BEST

Biodiversity, Ecosystem Services, Social Sustainability and Tipping Points in East African Drylands

Conservation and wildlife in Kenya

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BEST Project Policy Maker, Practitioner, Community User and Researcher Workshop
ILRI, Nairobi, 13th August 2013

What is happening in Kenya Rangelands

1. Biodiversity loss – wildlife declined by 50-70% in ASALs in the period 70s-2009 (Norton-Griffiths & Said 2010; Western et al 2009)

2. Livestock populations – vary year to year in response to rainfall, increase 0.6% per annum, high offtake

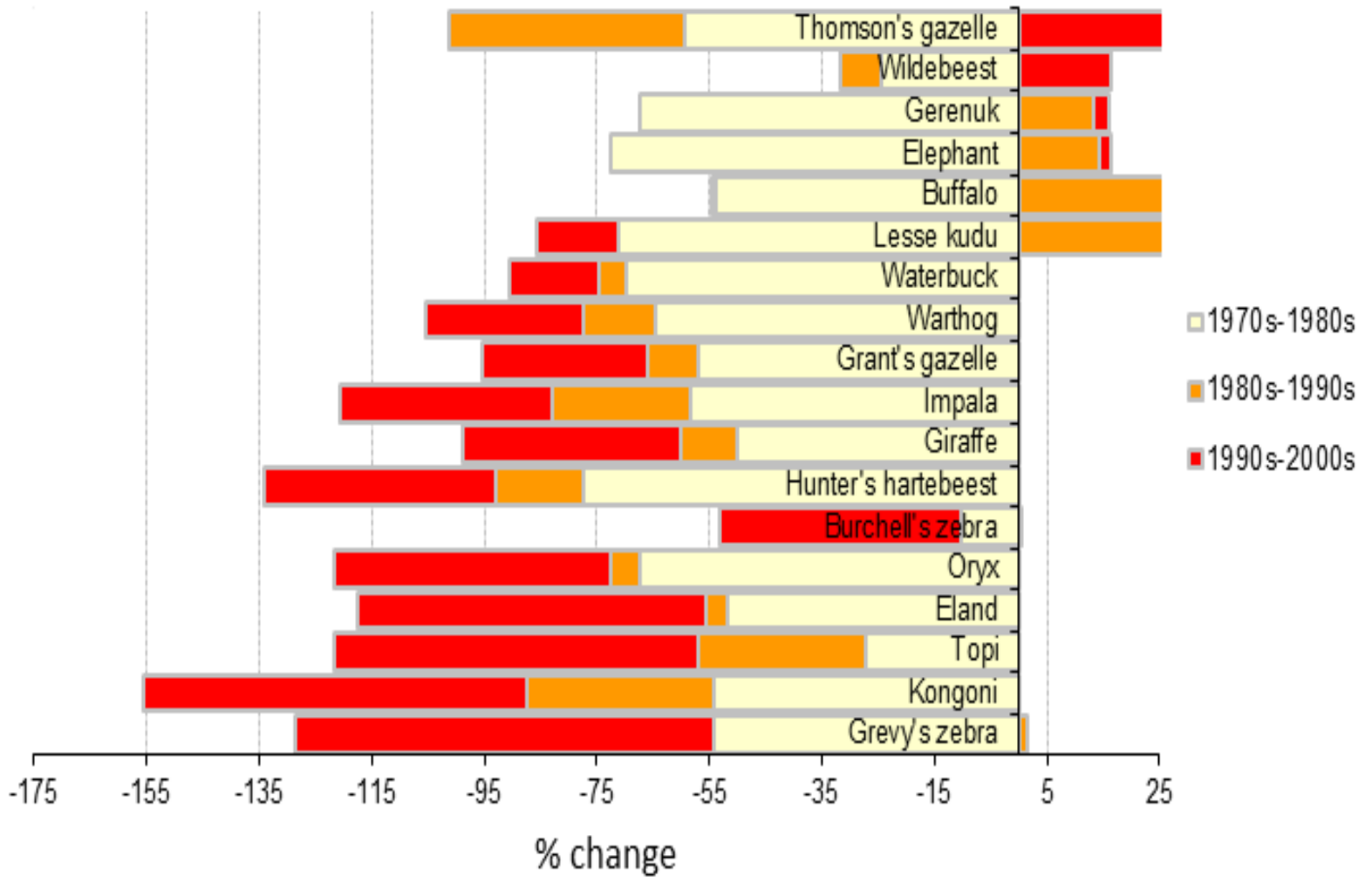
3. High poverty rates in pastoral communities

4. Emergence of conservancies – more than 160

5. Initiative for communities to benefit from wildlife revenue - Payments for Wildlife Conservation (PWC)

Wildlife trend and Poverty

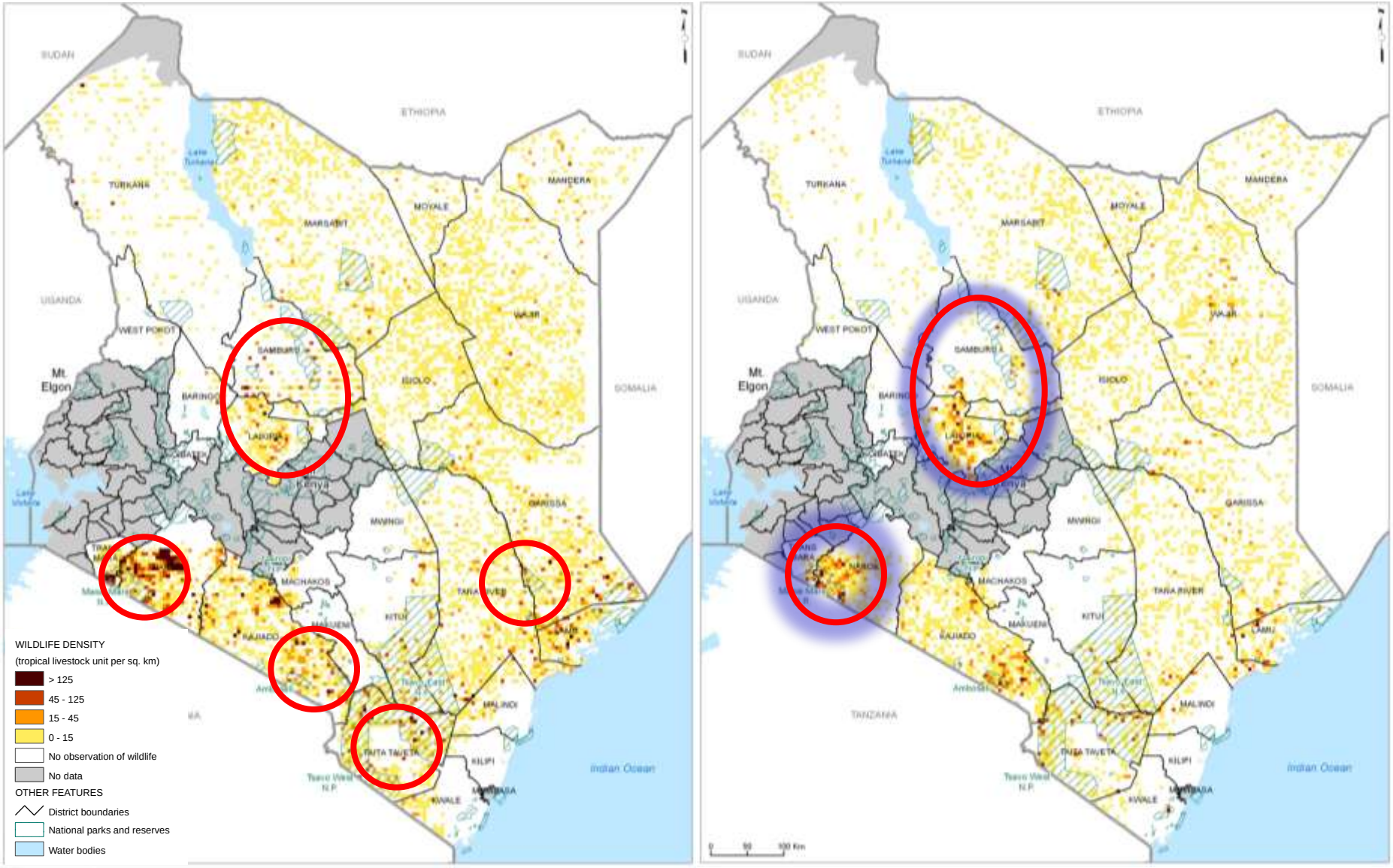
Wildlife trends in the Kenya rangelands between 1970s and 2000s



