Information System for Cultivation

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Abstract

Many of the agro-economies in the world are fast embracing information technology (IT) as an option to increase the efficiency of coordination among the key stakeholders such as the farmer, governments as well as the experts in the field. Sri Lanka despite focusing on developing the agriculture sector is yet to infuse the latest trends in IT to enhance its process in this sector through methods such as the use of agriculture information systems (AISs). The work in this research proposes a framework based on modern IT infrastructure such as web services, and mobile services to address the critical need of disseminating domain knowledge to the farmer with the aim of enhancing the cultivation process. The proposed framework is based on fuzzy predictive models to impart expert domain knowledge and recommendations to solve many of the problems faced by the farmer. The use of fuzzy logic emulates expertise in domain knowledge based on the best use of criteria provided by experts as well as farmers within the information system.