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# **Decision Support System in Fruit Production**

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#### **Abstract:**

For farmers, fruit farming has great promise. However, farmers have challenges, chief among them being a lack of awareness of how natural circumstances might impact agricultural output. Therefore, it does not produce outcomes that are adequate when plants are chosen that are inappropriate. Farmers may grow a wide range of fruit crops, including avocados, guava, rambutan, oranges, melons, and so forth. However, it should be mentioned that plants should be grown in line with the conditions of nature. This software was made by Designing to assist in determining how to cultivate fruit crops.

#### **Introduction:**

A PC-based application called a decision support system aids in the decision-making process. The program may be mixed-methods, subjective, or quantitative. The natural materials and real cycles involved in rural creation and management make it difficult, requiring extraordinary information organization to be gathered for sustenance. Reach the next level of efficiency, continue to improve the quality of your choices, and use critical thinking. An updated software used to assist in making decisions and strategies is called a decision support system (DSS). Anything that provides clients with sensible, measurable, and rational information to help them make educated decisions. Collaborative software-based systems called decision support systems (DSS) are designed to assist users in making decisions by providing them with access to a vast amount of data produced by several connected information systems. In order to support farmers' decision-making under a variety of circumstances, decision support systems help create transdisciplinary information, precisely arrange, and record farming information without supervision. Farmers are the target audience for appealing final judgments, thus there are no clear directives or commands given to them.



## **Types of Decision Support System**"

These can be classified into five types:

- Communications driven DSS
- Data driven DSS
- Document driven DSS
- Knowledge driven DSS
- Model driven DSS.

#### **Component for Decision Making:**

- Recognize the choice.
- Collect revelant information.
- Distinguish the other options.
- Measure the proof
- Choose among alternatives
- Make a change
- Survey your choice and its consequences

### **Crop Specific Mobile Application:**

The need for greater efficiency in developing a data-based framework cannot be overstated. Farmers, or the final customer, should get data in an ideal setting. Numerous exploration groups pursue comprehensive online platforms that allow access to all pertinent data. Through print media, radio talks, television shows, and online entertainment, ICAR-IIHR efficiently disseminates specialized information on the examination yields while connecting with several growers and other partners. To disseminate the data, a few online and portable applications on agricultural yields, natural products, vegetable yields, and flower yields are developed at IIHR, Bangalore. These apps are a great resource that have a lot of promise for agribusiness and farmer assistance. The official moment data application is called Arka Baagwani Portable Application. With options for both Android and iOS portable tasks, the program is simple to use and consistently upgrades. A few online applications on well-defined agricultural yields for natural goods, such as fruits (mango, papaya, pomegranate, guava, grapes, and sapota) and vegetables (brinda, onion, okra, French bean, watermelon, and tomato), have been developed at ICAR-IIHR Bengaluru.

## **Conclusion:**



A thorough grasp of all the models, formats, and reflections used by Decision Support Systems would enable better decision-making about opportunities, threats, and difficulties. Decision Support Systems are still a useful tool for providing enterprises with a controlled competitive advantage in a variety of industry sectors. The research's discussion leads to the conclusion that the Decision Support System Determination of Plant Cultivation Fruits can help farmers make decisions and benefit the broader public. By developing this application, farmers will be able to receive guidance and assessment in determining which fruit crops to cultivate by using a number of factors. The writer suggests that this application be developed using alternative methods, such as the linear regression approach, B/C ratio, IRR, and others, for the future research study. in order to compare the more precise and efficient outcomes.

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