



AFRICAN FORUM
ON URBAN FORESTS

2nd African Forum On Urban Forests

Green Horizons: Shaping the Future Resilience of African Cities through Urban Forests

18 March 2025 - 21 March 2025



in partnership with:

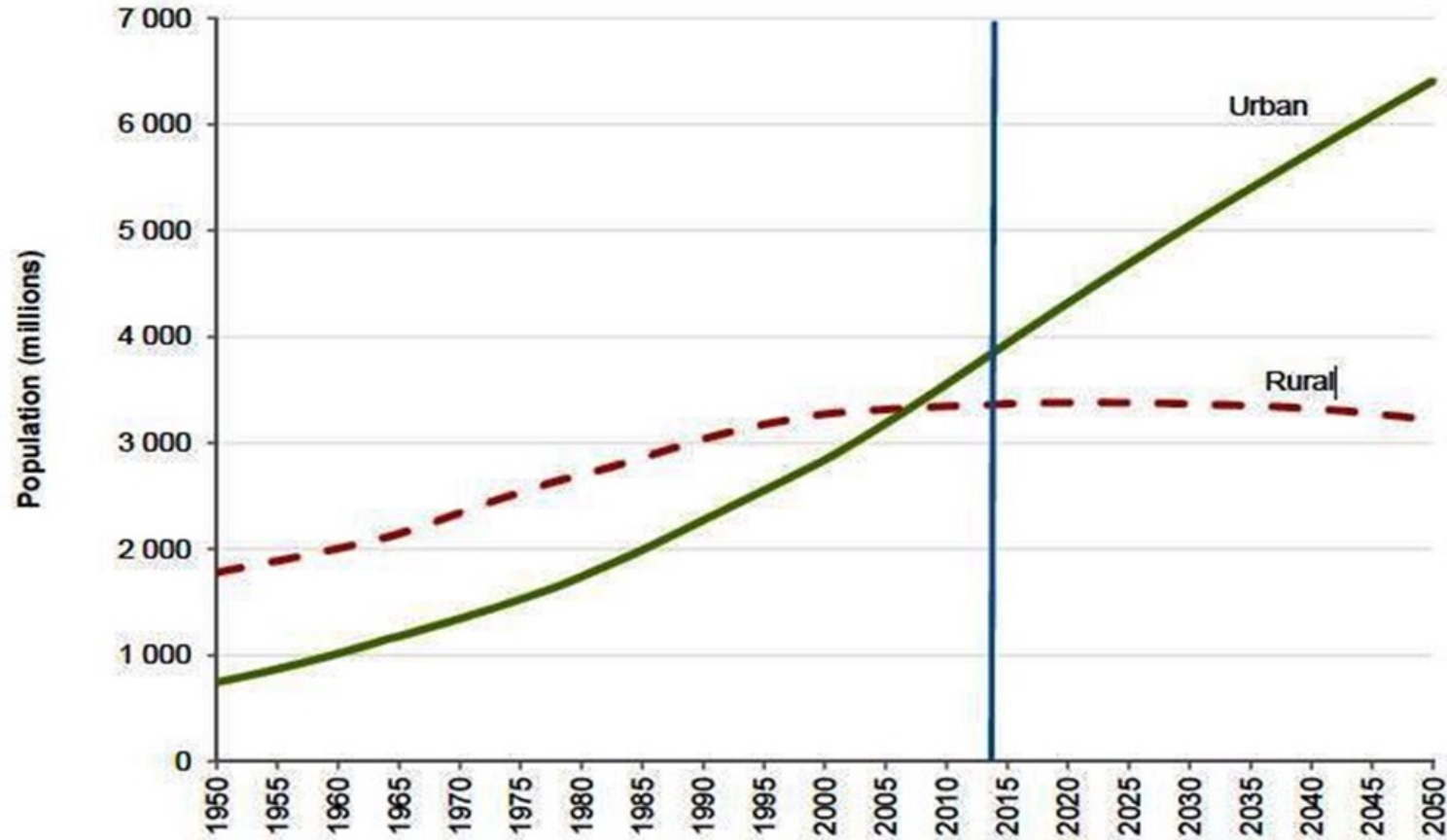


Dynamics of wild plant foraging practices in two medium-sized South African towns: How do foragers adapt and respond to change?

