

Farmer learning and application for sustainable intensification in Tanzania: drivers and implications for scaling

Haroon Sseguya^{1*}, Mateete Bekunda², Francis Muthoni³ and Japhet Masigo

Abstract

Many Sub-Saharan Africa (SSA) countries struggle to ensure realization of increased agricultural production amidst challenges such as climate change and population pressure. The approach of sustainable intensification (SI) in agriculture, characterized by increasing agricultural production using existing farm land in ways that are environmentally sound, socially acceptable and economically feasible, is being fronted as promising. Technologies that can lead to the realization of SI are available but one of the key challenges is the low reach among smallholder farmers. Farmer training and colearning among actors in the innovation system is a key pillar aimed at enhancing access to knowledge and skills, and subsequently, application. However, little is known about the drivers of learning transfer among beneficiary smallholder farmers in agricultural productivity enhancement interventions. We use the learning transfer inventory model to interview 150 farmers and five key informant interviews with extension staff to analyze the drivers of learning transfer in two districts in Tanzania, Kongwa and Mvomero, where the Africa RISING program is operational. A structural equation model that estimates the drivers and their strength was generated. Results indicate that access to markets, capital, timely information and influence are critical for effective learning transfer. Design of the learning interventions is also critical for learning transfer, with implications for a deliberate focus on choice of appropriate documentation, extension and training methods.













¹International Institute of Tropical Agriculture (IITA), Morogoro– Tanzania

²International Institute of Tropical Agriculture (IITA), Arusha – Tanzania

³International Institute of Tropical Agriculture (IITA), Dar es Salaam – Tanzania

^{*}Corresponding author: Haroon Sseguya, H.Sseguya@cgiar.org