

TITLE PAGE

- **Problem Statement ID** – [SIH25076](#)
- **Problem Statement Title** - [AI-Based Farmer Query Support & Advisory System](#)
- **Theme** – [Agriculture , Food Tech & Rural Development](#)
- **PS Category** - [Software](#)
- **Team ID** - [SRU_63](#)
- **Team Name** – [Team 404 Not Found](#)

IDEA TITLE

❖ Proposed solution

- **Voice assistant** supports regional languages for easy, hands-free interaction.
- **Farmers** can ask questions verbally and receive instant spoken responses and they can also get text responses
- **Icon-based interface** simplifies navigation for users with low literacy.
- Each **icon** represents a key function like crop advice, market rates, or schemes.
- **Voice and icon** inputs work together to guide users step-by-step.
- **Minimal text** ensures accessibility across age groups and education levels.

TECHNICAL APPROACH

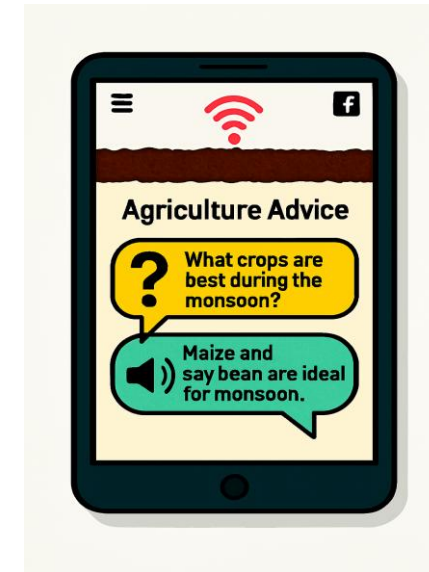
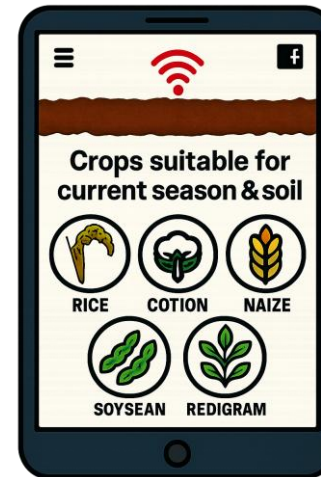


- **Technologies to be used –**
- **PLATFORM ARCHITECTURE :**
- **Frontend :** Built using HTML/CSS/JAVA SCRIPT For light weight performance
- **Backend:** Built using PYTHON ,Node.js for requests
- **VOICE ASSISTANT INTEGRATION :**
- **Voice Input :** Used Web Speech API for browse-based input
- **Support local languages(English , Telugu , Hindi , Tamil , Malayalam , Kannada)**

IMPACT AND BENEFITS

Empowers farmers by giving them easy access to crop advice, market rates, and schemes through voice and icons.

- **Improves usability** for non-literate users with simple visuals and spoken guidance.
- **Boosts productivity** by helping farmers make faster, smarter decisions.
- **Promotes inclusion** by bridging the digital gap in rural communities.
- **Goals** Multilingual communicator ,voice and text based,input and output , accurate to context ,user friendly & easy accessibility



FEASIBILITY AND VIABILITY



- **Feasibility:** Can be built using existing voice tools and icon-based mobile design.
- **Device compatibility:** Works well on basic smartphones used by most rural farmers.
- **Challenge:** Voice assistant may misinterpret local accents or background noise
- **Risk:** Some users may hesitate due to low digital literacy or fear of tech.
- **Strategy:** Use offline voice models and noise filters to improve accuracy.
- **Support:** Add a simple voice-guided tutorial to help new users feel confident
- **Future Outcomes :** Image Query , Market Trends , Translation

FEASIBILITY AND VIABILITY



Feasibility

Can be built using existing voice tools and icon based mobile design.



Device compatibility

Works well on basic smartphones used by most rural farmers.



Challenge

Voice assistant may misinterpret local accents or background noise



Strategy

Use offline voicemodels and noise filtering



Support

Add a simple voice-guided tutorial to help new users confident

REFERENCES



- Rehman, M. Z. U., Raghuvanshi, D., & Kumar, N. (2023). KisanQRS: A deep learning-based automated query-response system for agricultural decision-making. *Computers and Electronics in Agriculture*, 213, 108180.
- Vanitha, V., Rajathi, N., & Prakash Kumar, K. (2023). AI-Based Agriculture Recommendation System for Farmers. In *Computer Vision and Machine Learning in Agriculture, Volume 3* (pp. 91-103). Singapore: Springer Nature Singapore.
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