

Emerging ICT Technologies for Agriculture, Training, and Capacity Building for Farmers in Developing Countries: A Case Study in Zimbabwe

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Abstract

This chapter explores the use of emerging ICT technologies for agriculture in Zimbabwe, a developing country in sub-Saharan Africa. It investigates the concept of ICT technologies and their potential impact on agriculture. The chapter then brings the background and context of the study. The chapter is premised on a qualitative approach which fuses a literature review to situate the chapter and eight (8) in-depth interviews and a ten (10) member focus group discussion to gather empirical data. The findings reveal that there are emerging ICT technologies in Zimbabwe which include artificial intelligence, drone technology, IoT, robots, and big data. However, the application and use of these technologies are still very localized and limited to big and highly capacitated commercial farmers, with very few smallholder farmers using the technology because of challenges that impede the adoption and use of these emerging ICT technologies for agriculture by the bulk of farmers. The chapter submitted measures that could be implemented to try and increase the adoption and increased use of these technologies.