

# **E-Farm : A Farm Equipment Sharing Platform**

## **A Community Service Internship Report**

Submitted to the Faculty of Engineering of

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA,  
KAKINADA**

In partial fulfilment of the requirements for the award of the Degree of

**BACHELOR OF TECHNOLOGY  
In  
CSE (ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)**

By

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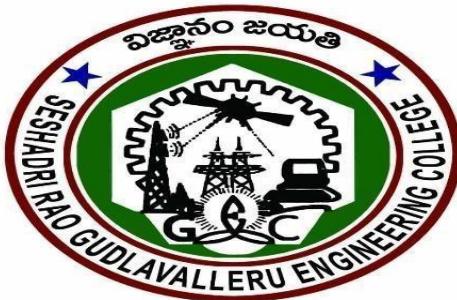
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**DEPARTMENT OF CSE (ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)**

**SESHADRI RAO GUDLAVALLERU ENGINEERING COLLEGE**

**(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)**

**SESHADRIRAO KNOWLEDGE VILLAGE**

**GUDLAVALLERU – 521356**

**ANDHRA PRADESH**

**2025-26**

# **Program Book**

## **for**

## **Community Service Internship**



**Name of the College :** Seshadri Rao Gudlavalleru Engineering College

**Name of the Department :** CSE (AI & ML)

**Name of the Faculty Guide :** Mr. A. Manoj Kumar

**Duration of the CSP:** From 19<sup>th</sup> May 2025 to 30<sup>th</sup> June 2025 and  
14<sup>th</sup> July 2025 to 26<sup>th</sup> July 2025

**Name of the Students:** Alapati Sai Mohana Deepthi,  
Amarthala Kanthi Sri,  
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**Programme of Study Year of Study:** B. Tech III Year

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**Date of Submission :** 13-11-2025

## **Student's Declaration**

We Alapati Sai Mohana Deepthi, Amarthala Kanthi Sri, Gowri Eshitha Christina, Gubbala Harini Reg. No 23481A4202, 23481A4204, 23481A4235, 23481A4236 respectively of the Department of CSE (Artificial Intelligence & Machine Learning) College do here by declare that we have completed the mandatory community service from 19<sup>th</sup> May 2025 to 30<sup>th</sup> June 2025 & 14<sup>th</sup> July 2025 to 26<sup>th</sup> July 2025 in Gudlavalleru under the Faculty Guideship of Mr. A. Manoj Kumar in College of Seshadri Rao Gudlavalleru Engineering College.

(Signature and Date)

### **Endorsements**

Faculty Guide :

Master of Trainer(S):

Head of the Department :

Principal :

## **Certificate from Official of the Community**

This is to certify that Alapati Sai Mohana Deepthi, Amarthala Kanthi Sri, Gowri Eshitha Christina, Gubbala Harini Reg. No 23481A4202, 23481A4204, 23481A4235, 23481A4236 respectively of Seshadri Rao Gudlavalleru Engineering College underwent community service in Gudlavalleru from 19<sup>th</sup> May 2025 to 30<sup>th</sup> June 2025 and 14<sup>th</sup> July 2025 to 26<sup>th</sup> July 2025.

The overall performance of the Community Service Volunteer during his/her community service is found to be (Satisfactory/Good).

(Authorized Signatory with Date and Seal)

## **ACKNOWLEDGEMENTS**

The satisfaction that accompanies the successful completion of any task would be incomplete without the mention of people who made it possible and whose constant guidance and encouragements crown all the efforts with success.

We would like to express our deep sense of gratitude and sincere thanks to **Mr. A. Manoj Kumar**, Assistant Professor, Department of CSE (Artificial Intelligence & Machine Learning) for his/her constant guidance, supervision and motivation in completing the project work.

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## **CHAPTER 1 : EXECUTIVE SUMMARY**

**E-FARM: A Farm Equipment Sharing Platform** Agriculture continues to be the backbone of India's rural economy, supporting millions of families and providing livelihood to a significant portion of the population. However, small and marginal farmers, who constitute over 80 percent of the farming community, often struggle to keep pace with the technological and financial demands of modern agriculture. The cost of purchasing farm machinery such as tractors, tillers, harvesters, and sprayers remains prohibitively high for these farmers. As a result, they rely on manual labour or outdated tools, leading to lower productivity and inefficiency.

At the same time, large-scale farmers or agro-industrial owners who have purchased modern machinery often use it for only a limited duration during the cultivation season. For most of the year, this expensive equipment remains idle, representing an underutilized asset. This situation highlights a critical imbalance—while some farmers have surplus machinery sitting unused, others are unable to afford the same technology despite needing it the most.