Hesekia Garekae
Department of Environmental Science
University of Botswana



BACKGROUND



Source: UN (2014)

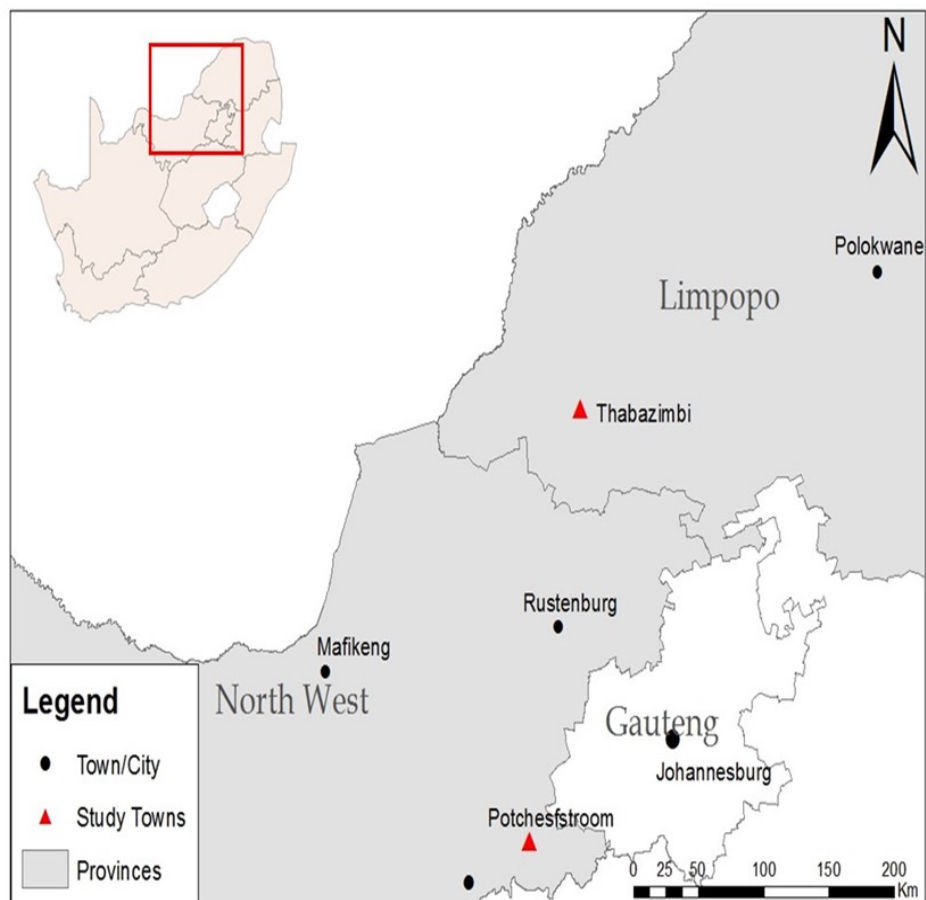


BACKGROUND

- Urbanisation present formidable challenges
- Threatens land-based livelihood activities in urban spaces
- Reconfigures foraging practice
 - **Form and shape**
 - **Right and access to green spaces**
- **This study assessed the socio-spatial dynamics influencing wild plant foraging practices in two medium-sized South African towns and how foragers adapt and respond to transformation**



