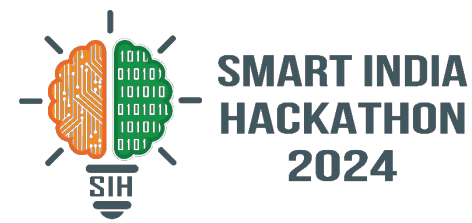
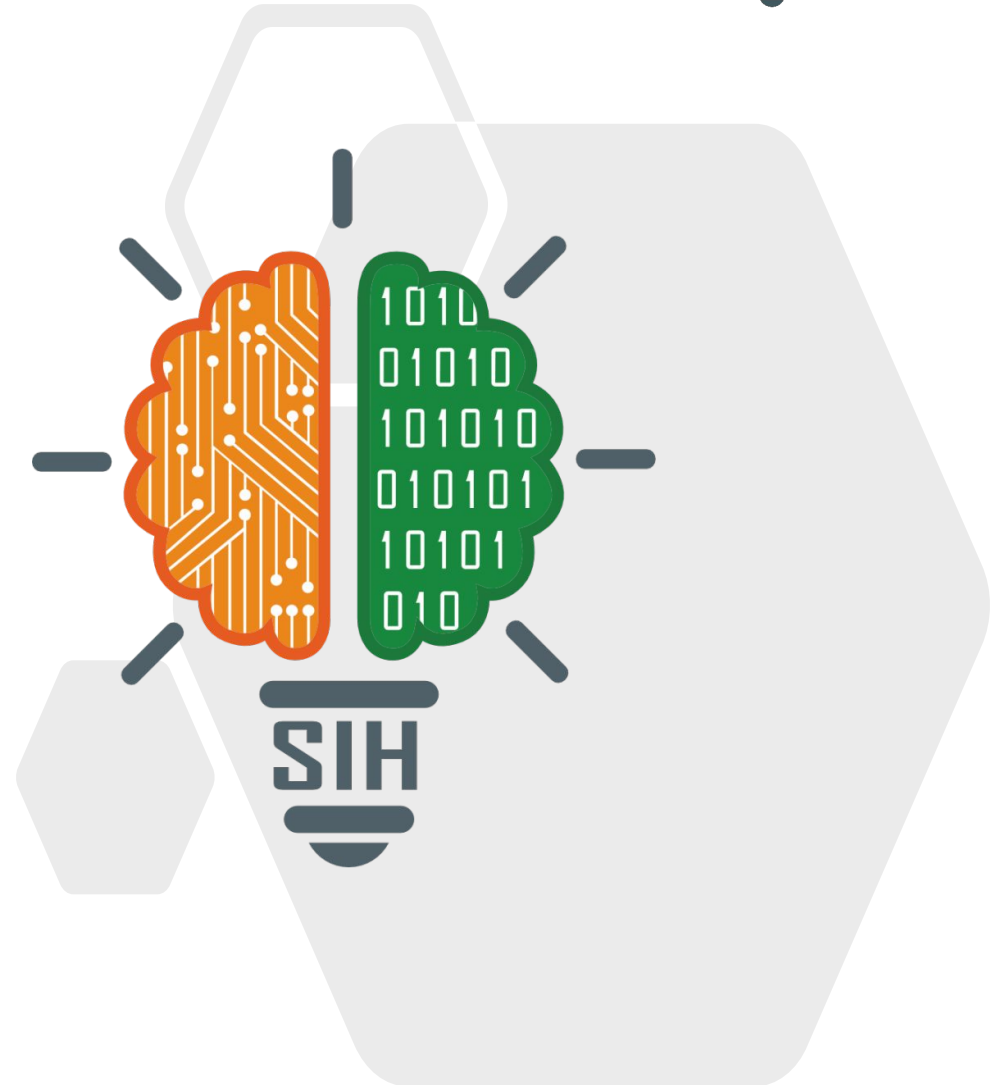


SMART INDIA HACKATHON 2024



- **Problem Statement ID – 1637**
- **Problem Statement Title- Mobile App for Direct Market Access for Farmers**
- **Theme- Agriculture, FoodTech and Rural Development**
- **PS Category- Software/Hardware**
- **Team ID-**
- **Team Name (Registered on portal)**



Mobile App for Direct Market Access for Farmers

Description of proposed solution

Farmers often trade their produce with petty traders and commission agents, so their incomes are low. Developing a mobile app to directly connect farmers to consumers and retailers will help overcome this problem.

