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AGENCE FRANÇAISE DE DÉVELOPPEMENT

‘Greater than the sum of their parts’

A study exploring the environmental complementarity of different types of Protected Areas in Kenya

World Parks Congress
Sydney, November 17, 2014.

Philip Muruthi *et al*.

Key question

Overarching question:
State owned protected areas, community conservation areas,
private ranches: how to achieve environmental complementarity and efficiency?

Study question:
What is the evidence (scientific and anecdotal) for the benefits of having different types of PAs in Kenya and the complementarities between them?

Approach

Study conducted 2011 – 2013

Main study components:

- 2011-12: Inventory of Kenya's protected areas: WDPA, new info
- 2011-12: 30 stakeholder interviews: synopsis of perspectives
- 2011-12: Literature review
- 2012: Expert consultation to generate conceptual framework for study
- 2013: Two case studies – Ewaso and Mara ecosystems
- 2013: Final workshop and final report

Understanding 'complementarity'

Study definition:

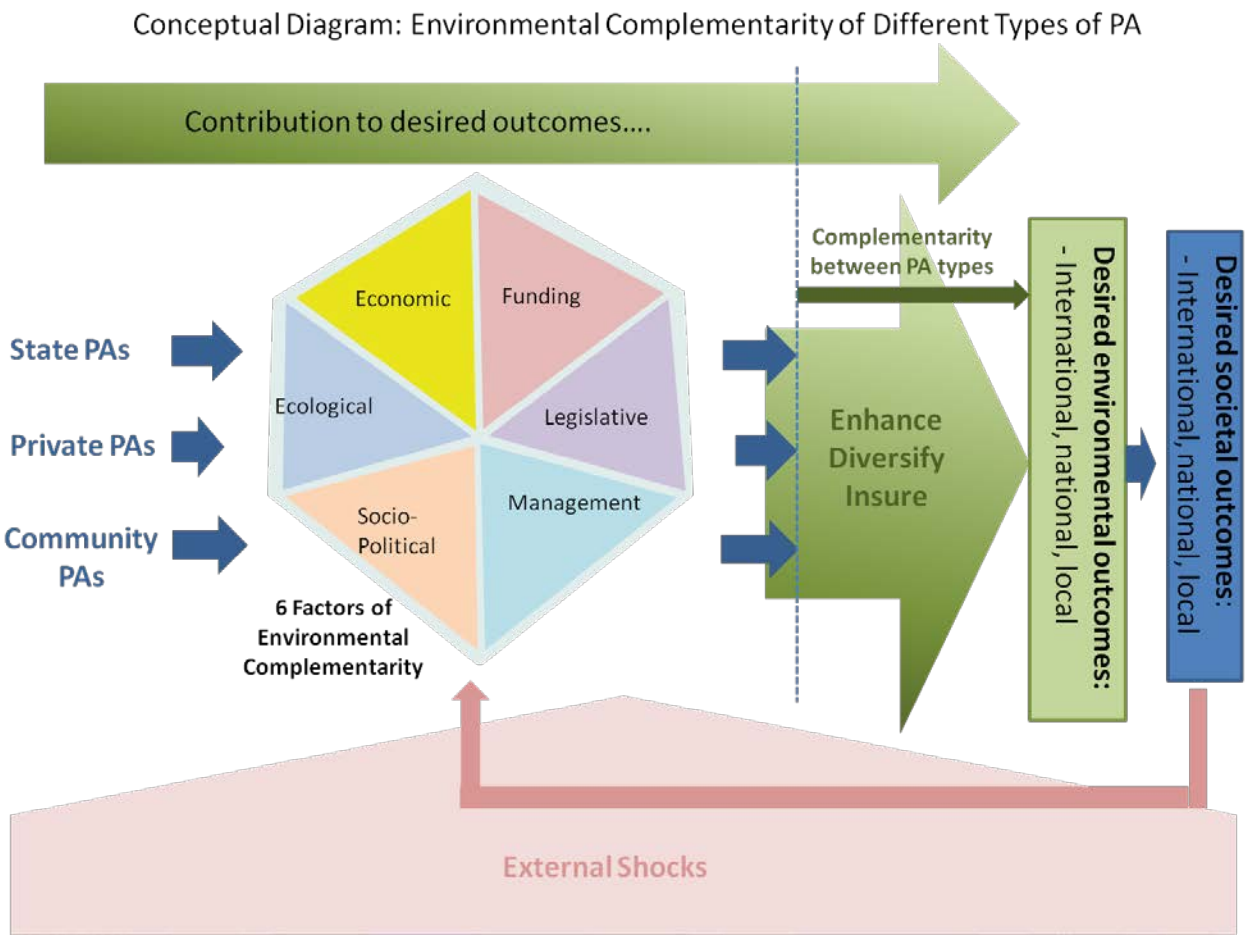
- "Environmental complementarity" describes ***the enhancement in progress towards achieving desirable environmental outcomes (as defined locally, nationally or internationally) as a result of the presence of community and private PAs alongside state PAs***.

