

# Towards integrated farming and biodiversity protection landscapes for improved livelihoods in a Southern African TFCA: policy and governance considerations

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8<sup>th</sup> International Symposium Agro Environ 2012, Wageningen, the Netherlands May 1-4.

# Presentation Outline

- Introduction
- Objectives
- Methodology
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- Conclusion

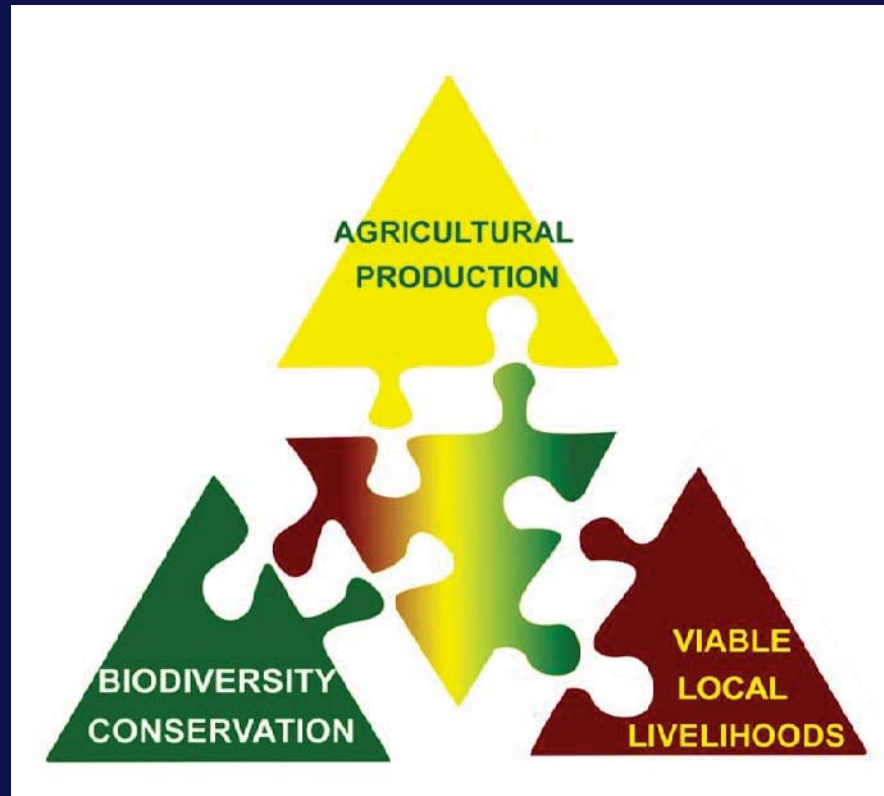


# Introduction

- A review of literature shows that the world faces a **challenge** to balance food production and biodiversity protection - **that there is need to meet the increasing demand for food through ecologically sustainable agricultural approaches.**
- The Transfrontier conservation areas (**TFCAs**) scheme which has gained popularity in Southern Africa presents an opportunity for addressing this challenge.
- TFCAs aim to achieve the conservation and sustainable use of biological and cultural resources (**along national boundaries**) whilst promoting regional peace, co-operation and socio-economic development.
- The aim of TFCAs overlaps with the goals of **ecoagriculture** (**an approach for integrating conservation and farming at landscape scale to improve livelihoods**).

# The Ecoagriculture Concept

(Source: Scherr and Buck, 2008)



Ecoagriculture is a broad framework for land use transformations that enhance rural **livelihoods** and agricultural **production** systems while **conserving** or restoring ecosystem services and biodiversity at a **landscape** scale