The mobile app will have three types of users: farmers, consumers, and retailers.

This app will allow farmers to display their produce with details such as name, price, and image, and they can also provide their contact information for negotiating prices through the app. Consumers and retailers can search for farmers by name or location in order to connect with them.

How to address the problem

Separate logins for farmers, consumers, and retailers will provide access to specific features.

Farmer and retailer details will be cross-referenced for authenticity.

Users can use location services to find nearby farmers and make calls through the app.

Offering real-time market trends will help farmers determine when to adjust the price of their produce.

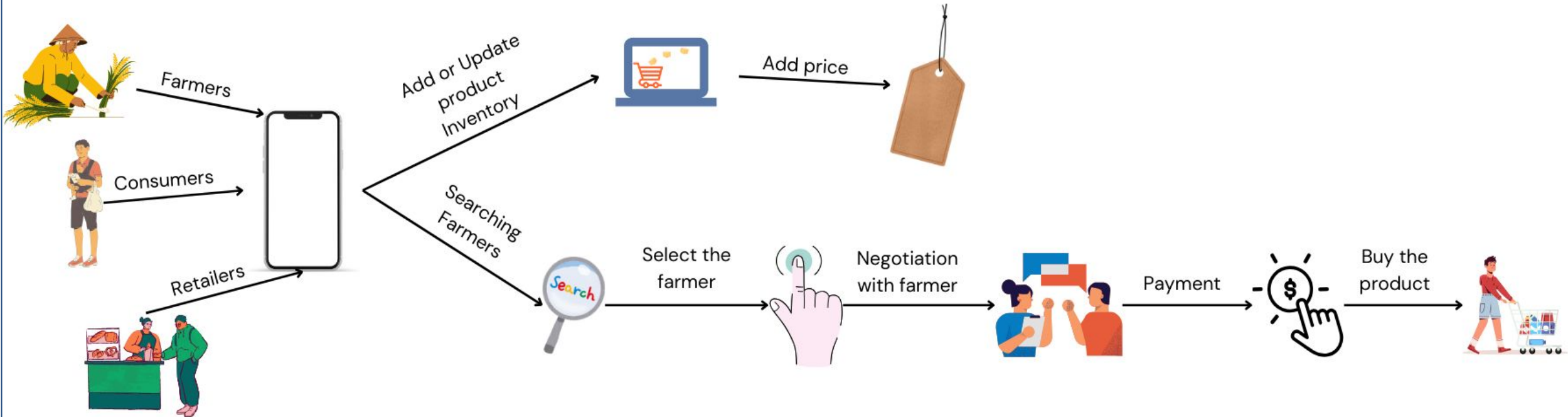
Payments for produce can be made online or in cash, offering flexibility.

This approach aims to effectively address the problem at hand.

Unique Feature

- 1) Direct Negotiation Mechanism
- 2) Real-time Notification Alert System
- 3) Market Analysis
- 4) Payment Gateways
- 5) Multilingual Support
- 6) Rating and Review System
- 7) Advertisement System

Flow Chart



Techstack:



❖ Feasibility

The project is technically feasible with established mobile technology, cloud infrastructure, real-time features, and payment integration.

There is a strong market demand, potential for user adoption among farmers, and a feasible revenue generation model.

❖ Challenges and Risks

Potential challenges include farmer adoption and education, infrastructure issues, trust and security concerns, logistics and delivery management, legal and regulatory hurdles, and market saturation and competition.

❖ Strategies for Overcoming Challenges

To address these challenges, strategies include implementing education and training programs, developing offline capabilities, enhancing security measures, partnering with local logistics companies, ensuring legal compliance, and focusing on unique value propositions and strategic partnerships.