STUDY AREA



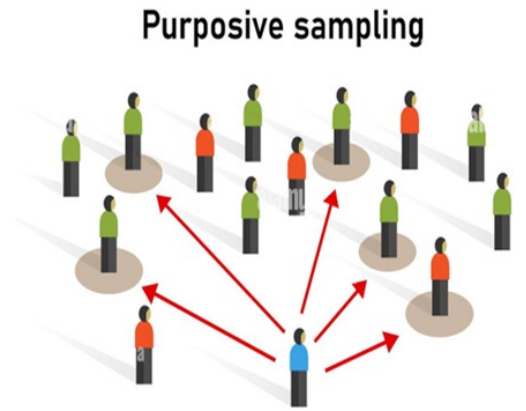
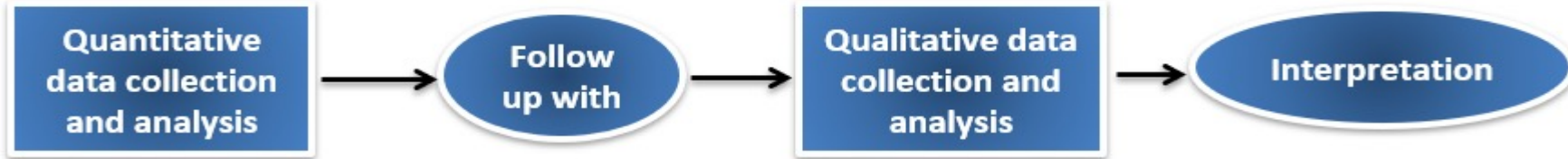
- Limpopo and North West provinces
- Two towns
 - Potchefstroom
 - 250,000 people
 - Mining, manufacturing and agriculture
 - Thabazimbi
 - 28,847 people
 - Mining, agriculture and tourism

METHODS

- Mixed method design
 - Explanatory sequential mixed method
- Multi-stage sampling design