Study differentiates two ways in which complementarity may be achieved:

- "**Additionality**": having different kinds of PAs can create "more" of something useful for biodiversity conservation.
- **"Synergy"**: having different kinds of PAs increases the impacts that one type of PA would have as a result of economies of scale, dependence or co-dependence.

Understanding ‘complementarity’

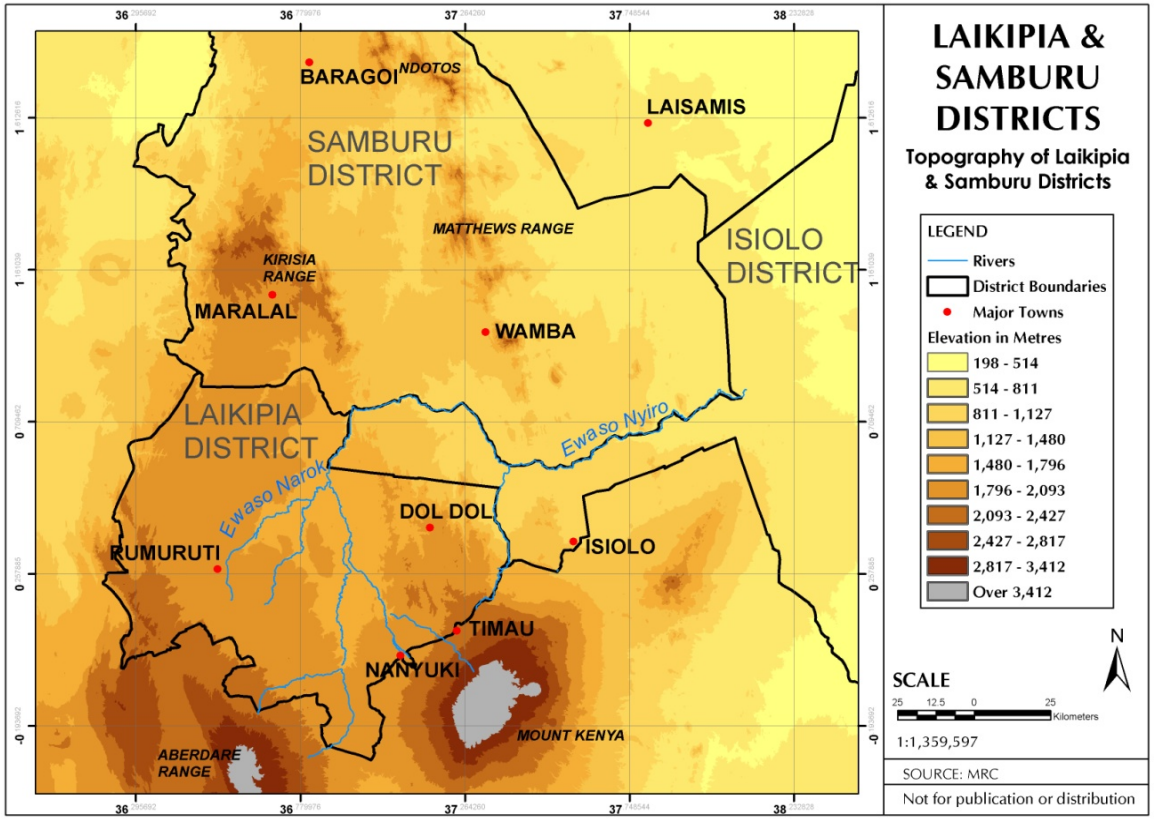
One conceptual framework:



Source : Authors.

