

## 2nd African Forum On Urban Forests

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

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# Urban Agriculture as a strategy for enhancing Climate Change Resilience and Food Security in Dar es Salaam, Tanzania

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#### Introduction

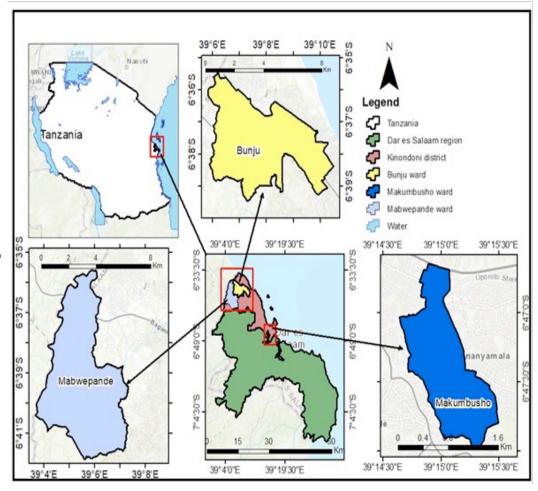
- The challenges in cities encompass population growth, unemployment, high food costs, biodiversity loss, and climate-related issues.
- Food security has always been a key resilience aspect for people living in cities (Barthel & Isendahl, 2013).
- This study examines how UA can build community resilience in Dar es Salaam, one of the fastest-growing cities in sub-Saharan Africa.





### Research Methodology

- ☐ A mixed-methods approach was used.
  - $\triangleright$  A household survey (n = 233),
  - ➤ Four (4) focus groups, and key informants (n = 25) revealed local perceptions of challenges and opportunities.
  - ➤ Data analysis One way ANOVA, SWOC, Peason's Chi-Square, Mann-Kendall trend analysis and spatial analysis

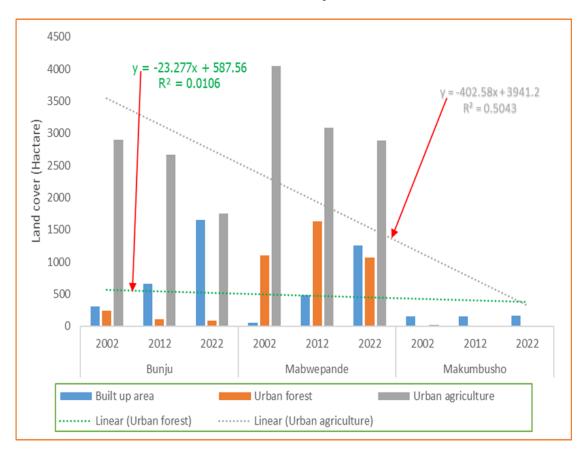


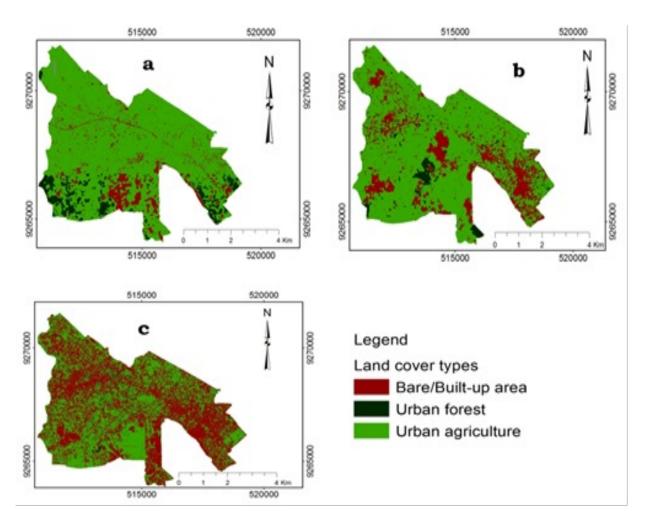




#### Results

- □ UA experienced a reduction in area by 33.3% loss [Fig (a) 2002, (b) 2012 and (c) 2022]
- ☐ Urban forest decreased by 15.1%





#### Results

- □ Income, job creation and reduced food miles (p = 0.21)
- □ UA use organic wastes for crop production (p = 0.15)
- Over 30% of respondents obtain 300,000 TZS from agriculturalrelated activities per month.
- ☐ Financial institutions are willing to offer loans
- ☐ There is an agricultural institutions/centres which offers opportunity for development of UA
- □ UA is hampered by land shortage, climate change extremes, and a weak regulations.
- ☐ Little support from decision makers



#### **Conclusion and Recommendations**

- There is a decline in the coverage of UA in the study area over the years, while the built-up areas have expanded.
- The urban forest areas are decreasing as well as the NDVI values suggest poor vegetation health - indicating changes in land use patterns.
- UA has contributed to livelihoods of communities – food (reduced food miles), income etc.
- Access to land for UA is limited, fear of eviction call attention on the need for secure land tenure.

- Opportunities (financial services, agricultural centres) can promote the growth of UA.
- There is a need to raise awareness, and collaboration among stakeholders.





## Thank You.

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