmers on technical itinerary of crop used
 - Establishment of crops on elementary plot of 25x25m² (Fig.2)
 - Yield evaluation
 - Survey on farmers' perception of tested crops



Fig. 3: Feed storage on a roof (left) and in a tree (right)

2. On farm experiments

- > Yields of both crops are satisfactory (Tab.2)
- > 83.3% of farmers intent to adopt the cowpea variety and 68.2% the sorghum variety

Tab. 2: Yields of the tested dual purpose crops (t DM/ha)



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TLU : tropical livestock unit, animal of 250 kg weight