
# Future of wildlife tourism in a changing climate:

## Case study of the Amboseli ecosystem in Kenya

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**Fig. 1: Anticipated experiences from a wildlife safari in Kenya.**

Wildlife is a focal attraction in the Kenyan tourism sector and the Amboseli ecosystem is known for offering unique scenic, biodiversity and cultural services to its visitors (Fig. 1).

**STUDY AREA**

Loitoktok district is a wildlife zone having protected areas on each direction; Amboseli National park at the centre, Maasai Mara on the extreme west, Chyulu Hills National Park on the North east, Tsavo West on the East and Mt. Kilimanjaro on the South. It also has several small conservancies and sanctuaries run privately in the community lands.

**PROBLEM**

Climate has far-reaching consequences for tourism businesses and destinations that are mainly dependent on natural resources like Kenya (Fig. 2). Climate change could be a major driver for extinction of undocumented species, migratory species and resident species that could affect proper functioning of the ecosystem (Fig. 3a). Secondly, climate change could cause 'social vulnerability' on internal properties of a society/population to reduce attractiveness of the area, lower tourism activity and the related income (Fig. 3b). Tourists have the greatest adaptive capacity depending on three key resources; money, knowledge and time, with relative freedom to avoid destinations impacted by climate change or shifting the timing of travel to avoid unfavourable climate conditions.

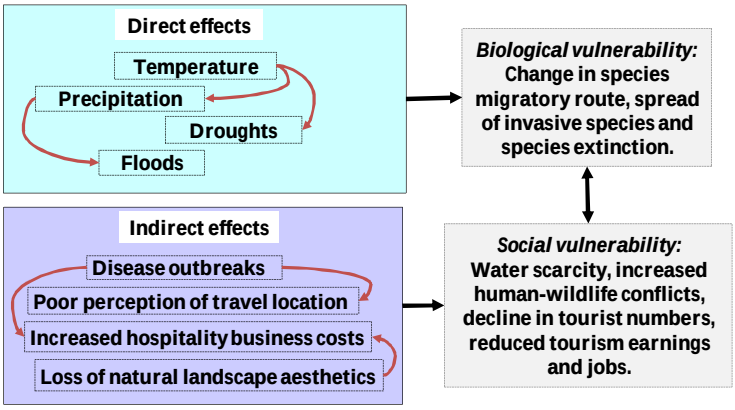


**Fig. 2: The negative ripple effects from climate change on the wildlife dependent tourism in Kenya.**


**Biological vulnerability (3a):** Populations of elephant, zebra and wildebeest suffered a huge loss following a drought episode in December 2009 in Kenya - Maasai preservation trust.


**Social vulnerability (3b)**: Six lions killed by villagers are laid down on a Kenya Wildlife Services (KWS) truck in Kenya, The lions were targeted in a revenge mission after four goats were found mauled in June 2012 - Xinhuanet.com

**Fig. 3: Practical examples of climate change impacts in the study area**

A collaborative network can coordinate community actions to exploit "beneficial climate change opportunities" and strengthen the capacity to sustain livelihoods that will support a robust tourism sector in Kenya and Sub-Saharan Africa (Fig. 5).

**THEREFORE:**

1. A potential **tourist** faces two keys challenges when selecting a destination.
   - ❖Loss of biodiversity in previously marketed destinations and
   - ❖Social stability and quality of life in climate vulnerable countries
2. A **hospitality service provider** struggles with high information gaps concerning affordable climate adaptation measures to lower cost of business and increase profits.
3. The entire **tourism sector** lacks a sustainable win-win policy to cover all its stakeholder's needs.

**SOCIAL NETWORK ANALYSIS –**

The main barrier to optimal tourism and wildlife management in Kenya is

a) Poor coordination between agencies and the resource itself (Fig. 4)

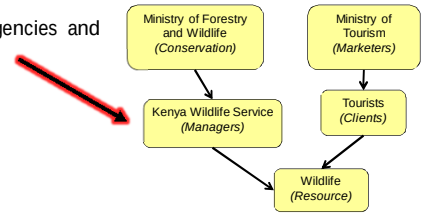


**Fig. 4: The main actors in wildlife tourism in Kenya.**

b) Network complexity that obscures efficient assessments of all economic activities at the grassroots. This disconnect is shown by the high number of non-reciprocal ties and missing connections between 'like-minded' actors in the network (Fig. 5).

Sequentially this affects the tourism industry through

- ❖ Reduction of wildlife and
- ❖ Lack of contingency plans to insulate the industry
- ❖ Poor diversification in tourism activities.

The ultimate solution to enhance wildlife tourism in Kenya is to increase mechanisms that encourage high stakeholder participation and inclusion of diverse cultural customs that will contribute to a win-win situation for all stakeholders and empower the community towards climate change impacts.

**Shown below are some activities to increase the tourist appeal in wildlife safaris during predicted climate change (for each category of actors) in Kenya.**

***Public actors:***

1. Intense adaptation and mitigation knowledge transfer to other actors.
2. Savannah pasture reestablishment, full compensation of wildlife damages and improved water management.
3. Creation of buffer zones around protected areas and strict execution of land subdivision policy.

***Private actors:*** Introduction of insurance packages to cover climate related liabilities in hospitality sector.

***Civic actors:*** Diversification of tourism activities through research into other indigenous art, music, and literature.

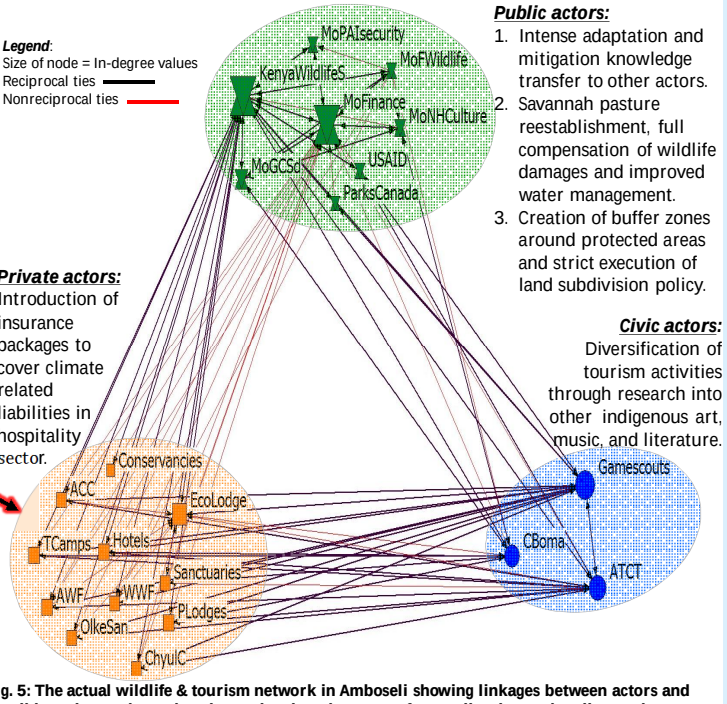


**Fig. 5: The actual wildlife & tourism network in Amboseli showing linkages between actors and possible actions to be undertaken to insulate the system from collapsing under climate change.**

**KEY REFERENCES:**

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- ❖ UNWTO and UNEP and WMO. (2008). Climate Change and Tourism: Responding to Global Challenges, (prepared by Scott, D., Amelung, B., Becken, S., Ceron, JP., Dubois, G., Gössling, S., Peeters, P. and Simpson, M.C.), UNWTO, Madrid, and UNEP, Paris.

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