Source: Natural Capital Atlas, DRSRS

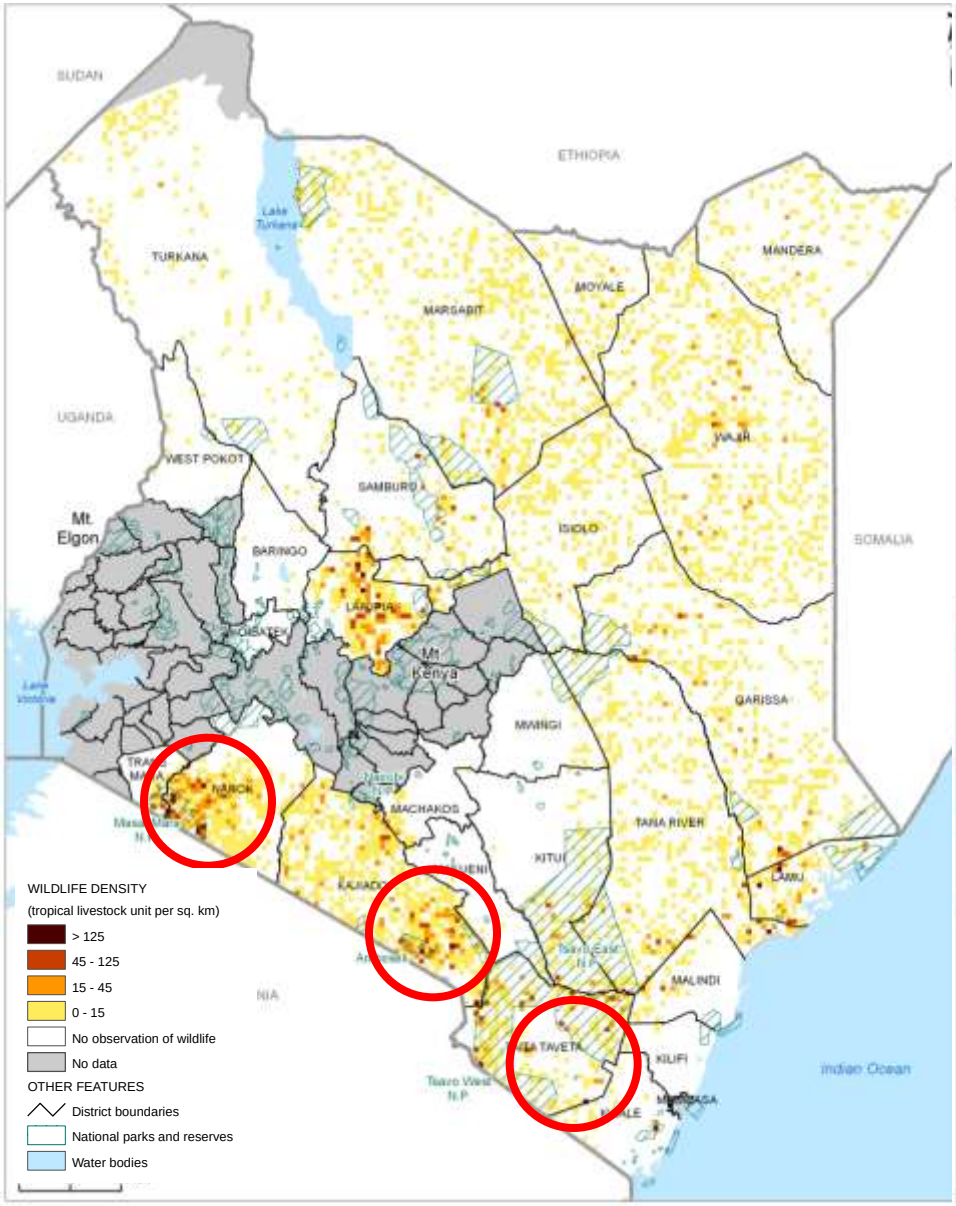
Wildlife Density1970s

Wildlife Density 1990s

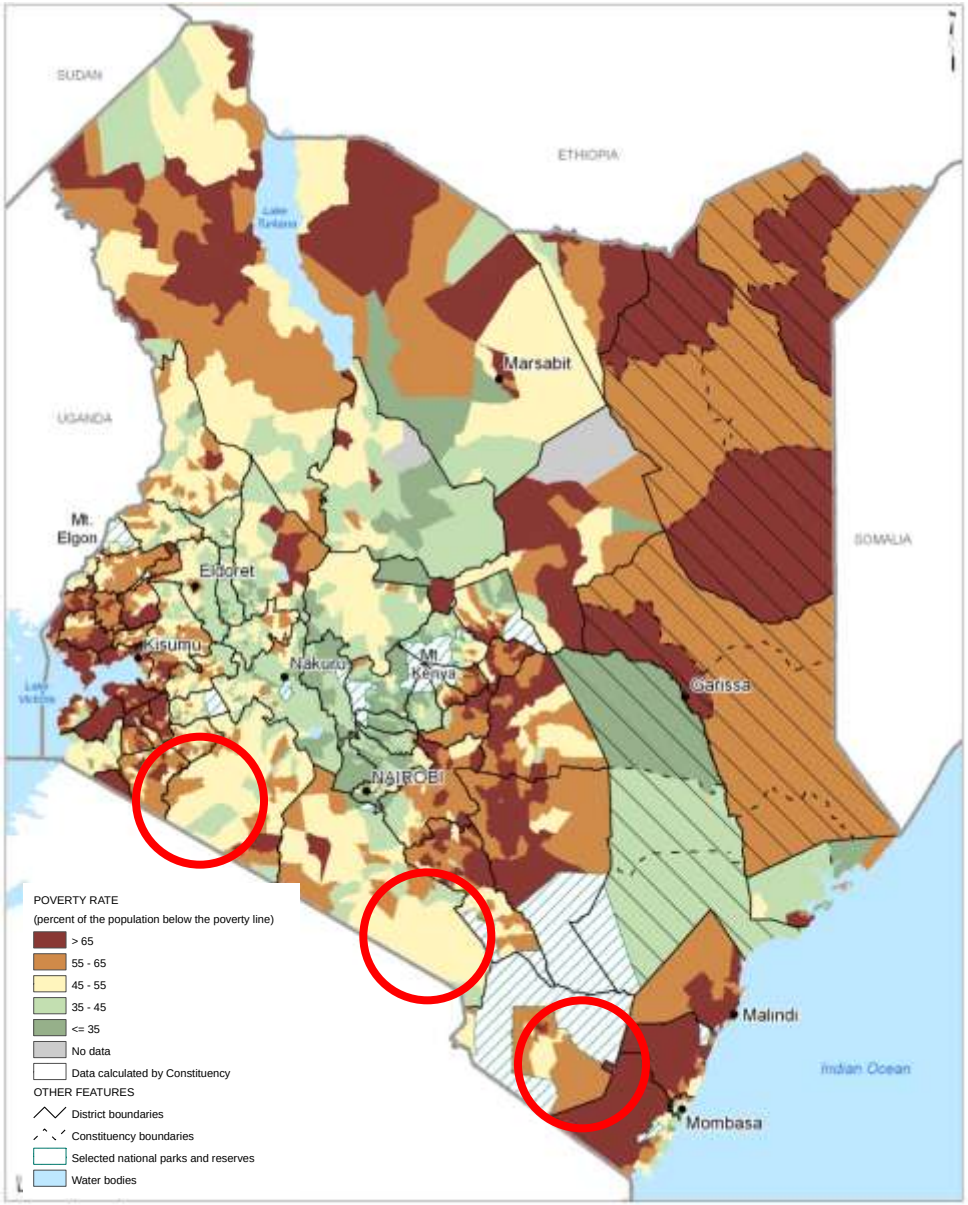


Source: WRI, ILRI, DRSRS, CBS 2007

Wildlife Density in 1990s



Poverty Rate in 1999



Source: WRI, ILRI, DRSRS, CBS 2007

Evolution of Conservancies

