

## **ICT Integration in Agriculture: A Case of Sri Lanka**

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Information and Communication Technology (ICT) has become an indispensable tool in several sectors including the agricultural sector. It embodies all the digital technologies used to capture, store, process, and exchange information. Traditionally, agriculture has been the backbone of the Sri Lankan economy and in the transition towards food self-sufficiency in Sri Lanka, ICT integration in the agricultural sector would be imperative. Accordingly, the main aim of the proposed study is to develop a framework for ICT integration in agriculture taking into account the Sri Lankan agricultural sector. The study would be supplemented by a systematic review of literature that identifies the different domains of research related to ICT in agriculture, existing frameworks for ICT adoption in agriculture around the world, and the global initiatives for ICT integration in the agricultural sector. The study will also survey major barriers and challenges in ICT integration in agriculture and it will provide insights on the future of ICT integration in agriculture in Sri Lanka. As a case study, the study considers the Permanent Crop Clinic Programme (PCCP) which is a plant pest and disease diagnostic and recommendation service implemented through farmer group structure called the Crop Clinics (CCs). CCs serve as an extension tool contributing to promote sustainable agriculture and also provide a unique educational experience for farmers through making recommendations based on the diagnosis of live samples. Based on a questionnaire survey employing different stakeholder groups including officers from relevant government authorities, instructors, and farmers, the study aims to provide recommendations on where and how ICT can be better integrated into the above program thereby supporting the realization of the PCCP objectives.

*Keywords:* ICT integration, Agriculture, Sri Lanka, Permanent crop clinic programme