The Community Service Project titled "*E-FARM: A Farm Equipment Sharing Platform*" seeks to bridge this gap through a digital, community-based solution. The project envisions the development of an online platform or mobile application that enables farmers to share, rent, or borrow agricultural equipment within their local communities. Using this system, farmers with underused machinery can list their equipment for temporary rental, while small and marginal farmers can easily book tools at affordable rates. By promoting a culture of sharing, this initiative aims to maximize

resource utilization and ensure that every farmer, regardless of financial status, has access to the tools needed for efficient production.

## **Objectives of the Project**

The E-FARM platform is designed to empower rural farmers in both technological and social dimensions. Its primary objectives include:

- Making modern farm equipment more accessible and affordable for small and marginal farmers.
- Reducing production costs through the shared use of agricultural tools and machinery.
- Promoting the digital transformation of rural communities by encouraging the use of online platforms.
- Creating a cooperative ecosystem that encourages knowledge exchange and collective problem-solving among farmers.
- Fostering resource optimization and sustainable agricultural practices through equipment sharing.

## **Learning Objectives**

- To make farm equipment more accessible to small and marginal farmers.
- To reduce agricultural costs through shared resource utilization.
- To promote digital empowerment and inclusiveness in rural areas.

- To build cooperation, trust, and mutual support among members of the farming community.

## **Learning Outcomes**

- Developed a deeper understanding of rural farming practices, challenges, and resource limitations.
- Improved communication and interpersonal skills through direct interaction with farmers and local communities.
- Gained practical experience in applying technical and digital knowledge to create real-world social impact.
- Enhanced teamwork, leadership, and problem-solving abilities through community-driven collaboration.
- Cultivated social responsibility and awareness of sustainable agricultural practices.
- Strengthened capacity to design and implement technology-based solutions for rural development.
- Encouraged empathy, cooperation, and active participation in addressing community challenges.

## CHAPTER 2: OVERVIEW OF THE COMMUNITY

Chitram is a semi-urban village located in the Krishna District of Andhra Pradesh. The village is recognized for its fertile lands, hardworking farming community, and strong agricultural traditions. A majority of the residents depend on agriculture as their primary livelihood, cultivating crops such as paddy, sugarcane, maize, and various vegetables. The village also values education and community development through nearby institutions and local initiatives.



Fig 1.2. Chitram Location

Agriculture in Chitram follows seasonal cycles, requiring timely access to essential equipment for ploughing, sowing, irrigation, and harvesting. However, due to the high cost of agricultural machinery, small and marginal farmers often struggle to purchase such equipment. Meanwhile, larger farmers who own machinery tend to use it only during specific seasons, leaving it idle for much of the year. This situation laid the foundation and motivation for our Community Service Internship—E-FARM.

**Through interaction with local farmers, we identified:**

- Heavy reliance on manual labor.
- Delays in farming operations due to limited access to equipment.
- Lack of an organized rental or sharing mechanism.
- Rising cultivation costs.
- Low awareness of digital tools that could simplify the equipment-sharing process.

These challenges indicated a strong need for a structured, shared, and easily accessible equipment-sharing platform, directly inspiring our project E-FARM, which connects equipment owners and users to make farming more efficient and collaborative.

Location: Chitram (V), Latitude – 16.22° N, Longitude – 81.05° E

## CHAPTER 3: COMMUNITY SERVICE PART

The project was executed over eight weeks, with each week focusing on specific objectives to build awareness, assess community needs, and introduce the concept of a shared farm equipment platform.

### **Week 1: Initial Community Interaction**

The project began with establishing meaningful connections with farmers and village representatives. This step was essential for building trust and gaining firsthand insights into the existing agricultural practices and resource utilization patterns. Field visits were organized in multiple villages to observe the diversity in crop choices, irrigation methods, and scale of operations. During these visits, informal discussions were held under local gathering spots such as temple courtyards or milk collection points, which served as neutral and familiar environments for farmers to share their real challenges.

Through these personal interactions, several recurring challenges emerged. Many small-scale farmers expressed concerns about high equipment costs, delayed maintenance, and the financial burden of owning machines that were only used for short durations each season. Larger farmers, on the other hand, admitted that their equipment often remained idle for long periods, leading to underutilization of costly assets. These rich discussions laid the foundation for introducing the concept of sharing agricultural equipment — an approach that could reduce costs while improving efficiency.

The week concluded with an introductory session to present the concept of a shared digital platform. The idea was positioned as a bridge between equipment owners and users, encouraging collaboration rather than competition. The team used simple analogies, comparing the idea to sharing tractors similar to how villagers already share water pumps or threshers on informal terms. The early discussions set a positive tone for the project and marked the beginning of community engagement.

## **Week 2: Data Collection and Problem Identification**

The second week focused on systematically collecting data to verify the insights gathered through informal interactions. To do this, a questionnaire-based field survey was designed in simple language, ensuring that participants could answer comfortably even with limited literacy. Questions focused on land size, type of crops grown, frequency of equipment use, ownership patterns, and rental practices.

