



Unlocking Regenerative Farming for Climate-Resilient Crop Production in Kenya: Evidence from African Indigenous Vegetables

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Introduction

Climate change poses significant threats to agricultural systems in Kenya, undermining smallholder productivity and food security.

African Indigenous Vegetables are recognized as climate-resilient crops.

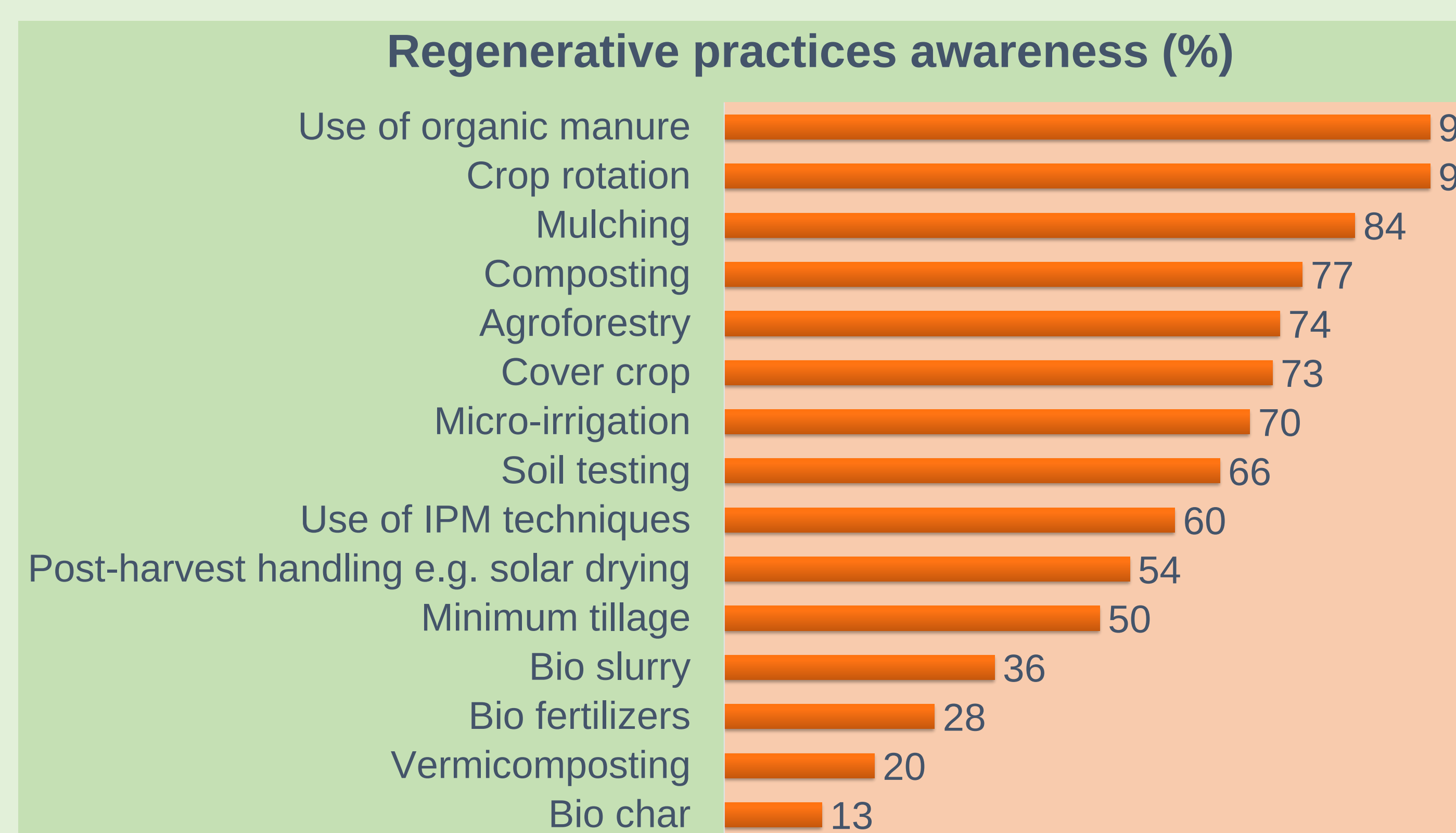


Regenerative agriculture offers potential solutions.