Photos: Rob O'Meara, Sarah O'Meara
Source of Information: Olare Orok Conservancy Trust publication

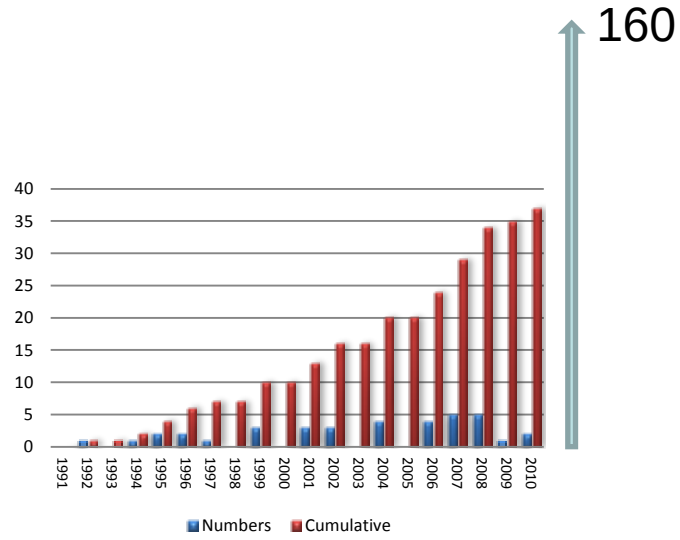
Shifts in Land Management in ASALs

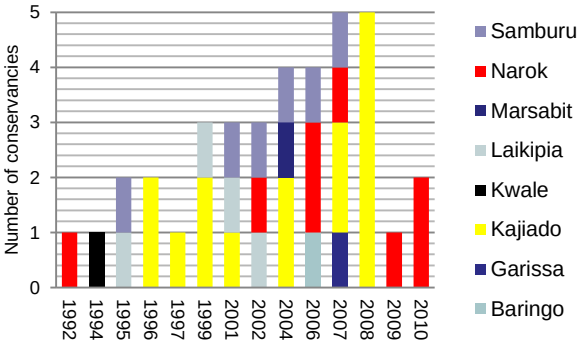
Land Tenure	Mobility	Tourism Benefits
Communal	Open	Latent
Privatized	Closed	Gone