Impact on

Farmers

- Increased Income
- Voice in the market
- Control over sales

Consumers

- Access to Fresh Produce
- Lower Prices
- Trust in Quality

Retailers

- Direct Sourcing
- Lower Prices

Benefits of the solution

Environmental Benefits

- Market for Eco-Friendly Innovations
- Reducing food waste.

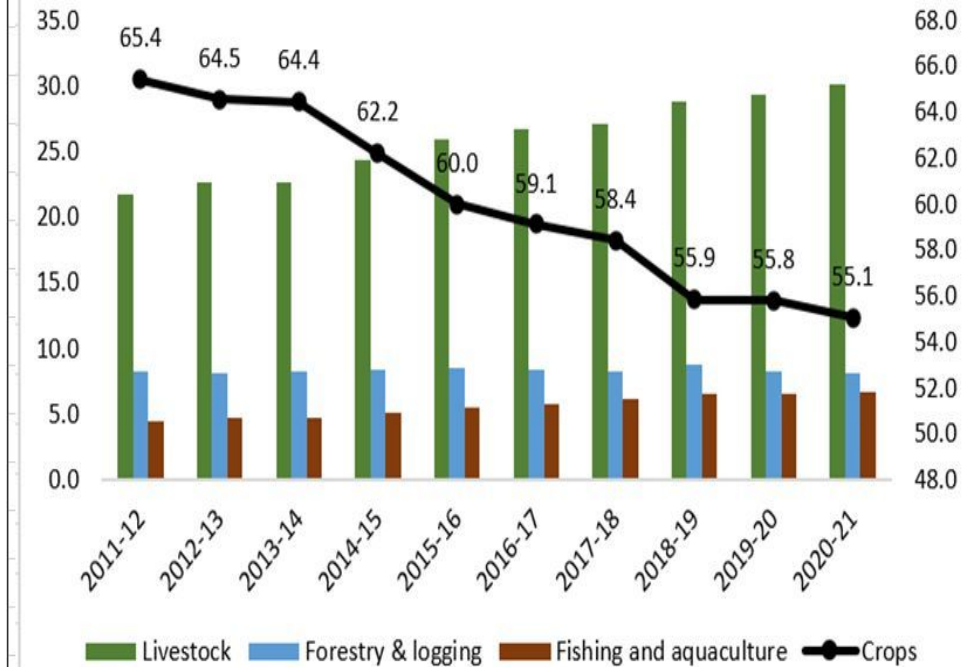
Social Benefits

- Supporting local economies.
- Uplifting rural communities

Economic Benefits

- Creating job opportunities and income.
- Lowering transaction costs and ensuring fair pricing for both farmers and buyers.

GVA in agriculture



Notes : Livestock growth has tapered off, especially after the cattle slaughter ban. But watch returns from crops. Unlike milk, where Kurien ensured that the farmer got 80% of the market price of milk, the farmer gets a poor market share for crops. The middleman takes away much.

Sources : Based on data of MoSPI; Economic Survey 2023

❖ Research

- How to improve farmer income as group
link: https://www.researchgate.net/profile/Atik-Aprianingsih/publication/329560069_Improving_Income_through_Farmers'_Group_Empowerment_Strategy/links/60057987299bf14088a36577/Improving-Income-through-Farmers-Group-Empowerment-Strategy.pdf

❖ References

- Co-designing a smartphone app for and with farmers
link: <https://www.sciencedirect.com/science/article/abs/pii/S0743016720317174>
- IoT-oriented software platform applied to sensor based farming
link: <https://beei.org/index.php/EEI/article/view/2177>

❖ Budget Analysis

- One - Time Payment:
 - Fullstack developer: ₹50,000
 - UX designer: ₹50,000
 - Digital Marketer: ₹50,000
 - Legal and Compliance Fees: ₹20,000
 - Contingency Fund: ₹1,50,000
- Annual Payment:
 - Hosting and Cloud Services: ₹80,000

Overall Budget Estimate: ₹4,00,000