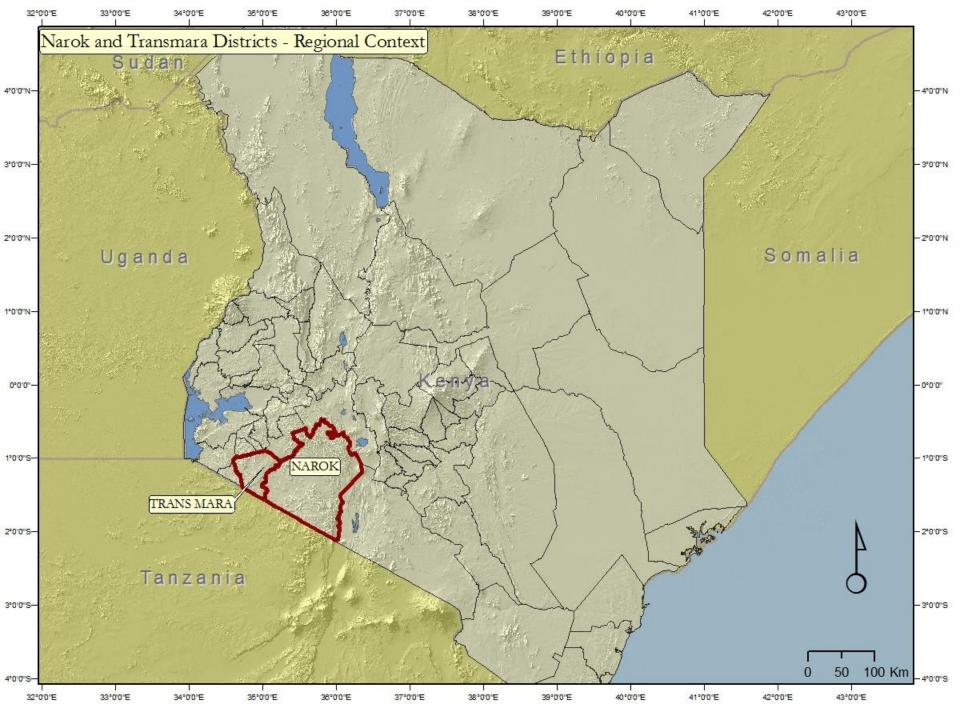
Mobility and sustainable Pastoralism in Southern Kenya

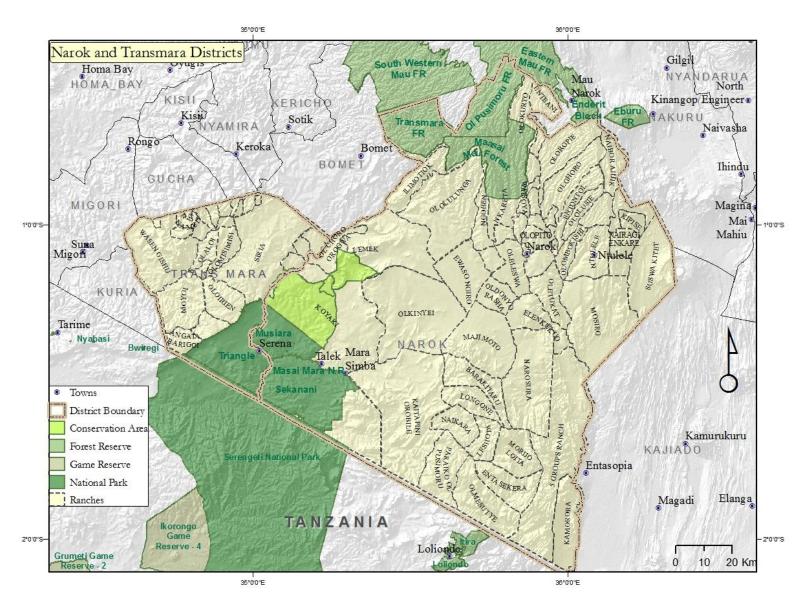
'The Future of Pastoralism in Africa' Addis Ababa