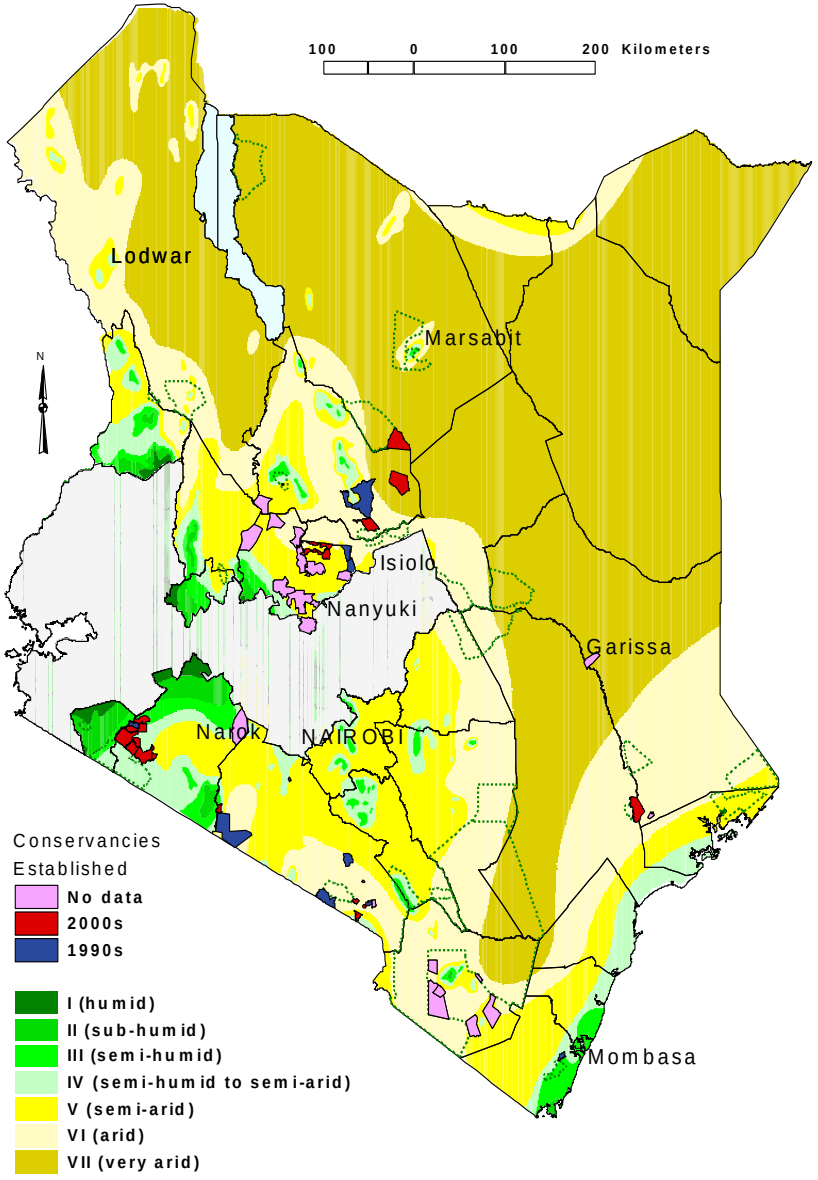
Land Lease

Payments for Wildlife Conservation (PWC)

Evolution of conservancies in the Kenya Rangeland

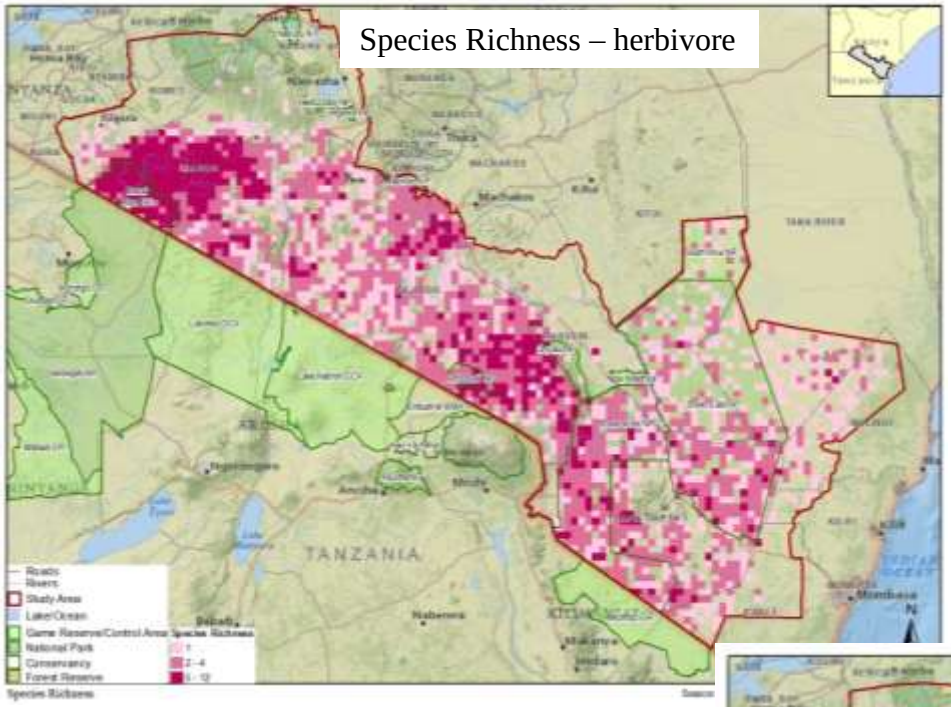






Source: ILRI 2012

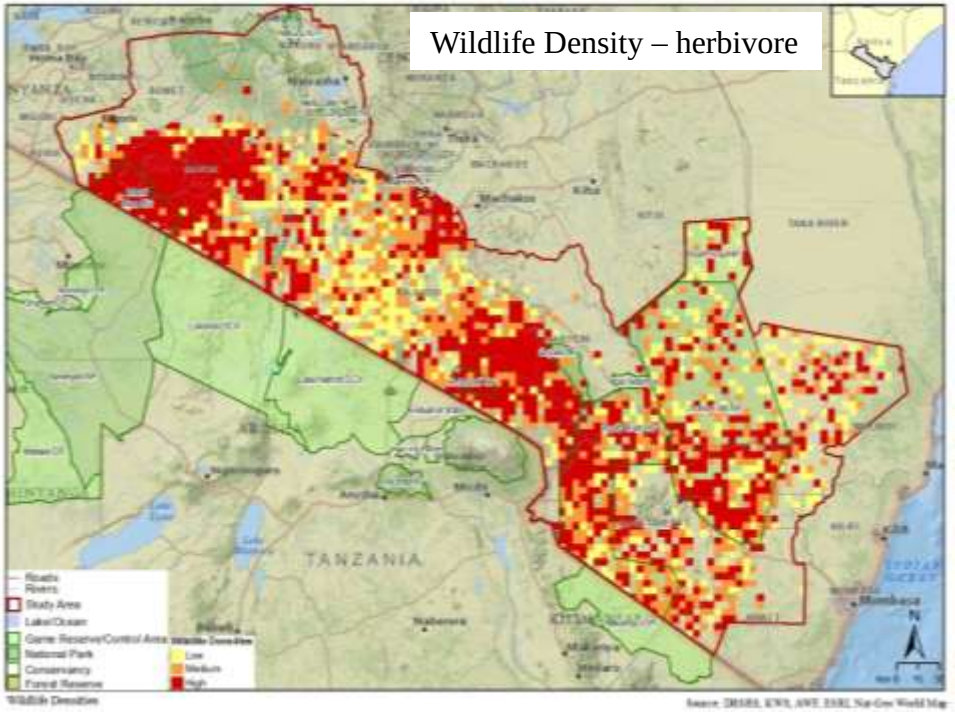
Species Richness – herbivore



Photos: Rob O'Meara, Sarah O'Meara
Source of Information: Olare Orok Conservancy Trust publication

