

Forest Cultural Ecosystem Services in Zambia's Forest Ecosystems.

Presenter: Felix Kalaba

Copperbelt University, Zambia

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Introduction



- Globally, forest ecosystems are a source of important ecosystem services
- These services are important for human well-being and are central to people's livelihood.
- Forest ecosystem services contribute to food and nutritional security in many rural areas in Least Developed Countries.

Use of Zambia forest ecosystems



Research focus



- Cultural ecosystem services remain the least studied ecosystem services in Forest ecosystems
- To understand the types of Forest Cultural Ecosystem Services (FCES)
- To examine the FCES provision in different rural settings
- To examine the perceived changes in the capacity in providing FCES

Research focus

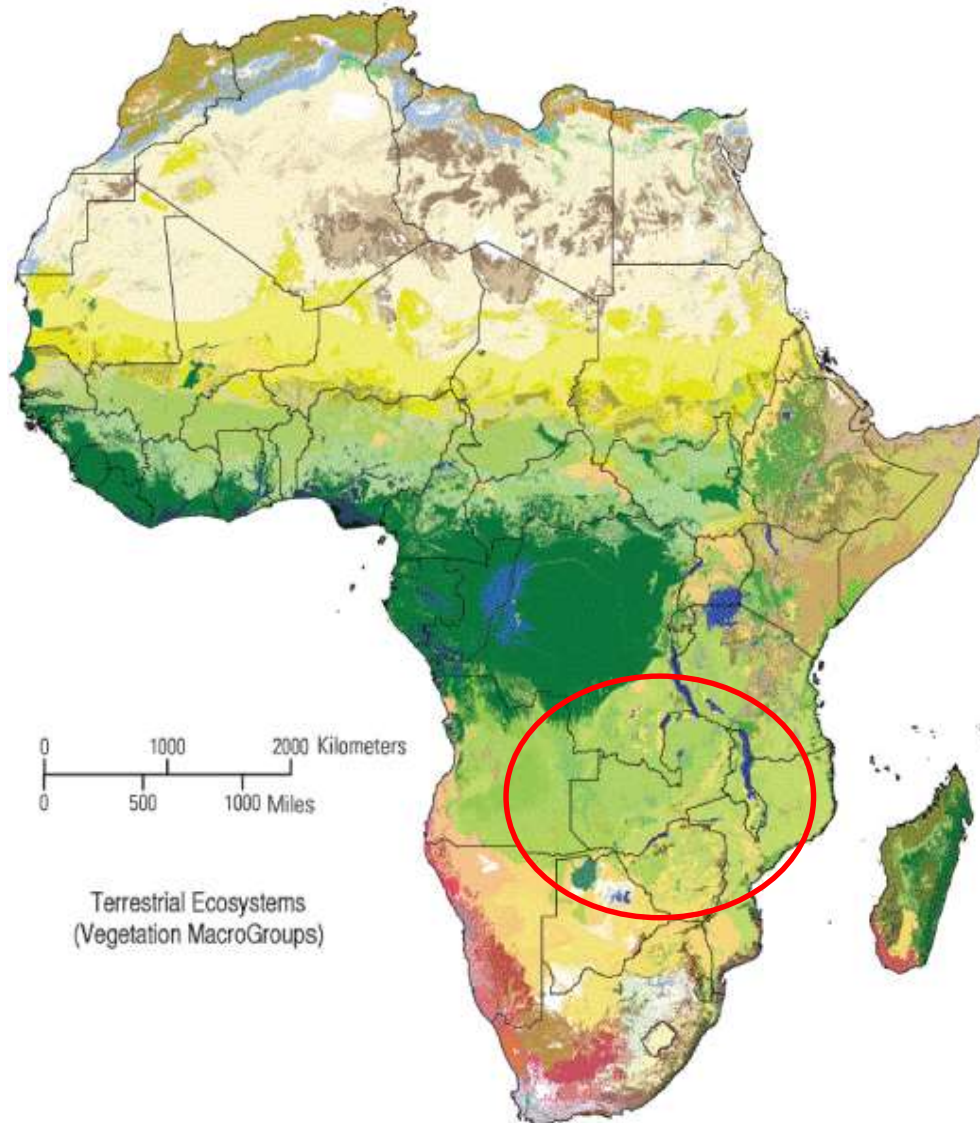
- Cultural services are non-material benefits obtained from the ecosystem ([MA 2003](#)).
- They emerge from individual or collective perceptions about the ecosystem in question, and are therefore dependent on cultural contexts ([Maass et al. 2005](#)).

