

# **Slide 1: Title**

AgroConnect: AI-Driven Digital Economy

Solution for Crop Trading and Micro-Finance

Team: A. Bhanu Naga Sai Lakshmi, Manoj, S. Sai Mohith, U. Bhargav

Guide: Dr. S. Shyam Sunder Rao

Department of CSE (AI & ML)

## **Slide 2: Contents**

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## **Slide 3: Abstract**

Agriculture is vital to many economies but faces issues like intermediaries, unstable crop prices, and limited finance access. AgroConnect is an AI-powered e-commerce platform using ML models such as Gradient Boosting and XAI for crop price prediction, recommendations, and privacy-preserving analytics, enabling fair trade and economic empowerment.

## **Slide 4: Problem Statement**

Farmers lack reliable info on crop selection, pricing, and loans. Traditional chains involve intermediaries reducing profits. Existing platforms do not use predictive AI or ensure privacy. AgroConnect addresses these with a unified intelligent, secure trading and prediction system.

## **Slide 5: Objectives**

- Build AI-based e-commerce connecting farmers and buyers.
- Use ML (Gradient Boosting, LSTM, etc.) for crop prediction.
- Integrate federated learning and XAI for privacy and transparency.
- Include analytics, government schemes, and secure login.
- Empower farmers socio-economically.

## **Slide 6: Challenges / Issues**

- Low digital literacy among farmers.
- Data verification and authentication issues.
- Loan risk assessment difficulties.
- Poor rural internet connectivity.
- Integration with financial institutions.

## **Slide 7: Applications**

- Direct crop trading marketplace.
- Micro-loan facilitation.
- Supply chain management.
- Farmer support and empowerment.
- Digital agriculture promotion tool.

## **Slide 8: Motivation**

- Farmers earn low profits due to middlemen.
- Lack of market transparency.
- Need AI-driven fair trade and predictions.
- Support financial inclusion and sustainable agriculture.

## **Slide 9: References**

1. AgroSmart: Empowering Farmers (ICSSES 2025)
2. Micro Loans for Farmers (ICCCNT 2020)
3. Next-gen AI in Agriculture (Frontiers, 2025)
4. Crop Price Prediction (Quest Journals, 2020)
5. Farmuser Chatbot (Springer, 2022)
6. Crop Tracker Web App (IET, 2022)

## **Slide 10: Thank You**

Thank you!

Questions and Discussions.