Kitengela Wildlife Lease Programme



Kitengela Wildlife Lease Programme: Is it Realistic, conditional, pro-poor and voluntary?

East and Southern Africa Katoomba Group Regional Workshop on
"Taking stock and charting a way forward: Payments for Ecosystem Services in Africa"
16-17 September 2008

Thomas Yatich, Mohammed Said, Brent Swallow & John Sononka

World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES

ILRI
INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE

The Wildlife Foundation

Criteria and Indicators for CES:
Realistic, conditional, pro-poor and voluntary

- **Examine the Mechanisms context and outcomes**
- **Assess mechanisms using Meine's(2007,2008) criteria and indicators (as well as Wunder's (2005) of CRES**
- **Examine other existing initiatives that enhance the overall functioning of the mechanism**
- **Synthesize lessons and experiences**
- **Propose/suggest ways to improve programme's sustainability**

Thomas Yatich, Mohammed Said, Brent Swallow & John Sononka

Draw on existing knowledge and experience through:

Literature reviews

Expert consultations

Case study reviews

- **Lessons learned from the 3-year experiences of RUPES (Rewarding Upland Poor for Environmental Services) project coordinated by the ICRAF SEA**

1 Kitengela: A Background

- NNP (117sq.km) founded in 1946 is northern most part of a larger ecosystem (2000 sq.km)-Athi Kapiti Plains
- Dispersal and calving area of wildlife migrating seasonally from and to the National Park
- Many game animals live permanently in the plains
- Plains inhabited by livestock herders, zone is urbanizing with upcoming horticultural farming for the export market;
- In 1980s land was subdivided and sold to developers-came with fencing and developments (Land-use change) along wildlife corridors leading to increased wildlife-human conflicts

1 Nairobi National Park

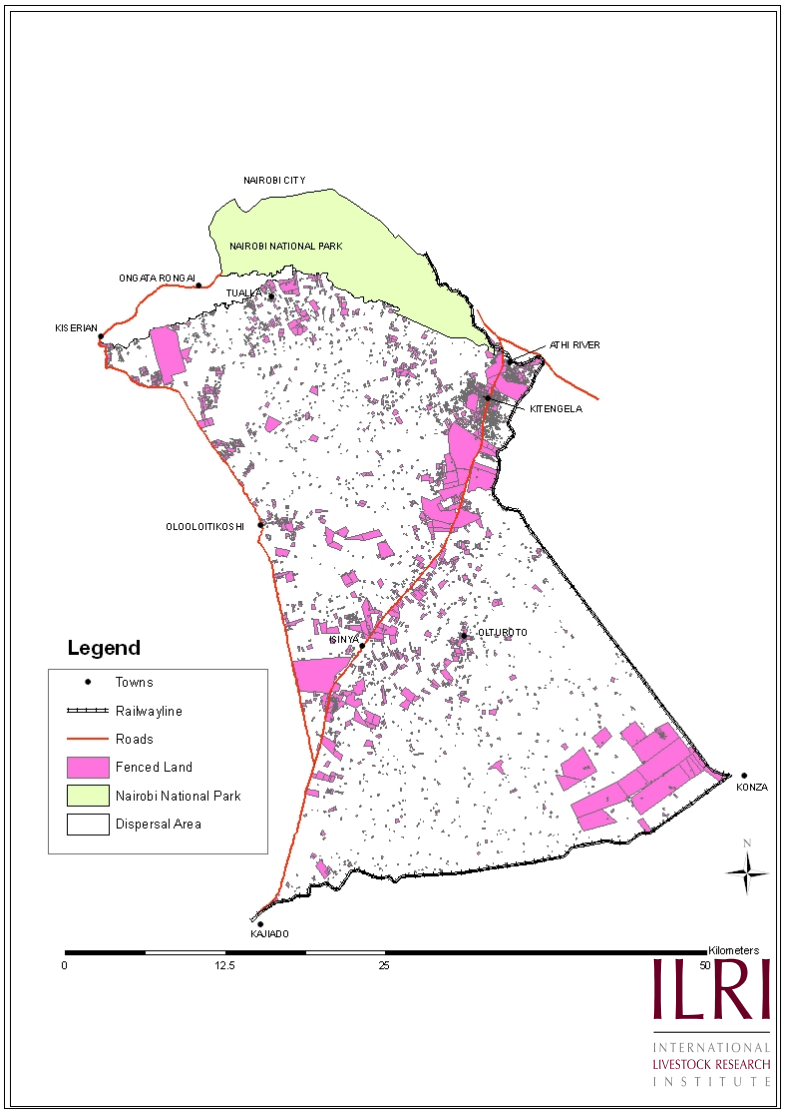
- 7 km from the centre of Nairobi and t**oo small** to be ecologically viable;
- **Wildlife must be able to disperse** to the south into the Kitengela area (2000 km2) during the wet season;
- Kitengela is under **private ownership** and currently in a process of subdivision, fencing, and conversion of grasslands to croplands;
- **Risk** of the capacity of contribute to the **dispersion** of wildlife, the **viability** of NNP and the **provision** of goods and services provided by the protected area;

