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Agri Management System

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Abstract- - The Agri Management System is a digital platform designed to support farmers by integrating multiple agricultural services into a single application. The system consists of key modules such as Dairy Management, Farm Management, Veterinary Services, and Tractor Services. The Farm Management module provides updated information on the rates of pesticides and fertilizers from various shops, enabling farmers to make cost-effective decisions. The Veterinary Services module helps farmers locate nearby veterinary doctors and facilitates direct communication through calls or messaging. Additionally, the Tractor Services module connects farmers with tractor owners, displaying service availability and pricing details for different types of agricultural work. The Dairy Management module assists in handling dairy-related activities efficiently. Overall, the system aims to enhance productivity, reduce operational challenges, and promote better decision-making for farmers by providing real-time information and easy access to essential agricultural services.

Keywords— Agriculture Management, Smart Farming, Farm Management System, Precision Agriculture, Digital Agriculture, Agritech

I. INTRODUCTION

Agriculture is a crucial sector, but farmers often face challenges in accessing timely information and services. The Agri Management System is designed to provide a unified digital platform that connects farmers with essential agricultural resources.

The system offers features such as information on pesticide and fertilizer rates, access to nearby veterinary doctors, and connectivity with tractor service providers. It also includes dairy management functionalities. By integrating these services, the system aims to simplify farming operations and improve productivity. It reduces dependency on manual processes and improves communication between farmers and service providers. The platform also ensures better decision-making through easy availability of updated information.

II. PROPOSED SYSTEM

The idea of the Agri Management System is based on identifying the common challenges faced by farmers in managing agricultural activities and accessing essential services. Farmers often lack a

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centralized platform to obtain information about inputs, services, and resources required for efficient farming.

Research was carried out by analyzing existing agricultural practices and understanding the need for digital solutions in rural areas. Various aspects such as availability of fertilizers, veterinary support, and farm machinery services were studied to design a system that addresses real-world problems. The collected information helped in structuring the system into different modules, ensuring that each feature provides practical and useful support to farmers.

III. RESULTS AND FINDINGS

The development of the Agri Management System revealed that integrating multiple agricultural services into a single platform greatly improves efficiency and accessibility for farmers. Each module of the system addresses a specific need, such as providing price comparisons for pesticides and fertilizers, enabling easy communication with veterinary doctors, and offering tractor service details with rates.

The study also shows that digital platforms can reduce time, effort, and dependency on traditional methods. Farmers can quickly access accurate information and connect with service providers, leading to better decision-making. The system promotes transparency in pricing and availability of services. It also helps farmers save costs by comparing different options before making decisions. The communication feature improves response time during emergencies, especially in veterinary services. Additionally, the platform encourages the adoption of technology in agriculture. The system is user-friendly and can be easily accessed by farmers with basic technical knowledge. It reduces the gap between rural users and modern digital services. The platform also supports better planning of farming activities. It can be extended in the future with more advanced features. Overall, the findings highlight that the system enhances productivity, simplifies farm management, and supports the modernization of agricultural practices.

IV. SYSTEM TESTING AND VALIDATION

The Agri Management System was reviewed by peers and experts to evaluate its functionality and usability. Feedback was collected on system design and module performance. The review helped identify areas for improvement and refinement. Necessary changes were made to enhance efficiency and user experience.

V. SYSTEM ENHANCEMENT AND OPTIMIZATION

Based on the feedback received, necessary improvements were made in the Agri Management System. The system design and features were refined to enhance performance and usability. Changes were implemented to improve accuracy, navigation, and overall efficiency. The user interface was simplified to make it more accessible for farmers with basic technical knowledge. Errors identified during the review were corrected to ensure smooth functionality. Data handling and response time were also improved. Additional validations were added to increase system reliability. The communication features were optimized for better interaction between farmers and service providers.

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The overall structure of modules was enhanced for better integration. These improvements made the system more effective, user-friendly, and practical for real-world agricultural use.

VI. CONCLUSION

The Agri Management System provides an effective solution to simplify and modernize agricultural activities by integrating multiple services into a single platform. It helps farmers access important information, connect with service providers, and manage their resources efficiently. The system improves decision-making, reduces effort, and enhances productivity. Overall, it contributes to the digital transformation of agriculture and supports farmers in achieving better outcomes.

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