March 20th -23rd, 2011

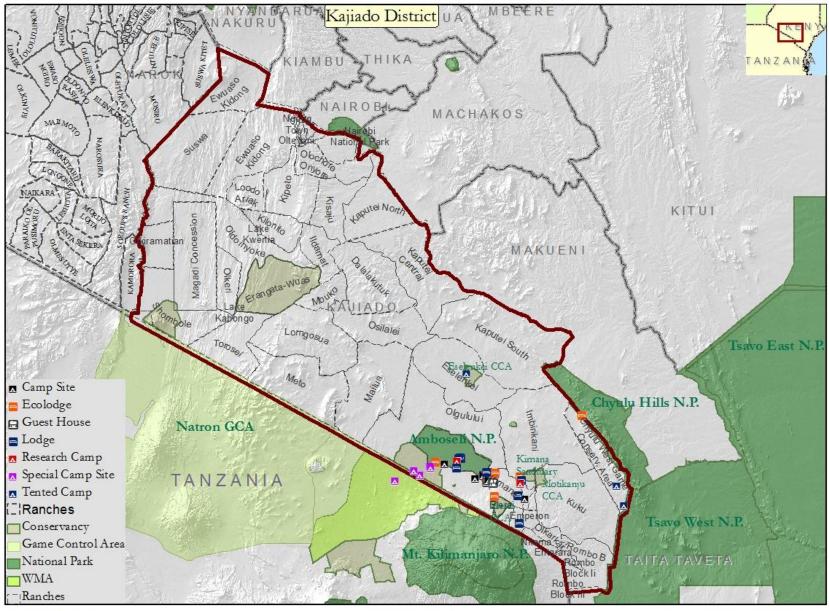
David Ole Nkedianye, Ph.D.



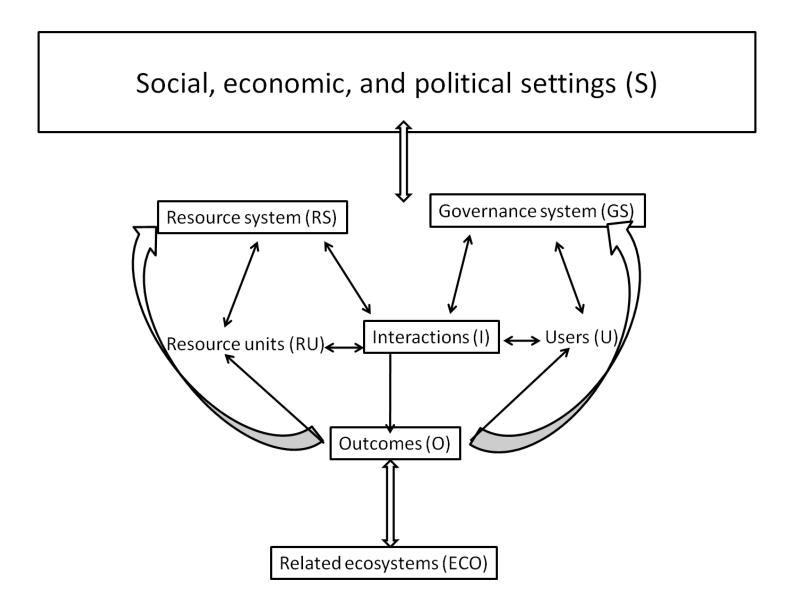
Narok County



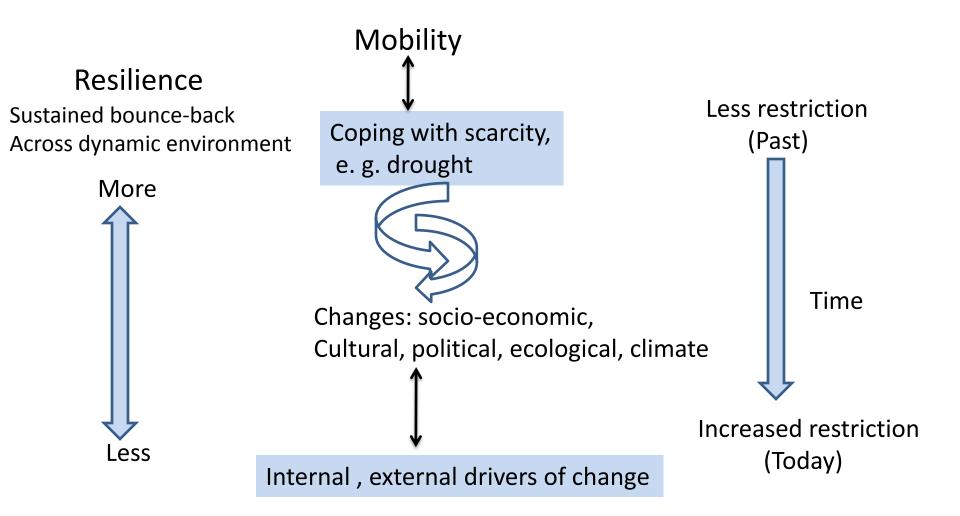
Kajiado County



The social, political and ecological interactions



Complexity in socio-ecological dynamics influencing mobility and resilience over time