Photo: Ron Beaton

Wildlife Density – herbivore



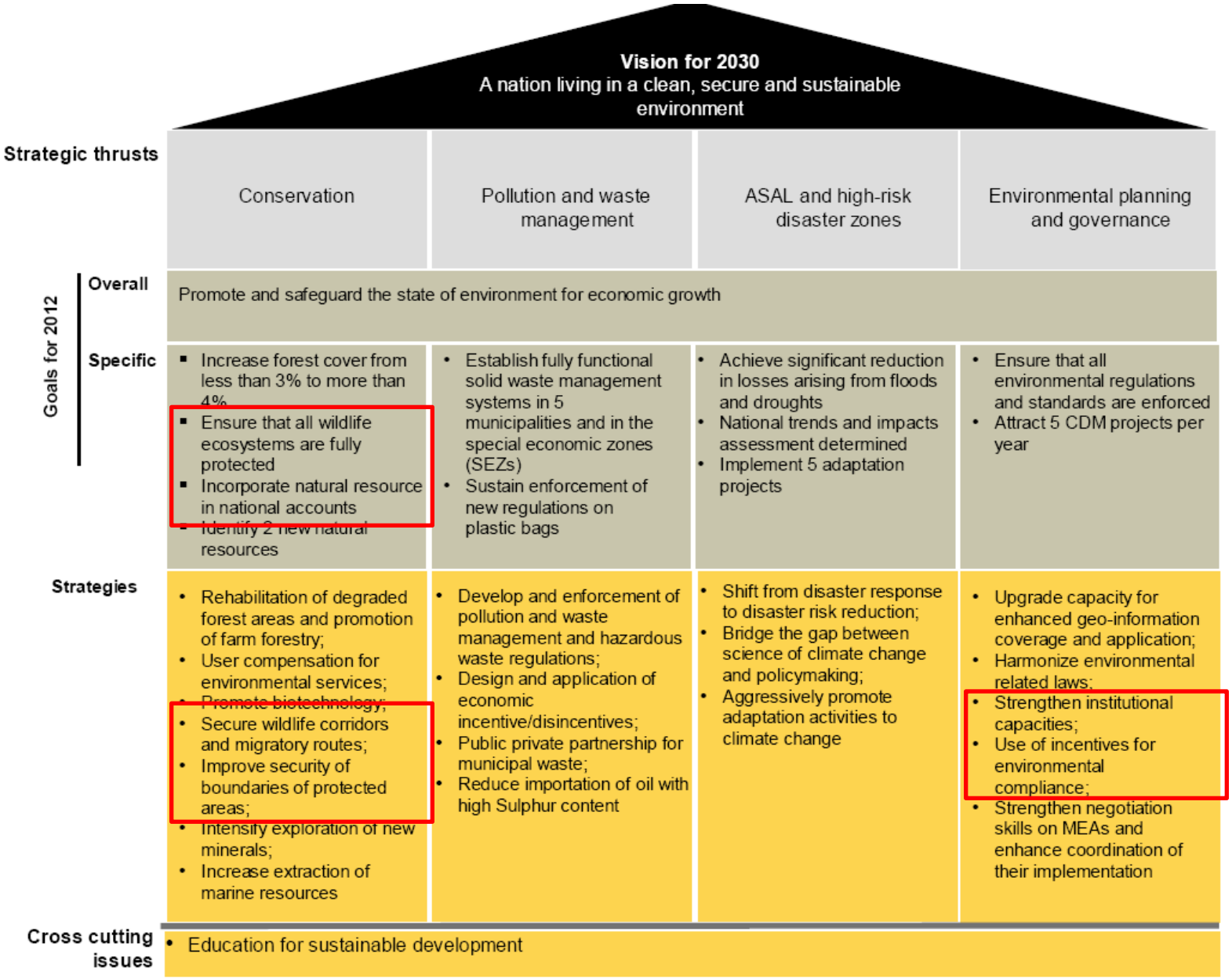
Source: DRSRS et al. in prep

Vision 2030

Securing Wildlife Corridors

Vision 2030

The Vision 2030 accords a clean, secure and sustainable environment prominence under the economic and social pillars inspired by the principle of maintaining ecosystems integrity and sustainable development.


Vision for 2030
A nation living in a clean, secure and sustainable environment
Strategic thrusts
Conservation
Pollution and waste management
ASAL and high-risk disaster zones
Environmental planning and governance
Goals for 2012
Overall
Promote and safeguard the state of environment for economic growth
Specific
Increase forest cover from less than 3% to more than 4%
Ensure that all wildlife ecosystems are fully protected
Incorporate natural resource in national accounts
Identify 2 new natural resources
Establish fully functional solid waste management systems in 5 municipalities and in the special economic zones (SEZs)
Sustain enforcement of new regulations on plastic bags
Achieve significant reduction in losses arising from floods and droughts
National trends and impacts assessment determined
Implement 5 adaptation projects
Ensure that all environmental regulations and standards are enforced
Attract 5 CDM projects per year
Strategies
Rehabilitation of degraded forest areas and promotion of farm forestry;
User compensation for environmental services;
Promote biotechnology;
Secure wildlife corridors and migratory routes;
Improve security of boundaries of protected areas;
Intensify exploration of new minerals;
Increase extraction of marine resources
Develop and enforcement of pollution and waste management and hazardous waste regulations;
Design and application of economic incentive/disincentives;
Public private partnership for municipal waste;
Reduce importation of oil with high Sulphur content
Shift from disaster response to disaster risk reduction;
Bridge the gap between science of climate change and policymaking;
Aggressively promote adaptation activities to climate change
Upgrade capacity for enhanced geo-information coverage and application;
Harmonize environmental related laws;
Strengthen institutional capacities;
Use of incentives for environmental compliance;
Strengthen negotiation skills on MEAs and enhance coordination of their implementation
Cross cutting issues
Education for sustainable development

Mapping Wildlife Dispersal Areas and Migratory Routes/Corridors
Southern Kenya Rangelands
Rangeland Ecosystems

