

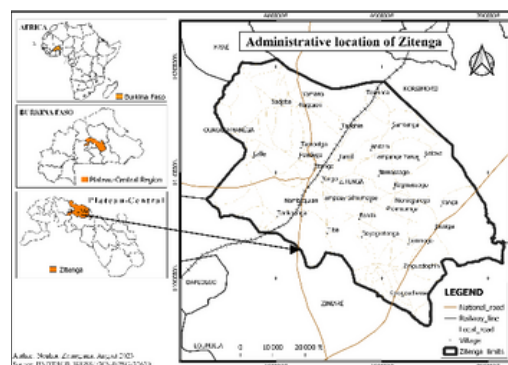
POLICY BRIEF



Stone bunds techniques (photo credit: author)

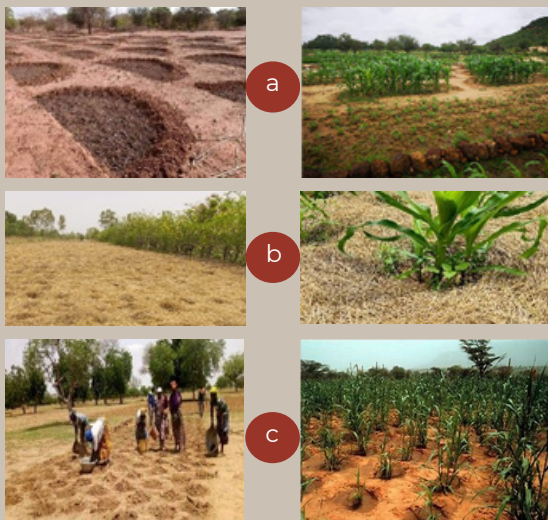
INTEGRATING LOCAL AND TRADITIONAL KNOWLEDGE INTO SUSTAINABLE LAND MANAGEMENT FOR REGENERATIVE AGRICULTURE

Land degradation is a major global challenge, particularly in terrestrial biomes and agroecosystems. Exacerbated by anthropogenic activities, it has led to food insecurity and displacement. In response, rural populations have developed techniques based on local and traditional knowledge for restoring agricultural land to combat the effects of land degradation, climate change and biodiversity loss. This policy brief summarizes research conducted in Zitenga, Burkina Faso, and assesses the effectiveness of these techniques in addressing land degradation in the context of climate change and desertification.



OVERVIEW

The study identifies key local and traditional knowledge-based agricultural land restoration techniques:



Legend: (a) Half-moon, (b) Mulching, (c) Zai system.

POLICY RECOMMENDATIONS

1. Facilitate platforms for the exchange of local and traditional knowledge between farmers, scientists and policymakers to enhance understanding and application.
2. Invest in programs that empower rural communities with the skills and knowledge required for the effective implementation of these agricultural land restoration techniques.
3. Recognize the invaluable contributions of local and traditional knowledge and integrate them into national and regional policies related to land management, agriculture and climate change adaptation.
4. Promote the adoption and scalability of sustainable agricultural practices, it is essential to integrate research and development with financial support mechanisms.

KEY FINDINGS

1. Effectiveness assessment

The techniques significantly contribute to increased crop yields (28.1%), improved soil fertility (27.9%) and enhanced livelihoods (20%). Additional benefits include fodder availability (13.2%), ecosystem regeneration (10.7%) and positive correlations with Sustainable Development Goals (SDGs).

2. Gender-sensitive approach

The positive correlation between gender and the choice of agricultural land restoration techniques indicates the necessity of adopting a gender-sensitive approach. Equal access to resources and information is crucial for ensuring the success and impact of land restoration projects, aligning with the broader goal of sustainable agricultural practices.

3. Contribution to SDGs

The techniques make substantial contributions to SDG 2 (Zero Hunger), SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), SDG 13 (Climate Action) and SDG 15 (Life on Land). Understanding the diverse impacts of these techniques on global sustainability goals is essential for effective planning and implementation.

4. Comprehensive use of plant species

The study underscores the importance of considering various uses of plant species in land restoration efforts. Beyond ecological resilience, these plant species contribute to cultural heritage preservation, shade provision, medicinal use, cooking fuel, domestic use, fodder production, agroforestry and economic growth, emphasizing the need for a holistic approach in land restoration initiatives.

NOTE

Research has become a key tool in the response to land degradation, providing invaluable insights into its causes, impacts and potential solutions. It is crucial to provide policymakers and communities alike with evidence-based approaches to mitigate land degradation and safeguard essential ecosystems for future generations.

CONCLUSION

The integration of local and traditional knowledge-based agricultural land restoration techniques into sustainable land management practices is essential for addressing land degradation, enhancing food security and mitigating climate change impacts. Policymakers, researchers and stakeholders should collaborate to create an enabling environment that recognizes, supports and promotes the invaluable contributions of these techniques towards regenerative agriculture and the achievement of global sustainable development goals.



Photo credit: author

Run-off water collection basin

REFERENCES

Nouhou Zoungrana, (2023). Use of local and traditional knowledge-based land restoration techniques in savanna ecosystems: lessons learned from Zitenga, Burkina Faso, [Master's thesis, Université Félix Houphouët Boigny]