Data collection took place across different socio-economic groups to ensure representation from marginal, small, and large farmers. The findings revealed a stark disparity: while large farmers often owned tractors and tillers, smaller farmers either relied on renting or sought help from neighbours. This dependency sometimes led to delays during critical moments such as ploughing or harvesting. Moreover, the surveys exposed an evident lack of structured rental systems. Most rental deals were verbal, based on personal relationships, which caused disputes over pricing and timing.

After compiling the data, the team identified two main gaps: the underutilization of existing equipment and the absence of an organized sharing mechanism. These insights confirmed the potential value of introducing a digital platform that could automate matching between availability and demand, reduce uncertainty, and help small farmers access technology affordably. This week's findings would directly guide the design of the upcoming project phases.

## **Week 3: Awareness on Digital Platforms**

By the third week, the project transitioned into building digital literacy and awareness about how technology could simplify agricultural operations. This phase involved organizing awareness sessions across selected community halls and village panchayat offices. Demonstrations were kept interactive, beginning with relatable examples such as online marketplaces and digital payment systems that some villagers already recognized.

The sessions explained, in accessible language, how a mobile-based platform could allow farmers to rent or lend equipment more efficiently. Real-life stories were shared—such as how similar sharing systems in other regions helped farmers optimize costs and improve productivity. The focus remained on showing how technology could support rather than replace existing community collaborations.

Special attention was paid to building confidence among older farmers who were initially hesitant about digital tools. To ease their concerns, the team showed offline-friendly features and emphasized that local mediators would always be available to assist them. By the end of the participants expressed curiosity and willingness to try out digital coordination, marking a key step toward community readiness.

### **Week 4: Introducing the E-FARM Model**

During the fourth week, the core concept of the “E-FARM” model was formally introduced. The team outlined how the platform would connect equipment owners and renters in a transparent and reliable way. A visual presentation illustrated the process: owners could list their machines, mention availability, and set a fair rental price; renters could search, book, and pay with traceable records. The aim was to modernize the traditional practice of equipment sharing without disrupting local customs.

A question-and-answer session followed to clarify common doubts. Farmers raised practical concerns about maintenance responsibilities, damage claims, and payment terms. The project representatives explained that E-FARM would assign accountability through digital agreements and transaction logs, ensuring fairness for both parties. Another strong motivation shared was pricing transparency, allowing farmers to avoid overcharging or hidden fees.

Beyond economics, the discussion also covered the potential for improved community unity. Sharing through an organized system would bring different farmer groups together, enabling better coordination during busy seasons. The week

concluded with optimism and collective enthusiasm about creating a locally adaptable model.

### **Week 5: Demonstration with Mock Interface**

To move from concept to tangible understanding, the fifth week involved conducting live demonstrations with a prototype interface of the E-FARM platform. The mock version simulated essential features such as listing equipment, browsing available options, booking time slots, and logging returns. Villagers were invited to interact directly with the simulated app using tablets and mobile phones.

Observers noted that farmers showed great interest in seeing how such technology worked in practice. However, usability challenges also surfaced — especially regarding terminology, button layout, and language comprehension. Many farmers preferred local-language prompts instead of English labels. Some participants proposed using audio instructions or symbols to simplify operation for low-literate users.

Feedback collection was an integral part of this week. Notes were taken on both functional improvements and user preferences. Participants overwhelmingly encouraged the inclusion of a Telugu interface and suggested a pictorial guide to help recall steps easily. These valuable insights became the basis for refining the platform before broader implementation.

### **Week 6: Training Community Representatives**

Recognizing the importance of local support, the sixth week focused on empowering community leaders to act as intermediaries between the platform and the farmers. These individuals, known as “Digital Mediators,” were carefully selected from among proactive village youth and respected elders. They were trained to assist others in account creation, booking transactions, and troubleshooting common issues.

Training sessions were practical and participatory. Each mediator was given hands-on exposure to the prototype, followed by role-playing exercises to handle common

user queries. They also learned how to document transactions and report technical difficulties. Additionally, guidance was provided on basic digital ethics, transparency, and record-keeping to maintain trust among users.

The introduction of Digital Mediators was a major success. Farmers felt reassured knowing that local, familiar individuals would help them transition into the digital system. This grassroots empowerment approach strengthened the project's sustainability and ensured that the community could manage it independently over time.

### **Week 7: Community Feedback and Model Refinement**

By the seventh week, the project had matured enough to invite structured feedback from the community. Organized group meetings allowed participants to share their overall experience and suggest improvements before the platform's final rollout. The feedback was detailed and highly pragmatic.

The requested upgrades included three key features: support for the Telugu language to make navigation easier, offline request logging for areas with poor internet connectivity, and SMS-based notifications for booking confirmations and reminders. These refinements showcased the community's growing digital understanding and their desire for user-friendly solutions tailored to rural realities. The project team worked closely with software developers to incorporate these adjustments. Farmers were kept informed about progress, reinforcing transparency and co-creation. This participatory refinement stage emphasized that E-FARM was a community-driven innovation rather than an externally imposed solution.

