



Introduction

Climate change poses a significant threat to global food security, particularly in developing regions where smallholder farmers rely on agriculture for their livelihoods. These farmers face multiple barriers in adopting climate-resilient technologies, including financial limitations, insecure land tenure, and inadequate knowledge transfer.

With adequate policies and targeted support, their abilities to adapt to climate change and maintain food security can be strengthened.

Key findings

- Adoption of pro-environmental agricultural technologies (PEATs) in China is supported by land consolidation but hindered by fragmented land and reluctance to change.
- Climate smart agriculture (CSA) improves resilience but faces challenges due to high costs and limited credit access.
- Agroforestry enhances soil fertility but lacks adequate incentives for widespread adoption.

Policy suggestions

- Secure land tenure to support long-term agricultural investments.
- Improve financial access to help smallholder farmers adopt resilient agricultural practices, such as drought-resistant crop varieties, water-efficient irrigation systems and no-till farming.
- Strengthen education and extension services for better knowledge transfer.
- Promote climate-smart infrastructure to support sustainable farming practices.



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