

April 2014 About this project

Name

Biodiversity, Ecosystem Services, Social Sustainability and Tipping points in East African drylands (NE/I003673/1)

<http://www.espa.ac.uk/projects/ne-i003673-1>

Principal Investigator

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Partners

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ASARECA network

Tanzania Wildlife Research institute

Timeframe

April 2011 to September 2013

Objective

To investigate how policy and economic incentives can improve the management of East African rangelands through their effects on pastoralists' livelihood choices.

Summary

East African rangelands are hotspots of biodiversity and livestock production, but also of wildlife decline and pastoralist poverty. The 'BEST approach' uses economic games, choice experiments, and modeling to explore pastoralist household decision-making and reveal the relative values placed on livestock, crops, cash investments and conservation income.



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BEST Practice

African drylands like those in Kenya and Tanzania are fast approaching a tipping point where grazing lands are becoming enclosed, thereby restricting mobility of livestock and adversely impacting livelihoods as well as driving drastic wildlife decline. BEST explores policy and economic incentives to rebalance the system.

East African rangelands are famous for their pastoralist populations like the Maasai, whose livestock production is important both for their livelihoods and the local and national economy.

Both domestic and wild grazing animals need open and contiguous rangelands. However, due to changing and conflicting policies on land tenure and natural resource management, grazing lands are becoming increasingly fragmented and impoverished. Households face critical decisions on land use with major tradeoffs impacting social and environmental sustainability.

Given these tradeoffs, how do different policy and economic drivers shape household decisions on land use choices, and with what ecosystem services and poverty implications?

The Biodiversity, Ecosystem Services, Social Sustainability and Tipping Points in East African Drylands (BEST) project has aimed to answer this question by setting itself five specific objectives, along with sharing knowledge with partners through collaborative working, stakeholder engagement and a wide range of communication tools ranging from policy briefs to peer-reviewed journal articles.

The BEST approach

BEST aimed to understand how different policy and economic drivers shape household decisions on land use choices. The specific objectives of the research included:

- 1 Developing a conceptually innovative approach focusing on the intersection of changing land tenure and NRM policies.
- 2 Leveraging existing datasets to develop lessons from cross-border comparisons between Kenya, Ethiopia (Boran) and Tanzania Maasai systems.
- 3 Modelling household decisions on how they use dryland resources in different policy and economic contexts.
- 4 Developing policy scenarios to support better ecosystem management and illustrate the impacts of poor people's resource use choices.
- 5 Building on local knowledge and engaging stakeholders through consultations, workshops and a media presence.

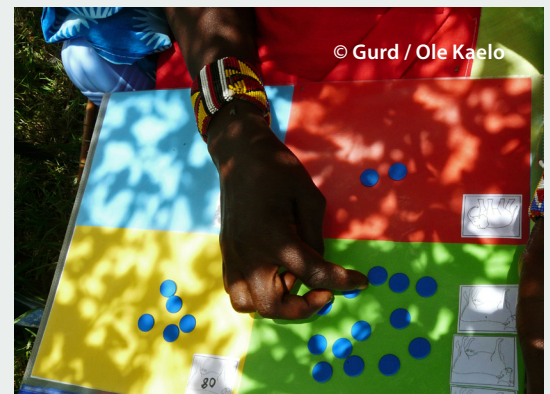
Leveraging ESPA funding

Team members have built on BEST to develop and contribute to new research in a number of fields, attracting further funding from multiple institutions, including:

- › ESPA 2013-6: Poverty and ecosystem impacts of payment for wildlife conservation initiatives in Africa: Tanzania's Wildlife Management Areas
- › ESRC-DFID 2013-2016: Measuring complex outcomes of environment and development interventions

BEST's Co-Investigator, Mohammed Said, has also had an impact on development policies:

- › Contributing to the task force for Kenya's natural capital valuation programme to develop a Biodiversity atlas, a key instrument for developing natural resource institutions and management policies.
- › Mapping wildlife corridors for Kenya's Vision 2030.



BEST Economic Games

In the photo above, a Maasai herdowner is playing one of the BEST economic games. The board sections represent communal, private, conservancy and national protected area land zones. The counters represent wealth invested as livestock grazing on communal or private land, or illegally in the protected area; or as cash-earning activities yielding regular revenue.

The games show that, as private land or conservancy options become available, people tend to invest more of their wealth in cattle. Choices to graze illegally are common, but very sensitive to context, with strategies shifting with household wealth and land tenure context.

Two-way learning

Given the project has recently been completed, it is still too early to demonstrate significant and sustainable impact. However, there are already positive results from the activities undertaken:

- › Policymakers and practitioners have a better understanding of: i) the values that pastoralists place on their livelihood activities; ii) the decisions they make as a result of this improved understanding; and iii) the implications of these decisions on their livelihoods.
- › Pastoralists are more aware and able to articulate the tradeoffs they face when negotiating with policymakers, practitioners and entrepreneurs.

The BEST ideas

The BEST conceptual framework and ideas behind it have shaped the projects listed above, among others, and are promoted by the BEST team in a wide range of advisory roles. Following the ESPA Science Conference, the Principal Investigator Prof. Katherine Homewood was invited to join the ESRC Expert Advisory Group for International Development, shaping emerging research agendas.

BEST ideas are being taken forward in the recently launched ESPA-funded PIMA project evaluating social and ecological outcomes of Tanzania's Wildlife Management Areas.



Next Steps for BEST

To further promote and research the concepts of the BEST project, the team intends to focus on:

- Local language media
- Revisiting communities with field assistants to better assess impact
- Developing an app based on BEST's economic games

For more information on BEST, please go to: www.ucl.ac.uk/best

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