



Prosperity

food  
future  
foundation

# Connecting Consumers and Producers



# Actionable Area

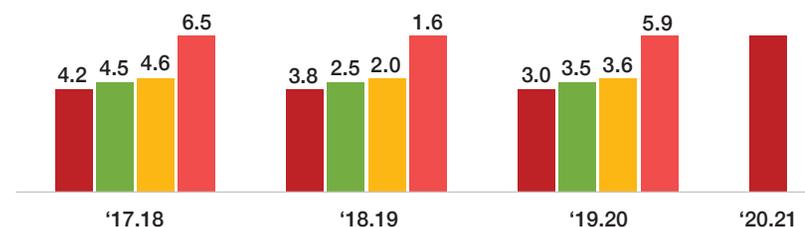
Initiate bridging producer-consumer integration with technology and digital intervention as an enabler in the value chain and effectively use social capital for transforming the food system.

## Issue

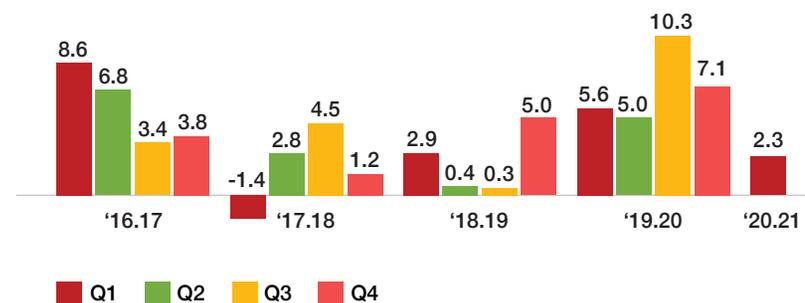
- India's current population of 1.38 billion, 17.7% of the world's population, will surpass China by 2030. This means consumers are increasing fast.
- India accounts for 2.4 percent of the global land, farmers in half the Indian states are marginal (land less than 1 ha), and the remaining are small farmers (landholdings of 1-2 ha). About 58 percent of the total workforce in the country is still engaged in agricultural and allied sector activities, which accounts for approximately 17.8 percent of the country's Gross Value Added (GVA) for the year 2019-20, the share of crops and livestock contribute about 85 percent of the overall agriculture output.
- The composite average growth rate (CAGR) in the last 30 years has been satisfactory. However, producers and consumers face several constraints, including input supply, technical expertise, credit availability, storage support, transport, output quality, and organic market connection. The Producer Support Estimate (PSE) for India was negative 11.2% of the value of farm receipts between 2000-01 and 2019-20, while Consumer Support Estimate (CSE) was one of the highest in the world at 28.8 percent.

## Growing Strong

Gross value added for agriculture & allied activities at constant prices (FY12) (%)



Difference between current and constant prices for GVA in agri & allied activities (%)



Source: MoSPI, Government of India



- In the overall food system, the non-technical subsystems such as governance, institutions, policy and regulations, and social norms are influential institutions. The base characteristic of this ecosystem is usually historically rooted, socially dynamic, cross-regional and works at cross-scale interactions among many processes and actors, and is culturally sensitive in multi-cultural settings. Thus it is systemic in an emergent rather than a planned sense. Social capital becomes an important carrier of the whole ecosystem.
- At a macro level, the unpredictability of agricultural production and the demand, risk in supply chain and value chain, absence of the organised social networks of producers, and volatility in the aggregation of platforms are critical challenges in a sustainable food system.
- India loses around USD 12.5 billion in terms of rejection at farm gate and loss during distribution. There is about 5-18% waste in the fruits and vegetable sector, 4-6% waste in farm produce and poultry and fish food loss is between 6% and 12%. The reasons for Post-harvest losses (PHL) are inadequate storage infrastructure, lack of knowledge on storing practices, inadequate timely market access, and small farm holdings to scale up, which account for 80% of the farm holdings.
- The traditional agricultural Value chain has been long with many intermediaries, which has created low returns for producers and a high price for consumers. A lively relationship between producers and consumers were never established given the volatile behaviour of the market intermediaries.