 - Stratified sampling – 4 strata's per town
 - Household survey – 374 households
 - Purposive sampling – 81 forager's
- Data collection
 - Questionnaire – structured and semi structured
- Inferential statistics
 - Principal Component Analysis
 - Kruskal Wallis



METHODS



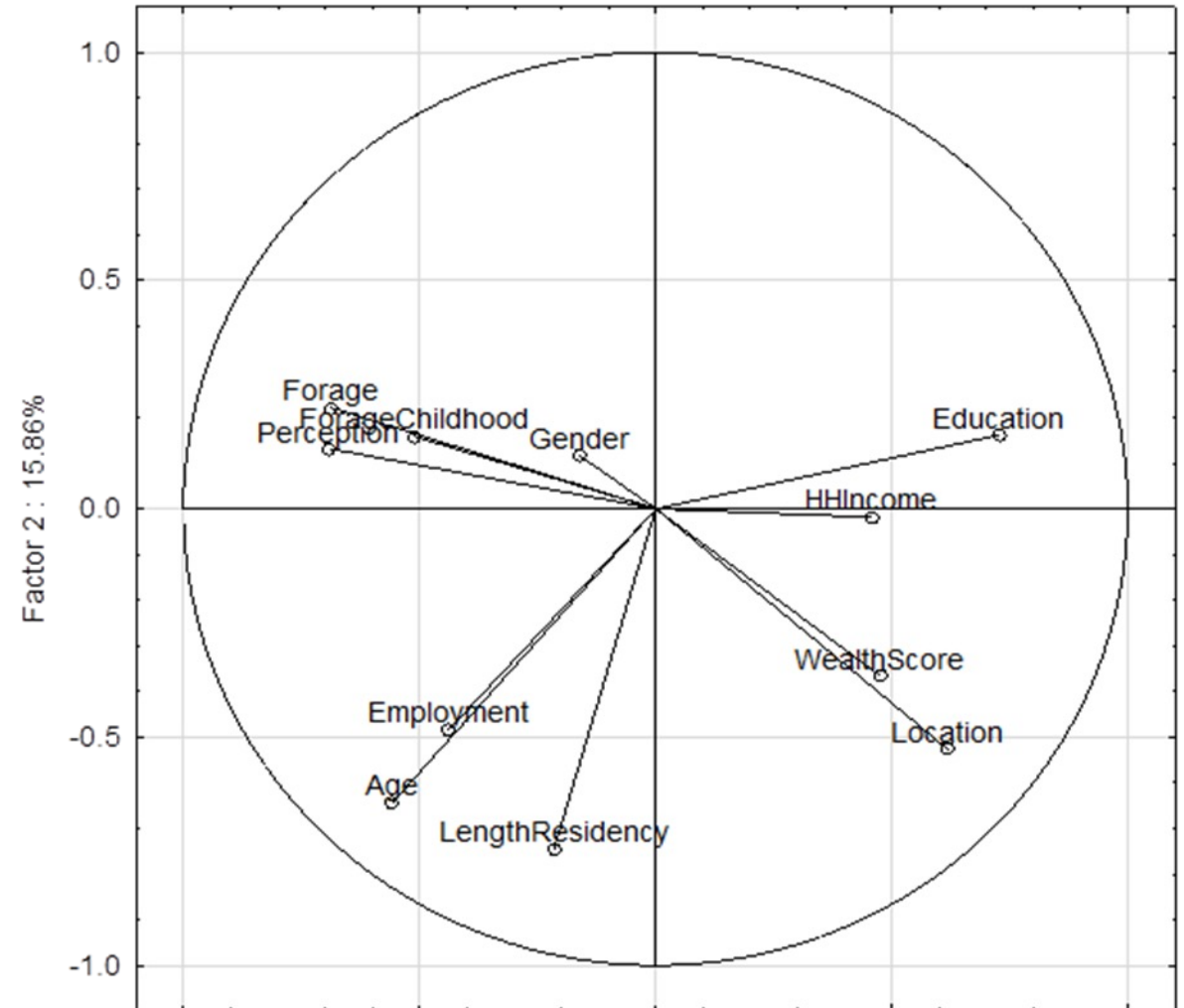
$$\chi^2 = \sum_i \frac{(O_i - E_i)^2}{E_i}$$

