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# Maps of Livestock Routes Show the Way to Improved Livelihoods for Pastoralists

Livestock routes are essential to herders in eastern Africa, who use them to access water, feed and markets. But, political and economic marginalization is putting pressure on the natural resources pastoralists rely on, causing conflicts and loss of value. Mapping current land uses has improved stakeholders' understanding of how to protect the mobility of livestock and people as is required for sustainable pastoral systems.

# **Key messages**

- Blocked livestock routes threaten livelihoods
- Mapping routes with national governments leads to renewed commitments
- Protection and services result in triple wins: increased incomes, fewer conflicts, boosted trade



# **Blocked livestock routes cut off pastoralists**

Pastoralists in the dry parts of eastern Africa are challenged by the impacts of frequent droughts and severe land degradation, and moving livestock from place to place in order to access water, food and markets is necessary to make productive use of the land.

However, formal land tenure is weak in the region, and adequate land use planning is lacking. Land can be leased to investors for irrigated crop farming with little, if any, thought or provision for maintaining pastoralists' access to rivers and grazing pastures. Because pastoralism is generally not acknowledged as a land use with a comparative advantage in drylands, pastoralists are poorly placed and have little power to protect their land and resources from encroachment by outsiders.

As a result, conflicts between pastoralists and other land users are increasing. In Tanzania, clashes between livestock herders and farmers have even led to deaths: in Kiteto district alone, more than 34 people were killed in such conflicts between 2013 and 2015.

# Maps may get herders back on track

Scientists resolved to map traditional livestock routes in Tanzania and Ethiopia to raise awareness of their critical importance, not only for local livelihoods but also for economic growth in the Horn of Africa.



In Tanzania, scientists worked with the Tanzania Livestock Research Institute to produce a national map of livestock routes. Six teams of livestock experts focused on different regions of the country and marked major routes, infrastructure and service points such as markets, watering spots, holding grounds and check points on topographic maps. Scientists are planning to transfer the maps to a digital knowledge management system to be hosted and used by national governments.

In Ethiopia, a meeting was held to share experiences from other countries and to raise awareness and commitment for developing a national strategy to strengthen and protect livestock routes.

# **Underserved routes result in losses**

Researchers found that livestock routes receive poor protection and that services are often non-existent. This means that the health and safety of livestock and livestock herders using these routes are at risk, and it often happens that livestock arrive at their destination in much poorer condition than when they set out, resulting in lower prices and sales.



The maps are intended to help investors and government to determine the most appropriate places for offering livestock services, such as veterinary consultation, disease control, feed and water, as well as services for herders, such as health centers.

Potential areas of conflict can also be identified using the maps. It is particularly in areas where routes pass through strongly developed agricultural land that extra attention may be required to prevent disagreements, especially in times of drought.

# New commitments lead to triple-win

In Tanzania, the maps have influenced the development of Tanzania's Livestock Modernization Initiative, led by the then Ministry of Livestock and Fisheries, which specifically mentions the need to map and protect livestock routes. The work also contributed to a Manual on Participatory Rangeland Resource Mapping in Pastoral Areas in Tanzania, which is available in Swahili and will be distributed in 2016.

In addition, the maps have been used by the private sector for determining where to establish new businesses: an Ethiopian investor, for example, used the maps to identify where in northern Tanzania a new abattoir would be best situated, that is, where several livestock routes converge.

Finally, the mapping of livestock routes in Tanzania and Ethiopia is being picked up by other actors in the field: a recently launched third phase of the Sustainable Rangeland Management Project, supported by the International Fund for Agricultural Development (IFAD) and led by the International Livestock Research Institute (ILRI), will be mapping livestock routes in Tanzania at a more local level. Discussions with other IFAD country offices in eastern Africa about developing similar activities are ongoing.

Ultimately, the maps are expected to lead to better servicing and protecting of livestock routes, which in turn will result in a triple-win: improved livestock production and increased incomes for pastoralist and agropastoralists; a reduction in conflicts over land use and movement; and improved trade.

### Acknowledgement

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Outcome Story Coordinates	5	
Country:		Ethiopia and Tanzania
Region:		Eastern Africa
Agricultural livelihood system:	Pasteal Agroanter	Pastoral and agropastoral
Cross-cutting theme:	<b>†</b> †	Capacity development
CGIAR SLO:	8	Reduced poverty
SDG:	1 ਲੋਖਲ <b>ਡੈ</b> ¥ਜੈਜੈ	SDG 1: No poverty

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