African Development Studies (Interdisciplinary - Social/Human focus)

Digital Agriculture Technologies Among Women Farmers in Zimbabwean Highlands: Comparative Analysis with Kenya

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Abstract

Digital agriculture technologies have gained traction in various regions of Africa, particularly among smallholder farmers seeking to enhance their productivity and profitability. In Zimbabwean Highlands and Kenya, women farmers represent a significant proportion of agricultural producers but often face unique challenges related to access to technology and resources. Data collection involved surveys conducted with a representative sample of women farmers in Zimbabwean Highlands and Kenya. Qualitative interviews supplemented the quantitative data to capture detailed experiences and perceptions. Digital agriculture technologies such as mobile apps for weather updates and soil moisture monitoring showed higher adoption rates among women farmers in both regions, contributing to significant yield increases by up to 20% in some cases. Profitability was also enhanced with an average increase of 15% in net income. The study highlights the potential of digital agriculture technologies as a viable solution for improving agricultural productivity and profitability among women farmers in rural settings, particularly when tailored to address specific local challenges. Governments and development organizations should invest in targeted training programmes and infrastructure support for women farmers. Tailored financial incentives could also play a crucial role in increasing adoption rates of these technologies.

Keywords: *African Highlands, Smallholder Farmers, Digital Technologies, Gender Studies, Agricultural Productivity, Participatory Action Research, ICT Integration*

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