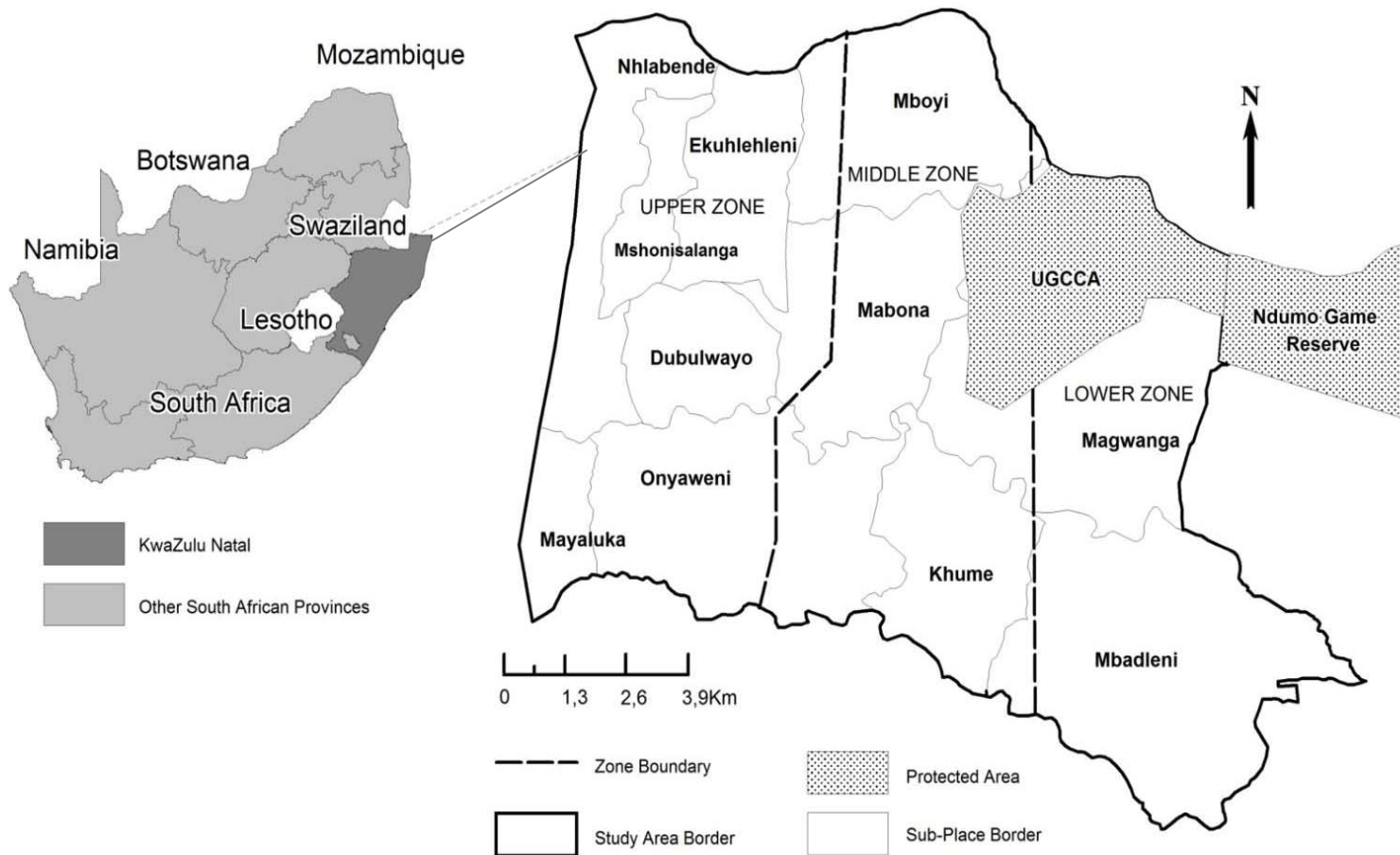
# Introduction (cont.)

- **Local communities** can possibly contribute towards achieving TFCAs' goals through implementing ecoagriculture.
- Policies, laws, regulations and governance (**manner in which access to resources is regulated and monitored**) provide the framework and context in which local communities make decisions and take actions that affect biodiversity.
- Hence the present research sets to investigate policy issues that might affect the contribution of local communities towards the achievement of TFCA goals.