4. Complementarity in the Ewaso system

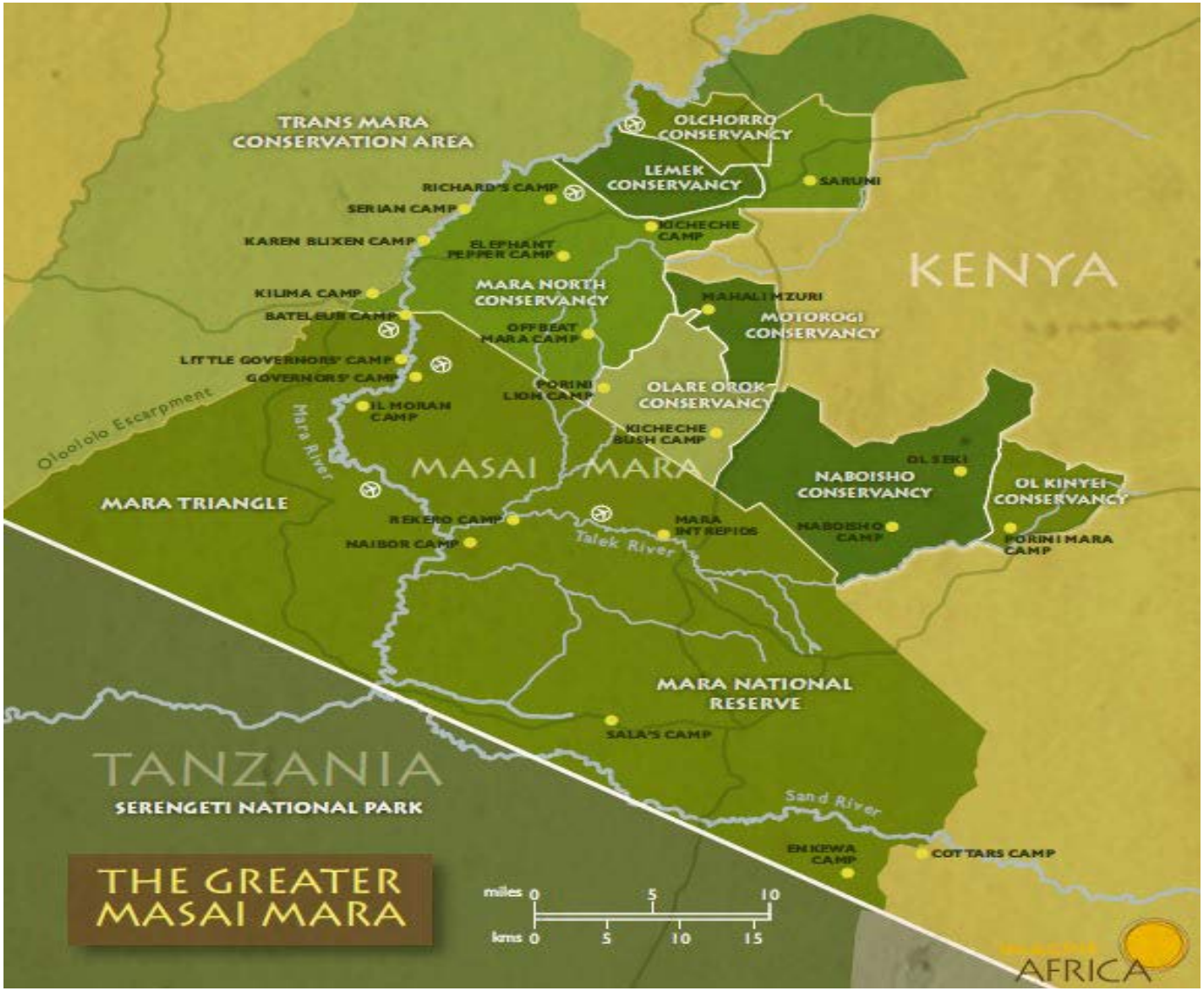
54,000 km2, diverse landscape, people, habitats and wildlife



- Approx. 15 National and Forest Reserves
- 3 National Parks (including Eland Downs)
- Approx. 16 PPA
- 15 CPA

50% of Ewaso under PAs

Complementarity in the Mara system



Complementarity in the Ewaso & Mara systems

Some main drivers for PA creation in the Ewaso and Mara systems

PA categories	Main drivers
SPA (State)	**Ecological mainly** water catchments, forests, wildlife **Economic:** maintained Samburu generates 85% of district revenue
PPAs (Private)	**Ecological:** large tracts of lands- potential for PAs **Economic:** diversification (tourism, collapse of ranching, cropping) **Political:** recognition by government (70s) of need for more space for wildlife **Social/aesthetics:** individual interest and passion
CPA	**Ecological** (partners)- opportunities for connectivity and space for wildlife **Economic:** infrastructure, services, tourism income, employment **Socio-political:** opportunity to reduce insecurity **Cultural:** forest cultural value

Complementarity in the Ewaso & Mara systems

HOW DO DIFFERENT TYPES OF PA COMPLEMENT EACH OTHER?