### **Week 8: Awareness and Sustainability Campaign**

The final week of the project revolved around ensuring long-term impact and continuity. A closing awareness session gathered farmers, mediators, and local officials to celebrate the project's progress and future goals. Representatives demonstrated the improved interface, showcasing how the feedback from earlier sessions had been implemented.

Printed user manuals and step-by-step guides, translated into Telugu, were distributed widely. These materials contained illustrations explaining how to register, list equipment, and book machinery, allowing farmers to use the system independently. The emphasis was now on creating local ownership rather than dependence on project staff.

To institutionalize the progress, the project facilitated the creation of a Community Equipment Cooperative Group. This collective would oversee platform usage, mediate disputes, and ensure fair scheduling. By combining digital tools with cooperative governance, E-FARM achieved a balance between innovation and community values. The initiative concluded with a palpable sense of accomplishment — farmers felt empowered, connected, and ready to sustain the shared economy they had helped design.

## **CHAPTER-4**

### **ACTIVITY LOG FOR THE FIRST WEEK**

<b>Day &amp; Date</b>	<b>Brief Description of the Daily Activity</b>	<b>Learning Outcome</b>	<b>Person In-charge Signature</b>
<b>Day –1</b>			
<b>Day – 2</b>			
<b>Day –3</b>			
<b>Day –4</b>			
<b>Day –5</b>			
<b>Day –6</b>			

**WEEKLY REPORT**  
**WEEK – 1 (From ..... to..... )**

**The objective of the Activity Done:**

**Detailed Report:**

## ACTIVITY LOG FOR THE SECOND WEEK

<b>Day &amp; Date</b>	<b>Brief Description of the Daily Activity</b>	<b>Learning Outcome</b>	<b>Person In-charge Signature</b>
<b>Day – 1</b>			
<b>Day - 2</b>			
<b>Day – 3</b>			
<b>Day – 4</b>			
<b>Day – 5</b>			
<b>Day – 6</b>			

**WEEKLY REPORT**  
**WEEK – 2 (From ..... to .....)**

**The objective of the Activity Done :**

**Detailed Report:**

## **ACTIVITY LOG FOR THE THIRD WEEK**

<b>Day &amp; Date</b>	<b>Brief Description of the Daily Activity</b>	<b>Learning Outcome</b>	<b>Person In-charge Signature</b>
<b>Day 1</b>			
<b>Day -2</b>			
<b>Day -3</b>			
<b>Day -4</b>			
<b>Day -5</b>			
<b>Day -6</b>			

**WEEKLY REPORT**  
**WEEK – 3 (From ..... to ..... )**

**The objective of the Activity Done:**

**Detailed Report:**

## **ACTIVITY LOG FOR THE FOURTH WEEK**

<b>Day &amp; Date</b>	<b>Brief Description of the Daily Activity</b>	<b>Learning Outcome</b>	<b>Person In-charge Signature</b>
<b>Day –1</b>			
<b>Day – 2</b>			
<b>Day –3</b>			
<b>Day –4</b>			
<b>Day –5</b>			
<b>Day –6</b>			

## **WEEKLY REPORT**

**WEEK – 4 (From ..... to .....) )**

**The objective of the Activity Done:**

**Detailed Report:**

## ACTIVITY LOG FOR THE FIFTH WEEK

<b>Day &amp; Date</b>	<b>Brief Description of the Daily Activity</b>	<b>Learning Outcome</b>	<b>Person In-charge Signature</b>
<b>Day -1</b>			
<b>Day - 2</b>			
<b>Day -3</b>			
<b>Day -4</b>			
<b>Day -5</b>			
<b>Day -6</b>			

## **WEEKLY REPORT**

**WEEK – 5 (From ..... to..... )**

**The objective of the Activity Done:**

**Detailed Report:**

## ACTIVITY LOG FOR THE SIXTH WEEK

<b>Day &amp; Date</b>	<b>Brief Description of the Daily Activity</b>	<b>Learning Outcome</b>	<b>Person In-charge Signature</b>
<b>Day -1</b>			
<b>Day - 2</b>			
<b>Day -3</b>			
<b>Day -4</b>			
<b>Day -5</b>			
<b>Day -6</b>			

## **WEEKLY REPORT**

**WEEK – 6 (From ..... to .....**)

**The objective of the Activity Done:**

**Detailed Report:**

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## ACTIVITY LOG FOR THE SEVENTH WEEK

<b>Day &amp; Date</b>	<b>Brief Description of the Daily Activity</b>	<b>Learning Outcome</b>	<b>Person In-charge Signature</b>
<b>Day-1</b>			
<b>Day- 2</b>			
<b>Day-3</b>			
<b>Day-4</b>			
<b>Day-5</b>			
<b>Day-6</b>			

