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## ICT-Based Platform for Facilitating Knowledge Access in Agriculture Extension Offices: A Case Study in Ethiopia

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## Abstract

Challenges in integrating Information and Communication Technologies (ICTs) into agricultural extension service delivery in developing countries are common. However, effective approaches that look into the sociotechnical systems of ICT services implementation and use at the organisational level are yet to come. Agricultural knowledge centres (AKCs), platforms that allow access to ICTs for online and offline knowledge and communication resources, were piloted in selected four regions of Ethiopia in the past decade. This research documents the challenges and opportunities of establishing AKCs by the Livestock and Irrigation Value Chains for Ethiopian Smallholders (LIVES) project and the agricultural extension offices that owned it ultimately. Data were collected through in-depth interviews with key actors that took part in the implementation and operationalisation processes as well as archival resources that documented the process. The study is framed by the perspectives of Actor Network Theory to document the interaction of social and technical factors in the processes of establishing AKCs. Results showed that integrating AKCs into the organisational structure of public agricultural extension offices for the purpose of knowledge sharing and communication was challenging from the start. The limited awareness on the appropriateness of AKCS for the provision of knowledge resources and information services in a complex socio-political context of agricultural extension offices resulted in the partial success of AKC services operationalisation. Hierarchical organisational structure and institutional system of the public sector brought challenges to make adjustments with regard to financial resource allocation and operationalisation of the AKC services. Additional but not accounted for responsibility given to unmotivated managers of the centres influenced the service quality the AKC offered. This study recommends the need for a closer look on the appropriateness of ICT initiatives in a context by looking at organisational goals and objectives as well as the service delivery systems, human resource capacity, and availability as well as the critical need for such initiatives.

Keywords: Ethiopia, extension, ICTs, information, knowledge, sociotechnical systems

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