



Theoretical Foundations for Assessing Self-Driving Tractors Among Kenyan Smallholder Wheat Farmers: An Impact Analysis on Yields

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Abstract

Self-driving tractors are increasingly adopted by smallholder farmers in Kenyan wheat cultivation regions to enhance productivity and efficiency. Theoretical analysis will be employed to develop a comprehensive model that considers factors such as tractor technology characteristics, farmer training programmes, and post-adoption support systems. The theoretical framework proposed provides a solid foundation for understanding how technology adoption can be harnessed to boost smallholder farming efficiency, particularly in contexts where traditional methods are labour-intensive and yield-restricted. Further empirical research should validate these theoretical insights by monitoring the long-term impacts of self-driving tractors on both productivity and sustainability across different wheat cultivation regions in Kenya.

Keywords: Kenya, Geospatial Analysis, Participatory Research, GIS, Precision Agriculture

ABSTRACT-ONLY PUBLICATION

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