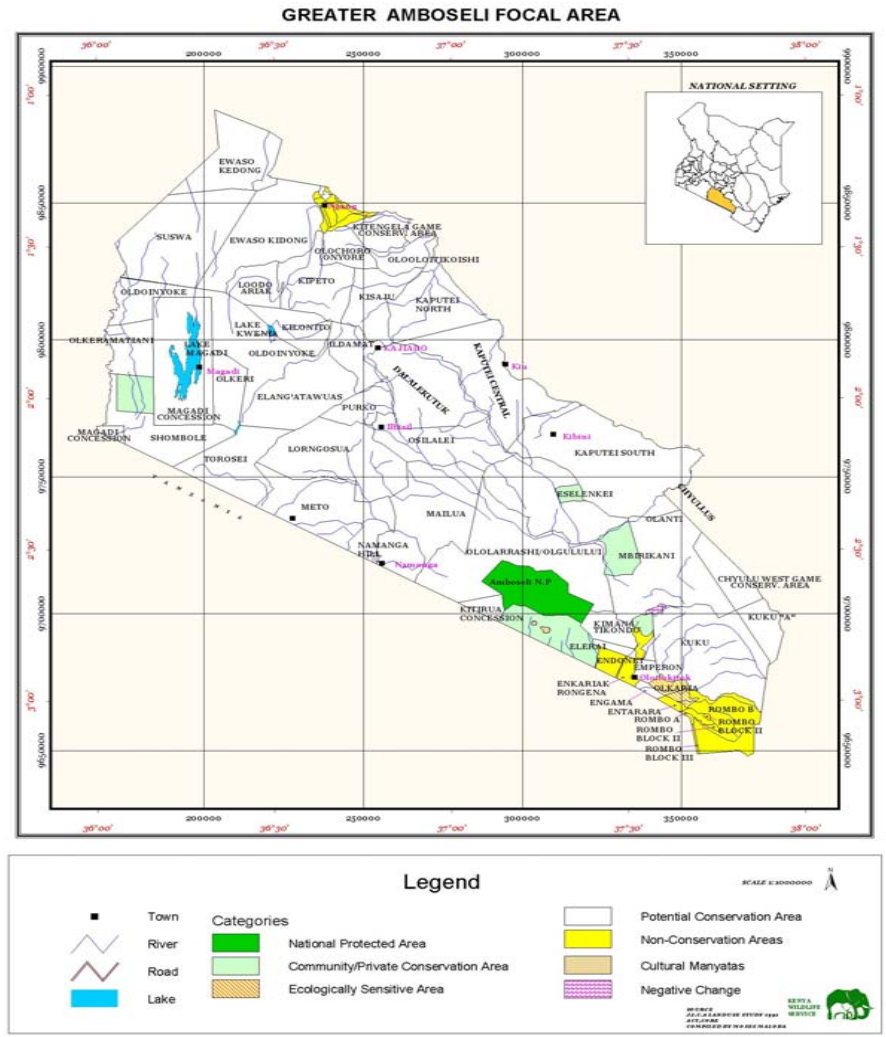
Thomas Yatich, Mohammed Said, Brent Swallow & John Sononka

