

Database Management System

Project_Assignment:1_Version:1

Software Requirements Specification (SRS)

Participants:

Group Number: 02

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Description of the case study:

Sustainable agriculture resource management

Purpose:

The main aim of the study was to analyze and evaluate farmer's knowledge of "Sustainable agriculture resource management" and its aspects as well as applying Sustainable agriculture activity on farms. It emphasized the importance of Sustainable agriculture for the future.

Intended audience and reading suggestions:

Agricultural scientists, farmers, environmentalists, and students

Product scope:

Help farmers proving space where they can easily access the information regarding Sustainable agriculture.

Descriptions:

In ancient India, the "golden era" of farming was characterized by a deep respect for agricultural traditions and a sophisticated understanding of the land. Farmers employed a harmonious blend of manual labor and ingenious tools, such as wooden ploughs and irrigation systems like canals and wells, to cultivate fertile river valleys and arid lands alike. Techniques like crop rotation and the use of organic fertilizers ensured soil fertility and high yields. Community practices and rituals celebrated the agricultural cycle, reflecting a profound connection between people and the land, which contributed to stable food supplies and robust economies.

Today, farming in India faces a complex array of challenges despite advancements in technology and methods. Modern agriculture has seen significant innovations, such as mechanized equipment, genetically modified crops, and advanced irrigation techniques, aimed at increasing productivity. However, these advancements come with issues such as environmental degradation, over-reliance on chemical inputs, and water scarcity. Soil health is increasingly compromised by intensive farming practices, and small-scale farmers often struggle with financial instability and inadequate access to resources. While technology has improved efficiency, the sector grapples with balancing high productivity with sustainability and environmental conservation.