

Information and Communication Technology for Sustainable Agriculture in Sri Lanka

Prepared by

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Declaration

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

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Abstract

This allows agricultural information to be quickly and accurately transferred in the field, it is possible to utilize existing agricultural information resources through mobile phone messages transferred to farmers. This report explains an agricultural SMS based system on a GSM network and web base system with their associated mechanisms. The purpose of this project is to construct a short message service system that is capable of receiving and sending messages in rural areas. For this, we are going to implement the system that will be able to receive and send short messages. Meanwhile, we establish a separate data table able to communicate incoming and outgoing information to a higher agricultural information management system.

In addition to the message service system it provides web base system for enhance total functionalities of the system. Under this it will grant facilities such as Auction facility that provides opportunity to sell the products for better price, Educational facility that provides learning materials in various formats (text, audio and video), Forum facility that offers opportunity to publishing information (opinions, suggestions, questions and etc), News facility that publishes currently up to date news and information, Event facility that publishes future events (work shops, meetings, discussions and etc), Advertising is a revenue module for system and etc. To gather above details, we conducted literature survey about then and now agricultural situation of county. Even it was reviewed other approaches to similar kind of projects in world wide.

Some of the several key areas that we concerned during the project development were technology adapted, implementation and evaluation. Mainly it was considered factors such as cost affectivity, reliability, popularity and user-friendliness of hardware and software requirements of the system. Finally it was conducted questioner to identify user preferences and opinions about the system to enhance existing features, find bugs and carry out further improvement of the system.

Through this entire system, we will be able to aggregate and analyze agricultural information for MIS purposes, forecasting and communicated back to the farmer.

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