A perspective from PA stakeholders (owners, managers, wardens…)

*"**Additionality**: the presence of different types of PAs creates "more" of something useful for biodiversity conservation"*.

The presence of three types of PA in the Ewaso enables:

- **More** space under conservation in private/community land context
- **More** types of tourism opportunity (high end, cultural, etc.)
- **More** diversity in funding opportunities and more funding available for conservation (NGO, IGO, philanthropy, business networks)
- **More** people &more types of people involved, more legitimacy

Complementarity in the Ewaso system

*"**Synergy** is the process by which the effectiveness of a PAs is increased directly or indirectly by the presence of another type"*.

Examples of synergies in the Ewaso:

- **Ecological** -SPA &PPA as refuges; CPAs- dispersal areas
- **Economic**: PPA &CPA build on SPA branding; PPA management costs reduced by presence of CPAs (less pressure..)
- **Raising funds:** build on each other for "pitch", SPA funding benefits all through development of the sector

Management effectiveness:

- CPA&SPA: Joint patrols and planning; more effective mix for enforcement
- CPAs provide intelligence, PPA quick reaction, innovation and risk taking
- SPAs provide legitimacy and standards on which others depend

Complementarity in the Ewaso & Mara systems

Legislative

- CPA & PPA rely on SPA to enforce the law
- SPAs need the “ground” to push for change, PPAs &CPAs need SPAs to reach government and follow the right process

Socio-political

- PPA &SPA depend on CPA to gain political support for conservation & increase understanding about conservation
- PPA &CPA need SPA to legitimise processes, ensure conservation stays a national agenda, provide a framework for PAs

Complementarity in the Ewaso system

Key outcomes of complementarity, in terms of contribution to internationally and nationally desired biodiversity outcomes…

Rate of loss of natural habitat halved (Aichi Target 5)/Enhance wildlife conservation (KWS SO1)

- SPA : Protect water towers & forests which would have disappeared. Cultural importance of forest increases success
- PPA: rangelands protection (sustainable management) enhancing grass productivity
- CPA: where grazing management is emphasises, increased vegetation cover is detected

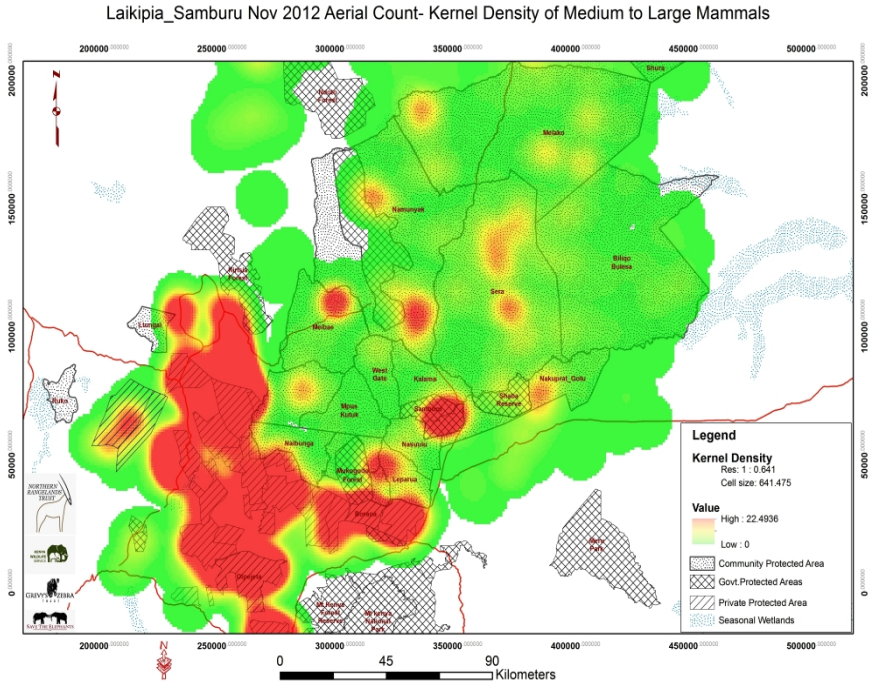
17% terrestrial and inland water covered by PAs (Aichi Target 11)/ Enhance wildlife conservation (KWS SO1) :

