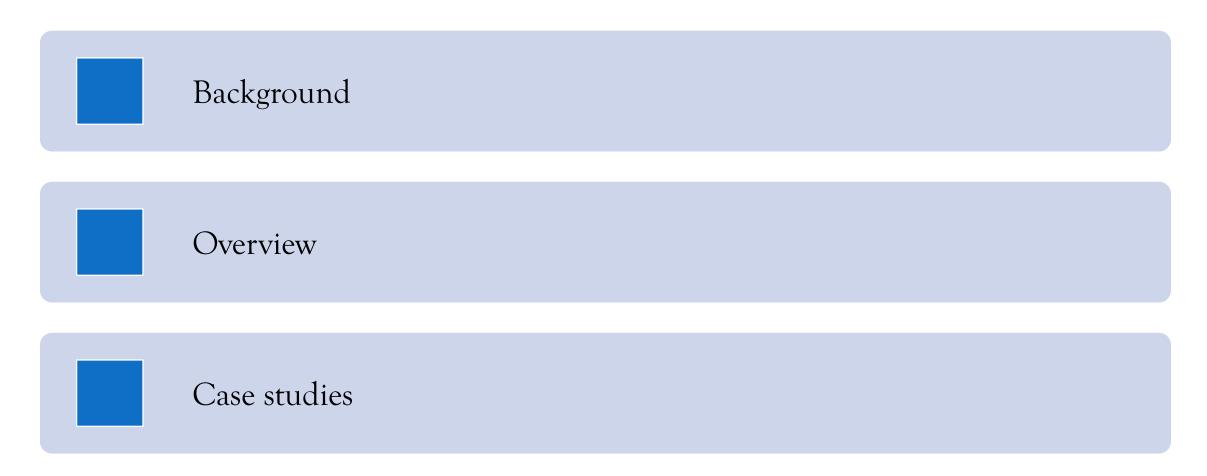
# Conflicts and confrontations threatening mobile pastoralists

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### The outlines



# Background

Mobility pastoral communities who depend on extensive livestock production, mainly cattle, camels, sheep and goats, as their most important source of livelihood, food security, nutrition, income and wellbeing.

Pastoral livestock production involves varying degrees of seasonal movement to access natural resources on a communally managed or open-access system.

Pastoralism plays an important role in the national, regional and world economies. It supplies millions of animals to both domestic and international markets through substantial livestock trade networks that link local and cross-border markets to neighbouring countries and international markets.

The mobility of pastoralists exploiting the animal feed resources along different ecological zones represents a flexible response to a dry and increasingly variable environment.

It allows pastoral herds to use the drier areas during the wet season and more humid areas during the dry season.

Mobility also allows pastoralists to mitigate the effect of unforeseen events, such as disease outbreaks.

These strategies allow pastoralists to survive in difficult environments and create economic value out of otherwise fragile ecosystems. Therefore, constraints on pastoral mobility, such as changes in land use, tenure regulations and borders, can undermine the whole pastoral system.

### Adaptability and mobility of pastoralism

The adaptability and mobility of pastoralism in relation to resource variability have been undermined by factors including climate change, environmental degradation and pressures to increase agricultural production to feed a rapidly growing population. The low mean rainfall of the late twentieth century, combined with the technocratic approaches to development, has increasingly marginalised the traditional approaches to resource management and food security.

The expansion of cultivation into marginal areas has led to deterioration of the land resources. The extended droughts triggered famines. These factors resulted in rapid changes in land use and land control and compression of pastoralists' livelihood space. As a result, social conflicts between agriculturalists and pastoralists have increased, along with the problems associated with overgrazing and land resource deterioration. These changes have left many pastoralists living in a world of insecurity, war, famine and drought.

### Pastoralism and food security

- Pastoral areas are increasingly becoming vulnerable to food insecurity and famine. As a result, these regions have become heavily dependent on external food.
- Many of these areas are experiencing high rates of wide-scale global acute malnutrition (GAM).
- In addition, children in pastoral settings are vulnerable to seasonal malnutrition during the lean season.

# Challenges of pastoralism

- Negative perceptions about pastoralism.
- Insecure land tenure due to increasingly competing interests for pastoralist land e.g. extractive industry, population growth, agricultural expansion.
- Extreme weather events linked to climate change leading to droughts, floods, disease outbreaks and plant cultivation.
- Restrictions on mobility, especially trans-boundary mobility.
- Adverse policies and exclusion from decision making processes.
- Continued under investment.
- Lack of adequate data.
- Lack of adapted social services.