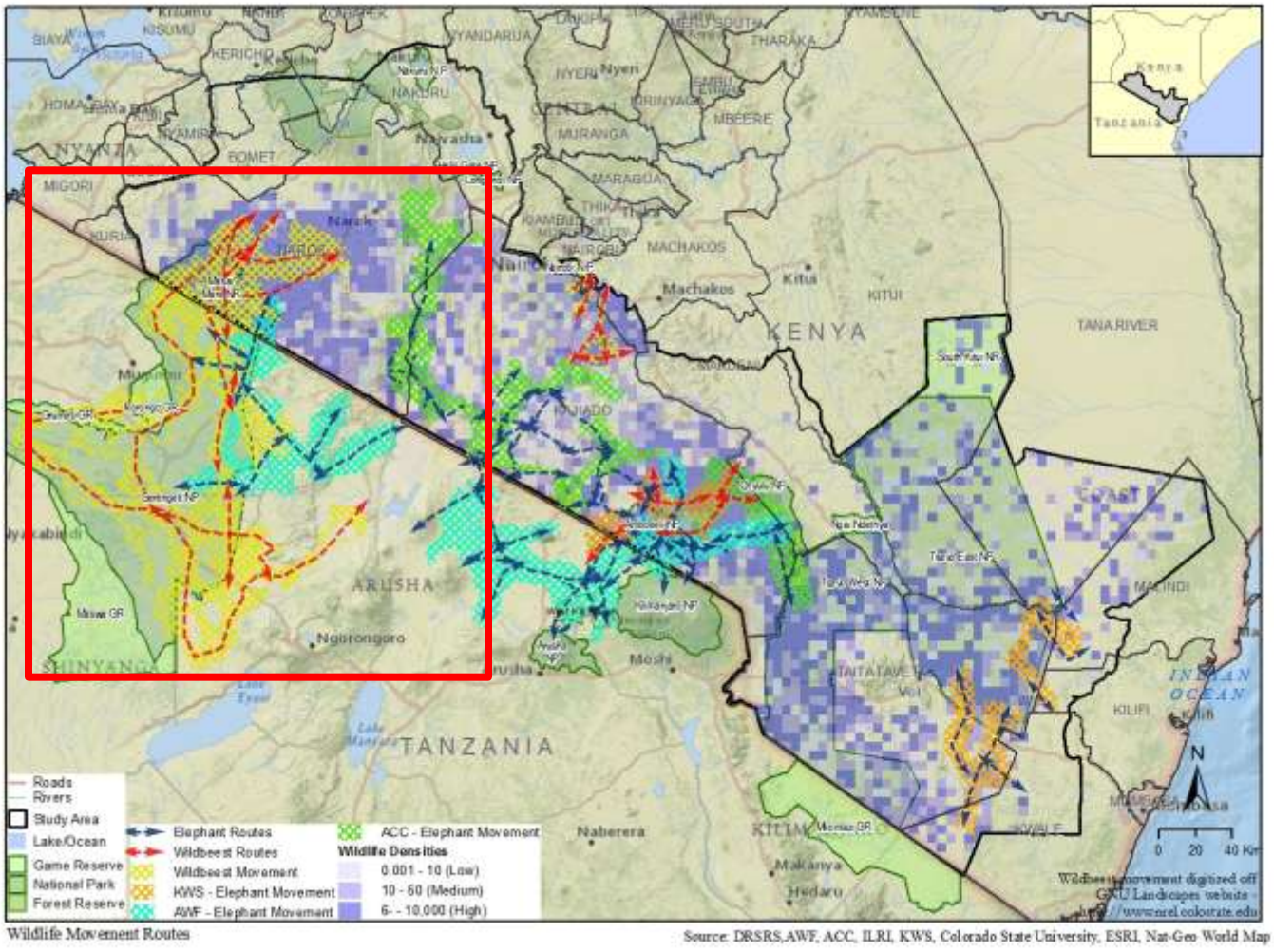
Corridors for Conservation

PART I

KENYA VISION 2030 FLAGSHIP PROJECT - Ministry of Environment and Mineral Resources (MEMR) TASKFORCE

KENYA VISION 2030 MEMR KENYA WILDLIFE SERVICE AFRICAN WILDLIFE FOUNDATION ACC AFRICAN CONSERVATION CENTRE ILRI INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE

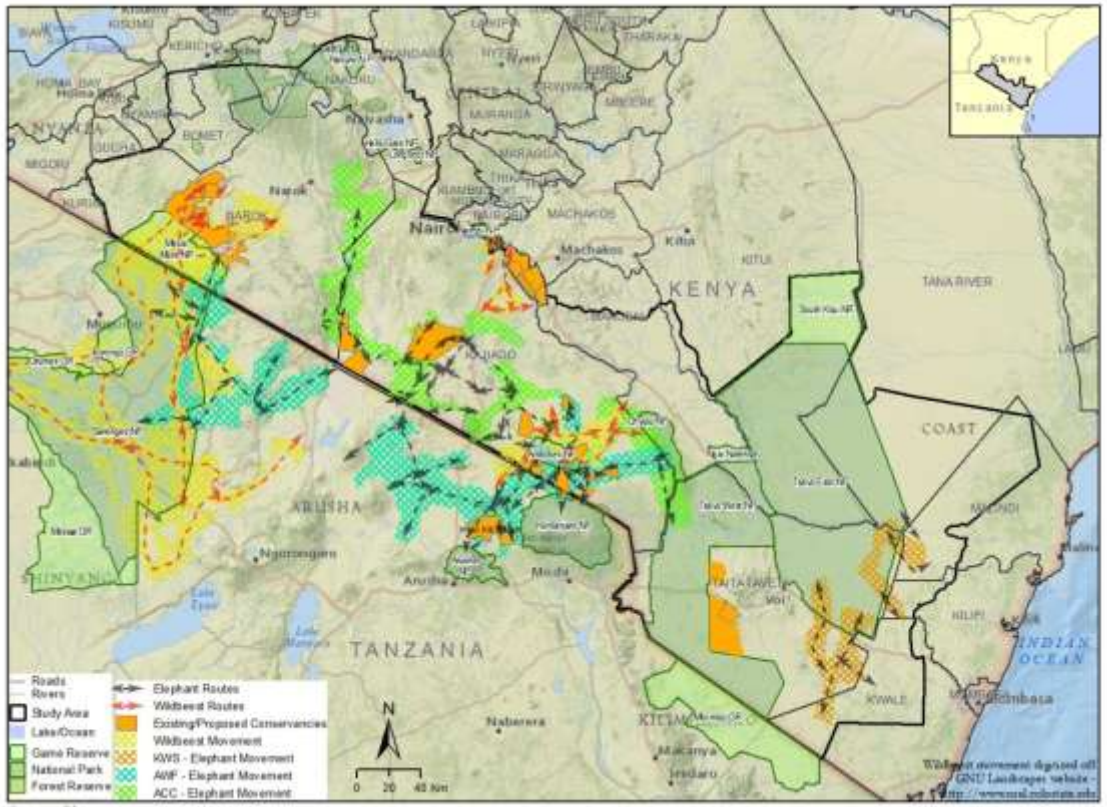
Wildlife dispersal areas and corridors



Wildlife Movement Routes

Source: DRSRS,AWF, ACC, ILRI, KWS, Colorado State University, ESRI, Nat-Geo World Map

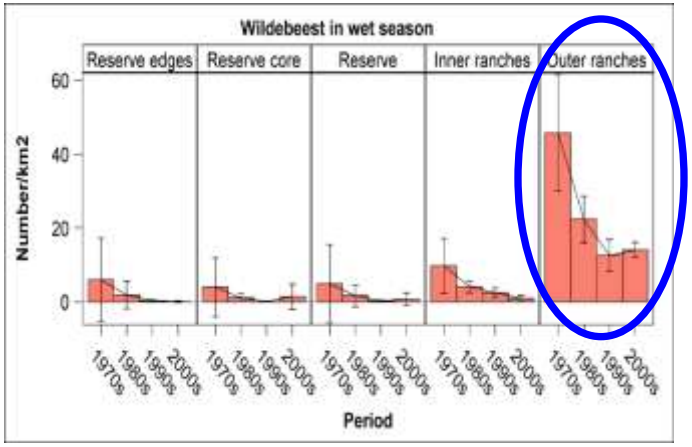
- **Connectivity of conservation areas both dispersal and wildlife corridors (Vision 2030)**
- **Conservation of meta-population**
- **Restoration of degraded lands and wildlife**