## **WEEKLY REPORT**

**WEEK – 7 (From ..... to ..... )**

**The objective of the Activity Done:**

**Detailed Report:**

## ACTIVITY LOG FOR THE EIGHT WEEK

<b>Day &amp; Date</b>	<b>Brief Description of the Daily Activity</b>	<b>Learning Outcome</b>	<b>Person In-charge Signature</b>
<b>Day -1</b>			
<b>Day - 2</b>			
<b>Day -3</b>			
<b>Day -4</b>			
<b>Day -5</b>			
<b>Day -6</b>			

## **WEEKLY REPORT**

**WEEK – 8 (From ..... to.....)**

**The objective of the Activity Done:**

**Detailed Report:**

## CHAPTER 5: OUTCOMES DESCRIPTION

### Problems Identified

- High cost of agricultural equipment.
- Underutilization of owned machinery.
- Lack of organized rental mechanisms.
- Increased labour dependency and operational delays.
- Limited digital awareness in rural populations.

### Proposed Solution

The proposed solution is E-FARM, a digital equipment-sharing platform enabling farmers to:

- List agriculture machinery available for rent.
- Browse and book equipment required for farming activities.
- Schedule time slots based on availability.
- Pay rental charges transparently.

### Mini Project Work Summary

We designed a web-based interface prototype demonstrating:

Feature	Description
Equipment Listing	Owners can register and post details of equipment.
Search and Booking	Farmers can find available machinery and schedule usage.
Payment Module	Rental payments handled transparently.
User Profiles	Verified identity ensures trust and accountability.

Used Technologies: HTML, CSS, JavaScript (UI Demonstration Model).

## **Short-term and long term action plan for possible solutions for the problems identified and that could be recommended to the concerned authorities for implementation.**

### **Short-Term Action Plan:**

1. Conduct farmer survey Collect data on equipment availability, needs, rental prices, interest level Understand real demand and supply
2. Identify equipment owners and early adopters Approach farmers who own tractors, harvesters, power tillers Build initial sharing inventory
3. Create simple listing system (WhatsApp / Google Form) Farmers post equipment details, availability & rates Start sharing without app development
4. Awareness & trust-building workshops Explain benefits: cost saving, cooperation, organized renting Increase farmer willingness to share
5. Create rules and guidelines Define responsibilities: fuel policy, damage handling, payment Avoid conflicts / misunderstandings
6. Pilot program in 1–2 villages Minimum viable implementation Test feasibility and gather feedback

### **Long-Term Action Plan:**

1. Develop mobile/web platform Build an app for booking, GPS location search, payments Digital system → convenience & transparency
2. Partner with agricultural departments / NGOs Collaborate for training, funding, farmer awareness Strong support + credibility
3. Financial support model Introduce small service fee / subscription / government subsidy Generates revenue to sustain platform
4. Expand to more villages / districts Add users systematically through campaigns & partnerships Platform growth (scalable model)
5. Introduce maintenance support Tie up with local mechanics or service centers Equipment always available and functional
6. Data & analytics for improvement Track usage, rental patterns, seasonal demand Optimize availability and pricing

## **Description of the Community awareness programme/s conducted w.r.t the problems and their outcomes.**

### **Workshops & Awareness Sessions**

- Conducted awareness sessions in Chitram village to address issues like delayed access to machinery and high equipment costs.
- Explained how equipment sharing reduces manual labour, saves money, and ensures timely farming operations.
- Introduced the concept of a digital platform to simplify the renting process.

**Outcome:** Farmers gained clarity on the benefits of equipment sharing and showed interest in adopting a structured system.

### **Hands-On Demonstrations**

- Demonstrated the use of the E-FARM website, including how to browse equipment, check availability, and make a booking request.
- Guided equipment owners on listing their tools with rental charges and availability timings.
- Showed basic features in both English and Telugu for easier understanding.

**Outcome:** Farmers developed practical confidence in using the platform; many expressed willingness to list or rent equipment during crop seasons.

### **Feedback Mechanism**

- Collected feedback through small surveys and face-to-face discussions after each session.
- Farmers suggested simpler navigation, local language support, and more equipment categories.
- Adjusted the website design and features based on their input.

### **Outcome:**

Improved usability and stronger community participation, making the platform more relevant to local needs.

## **Report of the mini-project work done in the related subject w.r.t the habitation/village.**

**Project Title:** E-FARM: Farm Equipment Sharing Platform

**Initiative:** Chitram Village, Krishna District

### **1. Introduction:**

E-FARM aims to support farmers by providing a community-driven digital platform where agricultural equipment can be shared and rented. Small and marginal farmers often struggle to afford machinery, while equipment owned by large farmers remains underused. E-FARM bridges this gap, helping farmers save costs, access tools on time, and improve farming efficiency.

### **2. Problem Statement:**

Farmers in Chitram face challenges such as limited machinery access, high purchase and maintenance costs, dependence on manual labour, farming delays, and no organized rental system. These issues lead to higher cultivation expenses and reduced productivity.