Some Drivers of Mobility

- Herd size: the larger the herd the higher the need for herder to move
- Severity of drought: when there is no better option – 'move or perish'
- Available, "cost effective" choices, especially if teaming up with friend, relative
- The absence of risks on the way, & destination

Cont.....Drivers of mobility

Availability of labour for herding, finances

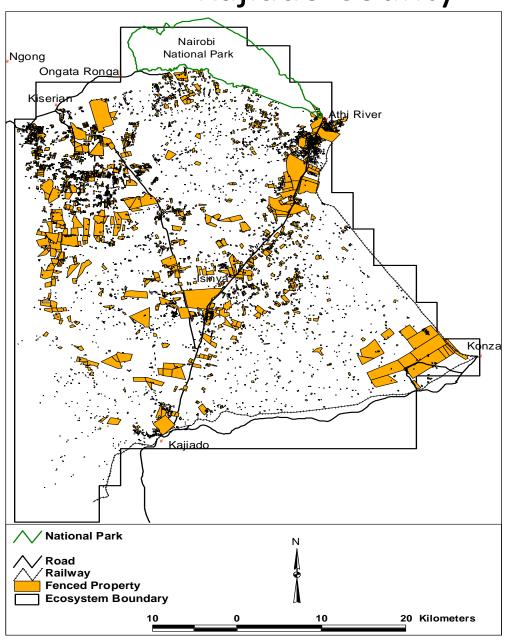
Urgent and choice (regular)

Rainfall gradient, erratic nature in spread and timing

Some salient challenges

- Land fragmentation: For example Group Ranch sub-division in Northern Kajiado, Southern Kajiado
- Dry-season refuges being sub-divided: high potential north-eastern areas, slopes of Mt. Kilimanjaro
- High rate of land sales, rampant land speculation, unsustainable plot sizes

Land fragmentation: the Kaputiei open plains, Kajiado County



Climate change, water and forage issues

- Over-extraction of water from swamps and rivers, springs, and siltation
- Higher temperatures will make water less available
- Pastures will dry up faster
- Frequent movement may become a necessity
- Unsustainable extraction of water (flower farms, eucalyptus trees...)

Demographic pressure

- Rapid population pressure from surrounding areas: urban, other agricultural areas
- Population density relatively low in Maasailand, but growing
- More of the dry season grazing areas getting settled on, fragmented and degraded
- Livestock mobility increasingly hampered

Droughts and other natural calamities

- Frequent droughts are pushing pastoralists to move more frequently and farther away
- Livestock mortality issues, off-take, costs
- Drought mitigation strategies
- Spread of diseases, vet. extension services
- Timely and reliable early warning on droughts

Reversing the tide: Land use planning

- Group Ranch protection against fragmentation
- Planning for dry and wet season grazing
- Delimitation of water sources e.g. springs, swamps, forests and salt licks
- Internal regulation of numbers through education on land holding dynamics and profitable off-take
- Sustained quality education to ensure meaningful diversification options

...Reversing the tide..Land use planning

- Strict planning of urban areas to delimit urban sprawl
- Clear zoning of rangelands with land subdivision limits clearly outlined
- A paradigm shift on land ownership and use
- Strong, consistent political support for longterm plans & economic empowerment of pastoralists
- A master plan for pastoral lands

Strengthen pastoral civil society and leadership

- Exert consistent pressure on policy makers
- Help to set the agenda for problem-oriented research
- Information and education for communities on challenges, opportunities, & emerging alternatives
- Empowerment of women and the youth information, education, to build resilience

Some key terms and readings

Resilience

- The capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity and feedbacks
- (see Walker et al. 2004; Berkes & Turner 2006; Armitage & Johnson 2006)

Fragmentation

- The isolation of habitat by creating barriers to movement like fences, roads or other hindrances that restrict the interactions between consumers and resources.
- (see Reid et al. 2008; Behnke 2008)

Diversification

- The process by which households construct increasingly diverse livelihood portfolios, making use of increasingly diverse combinations of resources, assets and activities
- (see Niehof 2004; Homewood et al. 2009b)

Acknowledgements

 The African Wildlife Foundation (AWF) for the Kajiado and Narok County maps

 The International Livestock Research Institute (ILRI) for the Kitengela fences' maps