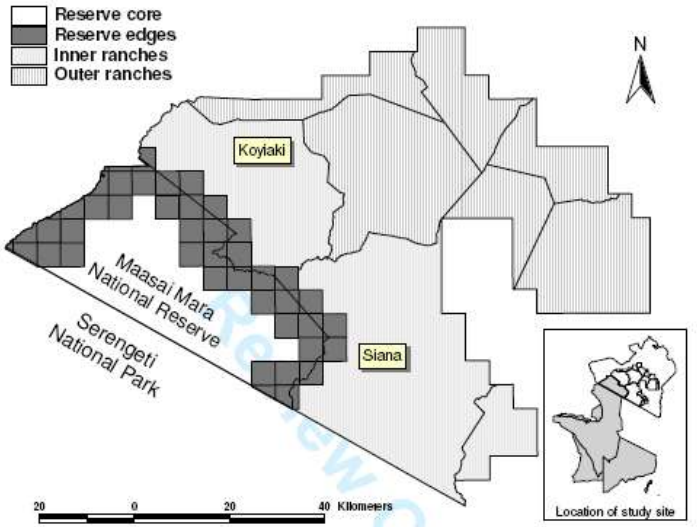


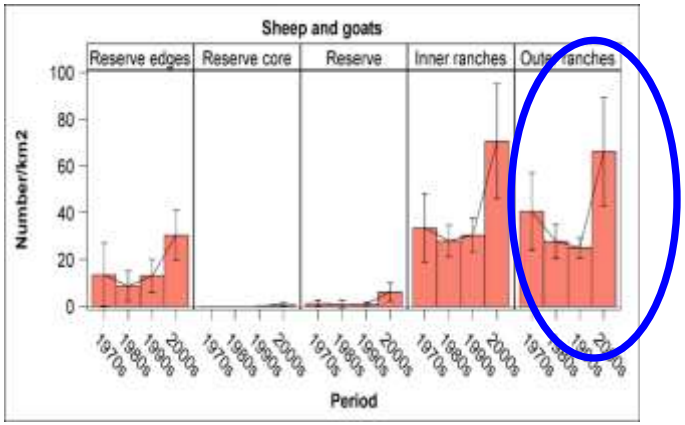
Opportunities

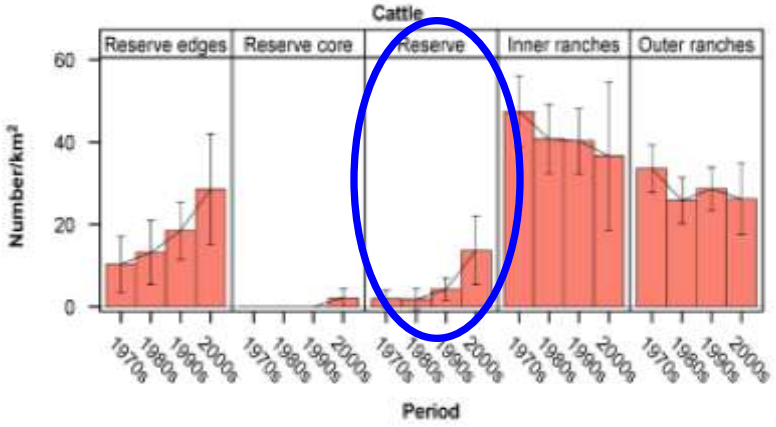
Source: DRSRS,AWF, ACC, ILRI, KWS, Colorado State University, ESRI, Nat Geo World Map

