



Adaptive Agriculture Techniques Among Smallholder Farmers in Mali's Sahel Region: Yield Enhancement Studies

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Published: 19 May 2012 | **Received:** 21 January 2012 | **Accepted:** 02 April 2012

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DOI: [10.5281/zenodo.18956029](https://doi.org/10.5281/zenodo.18956029)

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Abstract

Adaptive agriculture techniques have been recognised as crucial for enhancing crop yields among smallholder farmers in Mali's Sahel region, where climate variability poses significant challenges. Qualitative research methods were employed, including semi-structured interviews with 50 randomly selected farmers from the Sahel region of Mali. Data collection entailed in-person meetings to gather detailed insights on their farming practices and challenges. Farmers reported an average yield increase of 15% across all crops when implementing adaptive techniques such as intercropping, improved irrigation methods, and use of drought-resistant crop varieties. Adaptive agriculture techniques significantly enhance the resilience and productivity of smallholder farmers in Mali's Sahel region, particularly under conditions of limited water resources and climate variability. Government support for research into local agricultural practices should be intensified to facilitate wider adoption of proven adaptive methods. Farmer training programmes on sustainable agriculture should also be expanded.

Keywords: Sahelian, Smallholder, Sustainability, Qualitative, Adaptation, Methodology, Community Engagement

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