### Pastoralism and ecological interaction

**SEMI-ARID ECOSYSTEMS** 

- lack of water
- seasonality of rainfall
- hot and temperature degree
- livestock / wildlife interface
- Pests and flies

### Natural resources

- Highly limited agricultural production
- Almost exclusive use by extensive pastoral livestock systems
- Forest products, e.g. gum arabicum
- Mining, oil

# Demography

- Low population density
- Limited governance
- conflicts (resources)
- Access to education, health, and Veterinary Services

# Development of pastoralism

- Community engagement, pastoralist associations, self-help frameworks.
- ➤ Decentralized environmental management with active participation of pastoralist stakeholders in policy making.
- ➤ Maintain mobility in socially and ecologically acceptable forms.
- ➤ Promote Global partnerships World Initiative for Sustainable Pastoralism (WISP).
- Develop veterinary assistance with governments and private sector involvement.

# Development of pastoralism

- ☐ Pastoral areas are an indispensable part of future land use.
- It will be necessary to rethink local governance and social services, including animal and human health, education, transport, environmental management and security.
- Improved social services like human and animal health services, locally adapted governance, and integrated adaptive management will pave the way for the sustainable use of pastoral areas, including, export markets.

### Pastoralism in Africa

Pastoralism is a viable and sustainable livelihood system in the dry land areas of Africa. It is well adapted to manage the uncertainty and risks of these areas.

Moreover, pastoralism makes a major contribution to maintaining the health of the ecosystem because it is a rational, adaptable production system uniquely resilient to the climatic variability's of the dry lands.

In recent decades, pastoralism is facing ever-increasing challenges in the forms of increasingly variable and unpredictable climate, rising insecurity and violence, increasing risk of animal and zoonotic diseases, and insecure land rights and natural resources management. These changes are taking place in a context of neglect and exclusion.

Despite the weakening capacity of the pastoral communities, they are highly resilient, with an impressive capacity to sustain in the dynamic social-ecological spaces of the dry lands.

They make an enormous contribution to social, environmental and economic wellbeing at the regional, national and local levels. There is a critical need to strengthen the capacity of pastoralism to operate in more sustainable pathways

#### **Case study**

# Camel pastoralists in Sudan

# **Traditional Nomadic System**

This system is dominant in the geographical zone between 13°N to 16°N (Northern part of the camel belt).

This is typically practiced by the Kababish tribe in Northern Kordofan State. The camel herders are continuously on the move in response to availability of grazing and water supplies.

Mobile pastoral of camel is under pressure because of multiple changes in the production environment.

Increasing human population pressure on pastoral grazing areas and the economic implications resulting from diseases and lack of veterinary services are some of the factors that adversely affect traditional camel production.

Additionally, reproductive performance is low in camels due to late first parturition, long parturition intervals, and high calf mortality due to sudden death prevalence among camel calve.

Improvement of the reproductive performance and reduction of animal losses by management measures that are applicable to a mobile system appear to offer possibilities of increasing camel productivity and capacity to support the increasing human population.

### Transhumant or Semi-Nomadic System

In eastern and southern regions of the camel belt in Sudan and is practiced by semi-nomadic tribes.

In this system a degree of settlement is experienced during the rainy season where rainfed agriculture is practiced for stable food production and the crop residues provide feed supplement for camel populations.

In Eastern Sudan practice a transhumant mode of range utilization. They move from one area to another following certain migratory routes, e.g. the Rashaida spend the rainy season (July - October) around Kassala and move about 400 Km to spend the dry season (March - June) in the southern fringes of their traditional zone in Doka area.

Members of the Shukria, Lahaween and Kawahla tribes stay in Butana plains during the rainy season, either to the south (Gadaref) or to the southeast along the Atbra River course.

Camels' pastoralists have to balance the natural requirement of their camels with the need to prevent overgrazing and maintain range productivity.

The camels owners can clearly explain in details of the topography and landscape where they once herded their animals; types of plant growth, species diversity from one area to another, camel preferences in different seasons, plant saltiness, or tell from the smell of the milk production when eaten by camels, also know which species are useful for medicinal purposes.

