Information and Decision Support System to Enrich Paddy Cultivation in Sri Lanka

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Abstract

Information Technology (IT) has connected the world together and now changing our life styles and social insights dynamically. In all stages of the agricultural industry, information technology plays a vital role in the management and success of a business. Hence agriculture has been greatly influenced by IT. This paper briefly explains one such attempt aimed at designing an information management and a decision support system for paddy cultivation enabling both decision making authorities and farmers to make effective decision making. Using this information system the frequent fluctuation of prices of products of paddy cultivation can be avoided by setting up paddy purchasing centers to purchase the excess harvest and import the shortage of such product if any, in time. At the same time the expected price of the paddy harvest can be predicted in advance before the end of each season and they can prepare for the situation coming up by adopting counter strategies. We consider a number of parameters for the harvest prediction and we develop a classification model based on a decision tree to predict the harvest. Further individual farmers' productivity reports, reports on fertilizer subsidiary distribution and reports on tax on paddy lands are the other useful artifacts that could be generated from the system. The system was evaluated based on the information we collected from different Govi Jana Kendra.