## PROMISING RESILIENCE PRACTICES





# **Demarcation of livestock routes**

Livestock route demarcation is an old practice in the Sudan. It involves delineating the line that organises the seasonal movement of livestock from dry season grazing grounds to wet season grazing areas. There are other routes assigned for trekking livestock to main livestock markets

### Introduction

Seasonal livestock migration from one grazing ground to another one is guided by the availability of pasture, water and to escape flies during the wet season. Whole pastoral families and/or households move with herds. There is a division of labour for men and women during the movement trips and when they stop to rest on the routes.

Demarcation of the routes is done to reduce potential conflicts or disputes between farmers and herders over accessing natural resources. The pastoral communities have their own weather or rainfall prediction system and very comprehensive information sharing on pastures, development during the rainy season.

However, when there is shortage of rains during the season, they do not proceed to the summer grazing grounds and they may cut their seasonal movement in the middle of the route to return to their wet season grazing areas. Livestock routes are inherited cultural traditions within the livelihood of pastoral communities in the Sudan and many social events and traditions are attached to the culture and season, including marriage ceremonies, poetry, shopping or marketing seasons.



#### INTERVENTION AREA Market access, trade and financial services

LOCATION Republic of Sud<u>an</u>

#### STAKEHOLDERS AND PARTNERS

The main institutions, partners and the main implementing agencies involved in such practices are those that benefit from and interact with mobile communities. This includes the range and pasture localities' authorities, Groundwater and Valleys General Directorate offices, administrative units, forestry department, veterinary services, vaccination, police forces...etc

#### BENEFICIARIES

Pastoral households or communities and those of transhumance mode of living. If the migration is for marketing then the main role belongs to men. When it is for the purpose of finding grazing grounds, the whole family of households participate

- Specialised committees with members from technical departments were established to review the feasibility of proposed routes and prepare a convincing argument with justification for demarcating a route for livestock mobility between grazing grounds. These committees represent the stakeholders and representatives from the communities that propose the coordinates for the route.
- After an agreement is reached on the livestock route, coordinates for the livestock routes and the resting areas along the route are recorded and maps are produced.
- The vaccination teams for children and livestock establish their seasonal teams to catch up with the mobile herds and families along the livestock routes.

#### Results

Major livestock trade routes with 1-4 km width have been demarcated, regulated and maintained by the respective states. More importantly, the states facilitated the digging of reservoirs (haffirs) which harvest water from surrounding land during the rainy season and can then be used as a source of water for livestock in the dry season.

The Sudan Livestock Route Company, which is affiliated to the Animal Resources Bank, was implemented in an area running from the west of the country near Nyala, along a distance of about 1,000 km, and then up to Khartoum. It included a secondary southern route (a dry season route) and followed the railway line closely for the most part. The project activities were concentrated mainly in the states of Northern Kordofan and Southern Darfur.

At completion, 50 water yards along the livestock market route were operational. These water yards had 83 tube wells on two main routes over a distance of about 2,000 km. The water yards were equipped with water storage tanks, selling facilities, staff housing, vehicles for delivery of supplies, and radio equipment. People who live close to the water yards would have access to them, as would the pastoralists on seasonal migration.

The distribution of the water yards was well planned and enabled the animals to obtain water, thereby reducing losses due to mortality and lower weights. The project also had a positive impact by diminishing the trek times along the route, cutting trekking and holding costs and boosting the marketable meat value and the incomes of pastoralists and livestock traders.

Each route is designed based on the nature of the ground/ areas that the route is crossing, to ensure there are resting areas (usually with a radius of 5 to 10 km) to enable resting families and herds to access feed and water sources. Normally the distance between resting grounds varies between 20 to 30 km and the type of livestock moving or herd composition. For example for camels the distance could be larger and for small ruminants the distance between resting areas are shorter.

#### Constraints

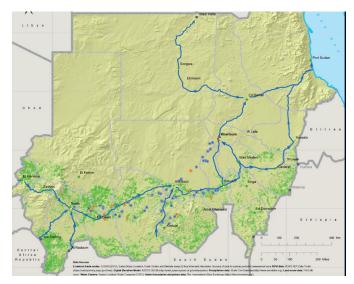
- The number of haffirs is inadequate given the high number of animals and the long distances that they are transported along.
- Most livestock must trek from Sudan's major livestock producing areas to Khartoum and main export markets. During the dry season, when water and fodder are scarce, this is an inefficient form of transportation that takes considerable time. Animals coming from Darfur and North/South Kordofan sometimes trek up to 45 days to reach markets around Khartoum. This results in significant loss of body weight and affects animal health, hence the need for water/fodder interventions.

#### **Replication and upscaling**

The process for demarcation is very participatory in nature through the tribal leaders in the specific areas and local authorities. The cost of demarcation of livestock therefore depends on the surveying costs, erections of the demarcation poles, awareness campaign for the demarcated routes, and cost for construction of water points and rehabilitation or reseeding of resting grounds along the routes.

#### Additional information

- Dirani, O., M. Jabbar, and B. Babiker (2009). "Constraints in the Market Chains for Export of Sudanese Sheep and Sheep Meat to the Middle East." International Livestock Research Institute (ILRI) Research Report 16. Ministry of Animal Resources and Fisheries, Sudan and ILRI, Nairobi.
- FAO (2017). Water and fodder availability along livestock trade routes in the Horn of Africa: A baseline report.



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