Equipping farmers with digital tools and information to enable more equitable economic outcomes in India
Summary

Mastercard’s Farm Pass is a digital platform that directly connects smallholder farmers to the agricultural and financial ecosystem. This gives farmers improved access to their buyers and increases price transparency. Subsequently, farmers are empowered to demand higher prices, ultimately ensuring their own greater economic security.

Farm Pass also facilitates access to credit, quality inputs (such as fertilizer, pesticides and seeds) and advisory services, so farmers can grow their business.

Farm Pass supports over 900,000 farmers globally and is live in India in Maharashtra, Karnataka, Uttar Pradesh, Andhra Pradesh and Tamil Nadu.

Farm Pass is on track to reach 7 million smallholder farmers by 2025 with the aim to double farmers’ incomes in line with national government mandates.
Context

Agricultural development is one of the most powerful tools we have at our disposal to end extreme poverty and boost shared prosperity. Agriculture sector growth is two to four times more effective in raising incomes among the poorest compared to other sectors.

The agricultural market composes 6.4% of the world’s economic production, totaling over 5 trillion USD.1 Agriculture employs more than a quarter of the world’s workforce in both developed and developing countries.2 65% of poor working adults make a living through agriculture.3

Smallholder farmers are the heart of the agricultural value chain, yet farming no longer offers a sustainable livelihood. Next-gen farmers are leaving their communities to pursue more stable jobs.

Most agriculture value chains are highly complex, manual and cash-based, which means they are also vulnerable to income-diminishing inefficiencies, fraud and waste.

Challenge

Smallholder farmers in India urgently need access to credit, high-quality inputs and buyers to make farming commercially sustainable.

Many ag-techs offer partial solutions and do not solve fundamental infrastructure challenges. For example, 53% of India’s population is offline, and 75% of rural households are digitally illiterate.

At the same time, financial institutions are unable to meet government-mandated priority sector lending targets due to the high cost of acquisition and risk.

By increasing access to new markets, driving supply chain transparency and creating a transaction history, Mastercard Farm Pass enables smallholder farmers to enter the formal financial economy more easily, shore up their businesses and ultimately improve their economic standing.

Solution

Mastercard Farm Pass equips participants across the agricultural sector with the digital tools and information required to enable more systematically equitable outcomes. The platform brings together various agri-sector stakeholders from the supply and demand sides into one digital agricultural marketplace, thereby amplifying the collective positive impact on farming communities.

Farm Pass enables:

1. **Buyer-Side Marketplaces**: Buyers can create and manage produce orders to Farmer Producer Organizations (FPOs), as well as register users, view reports and make payments

2. **Seller-Side Marketplaces**: Enables FPOs to aggregate smallholder farmer produce for sale via smartphones and the web — FPOs can register farmers, record expected harvests, manage buyer orders, pay farmers digitally, access reporting and communicate with their farmers via SMS text messaging

3. **Digital Payments**: Enables safe and secure digital payments to smallholder farmers so they no longer need to wait days or weeks for cash payments that are unsafe or incomplete

4. **Financial Services**: Creates a digital record of the farmer’s transactions that can unlock financing opportunities

5. **Access to Third-Party Services**: Enables FPOs and farmers access to third-party services to help manage their harvest and boost productivity

Farm Pass is valuable for agri-buyers who desire sustainable sources of quality produce at favorable market prices and for smallholder farmers looking for reliable markets and fair prices.

Key benefits include convenience, transparency, operational efficiencies, trust and financial inclusion.
Results

**Fairer Pricing:** Eggplant, bean and lentil farmers in Coimbatore, India, were locked in to selling to local merchants at a low price, who sold the produce onwards at a 3.5x markup. Farm Pass created price transparency, raising the market price for everyone. Now, local merchants can match the 20+% higher prices that buyers on Farm Pass are offering.

**Productivity Gains:** Despite farming for generations, many farmers lack the data and knowledge necessary to solve the multitude of challenges that put their harvest at risk. The LFN Farmer Network, also known as LFN, leverages Farm Pass to digitize produce procurement, inputs supply and advisory services at scale. Through Farm Pass, Leaf advised carrot farmers in Ooty, India, about which pesticides to use and facilitated access to credit needed to purchase the inputs on time. This enabled farmers to increase their yield from 10 to 30 tons per acre per crop cycle.

**Credit Access:** Without credit, farmers are unable to grow their business or mitigate against a poor harvest. Many farmers struggle with cash flow and are even forced to sell personal possessions at the start of the crop cycle if they are unable to access fair loans. Some farmers seek cattle loans so they can sell milk daily to support their income. By creating a digital identity and transaction record, Farm Pass connects farmers to financial institutions for loans at fairer rates and when they are most needed.

**Supply Chain Management:** Buyers and traders leverage Farm Pass to forecast and ensure a steady supply of income. In Mysore, India, tomato traders use Farm Pass to smooth their income and reduce produce wastage.
Lessons for financial inclusion

1. Digitizing payments facilitates fast, secure and traceable transactions across the supply chain, allowing for more liquidity and enabling better financial management.

2. The improved price transparency and connection to multiple buyers enables smallholder farmers to command a fairer price and therefore generate higher profits.

3. The use of a digital platform allows for safe and secure data collection, which can be used by financial service providers to provide working capital and other relevant financial tools.

4. Digitizing agricultural transactions makes it easier to connect smallholder farmers with financial service providers and other organizations that can offer important services such as loans or agricultural advisory services.

“We’ve found many of these farmers are price takers and not price makers. We’re digitizing value chains to be more transparent, empowering the farmers.”

- Tara Nathan, EVP, Digital Solutions for Development at Mastercard

“With the introduction of Farm Pass, the market became more transparent, and traders now must match the higher prices of Farm Pass buyers.”

- Tara Nathan, EVP, Digital Solutions for Development at Mastercard

“This is a big revolution and a benefit to all farmers.”

- Saravanan, smallholder farmer in India and Farm Pass user