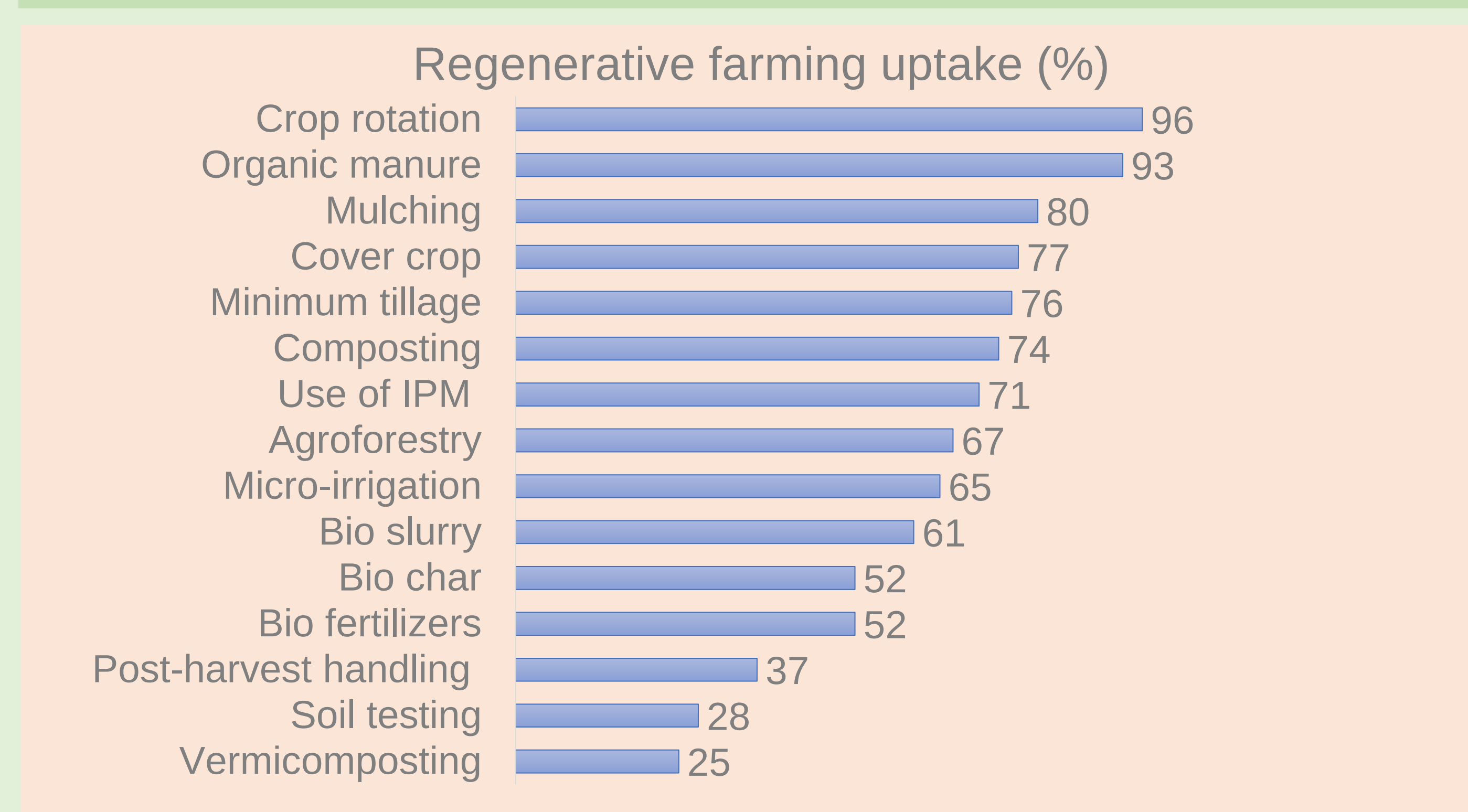
Adoption among vegetable-growing smallholders remains low.

The study assessed awareness, knowledge levels, adoption rates, and perceived effectiveness of selected regenerative technologies

Results



- Highest for use of organic manure and crop rotation
- Biochar and vermicomposting less popular



- Highest for use of organic manure and crop rotation
- Lowest adoption on vermicomposting and soil testing
- Choice determined by the need to increase production, income, environmental health and food safety

Adoption constraints

- Low knowledge level
- Cost of investment
- No market incentives e.g., higher price premiums

Conclusion

- Regenerative farming is a significant promise for climate adaptation.
- Adoption is constrained by knowledge gaps, productivity trade-offs, and lack of market incentives.
- Bridging the awareness-adoption divide requires moving beyond training to address capital constraints, labor demands, and the absence of premium pricing.

Materials and Methods

A mixed-methods design, combining household surveys (n=252), farmer focus group discussions, and key informant interviews with traders across Kenya