- Together, PAs cover more than 50% of the Ewaso area

Complementarity in the Ewaso system

Prevent extinction of known threatened species (Aichi Target 12)/Enhance wildlife conservation (KWS SO1) :

- **PPA:** black rhinos, most Jacksons' hartebeest, 15% of Kenya's lions..
- **CPA**: connectivity and dispersal for wild dogs, lion, elephants.
  Grevy zebra (50% in CPAs)
- **SPA**: habitats for mountain bongo and
  giant forest hog.



Complementarity in the Ewaso system

Ecosystems providing essential services are restored or safeguarded (Aichi Target 14)/ Enhance wildlife conservation (KWS SO1)/Restoration of Kenya's key water towers (Vision 2030)

- SPA protect water towers & carbon stocks (forest protection)
- PPA protect land cover; water & carbon stocks
- PPA and SPA protect grass (food) supporting other livelihoods systems
- Grass management in CPAs results in increased vegetation cover

Degraded ecosystems are restored (Aichi Target 15)/Enhance wildlife conservation (KWS SO1) :

- PPA & CPA ensure increasing focus on rangelands restoration
- Some key springs and cultural sites protected by CPAs (e.g Sera Conservancy).

4. Complementarity in the Ewaso system

Community Protected Areas…

WHY IT IS IMPORTANT TO HAVE THEM IN THE MIX IN THE EWASO?

- Can withstand shocks, have legitimacy of mass of people creating resilience
- Have strong political support
- Make conservation and wildlife relevant (widespread economic returns- employment, income, social infrastructure...)
- Eyes for the others/provide good intelligence

...*BUT WHY NOT ONLY THEM*?

- Conservation can be abandoned for more economically competitive sectors
- Decision making is slow- consensus
- Governance is often poor potentially affecting biodiversity results

Complementarity in the Ewaso system

Private Protected areas…

WHY IT IS IMPORTANT TO HAVE THEM IN THE MIX IN THE EWASO?

- Flexible and quick to react
- Proven success in wildlife conservation
- Efficient management
- Access to good technical skills, good security
- Innovative; can take risks
- Have access to resources (human, and financial) through business and personal networks
- They provide training

… BUT WHY NOT ONLY THEM?

- Not considered as part of the community, less political support
- Not always recognised
- As owners change, interest can change

Complementarity in the Ewaso system

State Protected Areas…

WHY IS IT IMPORTANT TO HAVE THEM IN THE MIX IN THE EWASO?

- Devoted to conservation , mandate of conserving Kenya's biodiversity, conservation hubs
- Provide refuges for wildlife (no human disturbance in theory), inspiration
- Provide legitimacy to the sector and thus have some control and power
- Have political support (at the policy level, not always at the ground level)
- Are respected institution- proven conservation model
- They ensure continuous national interest
- Reserves- because they are the community arm of government, more social support

…BUT WHY NOT ONLY THEM?

- Necessary bureaucratic process ➡ slow reactivity
- Not always in touch with the ground
- Policies can change which consequences on management thus biodiversity

What are the Environmental Limitations of a PA Mix?

- Competition
- Mistrust
- Livestock grazing
- Dominance of economic vs. environmental outcomes

Summary findings and conclusions

Main study outputs:

- Clear definition;
- Clear conceptual framework for analysis: 6 underlying dimensions of complementarity : ecological, economic, funding, management, legislative and socio-political;
- Two ways complementarity delivered within each dimension : “additionality” and “synergy”;
- The 6 dimensions may overlap and influence each others. They are highly intertwined;
- Complementarity occurs “within” each of the 6 dimensions and “across” them.

Study findings and conclusions

Not assessing one type of PA against another, but trying to increase understanding of complementarities between them, in order to strengthen whole system

Lessons learned on applying the concept of environmental complementarity:

- Study finds complex array of complementarities between different types of PAs
- Study finds strong case for considering all PAs as a network (not just state PAs)
- Surprisingly underdeveloped concept: a gap to fill!
- Need for more specific research on complementarity and evidence

Thank You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