### **3. Proposed Solution:**

The solution is a bilingual (English & Telugu) website where:

- Owners can list tractors, rotavators, sprayers, and other equipment with details and rental fees.
- Farmers can search, request, and schedule machinery as per their crop requirements.
- The platform promotes better utilization of equipment, timely operations, and cost-effective farming.

E-FARM empowers farmers with easy access to machinery, improves cooperation within the community, and supports sustainable and efficient agricultural practices.

#### 4. User Interface of the App :

##### Registration Page



### Create Account

Join eFarm community

Full Name

Phone Number

Email (Optional)

I want to

Rent Equipment

List Equipment

Send OTP

OTP भेजें

पूरा नाम

फोन नंबर

ईमेल (वैकल्पिक)

मैं चाहता हूं

उपकरण किराए पर लें

उपकरण सूचीबद्ध करें

Already have an account? [Login](#)

पहले से खाता लॉगिन



### खाता बनाएं

eFarm समुदाय में शामिल



Fig 5.1. English version

Fig 5.2. Hindi version

## Login Page



Welcome to eFarm

Rent farm equipment easily

Phone Number

Enter 10-digit phone number

Password (Optional)

Enter password

Login

Login with OTP

Don't have an account? Register

ఫోన్ నంబర్

10 అంకల ఫోన్ నంబర్ నమోదు చేయండి

పాస్‌వ్యార్డ్ (ఐచ్చికం)