$$H = \left[\frac{12}{n(n+1)} \sum_{j=1}^c \frac{T_j^2}{n_j} \right] - 3(n+1)$$



RESULTS

- Foraging is widespread: 68%
- Foraging was key in providing **provisioning services**
- Foraging occurred in a **variety of spaces**

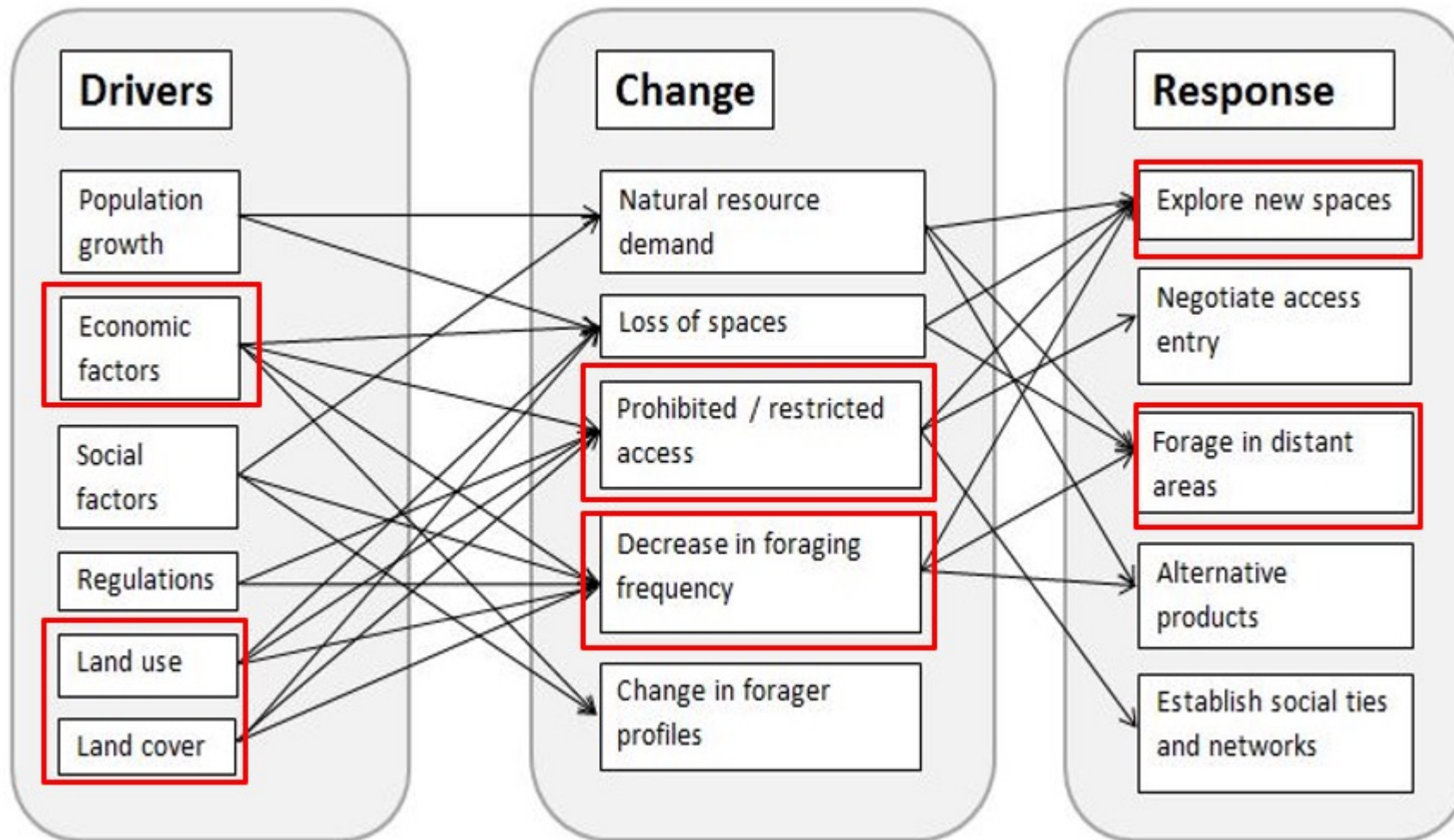


RESULTS

- However, the rapid urban transformation (re)shapes foraging practice over time
- This transformation changes the form and nature of foraging practice
 - **Spaces, regulations, and foragers profile**
- Urban foraging is not only dynamic in space and time but also a complex entity
- It is driven by multifaceted factors, often operating simultaneously
 - Population increase, socio-economic factors, governance regimes, land-use and land cover changes



RESULTS



IMPLICATIONS & CONCLUSION

- The findings implies that foraging practice is constantly changing over time
- The declining foraging spaces calls for attention in land-use planning
 - Planning and developing urban spaces against the backdrop of productive spaces, promoting their social and ecological functions
 - Land-use conversions should take into account the historical context of particular spaces to promote compatible and multi-functional land-uses
- Declining number of foragers likely to erode its value and the collective agency of foragers



IMPLICATIONS & CONCLUSION

- This dynamics makes foraging a complex entity
 - Diverse actors involved in the different facets of the practice (Shackleton et al., 2017)
 - Multifaceted but interrelated drivers
- Unilateral solutions aimed at circumventing the changing dynamics likely to be unsuccessful
- Calls for development of a wide range of responses to adapt to and cope with the changing dynamics



ACKNOWLEDGEMENTS

- **Prof. Charlie Shackleton (*Rhodes University, South Africa*)**
- **AFRICITY team members**
 - *University of Erlangen-Nuernberg (FAU), Germany*
 - *Rhodes University, South Africa*
 - *Sokoine University of Agriculture, Tanzania*
 - *College of Business Education, Tanzania*
 - *LEAD Southern and Eastern Africa, Malawi*
- **Study participants**

SPONSORED BY THE



Thank You.

