



# Urban Food Security Initiatives for Smallholder Farmers in South Africa's Free State Province: A Two-Year Randomized Controlled Trial of Integrated Agricultural and Livestock Rearing Support

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## Abstract

Urban food security initiatives are crucial for smallholder farmers in South Africa's Free State Province to improve their livelihoods and reduce rural-urban migration. A total of 150 smallholder farmers were randomly allocated into intervention and control groups. The intervention group received comprehensive training, technical assistance, and financial support for both crop cultivation and animal husbandry. Farmers in the intervention group showed a significant increase in livestock productivity by 42% compared to baseline levels, with an average of 50% higher income from agricultural outputs over the two-year period. The study confirms that integrated support for smallholder farmers can enhance their economic resilience and contribute to urban food security through diversified farming practices. Policy makers should consider scaling up such initiatives, integrating them with other social safety nets and promoting sustainable land use practices. Urban Food Security, Smallholder Farmers, Integrated Support, Livestock Productivity, Income Enhancement

**Keywords:** *African Geography, Smallholder Farming, Livestock Rearing, Randomized Controlled Trial, Agricultural Extension Programmes, Rural Development Studies, Food Security Studies*



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