



Access and Use of ICTs in Crop Productivity by Young Farmers in Tanzania  
 A Policy Brief  
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Although there is no single, universal definition of Information and Communications technologies (ICTs), the term generally refer **to an assembly of technologies that are used to handle information and aid communication**. These include mobile phones, tablets, computers, televisions, satellites, office software, Short Messaging Services (SMS), social media, Geographical Information Systems (GIS) and drones. ICTs influence crop productivity by expanding communication, cooperation, and ultimately innovation among the growing array of actors in crop productivity. ICTs, especially mobile phones and computers, can and do drive participatory communication, including communication from those on the margins of traditional research-extension processes. ICTs are key instruments that organizations use to deliver services to larger numbers of rural people than they could reach before.



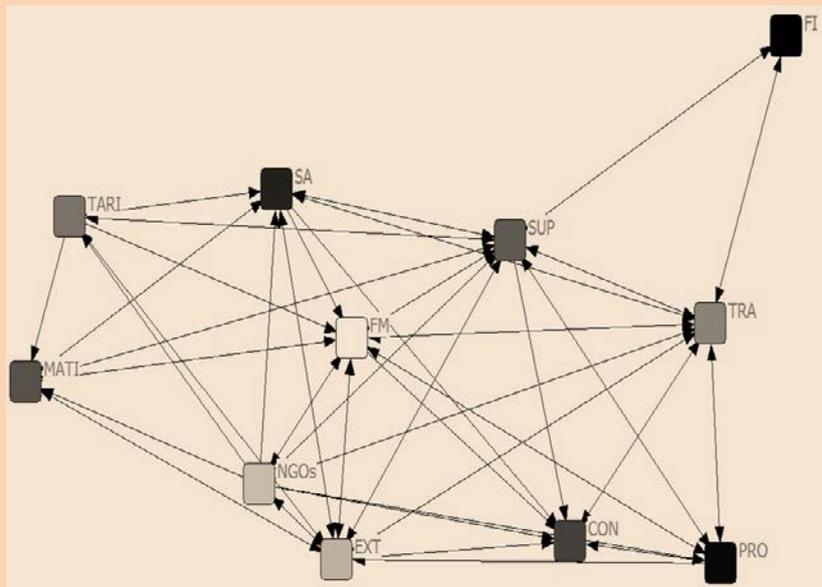
Based on the study **“The Influence of ICTs Adoption in Crop Productivity among the Youths in Misungwi and Kilosa Districts, Tanzania,”** in October 2018, results show that of the 400 respondents, 160 (40%) do not adopt ICTs while 240(60%) have adopted ICTs to enhance crop productivity endeavors. The ordinary mobile phone is the most used (49.75%) followed by smartphones (17.25%) and only 2.5% respondents have access to computers. Factors such as sex, education level of the respondents, access to credit, farm location, distance from the market, receiving advice from NGOs and farm size had a positive and significant influence on intensity of ICTs adoption. On the contrary, crop diversification negatively affected the intensity of ICTs adoption.

**Policy Implication**

**Promoting the acquisition of smart phones or wider public access to computers is a necessary first step towards enhancing ICT use by young farmers in Tanzania**

Agricultural Innovation System (AIS) which is a network of actors in the field of agriculture such as research, extension, input supply and credit, marketing, production and regulation, insist on **interactions** of people and ideas in order **to improve productivity by applying new knowledge or recombine existing knowledge**.

**From the study it show that,** young farmers have limited interaction with important actors such as agricultural training and research institutes, agricultural seed agency and the financial institutions.



**Key:** **MATI** – Ministry of Agriculture, **TARI** – Tanzania Agricultural Research Institutes, **SA** – Seed Agencies, **FM** – Farmers, **NGOs** – Non Governmental Organizations, **EXT** – Extension Agents, **SUP** – Input Supplies, **CON** – Consumers, **TRA** – Traders, **PRO** – Processors and **FI** – Financial Institutions

#### Policy Implication

Adoption of new farming technologies including ICTs adoption cannot be fulfilled if important actors such as researchers who are the source of innovation, extension agents, seed agencies, financial institutions and farmers are not interacting. In order to enhance crop productivity among farmers in Tanzania, facilitating interactions among key stakeholders such as farmers, researchers, extension agents, input suppliers, traders, processors, government officials are recommended.

Furthermore, results show that adopters of ICTs had higher crop yields compared to non-adopters by the difference of 49kg per acre.

#### Policy Implication

For the sake of promoting crop productivity among young farmers in Tanzania, the study recommends on the need of equipping districts with ICT facilities such as computers for exchanging information and knowledge on crop productivity by the Ministry of Agriculture so that young farmers can use these centers to access crop productivity related information.

The main question that needs to be answered by the above audiences is how to increase productivity among young farmers. What needs to be asked is how ICTs can influence crop productivity.

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