

P a s t o r a l i s m

Progressing Policies that favour Pastoralists

5. Climate Change

The context

Climate change will have serious impacts on pastoral areas, including increased severity of drought. Yet discussion of the impacts has often been simplistic and polarised between those who predict catastrophe and those who point to pastoralists' ability to adapt, if the policy context allows. At the same time, there is controversy over the contribution of pastoralism to greenhouse gas emissions.

According to the study Croppers to livestock keepers by Peter Jones and Philip Thornton, boosting livestock production may be the only alternative to crop production for millions of poor farmers across Africa as climate change leaves land unsuitable for cultivation, yet remain viable for raising animals which are more tolerant to heat and drought. In addition to providing a buffer against the risks of climate change, livestock would enable farmers to take advantage of the increasing demand for meat and dairy products in Africa.

Policy implications

Donors need to invest in research and development:

- Locally-specific climate projections and research on the full range of climate change impacts
- Pilot dissemination of climate information, at various scales and various timescales, to determine what is useful to pastoralists and those who support them
- Research on the contribution of pastoralism to greenhouse gas emissions, and the positive opportunities for carbon sequestration on rangelands
- Action to increase pastoralists' resilience to climate change.



credit: WRENmedia

“We have always adapted. That is why pastoralism has already survived for thousands of years. With climate change we have to continue to adapt. But with our skill and our animals we produce food - meat and milk - in places where nothing else can be produced. And there is interest in how rangelands absorb CO₂. Community-driven research can help find the answers and shape the right policies.”

John Kamanga, Chairman of Olkirimatian Group Ranch, Kenya

Victims or adapters?

Projecting future climates for pastoral areas is fraught with uncertainty. Discussion of the impacts has been polarised between those who fear pastoralism is unsustainable, justifying withdrawal of support and forced settlement of pastoralists, and those who see its economic contribution and emphasise pastoralists' ability to adapt, given the right policies.

While recognising both the ability to adapt and the seriousness of the threat, what is needed now is an increase in the availability of local climate projections. Pastoralists, and the various agencies concerned with pastoral development, need to have climate risks presented clearly to them, and be involved in discussing the implications and the responses.

Ways forward

- Pastoral development needs nuanced research into the impacts of climate change, including bush encroachment and new patterns of animal disease
- There is a need for research and programming on the dissemination of climate information over various timescales
- In-depth research on the contribution of pastoralism to greenhouse gas emissions and the feasibility of mitigation through carbon sequestration is required
- Action should be taken now to increase pastoralists' resilience to climate change by helping them manage drought, fostering livelihood diversification and education, and giving pastoralists a voice through empowerment and good governance.



Community driven research into drought involves those affected in shaping solutions.

Evidence of change

In 2009, whilst in the grip of the worst drought for 50 years, the Maasai of the South Rift Valley of Kenya asked the research team based in their midst to help them design a drought survey. Aware of climate change predictions and that pastoralism could be seriously affected, their aim was to be able to understand the drought's effects and, where possible, to learn how to be better prepared for future water and grazing shortages. Community research assistants were commissioned to question pastoralists across three neighbouring areas about the effects of the drought and the coping measures being adopted. They monitored the extent of the grazing available in different areas and reasons why some areas offered more feed than others. They investigated the immediate impact on families as well as the anticipated longer term implications for schooling, grazing management etc. Listening to elders' previous experiences of drought and traditional methods of grazing conservation or 'grass-banking' was a priority, as well as recording how much people were paying for bought-in feedstuffs and whether in future they would be interested in conserving grass by making hay or storing locally available by-products. A follow-up survey was also planned, in order to capture information, attitudes and behaviour post-drought.



“We are the first to notice change in climate, the plants which suffer. Our camels graze a little from each plant and move on, always moving. Camels don't spend the whole day eating one tree. They just have two or three bites and then move on. They are totally crazy those who say our animals aren't friendly for the environment. For the desert they are. We will travel long distances not to destroy a grazing place. When we are restricted the problems begin.”

Habdiram Raika, pastoralist, India