# Study Objectives

- To evaluate the influence of public policies and customary rules on the utilization and management of indigenous tree resources by communal farmers and how this affects the development of ecoagriculture policy.
  - To assess local perceptions on availability of wild tree resources in the area
  - Indigenous forests and woodlands or scattered trees in agricultural fields are a major component of ecoagriculture landscapes.





- Name: Mathenjwa Tribal Authority (MTA)
- Communal farming area in northern KwaZulu-Natal Province of South Africa
- Within Lubombo TFCAs; Lies in Maputaland Centre, a biodiversity hotspot.
- Home to some of southern Africa's poorest people who rely heavily on local natural resources



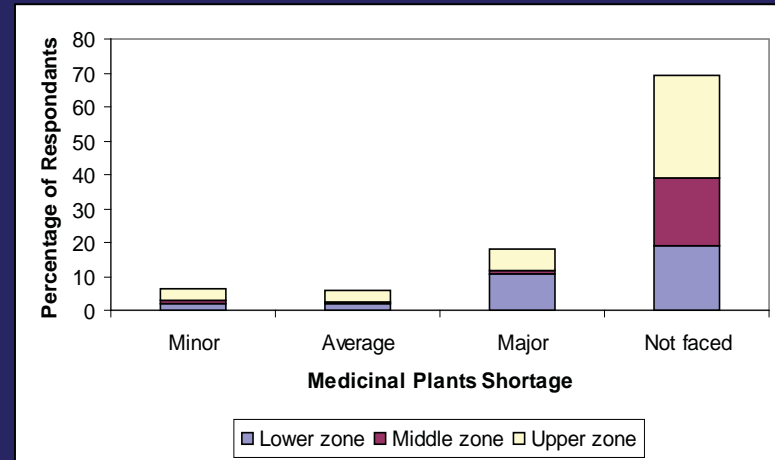
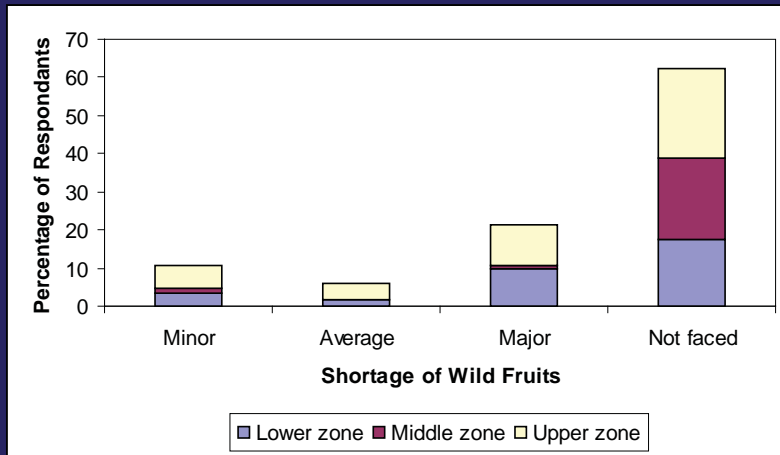
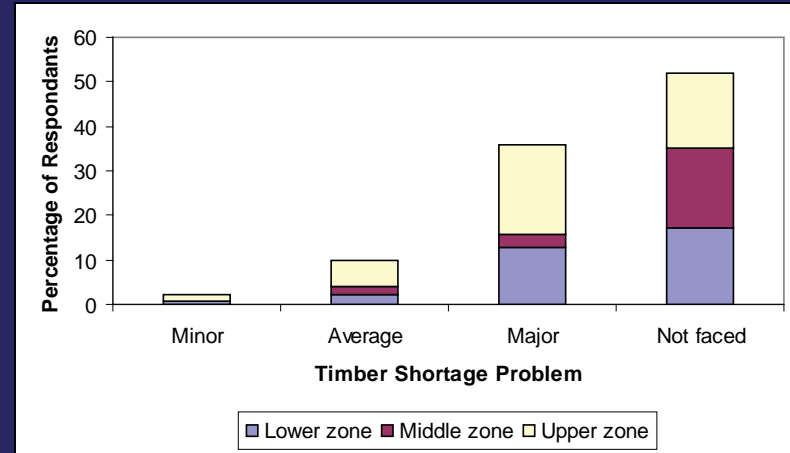
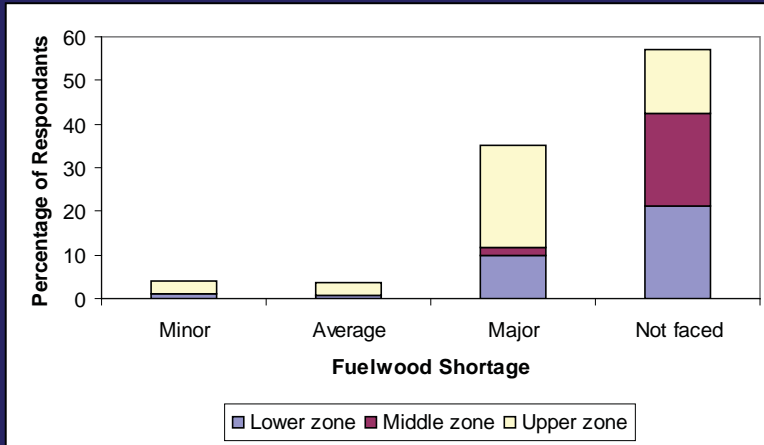
# Methods

