



Tropentag, September 19-21, 2012, Göttingen – Kassel/Witzenhausen

“Resilience of agricultural systems against crises”



## Adaptive Strategies by Pastoralists to Cope with Drought Episodes in North Kordofan, Sudan

ABDELAZIZ ELSHEIKH<sup>1</sup>, ABDALLA MOHAMED ABDALLA<sup>2</sup>, TARIG ELSHEIKH MAHMOUD<sup>3</sup>

<sup>1</sup>University of Kordofan, Centre for Peace and Development Studies, <sup>2</sup>Faculty of Natural Resources and Environmental Studies, <sup>3</sup>Gum Arabic Research Centre, Sudan

### Introduction

Recurrent drought episodes are not uncommon phenomena in many parts of Saharo-Sahelian areas in Africa. In drought affected areas natural resources base is very vulnerable and rural communities suffered such phenomena since the drought spell that hit the area since late sixties of the last century. Communities in these areas developed some indigenous knowledge to cope with the drought impacts. Land use pattern in the northern part of North Kordofan State of Sudan is considered as a real pastoral system, which is dominated by camels and desert sheep herders. As the results of the recurrent drought spells that hit this arid Sahelian area, pastoralists face multitude of challenges that substantiate development of some adaptive strategies to cope with such environmental crisis.



North Kordofan, Sudan,



Herd mobility

### Objectives

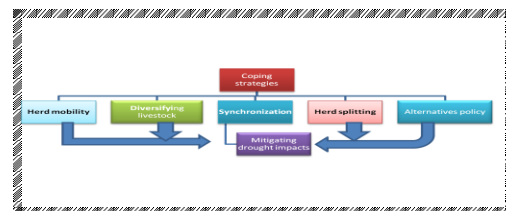
This study is designed to scrutinize the adaptive strategies tailored by pastoralists in *Hamrat Elsheikh* Administrative Unit in North Kordofan State. It is also intended to develop a model for proper management of the pastoral system in the drought stricken areas in the state. This model is expected to resolve problems within the system as shortage of pastures and range species resulted from drought episodes that jeopardize the natural pastures.

### Data collection and analysis

Historical, descriptive and analytical approaches were followed via direct interviewing questionnaires with key informants randomly selected from pastoralists' villages in the study area.

### Results

61% of interviewees quoted the main adaptive strategies that prevail. These include herd mobility in search of water and pastures, keeping drought resistant animals by having a higher proportion of desert sheep, goats and camels than cattle, diversifying livestock species in favor of resilience to drought, synchronizing livestock breeding time with rainy season, and herd splitting with assistance from relatives. These strategies mitigate the impact of drought on pastoralists' life. They have also contributed in boosting-up livestock populations, pave the way for pastoralists to survive and sustain their animal resources. Some shortcomings were observed by pastoralists like the lack of some extension and veterinary services and lack of dispersion of seeds of range species.



Coping strategies with drought Episodes

### Conclusion

Strengthening these adaptive strategies prevailed in the study area could diminish vulnerability of pastoral resources which is key aspect of reducing drought risks.