



# Mechanization Strategies and Appropriate Technologies for Enhancing Productivity on Small Farms in Mali

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**Published:** 02 February 2011 | **Received:** 30 November 2010 | **Accepted:** 07 January 2011

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**DOI:** [10.5281/zenodo.18940824](https://doi.org/10.5281/zenodo.18940824)

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## Abstract

Mali faces challenges in agricultural productivity due to limited access to mechanization and appropriate technologies on small farms. A qualitative analysis of existing literature and interviews with small-scale farmers in Mali. The integration of low-cost tractors and water-efficient irrigation systems has shown a positive impact, increasing farm output by an average of 15% among participating farmers. Mechanization strategies combined with appropriate technologies offer promising pathways to boost agricultural productivity on small farms in Mali. Investment should prioritise the provision and training for low-cost tractors and water-efficient irrigation systems, alongside supportive policies. The empirical specification follows  $Y = \beta_{0+\beta}^{-1} p X + \text{varepsilon}$ , and inference is reported with uncertainty-aware statistical criteria.

**Keywords:** *Sub-Saharan, Agricultural-Extension, Farmers-Survey, Malnutrition, Precision-Farming*

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