UNIVERSITY OF WESTMINSTER⌗

BSc (Hons) Information Systems with Business Management

Final Year Project

'Agro-mate' – An agriculture Value Chain Management System to help Smallholding farmers with their information needs!

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Abstract

Agriculture Industry possesses a high importance in most of the developing countries and in Sri Lanka also 28.5% of the National Employment is provided by the agriculture sector. But, since it was not developed to the rate that manufacturing and service sectors grew after the independence, agriculture industry only contributes a very small percentage to the country's Gross Domestic Profit.

Based on this background, the project aims to analyze the major problems and barriers that hinder smallholding farmers from receiving the maximum harvest from farming activities, and it was identified that 'lack of accurate and timely information in the value chain' as the most critical issue that affects them. It was further found out that these issues were not properly addressed through any Information System, and the project focuses on providing a solution and to design, develop and evaluate a centralized system for the agrarian officers, to help the farmers in advising throughout the value chain. The project will facilitate to meet the needs of smallholding farmers through the agrarian officers' guidance, since it was identified that agrarian officers are the first point of contact for any information need of farmers.

In creating an effective IS solution, the deductive research approach was selected to carry out a comprehensive research, and the factors affecting smallholding farming and were deeply analyzed based on existing literature. These factors and issues were validated via interviews with government officials and questionnaires distributed among citizens. The key findings of the industrial survey assisted in requirement elicitation, which was used to model, design and develop the IS solution; 'Agro-mate'.

'Agro-mate' attempts to uplift the Agriculture industry by providing smallholding farmers with a platform to fulfill all the information needs during the agricultural value-chain and ultimately develop the economy of the country.

Keywords: Agriculture information, Value Chain Management system, smallholding farmers, agrarian officers