2 Ecosystem Services provided by NNP and importance to Human well-being

Ecosystem function /Ecosystem service	Nairobi N=166 Mean ± St Dev.		Kitengela N=74 Mean ± St. Dev.		Level of significance p
Production function: Provision of natural resources					
Food/Raw material: **provision of pastures for livestock and wildlife and extraction of building material in the area of the NNP.**	**3.07**	**±1.399**	**2.56**	**±1.401**	**0.097**
Information function: Provision of opportunities for cognitive development					
Recreation: **Development of tourism activities and wildlife viewing in NNP**	**4.48**	**±.686**	**4.50**	**±.815**	**0.84**
Education**: school visits to NNP and implementation of research projects in the area.**	**4.70**	**±.566**	**4.70**	**±.735**	**1**
Quietude**: Perception and use of NNP as a peaceful natural place to escape from the city stress**	**3.66**	**±1.185**	**3.73**	**±.941**	**0.65**
*Habitat function :*Provision of suitable living space for wild plant and animal species					
Conservation**: Provision of refuge for endangered wildlife within the park boundaries.**	**4.36**	**±.870**	**3.99**	**±.972**	0.0037
Regulation function: Maintenance of essential ecological processes and life support systems					
Water supply/regulation: **Provision of water for human consumption, livestock and wildlife, as well as for industry and agriculture**	**3.53**	**±1.346**	**4.01**	**±1.153**	0.0132
Air quality: **positive effect of the Park open space to air circulation.**	**3.50**	**±1.257**	**4.35**	**±.818**	0.001

Source: Rodriguez et al., 2006





Thomas Yatich, Mohammed Said, Brent Swallow & John Sononka

World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES

ILRI
INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE

The Wildlife Foundation

2 Land Use and Land Tenure: A Retrospect

- **1911:** Maasai lost 60% of land as a reserve extendng from Southern Kenya to Northern Tanzania was created;
- **1940s:** More land was lost as NNP was created with links to Amboseli, Tsavo East, Serengeti NP and Ngorongoro Conservation Area
- **1960S:** Group Ranches were set up
- **1986:** Individual Ownership of Land began (51 to 298 hectares per family)
- **1990S:** Land privatization continued
- **2004:** Land parcel maps show a mean of 68 hectares (largest: 1200 hectares; smallest: 2 hectares)
- **2004:** Subdivision, fencing continued

Thomas Yatich, Mohammed Said, Brent Swallow & John Sononka

3 Mechanism Evolution

- Started by FoNNaP in 2000 and later handed to TWF
- **Motivating factors:** problems posed by land use/tenure change and increased human-wildlife conflicts
- **2000:** A total of 704 acres from 18 landowners leased & each paid KES. 300 (approx.4USD)
- Currently 148 beneficiaries are enrolled in the programme;
- Programme address the reasons why people sell land-to pay school fees
- Is an alternative source of income for participating households;
- Beneficiaries use the funds to pay school fees, buy food stuffs

Beneficiary Enrolment & total payments

Year	No. of Beneficiaries	Total Amount paid
2000	18	345,600
2001	65	1,124,935
2002	99	2,127,065
2003	117	2,625,212.50
2004	116	2,622,285
2005	155	2,699,247
2006	115	911,195
2007	114	2,707,467
2008	148	3,329,674

Source: The Wildlife Foundation, 2008

3 Functioning & Challenges

- Beneficiaries sign a contract with TWF (see copy shared)
- Adherence to the conditions of contract are monitored by TWF;
- In the event that beneficiary sells the land,s/he is removed from the records;
- Payment is in 3 installments and in the last Saturday of the holiday before schools open (January, May and September)
- **Challenges:** Payment per acre is too low compare to land value (a plot in Kitengela goes for about KES.900,000);
- Land use change and lack of a land use plan (in the pipeline)
- Lack of enough funding to enroll more landowners

4 Criteria and Indicators

- **Realistic** (long term, ecosystem valuation)

- Type of environmental service and whom is clearly defined before the program was started (ILRI's, AWF & ACC research);
- Significance of the ecosystem to conservation and economic growth well know and provided a basis for mechanism design;
- Factors that contributed to human-wildlife conflicts established;
- Trade-offs made-livestock & conservation instead of agriculture
- Potential shifts have been anticipated and a land use zonation in the making
- A rationale for government support in the pipeline

5 Criteria and Indicators

Cont'd

- **Conditional** (effective, transparent)

  - No delivery without pay, no pay without delivery
  - Providers bound by a contract-basis for evaluating eligibility for payments
  - Service provision monitored by TWF and the beneficiaries
  - But payment is too low and could threaten the programme's sustainability

5 Criteria and Indicators

Cont'd

- **Pro-poor** (impact pathways, links to 'drivers')