Significance of the study



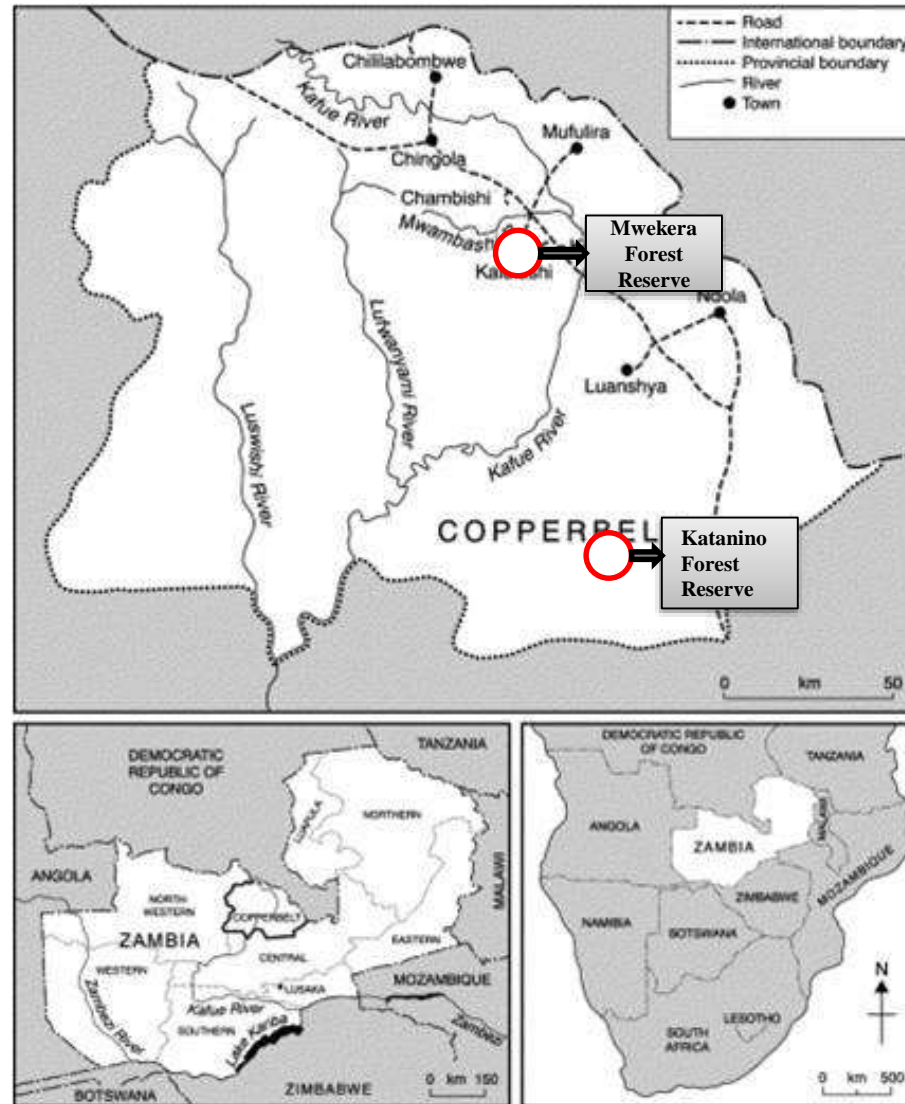
- Demand for ES is increasing against the backdrop of declining ecosystems.
- Global policy interest in forest ecosystem services has increased due to their role in providing ES important for human wellbeing, and mitigating climate change.
- Miombo woodlands are the most extensive forest formation (270 million ha) in Africa and are rich in plant diversity.
- Home to over 100 million people