పాస్‌వ్యార్డ్ నమోదు చేయండి

లాగిన్

OTP తో లాగిన్ చేయండి

భాత్తా నమోదు చేయండి

Fig 5.3. English version

Fig 5.4. Telugu version

## Home Page

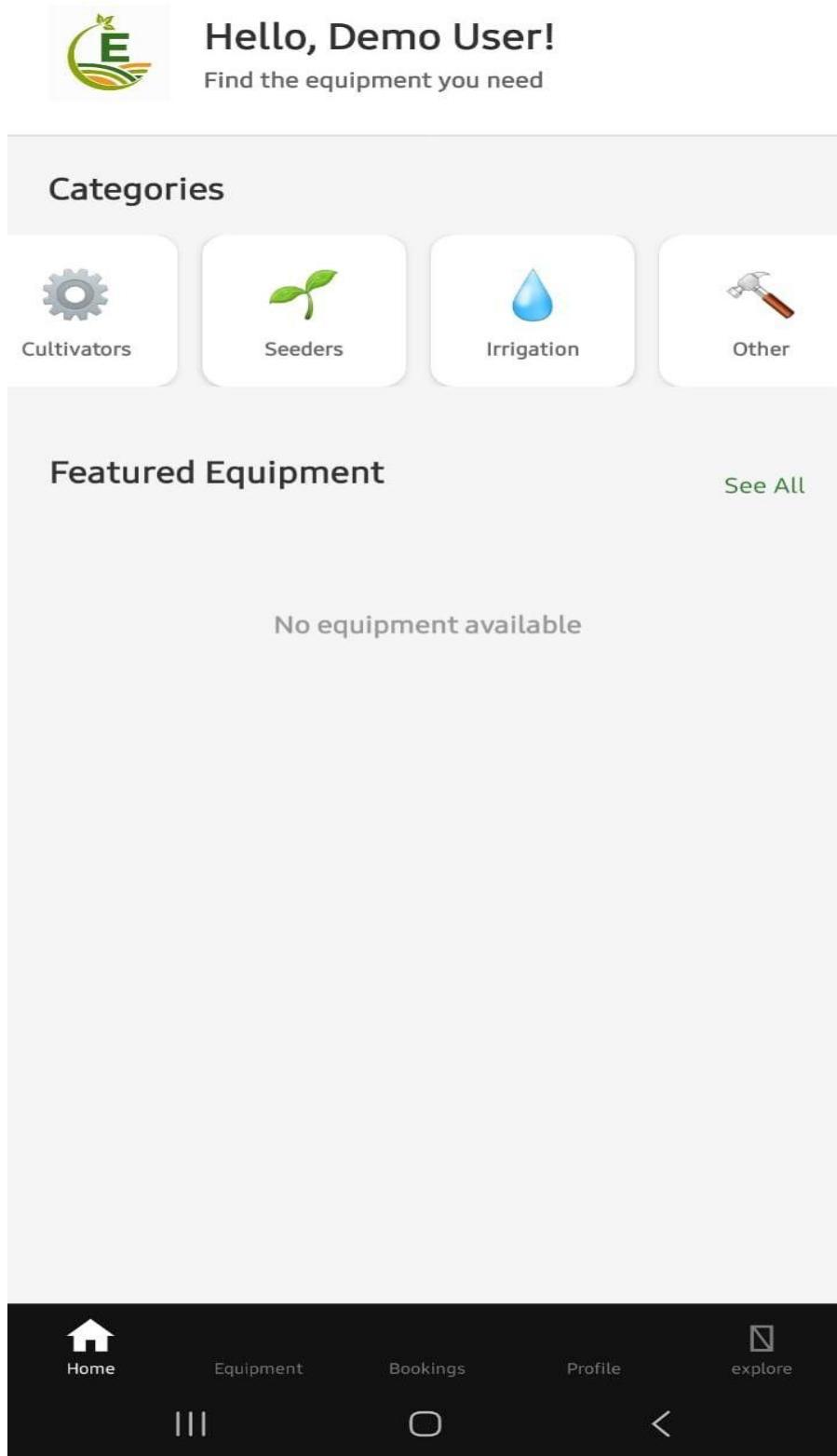


Fig. 5.5. Home Page

## **5. Technologies used:**

- **HTML:** Used to create the structure and layout of the website.
- **CSS:** Provides the styling, including fonts, colors, and responsive design to ensure the website looks good on all devices.
- **JavaScript:** Adds interactivity and dynamic behavior, such as switching between sections and toggling between English and Telugu content.
- **Multilingual Support:** Allows content toggling between English and Telugu to cater to a wider audience.

## **CHAPTER 6: RECOMMENDATIONS AND CONCLUSIONS OF THE MINI PROJECT**

### **Recommendations**

To enhance the effectiveness and outreach of the E-FARM initiative, the following recommendations are proposed:

1. Conduct periodic digital literacy workshops for farmers – Regular training sessions should be organized to educate farmers about using the E-FARM platform and other digital tools. These workshops can help them gain confidence in accessing, booking, and managing agricultural resources through mobile applications.
2. Encourage the creation of village-level cooperative groups for managing shared machinery – Forming small cooperatives can ensure transparent management, better maintenance of shared equipment, and increased accountability among members. This approach can also strengthen social bonds within rural communities.
3. Integrate SMS-based booking systems for non-smartphone users – Since a significant number of farmers still rely on basic mobile phones, integrating SMS functionality will help bridge the digital divide and make the system inclusive for all sections of the farming community.
4. Provide language localization support for wider adoption – Offering the platform in multiple regional languages will make it easier for farmers to interact with the system. This will improve accessibility, understanding, and user satisfaction across diverse linguistic regions.

### **Conclusion**

The E-FARM initiative has proven to be a promising step toward modernizing the agricultural sector through digital innovation. By enabling collaborative resource-sharing, it helps reduce cultivation costs, minimize equipment redundancy, and promote environmental sustainability. The project not only fostered stronger community interaction among farmers but also provided valuable insights into the challenges and opportunities within rural agricultural ecosystems. Overall, E-FARM demonstrates how digital platforms can empower local economies, enhance productivity, and contribute to the long-term goal of sustainable farming practices.

# **Student Self-Evaluation for the Community Service Internship**

Student Name: Alapati Sai Mohana Deepthi

Registration No: 23481A4202

Period of CSP: From 19/05/2025 to 30/06/2025 and 14/07/2025 to 26/07/2025

Date of Evaluation: 15<sup>th</sup> November 2025

Name of the Person in-charge: Mr. A. Manoj Kumar

Address with mobile number: SRGEC, Gudlavalleru. Mobile no - 8885124580

**Please rate your performance in the following areas:**

**Rating Scale:** 1 is lowest and 5 is highest rank

<b>1. Oral communication</b>	1	2	3	4	5
<b>2. Written communication</b>	1	2	3	4	5
<b>3. Proactiveness</b>	1	2	3	4	5
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<b>5. Positive Attitude</b>	1	2	3	4	5
<b>6. Self-confidence</b>	1	2	3	4	5
<b>7. Ability to learn</b>	1	2	3	4	5
<b>8. Work Plan and organization</b>	1	2	3	4	5
<b>9. Professionalism</b>	1	2	3	4	5
<b>10. Creativity</b>	1	2	3	4	5
<b>11. Quality of work done</b>	1	2	3	4	5
<b>12. Time Management</b>	1	2	3	4	5
<b>13. Understanding the Community</b>	1	2	3	4	5
<b>14. Achievement of Desired Outcomes</b>	1	2	3	4	5
<b>15. OVERALL PERFORMANCE</b>	1	2	3	4	5

**Date:**

**Signature of the Student**

## **Student Self-Evaluation for the Community Service Internship**

Student Name: Amarthala Kanthi Sri

Registration No: 23481A4204

Period of CSP: From 19/05/2025 to 30/06/2025 and 14/07/2025 to 26/07/2025

Date of Evaluation: 15<sup>th</sup> November 2025

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<b>14.</b>	<b>Achievement of Desired Outcomes</b>	1	2	3	4	5
<b>15.</b>	<b>OVERALL PERFORMANCE</b>	1	2	3	4	5

