

TEXTBOOK ON DIMENSIONS OF AGRICULTURAL EXTENSION

Sunil Kumar
Mustfa Hussain
Akanksha Singh
Jagatpal
Ashish Singh



Textbook on Dimensions of Agricultural Extension

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EXPERT SYSTEM, E-AGRICULTURE AND M-AGRICULTURE

– Sunil Kumar

ABSTRACT

Expert system will increase the probability, frequency and consistency of making good decisions, additive results of knowledge of many domain experts, facilitates real-time, reasonable cost expert-level decisions by the non-expert, enhance the use of most of the obtainable data and free the mind and time of the human expert to enable him or her to focus on additional creative activities. Now-a-days, expert system expert system has been developed in varied agricultural crops like rice, wheat, tomato, oilseeds and mustard, mango etc. in order to diagnose varied pests and taking management decisions for the advantage of farmers. New innovative approach of farm management, includes a key element i.e. the utilization of hardware and software technologies, like the deploying of sensor nodes, control management systems, robotics, satellites for imagery and positioning, data storage and analysis, advisory systems, and terrestrial and aerial drones. However, the aim of smart farming should not be just in industrializing agriculture, however in creating the whole process more efficient, sustainable, and of high quality, whereas respecting farmers' desires.

Keywords: *Expert system, innovative approach, smart farming, agriculture and farmers.*

Introduction

Expert Systems may be a system that employs human knowledge captured in a very computer to solve issues that commonly require human expertise and experience. In agriculture, expert systems unite the accumulated expertise of individual disciplines, viz., plant pathology, entomology, horticulture, agricultural meteorology and animal sciences; into a framework that best addresses the specific, on-site needs of farmers. Expert systems will facilitate knowledge transfer and can guide growers to take decision into different aspects of crop management for increasing the productivity and the profit ratio and also combines the experimental and experiential knowledge with the