- Does not arm the poor as they are allowed to continue using their land
- Involve consultative meetings where interests of the poor are taken into consideration
- Beneficiaries use payments received to improved their livelihoods and send the girl child to school
- Ideally payments received are meant for school fees but if a beneficiary does not have a child in school use of money is not restricted
- Different poverty dimensions are addressed by the programme (next slide)

PATHWAYS FOR CES TO ALLEVIATE POVERTY

P1 Stop negative 'drivers' that enhance poverty and degrade environmental services ('PUPES')

P2 Enhance local environmental services and resources (e.g. regular supply of clean water, access to beneficial plant and animal resources)

P3 Enhanced security of tenure, reduced fear of eviction or 'take-over' by outsiders, allowing investment in land resources; increased asset value

P4 Enhanced trust with (local) government, increased 'say' in development decisions

P5 Increased access to public services (health, education, accessibility, security)

P6 Payment for labour invested at a rate at least equal to opportunity cost of labour

P7 Increased access to investment funds (micro credit or otherwise) for potentially profitable activities

P8 Entrepreneurship in selling 'commoditized' environmental services

(Source: Meine, 2006)

5 Criteria and Indicators *Cont'd*

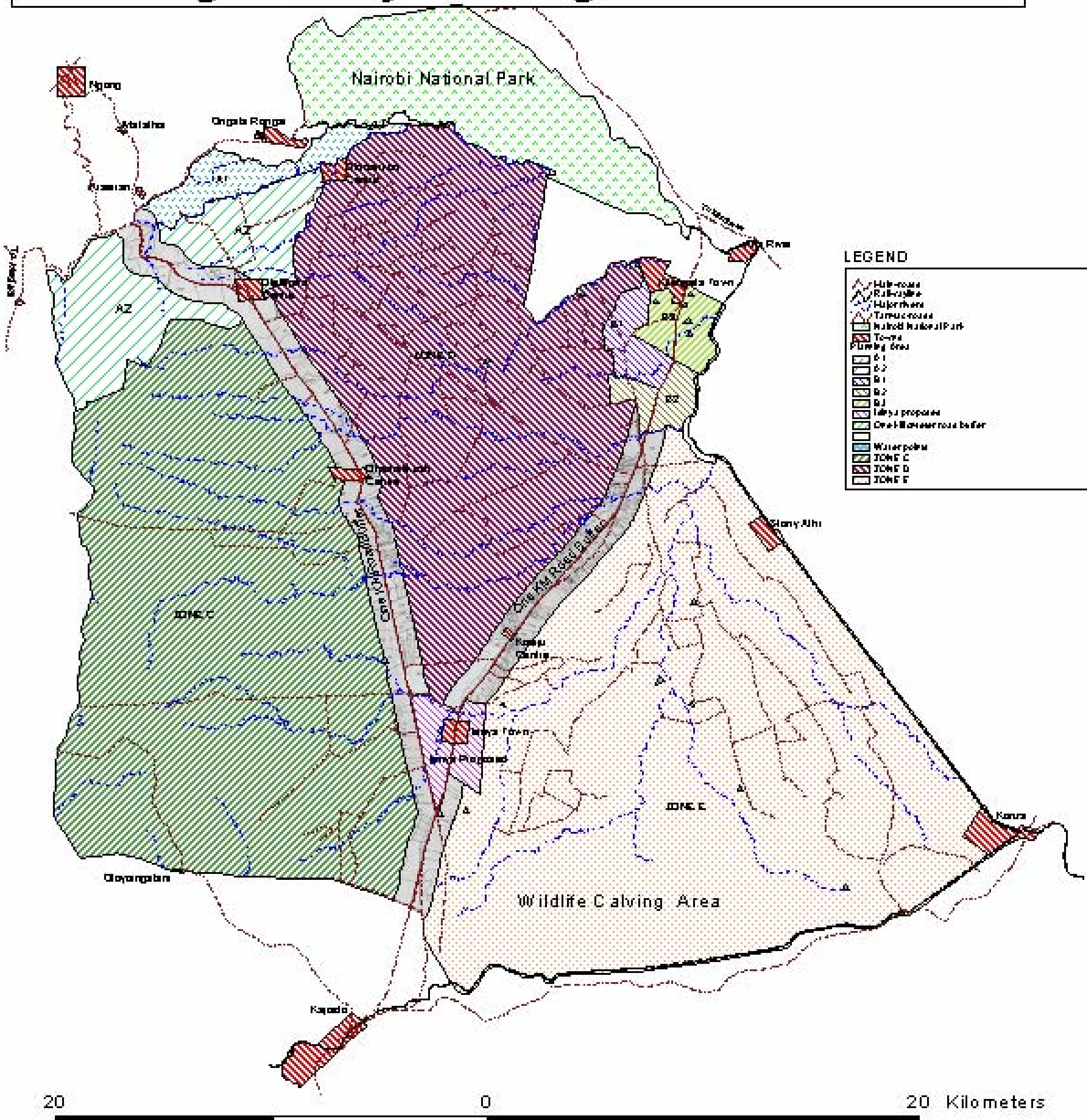
- **Voluntary** (adaptive, efficient)