**Date:**

**Signature of the Student**

## **Student Self-Evaluation for the Community Service Internship**

Student Name: Gowri Eshitha Christina

Registration No: 23481A4235

Period of CSP: From 19/05/2025 to 30/06/2025 and 14/07/2025 to 26/07/2025

Date of Evaluation: 15<sup>th</sup> November 2025

Name of the Person in-charge: Mr. A. Manoj Kumar

Address with mobile number: SRGEC, Gudlavalleru. Mobile no - 8885124580

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<b>14.</b>	<b>Achievement of Desired Outcomes</b>	1	2	3	4	5
<b>15.</b>	<b>OVERALL PERFORMANCE</b>	1	2	3	4	5

**Date:**

**Signature of the Student**

## **Student Self-Evaluation for the Community Service Internship**

Student Name: Gubbala Harini

Registration No: 23481A4236

Period of CSP: From 19/05/2025 to 30/06/2025 and 14/07/2025 to 26/07/2025

Date of Evaluation: 15<sup>th</sup> November 2025

Name of the Person in-charge: Mr. A. Manoj Kumar

Address with mobile number: SRGEC, Gudlavalleru. Mobile no - 8885124580

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<b>15.</b>	<b>OVERALL PERFORMANCE</b>	1	2	3	4	5

**Date:**

**Signature of the Student**

## **Evaluation by the Person in-charge in the Community/Habitation**

Student Name: Alapati Sai Mohana Deepthi

Registration No: 23481A4202

Period of CSP: From 19/05/2025 to 30/06/2025 and 14/07/2025 to 26/07/2025

Date of Evaluation: 15<sup>th</sup> November 2025

Name of the Person in-charge: Mr. A. Manoj Kumar

Address with mobile number: SRGEC, Gudlavalleru. Mobile no - 8885124580

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<b>15. OVERALL PERFORMANCE</b>	1	2	3	4	5

**Date:**

**Signature of the Supervisor**

## **Evaluation by the Person in-charge in the Community/Habitation**

Student Name: Amarthala Kanthi Sri

Registration No: 23481A4204

Period of CSP: From 19/05/2025 to 30/06/2025 and 14/07/2025 to 26/07/2025

Date of Evaluation: 15<sup>th</sup> November 2025

Name of the Person in-charge: Mr. A. Manoj Kumar

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<b>15 OVERALL PERFORMANCE</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**Date:**

**Signature of the Supervisor**

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**Date:**

**Signature of the Supervisor**

# Photos and Video Link



## Photos Link:

<http://alturl.com/gqmmu>

## Github Link:

<https://github.com/eshithachristina/E-Farm>

# **SESHADRI RAO GUDLAVALLERU ENGINEERING COLLEGE**

(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)

Seshadri Rao Knowledge Village, Gudlavalleru

## **Department of CSE (Artificial Intelligence and Machine Learning)**

### **Program Outcomes (POs)**

#### **Engineering Graduates will be able to:**

- 1. Engineering knowledge:** Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.
- 2. Problem analysis:** Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4).
- 3. Design/development of solutions:** Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5).
- 4. Conduct investigations of complex problems:** Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).
- 5. Engineering tool usage:** Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6).
- 6. The engineer and The world:** Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).
- 7. Ethics:** Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)
- 8. Individual and Collaborative team work:** Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.
- 9. Communication:** Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences.
- 10. Project management and finance:** Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.
- 11. Life-long learning:** Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

### Program Specific Outcomes (PSOs)

PSO1 : Formulate and Develop optimized solutions by using mathematical and domain-specific knowledge for computationally intensive applications.

PSO2 : Apply Artificial intelligence and Machine learning Techniques and use AI specific tools to solve multidisciplinary and real world problems.

### PROJECT PROFORMA

Classification of Project	Application	Product	Research	Review
	√			

Note: Tick Appropriate category

Project Outcomes	
Course Outcome(CO1)	Identify societal needs/problems
Course Outcome(CO2)	Investigate possible solutions to solve the problem
Course Outcome(CO3)	Use community involvement & AI Techniques to address the problem.
Course Outcome(CO4)	Prepare a report on the problem and its solution

### Mapping Table

Each CO is mapped with the POs and PSOs in three levels, '3' indicates high, '2' indicates moderate and '1' indicates low level

AM3503 : COMMUNITY SERVICE INTERNSHIP													
Course outcomes	Program Outcomes and								Program Specific Outcome				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2
CO1: Identify societal needs / problems	1	3				2	1	2	2	2	1	2	2
CO2: Investigate possible solutions to solve the problem		2	3	2		3	2	3	3	2	2	2	2
CO3: Use community involvement & AI Techniques to address the problem.			2	2	2	2	1	2	2	2		1	1
CO4: Prepare a report on the problem and its solution	2	1	2		2			2	2		2	2	2
<b>COMMUNITY SERVICE PROJECT</b>	1	2	2		1	2	1	3	3	2	2	2	2