Miombo woodlands



Research design and Methods

- Study area

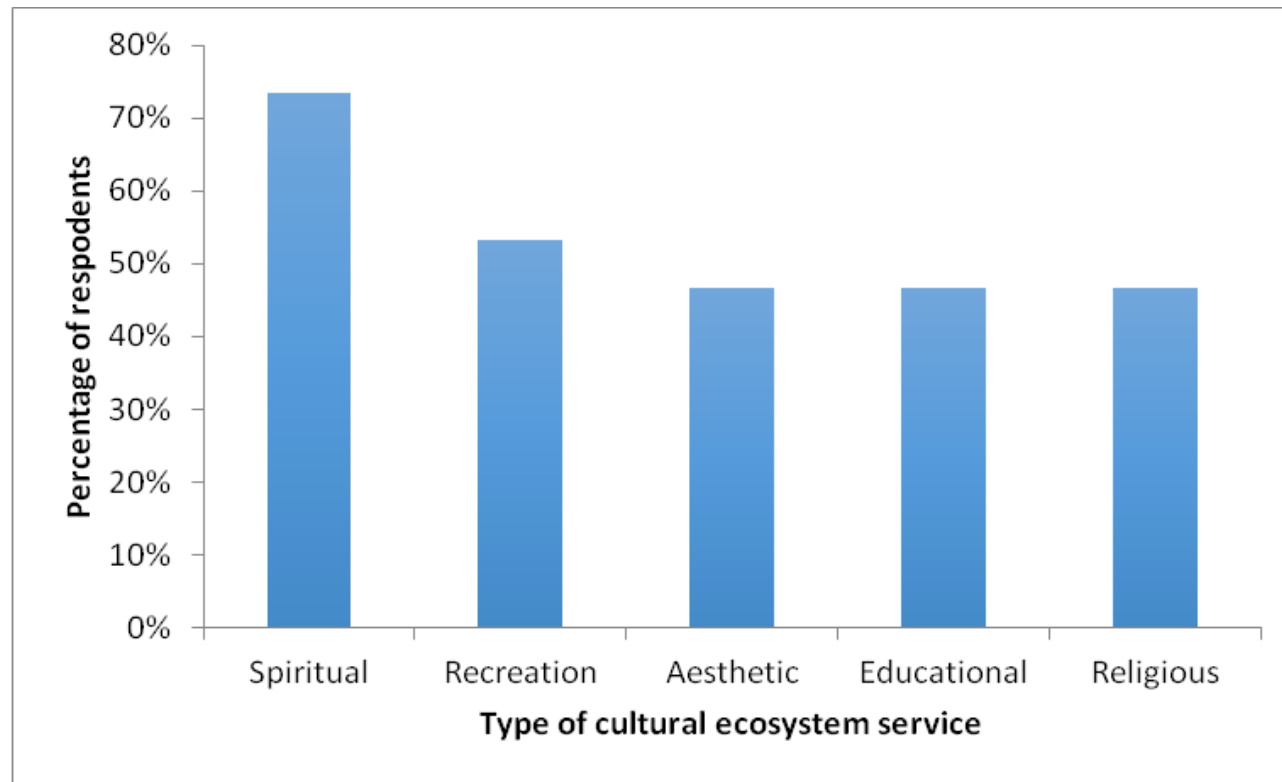


- Data collection Methods
 - Household questionnaires
 - In-depth interviews
 - Focus group meetings



Results

- Types of FCES



Results



- **Spiritual benefits- 73.3%**
 - Respondents beliefs that graveyards have spirits of the dead that help protect the land
- Traditional ceremonies – performed in forests and use diverse plant species

Results cont....



- **Traditional Educational benefits – 46.7%**
 - initiation ceremonies for girls that have reached maturity. E.g *D. Condylocarpan* tree shade is the preferred tree species for the ceremony because it symbolizes that a woman should be fruitful as the tree bear fruits.
 - Tree is protected from being cut and in most case these areas are surrounded by a lot of trees that provide shades and privacy to the girls

Results cont....



- **Aesthetic 53.3%**
- **Recreation – 46%**
- **Religious benefits- place of prayer**

Changes in provisioning of FCES



- 73.3% revealed reduction in provisioning of cultural services over the last two decade.
- Affected services - recreation, aesthetic, educational and religious benefits
- There is however no reduction in provisioning of spiritual benefits as trees are retained around graves for fear of provoking the spirits

Changes in capacity to provide FCES



- Cultural differences- 60%
- Christianity- 25%
- Decision making stricture and enforcement - 15%

Threats to forests



Pressures on Forest ecosystems

- 48% of respondents reported food shortages every year (November-April).
- The main coping strategies are charcoal production (45.3%), casual labour (35%) and remittances (9.4%).
- *“When you run out of food in the household, the axe hits the tree” Male respondent, Mwekera study site.*





Discussion

- High consumption of FPES for food, medicine, construction material.
- “Zambia woodlands are a pharmacy, a supermarket, a building supply store, a grazing resource, cultural heritage site and spiritual temple”
- Pressure on forests are reducing the provisioning of FCES
- Ethnic diversity and erosion of social norms

Discussion

- The appreciation of cultural services by many indigenous people is profound ([Butler and Oluoch-Kosura 2006](#)).
- Spiritual bonds with sacred landscapes ([Butler and Oluoch-Kosura 2006](#))
- Ritual practices
- Indigenous knowledge
- All the main uses boarder on ***Cultural identity***

Conclusions

- Zambia's forest ecosystems provide important FCES
- FCES are dependant on tribe and people's relationship with the forests
- Current deforestation and forest degradation pose a danger to cultural erosion among indigenous people especially near urban areas.
- Need to incorporate cultural uses of forests in policy and practice to guide integrated landscape management

- **Questions and Comments**

kanungwe@gmail.com