- Primary and secondary data information sources used:
  - questionnaire surveys (170 local farmers' household heads; + 30 household representatives)
  - key informant and group interviews,
  - direct observation.
  - public policy/legislative documents
- Study area was divided into three zones: lower zone (low-lying gently sloping coastal plain, around 150m ASL), middle zone (rugged and mountainous area around 350m ASL, transitional between lower and upper zones) and upper zone (dissected plateau, about 550m)



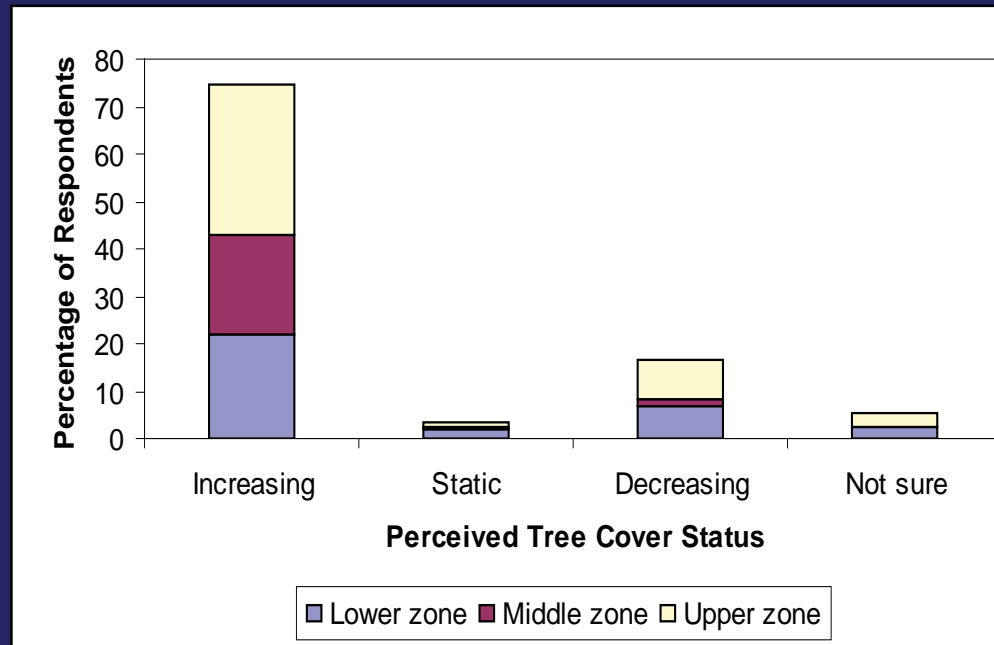
# Results and Discussion

Problems associated with lack of indigenous tree resources were marginally felt in the area.



