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PROPOSED MINI PROJECT WORK SYNOPSIS ON

"Krushibook: A Social Media Platform for Farmers"

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ABSTRACT

The **Krushibook** is an innovative social media platform designed specifically for farmers to enhance communication, knowledge sharing, and resource management in agriculture. The platform provides farmers with access to real-time agricultural data such as weather forecasts, market prices, and government schemes while facilitating peer-to-peer knowledge exchange and expert advice on modern farming techniques. It aims to bridge the information gap between urban and rural farming communities by making critical information accessible through an easy-to-use mobile application. The application will use technologies such as React Native, Node.js, Firebase, and MongoDB to provide an efficient and secure platform for farmers. **Krushibook** is designed to improve decision-making and productivity for farmers, fostering a collaborative environment where knowledge, best practices, and innovations in farming can be shared across regions

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CHAPTER 1

INTRODUCTION

Agriculture remains one of the most critical industries globally, employing millions of farmers who contribute to the global food supply chain. Despite its importance, many farmers, especially in rural and underdeveloped areas, face challenges related to a lack of information, inadequate access to markets, and limited resources. Traditional methods of communication, such as word-of-mouth and physical marketplaces, often lead to delays in receiving important information such as weather alerts or market price changes. Moreover, farmers in remote areas may not have direct access to government schemes that are designed to improve their productivity and income.

Digital technology has transformed various industries, but the agricultural sector is yet to fully benefit from it, particularly in terms of collaborative and community-driven platforms. **Krushibook** aims to change that by creating a digital ecosystem where farmers can connect, share knowledge, and access the resources necessary for better decision-making in farming operations. The platform will also serve as a bridge between agricultural experts and farmers, ensuring that expert advice is available to even the most remote communities. This project aims to make agriculture more sustainable, efficient, and profitable by enabling easy access to the right information at the right time.

CHAPTER 2

PROJECT OVERVIEW

2.1 PROBLEM STATEMENT

Farmers in many parts of the world face significant barriers when it comes to accessing reliable, timely, and actionable information. Market prices for crops often fluctuate, leaving farmers uncertain about when and where to sell their produce for maximum profit. Weather conditions can change rapidly, and without accurate forecasts, crops can suffer from drought, floods, or pest infestations. Additionally, the lack of access to modern farming techniques and expert advice limits the ability of many farmers to adopt new technologies or practices that could improve yields and reduce costs. There is a clear need for a centralized platform that offers a wide range of agricultural information and facilitates community engagement to support the farming community.

2.2 OBJECTIVES

The primary objective of this project is to develop a system that:

- To develop a digital platform that provides farmers with a space to interact, share knowledge, and ask for advice from peers and agricultural experts.
- To give farmers access to real-time information on weather patterns, market prices, and government schemes, improving their decision-making capabilities.
- To bridge the gap between traditional farming practices and modern techniques by providing educational resources and expert advice on pest control, water management, crop rotation, and the use of fertilizers.
- To facilitate access to government subsidies, grants, and schemes that could help farmers improve their financial standing and productivity.
- To create a strong and supportive online farming community, where collaboration, networking, and shared learning are encouraged.
- Introduce Video-Based Learning with Krushi Shorts:
- Incorporate Krushi Shorts, a feature designed to deliver quick, digestible video content similar to social media "shorts" or reels. These videos will include tutorials, tips, success stories, and expert advice, presented in short 30-60 second clips.

2.3 SCOPE OF PROJECT

The scope of the Krushibook Project includes:

- Development *Krushibook* will be a comprehensive platform designed to cater to the diverse needs of farmers across different regions. The platform will be available on both Android and iOS devices, ensuring that it is accessible to a wide audience. Key features of the platform will include:
- *Community Forums*: Farmers can discuss farming-related issues, share advice, and offer support to one another.
- *Market Price Tracker*: This feature will provide real-time updates on the prices of various crops in local and international markets, helping farmers decide the best time and place to sell their produce.
- *Weather Forecasts*: Farmers will be able to access daily and weekly weather updates, ensuring that they can prepare for changes in weather patterns that might affect their crops.
- *Expert Advice*: Agricultural experts will be available on the platform to answer questions, offer advice, and provide guidance on modern farming techniques.
- *Educational Content*: The platform will feature videos, articles, and guides on topics such as organic farming, pest control, sustainable farming methods, and the use of technology in agriculture.
- *Government Schemes and Support*: Farmers will have access to information on relevant government schemes, including eligibility criteria and application processes.

2.4 LITREATURE REVIEW

The Agricultural extension services have traditionally played a key role in disseminating knowledge to farmers. However, research suggests that these services have not kept pace with the rapid technological advancements in agriculture, particularly in the area of information dissemination. Studies have shown that farmers who have access to mobile technologies are more likely to receive timely information on market prices, weather forecasts, and government schemes, leading to better decision-making and higher productivity. Despite the availability of some agricultural apps, most are focused on e-commerce or weather forecasting, with limited features for community engagement or expert advice. **Krushibook** aims to fill this gap by creating a comprehensive, all-in-one platform that not only provides information but also fosters collaboration and shared learning among farmers.