Trends of wildebeest and sheep & goats in the Mara Ecosystem



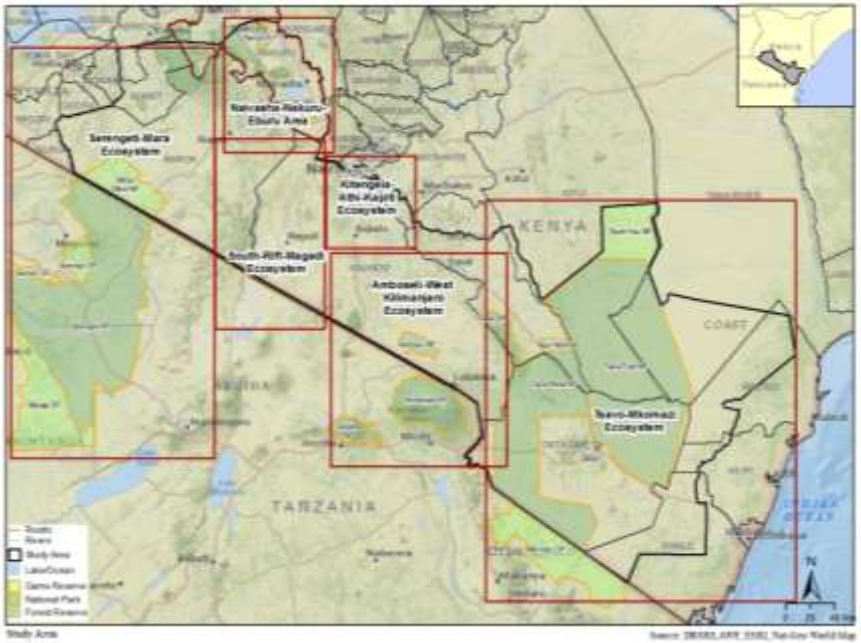






Source: Ogutu, Owen-Smith, Piepho and Said 2011

Elephant Movements in Tsavo



Source: DRSRS et al. in prep

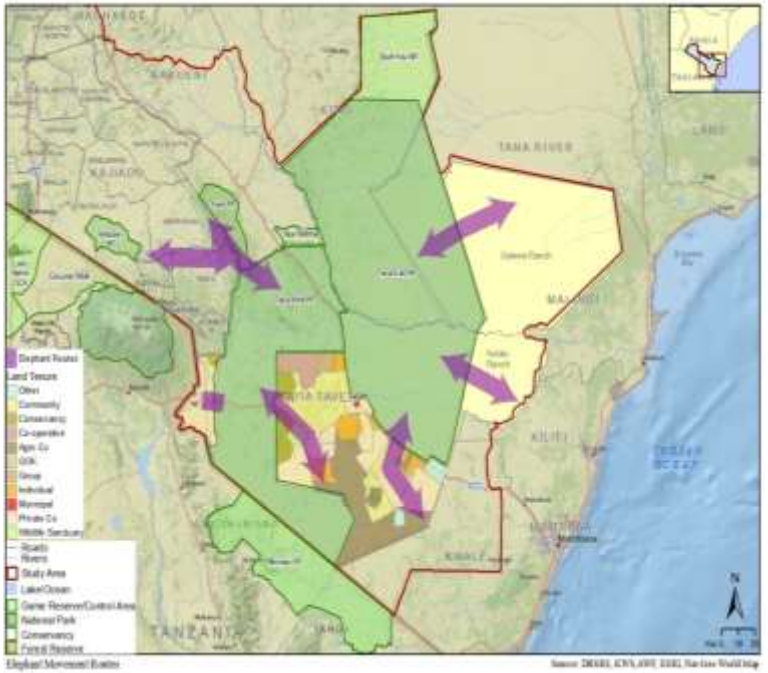
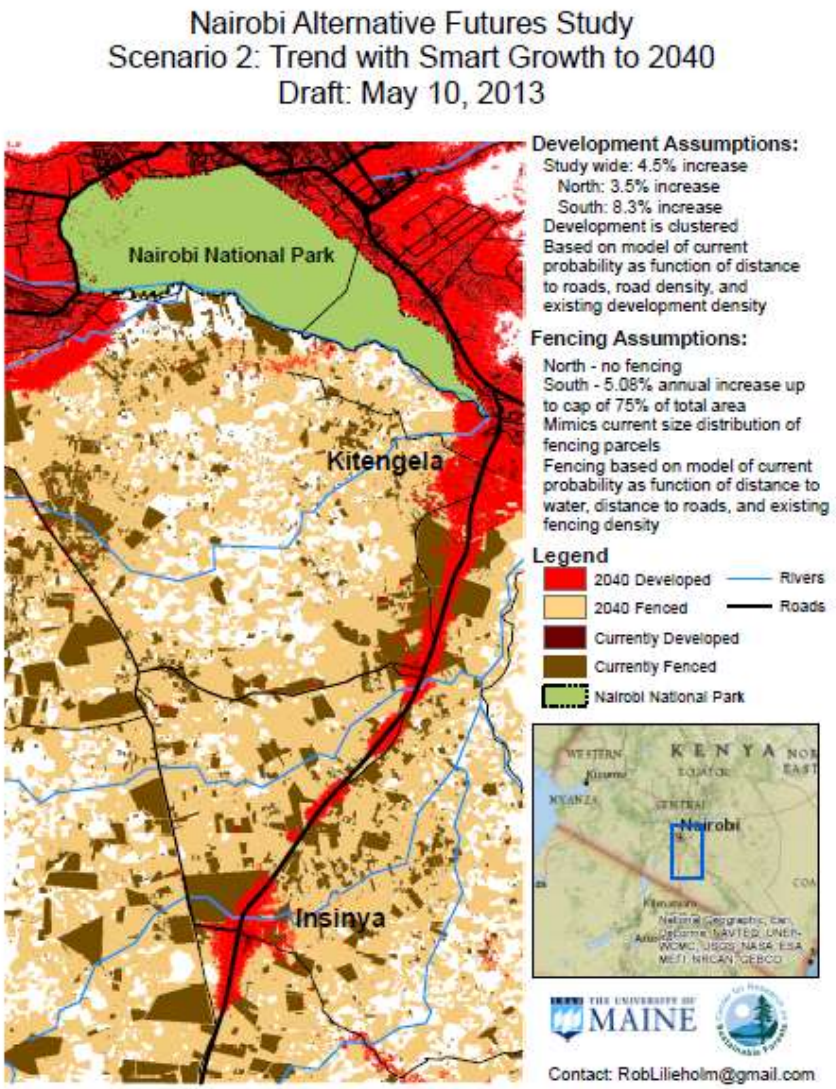


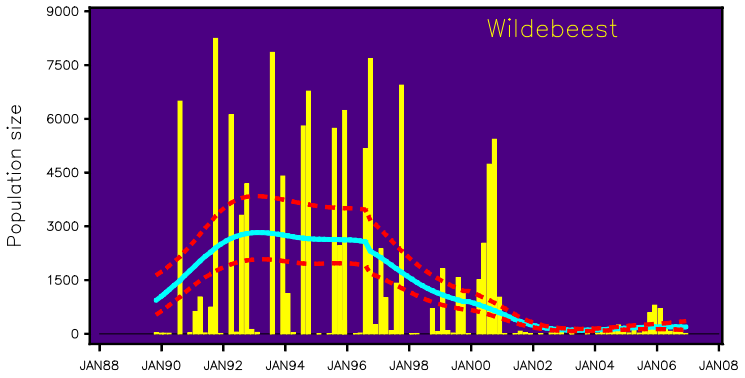
Photo: Msoffe

KENYA VISION 2030 MEMR ACC ILRI

Drivers	Population growth; insecure land tenure; land subdivision; changing climate and rainfall patterns - scarcity of water and recurrent droughts; lack of incentives to conserve wildlife; lack of policy e.g. land use and development of conservancies.
Pressures	•Land use change - conversion to settlements, subsistence farming, sisal plantations; grazing leases; fencing; sedentarisation; •Human encroachment - incompatible land uses; forest destruction; charcoal burning; wild fires; poaching; precious stone mining; and •Human-wildlife conflicts - crop damage, livestock predation, injury or death to humans
State	**Critical elephant corridors not threatened (located in the Park)** 1.River Tiva Crossing, Yatta gaps and Ngulia to Yatta **Blocked wildlife corridors** 1.Southern park area to Rukinga and Taita (fences, small scale farming); Maktau to Kasigau (heavily settled, fences, small-scale farming); Kamboyo to Chyulus (encroached); Chyulu to Amboseli (land subdivision and sale, irrigated and rain fed agriculture, fences, incompatible tourism development); and Lake Jipe (high density settlements and agriculture) **Degraded wildlife corridors** 1.Tsavo East to Galana (over grazed); and Tsavo to Kulalu (over grazed)
Impacts	Loss or fragmentation of wildlife habitats; decline in wildlife populations (e.g. wild dogs);
Response	•Establishing game sanctuaries and community wildlife conservation areas; •Direct purchase of private lands for inclusion into the wider protected area system; •Establishing legal and economic instruments (leases, easements and agreements); •Establishing participatory land use planning; •Strengthening the protected area management through inclusion of wildlife extensions and diversification of incentive; and •Implementing transboundary conservation initiatives (TsavoWest NP and Mkomazi GR)

Scenario NNP





Source: Lilieholm et al. 2013; Ogutu et al. in press

Kenya's Natural Capital Atlas

- ACC lead agencies
- Contribution from government ministries and department agencies (DRSRS, KWS, Museums of Kenya, Nature Kenya, Universities, NGOs), International Organizations (ILRI, WRI, ..)
- Report ready – End of September

Issues – Wildlife Bill

- Devolution and governance of natural resources
- National and county responsibilities as it relates to conservancies – security, land use plans, coordination, …
- Resource allocations, monitoring of the conservancies, …..

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With special thanks to:

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