#### The constrains facing camel pastoralists in eastern Sudan

Animal herders in Sudan are agro-pastoralists, leading a nomadic life combined with minor crop production activities for about four months of the year.

The camel pastoralists are always moving over large areas in search of food and water for the camels.

During their continuous transhumance, camels are affected by many production limiting factors such as diseases, range and pasture limitations, water scarcity, high calf mortality, and recently, security problems.

There were three systems of camel production in the study area (Table 2), namely nomadic, seminomadic and sedentary and they represented 58.8%, 30.9% and 10.3%, respectively.

Nomadic tribes in the study area were represented by Lahaween and Rofaah tribes and their dwelling type was tents made from Hair and wool, and the semi nomadic tribes were represented by Kenana and Rashaida tribes and their dwelling type was cottage made from tree branches and sorghum stalk.

The sedentary tribe was represented by Shokria tribes and their dwelling types were buildings made from either mud or bricks with cement.

# Shortage in water

Information collected from water Corporation of Gedarif state, the amount of coverage of drinking water to the animal population in the state is about 50%, which means that a lot of efforts and funds must be spent to increase the drinking water coverage for livestock in the state.



# High taxes

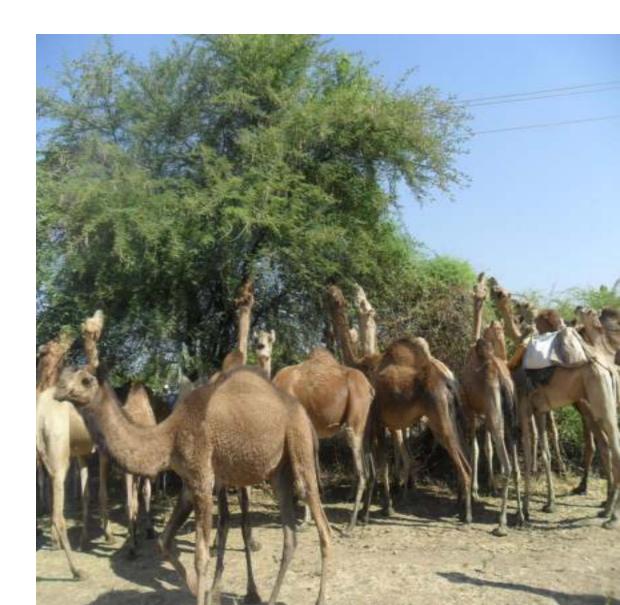
There are many complains among the camel herders and owners from high market taxes and other local governmental taxes (district), consequently this may lead the camel owners and herders to abandon the commercial activity concerning camel business to other types of activities for their living.



# Shortage in pasture and fodder

The main sources of live stock fodder in the area is grazing and browse provided by natural vegetation but because the natural pasture in this area is increasingly diminishing by the expansion of mechanized agriculture farming, the camel herders and owners become increasingly dependent on crop residues.

The camel owners and herders are becoming increasingly unsatisfied by this situation because of the high price of crops residues imposed by the farmers and the competition among the three system of camel production.



### The losses due to theft of animal

Theft of camels occurs during the wet season when a lot of ethnic group are found in one area, but it much more in camel production area.



### Disease control

The Ministry of animals' resources and fishers (Gedarif State) is responsible body for livestock disease control.

The Ministry mainly targets its health services towards cattle, sheep and poultry while little services are targeted towards camels. The main camel diseases in the Gadarif State are mange (29.3%) and Trypanosomiasis (23.3%).

Mainly the camel herders practice traditional treatment for most disease (firing) and rarely take their sick camels for proper veterinary treatment to the major veterinary hospital in the towns.



Low level of education among camels mobile

pastoralists

There is a high percent of family members who are Illiterate because they did not find a chance for education. Illiteracy among the herd's owners and their families reached as high as 69.78 %. This indicates the need for appropriate systems for education to suit the camel herders and improve their life standard.



### Capital of investment

Other constraints to camel production in Butana pastoral region included lack of enough capital for investment, labour problem and marketing shortages.

These constraints may indicate that changes from subsistence to commercialization were already well advanced in the area.

Thus, it would be expectable that labour and capital constraints would assume more significance in the future, if the more pressing problems of pasture, veterinary services, and security and water shortages received proper attention.

# THANKS FOR YOUR ATTENTION