2.5 EXISTING SYSTEM

While there are several existing platforms that provide agricultural information or facilitate e-commerce for farmers, none of them offer a robust social network specifically for farmers. Platforms like IFFCO Kisan and Kisan Network provide useful features such as market price tracking and weather updates, but they fall short in creating a collaborative environment where farmers can interact and share knowledge. Social media platforms like Facebook and WhatsApp are widely used by farmers to communicate, but they are not tailored to the specific needs of the agricultural community, leading to inefficiencies in information sharing.

2.5.1 DISADVANTAGE OF EXISTING SYSTEM

- *Lack of Community Focus*: Most agricultural apps are transactional and do not prioritize community building, which is critical for sharing knowledge and solving common problems.
- *Limited Scope*: Existing platforms often focus on a single aspect of farming, such as e-commerce or weather, without addressing the broader needs of farmers, such as access to expert advice or government schemes.
- *Fragmented Information*: Farmers often have to use multiple apps to access market prices, weather information, and expert advice, which can be time-consuming and confusing.

2.6 PROPOSED SOLUTION

Krushibook offers a comprehensive solution that combines the best features of social media, e-commerce, and agricultural information services into a single platform. By providing a space where farmers can communicate, collaborate, and access real-time information, **Krushibook** will help farmers improve their productivity, profitability, and sustainability. The platform will be designed with a simple and intuitive user interface, ensuring that even farmers with limited technological literacy can use it effectively.

2.6.1 EXPECTED OUTCOME AND ADVANTAGES

- *Improved Access to Information*: Farmers will have real-time access to critical information such as weather updates, market prices, and government schemes.
- *Enhanced Knowledge Sharing: By fostering a strong online community, **Krushibook** will enable farmers to share best practices, learn from each other's experiences, and solve common problems.
- *Greater Productivity*: With access to expert advice and modern farming techniques, farmers will be able to adopt more efficient and sustainable practices, leading to increased yields and reduced costs.
- *Stronger Community Support: **Krushibook** will create a sense of community among farmers, encouraging collaboration and mutual support.

2.7 REQUIREMENTS

2.7.1 HARDWARE REQUIREMENTS

- Smartphones or tablets for accessing the application.
- Basic internet connectivity for real-time updates.

2.7.2 SOFTWARE REQUIREMENTS

- *Frontend*: React Native for cross-platform mobile application development.
- *Backend*: Node.js and Express for building a scalable backend.
- *Database*: MongoDB for storing user data, posts, and real-time updates.
- - *APIs*: Integration with weather

2.8 TIME/PHASES

PHASES	DURATION	MILESTONES	EXPECTED DATE OF COMPLETION
Phase 1: Research and Planning	2 weeks	- Conduct a literature review on existing platforms for farmers. - Define projectscope, objectives,and features. - Identify hardware and software requirements. - Prepare synopsis and project plan.	
Phase 2: Environment Setup	1 week	- Set up the development environment (React Native, Node.js). - Install necessary libraries, dependencies, and APIs for weather, market data.	
Phase 3: UI/UX Design and fronted Development	3 weeks	- Design wireframes and UI/UX for the mobile app. - Develop the frontend with React Native. - Implement community forums, market tracking, and weather update features.	

Phase 4: Backend Development	3 weeks	- Build server-side functionality using Node.js and Express. - Set up MongoDB for user data and agricultural updates. - Implement real-time data fetching from APIs.	
Phase 5: Features Integration	2 weeks	- Integrate frontend and backend modules. - Implement user authentication (Firebase), real-time updates, and community interactions.	
Phase 6: Testing and Debugging	2 weeks	- Conduct unit and integration testing. - Ensure system reliability and bug fixing. - Collect feedback from potential users.	
Phase 7: Deployment and Launch	1 week	- Prepare deployment for Android and iOS. - Submit app to Google Play Store and Apple App Store. - Conduct a soft launch for feedback and final adjustments.	

Phase 8: Documentation and Final Review	1 week	- Prepare project documentation, including user manuals and technical reports. - Conduct final reviews and prepare for project presentation.	

CHAPTER 3

CONCLUSION

The **Krushibook** project presents a significant step forward in leveraging technology to enhance the agricultural sector by addressing key challenges faced by farmers, including lack of timely information, poor access to expert advice, and limited interaction with other farmers. By creating a comprehensive platform that combines social networking with essential agricultural tools, **Krushibook** aims to empower farmers through real-time data, expert knowledge, and a collaborative community environment.

Through its user-friendly interface and cross-platform accessibility, **Krushibook** will provide farmers with instant access to critical resources such as weather forecasts, market price trends, and government schemes. The platform will foster stronger relationships between farmers and agricultural experts, allowing for an exchange of knowledge that can lead to more sustainable and efficient farming practices. Additionally, the community-driven aspects of the app will encourage collaboration and mutual support, helping farmers to solve problems collectively and share best practices.

The expected outcomes of **Krushibook** include increased productivity, improved decision-making, and stronger financial outcomes for farmers, as well as the creation of a more informed and connected agricultural community. By empowering farmers with the tools and information they need to succeed, **Krushibook** holds the potential to not only improve individual livelihoods but also contribute to the overall development of the agricultural sector.

As technology continues to evolve, platforms like **Krushibook** will become increasingly important in bridging the digital divide and ensuring that all farmers, regardless of their location or resources, can access the information they need to thrive. This project lays the foundation for a future where farming is more connected, collaborative, and sustainable, setting the stage for long-term improvements in food security and rural development.