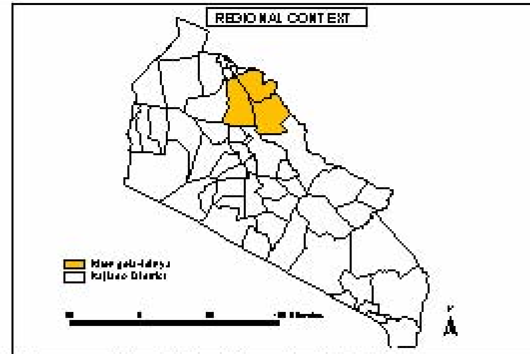
- Involvement is based on community-scale efforts rather than individual decisions;
- Range of incentives & disincentives are place to ensure compliance;
- **Enforcement:** Monitoring done by beneficiaries
- More beneficiaries wish to join but the funding is not adequate;
- **From buyer perspective**: Exploring the following investments:
  - Direct government investment
  - Voluntary private investment
  - Regulated private investment

6 What is ongoing?

- Formulation of Kitengela-Isinya Zoning Plan
- Implementation of a complementary consolation scheme (so far since 2003, a total of KES 11 million has been spent
- Wild Dog Programme was implemented from 2006
- A scouts programme
- A Land Buying Trust

Kitengela Isinya Zoning Plan 2006 - 2026





Proposed Land Uses/Standards By Zones

Zone A1 - Ongata Rongai
Residential urban land size 1/4 to 1/2 acres
medium density

Zone A2 - Transitional zone
Residential - country land size 1 to 2 acres
Low density residential development and subsistence farming

Zone B1 - Kitengela
Low density residential land sizes 1/2 acres
Buffer zone for urban containment

Zone B2 - Kitengela
Industrial land use and high density residential developments 1/8 acres. Buffer zone for urban containment to South East

Zone B3 - Kitengela
Urban core commercial industrial use land sizes 1/16 to 1/2 acres. Encourage high rise development

Zone B4 - Isinya
Divisional headquarters, residential, commercial and industrial

Zone C
Livestock and wildlife promotion area minimum land size 80 acreas. 1 km buffer zone on A104 and 1/2 km buffer zone on D523

Zone D - Wildlife Conservation
Land size 60 acres minimum. Wildlife promotion, eco-tourism, and livestock production

Zone E - Wildlife calving area
Wildlife conservation, livestock production, control mining/quarrying. Land sizes minimum 60 acres

Ministry of Lands
Physical Planning Department

6 In the pipeline & proposed

- Formulation of an endowment fund for KWLP as well as the Consolation programme;
- Explore involvement of Nairobi City residents to contribute to the programme;
- Involve the private sector
- Explore funding from public funding programmes
- Explore exchequer funding
- Formulate and explore various options to involve Nairobi City residents in paying for biodiversity services

- Explore funding from public funding programmes

6 Lessons & Experience

- Obtaining buy-in is critical
- Having a realistic, conditional, voluntary and pro-poor mechanism enhance efficiency, transparency and fairness;
- It is good to aim at having norms of acceptable behaviour shifting upwards so that ultimately conditional payments are replaced by baseline expectations.

Some research questions & discussions…

… on criteria

Criteria and Indicators for CES:

Realistic + conditional + pro-poor + voluntary

- Can any of these be left out? (e.g. Sven Wunder c.s. argue that 'pro-poor' is unnecessarily complicating the PES debate)
- Are there important other categories of 'Criteria'
- Are there better 'indicators' for the respective 'criteria'?
- Are we in consensus that these criteria and indicators can help shape context, mechanisms and outcomes of RES/PES initiatives?