# Results and Discussion (cont)

The greater proportion of respondents perceived an increase in natural bush, woodland or forest cover in their localities. Perceptions can influence attitude towards biodiversity conservation.



# Comparison with complementary studies

- **Fleury (2011)** analysed landcover from satellite imagery -  $\frac{1}{4}$  of the land area was cleared,  $\frac{3}{4}$  were under natural vegetation cover.
- **Torquebiau et al. (2010)** analysed a series of aerial photographs from 1942 to 2010 found an increase in tree cover over this period.
- Implying that vegetation of the area is in a reasonably undisturbed condition.



# Observed challenges

- Study revealed challenges relating to existing governance regimes:
- **State legislation** provides for protection of specified tree species; restricts amounts harvested, or harvesting method whereas **customary norms** allows free and open access for local residents with no restrictions.
- **Reluctance** to comply with legislation protecting plants perceiving this as prioritizing conservation at the expense of livelihoods.
- **Conflict** between local traditional structures and municipal or provincial authorities
- The **day to day conduct** of the local people is determined mainly through customary norms.
- Enforcement of public legislation in these circumstances becomes a challenge without **cooperation** from local community.
- Key informant interviews revealed that the state lacks **capacity** to enforce and monitor compliance.



(a)

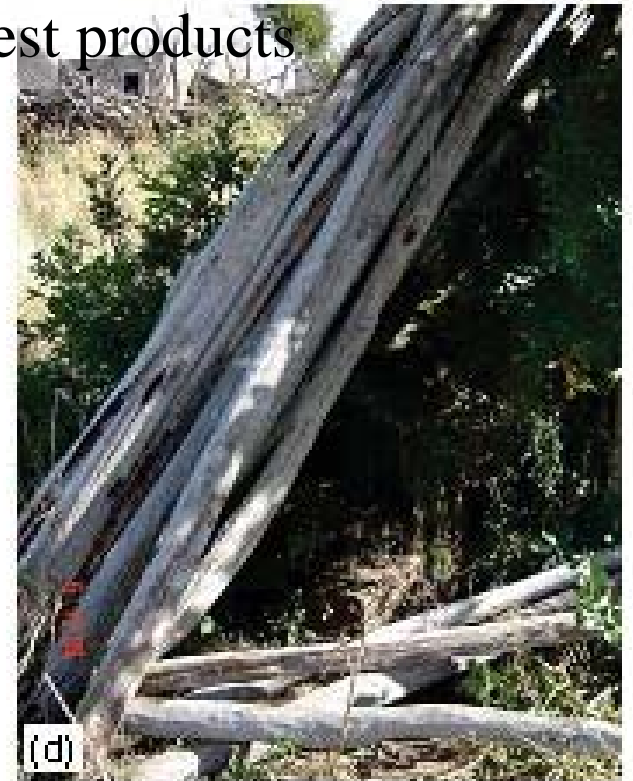


(b)

## Unmonitored harvesting & sale of forest products



(c)



(d)



# Implications for ecoagriculture policy

- Many countries including South Africa have **no ecoagriculture policy** to guide and support agriculture-biodiversity integration
- Ecoagriculture approach is **gaining recognition** across the world - many countries likely to consider developing ecoagriculture policy.
- **Potential challenge:** lack of effective enforcement like other environmental policies.

# Conclusion

- Suggestions for ecoagriculture policy development:
  - Incorporate customary rules
  - Effectively engage local community members – e.g. scenario planning & community visioning.
  - Operationalize through local traditional leadership structures in collaboration with other stakeholders.

## Acknowledgements to:

- International Foundation For Science (IFS)
- French Institute of South Africa (IFAS)
- University of Pretoria
- National Research Foundation (NRF)
- CIRAD – France
- Ezemvelo KwaZulu-Natal Wildlife
- Wildlands Conservation Trust
- All persons who gave their support