- The quality of the produce, adulteration at source and in transit, information asymmetry about the product and supply chain, and lack of transparency are concerns in the producer-consumer connection ecosystem. They affect customer order-to-fulfilment lead-time (CLT), supplier order-to-fulfilment lead-time (SLT), the complete cycle time (CT), and the delivery-to-customer lead-time (DTC).

## Status

- Towards making the systems robust and more efficient, market integration activities are getting designed for better outcomes. Developing a unified market for agricultural commodities, India launched the Electronic National Agriculture Market (eNAM) in 2016 by networking existing Agriculture Produce Marketing Committees (APMCs), primarily to increase the choice of the farmers' produce for sale in 'Mandi'. The immediate future looks at 22,000 'Mandis' and about 7,500 APMCs connected with eNMA, which expands the ecosystem of the producer network. This has brought in the unorganised produce community on a platform offering efficiency and scale.
- In policy environment, introduction of Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 and Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020, The Essential Commodities (Amendment) Bill, 2020 and Farmer Service Bill 2020 argue to favour farmers directly for their products and reduce the value chain benefits transferring partial advantages to consumers.



- Market actors and stakeholders such as input suppliers, farmers, and other producers like FPOs and cooperatives, intermediaries, food processors, traders, consumers, and others in forwarding and backward integration are experimenting with new business models. The collaborative models of cooperatives/ FPOs with corporate chains, small farmers clustering to 'Haats', technology-led facilitation, and end-to-end solution to producers by companies are success cases, but the scale is big to manage in India.

## Vision 2030

- **Creating self-sufficient, inclusive, integrated, fair, sustainable, and technology-led global value chain ecosystem delivering food & health assurance by the producer-consumer partnership. The producer structure, expertise, network, partnerships, and alliances optimising the management cost, screening cost, and transfer cost would make the efficient producer-consumer relationship commercially beneficial.**

# Pathways



Create a food system execution council (FSEC) to plan, execute and monitor the sector requirement. This can be attempted with the help of technology to avoid delivery asymmetry. Developing the tracing of the produce model, the value distribution in the value chain, partnership value acquisition, and automation of data collection and analytics for policy.

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Develop quality standards and marks for safe and traceable farms and food.

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Launch programs and schemes of incentivisation to produce safe, natural, organic foods.

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Rationalise the logistics cost of farmers to leverage the digital marketplace.

# Pathways

## IMPLEMENTATION



Promote consumption-linked production, i.e., understanding food consumption patterns of both domestic and exports markets and taking those to the producers.

Mapping the consumer behavior for taste, preferences in the food sector and accordingly developing the market systems.

Dialogues and discussions at the farmers' end and orienting them around the market systems assured market for farmers and risks associated.

Promoting federation of FPOs, cooperatives, and SHGs as the new set of institutions to address the market and marketing-related challenges.

Netting the demand side by active engagement with consumers' associations, hotel associations, industry bodies like CII, FICCI, PHD chamber of commerce.

Creating capacity-building programs to achieve the goals and actions in Traceability Agenda, i.e., reduced cost of cultivation, improved productivity and product quality, and food safety and certification norms.

Develop a contract farming financing model by the buyer to the farmer.

Developing products of crop assured insurance, weather insurance, market risk insurance with smart claims management system.

Develop micro-farm market with smartphone technology connect and offer packaging, branding, logistics support to produce the high end.

Develop dual transaction systems, i.e. farmers as consumers for commodities, input supplies, and services like finance, insurance, logistics.

# Pathways



Develop the designs of traceability and modelling the engagement of produce and supply chain stakeholders, i.e., farmers, FPOs, cooperatives, cold chains, retailers, etc.

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Develop local, regional, national, and global models of traceability in food systems.

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Develop scalable best practices and dissemination to replication.

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Create comprehensive digital and data system at Gram Panchayat level since Digital ecosystem is being laid down for two-way communication towards support and connect

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Design local level network (LLN) initiatives to connect producers and consumers such as Residents Welfare Associations in urban settlement and FPOs connect.

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Frame the inclusive institutional system connecting PDS, CBOs, and private players.

Develop and design capacity-building programs for all stakeholders in new food systems requirements, including policymakers, intermediaries, financial institutions, FPOs, and smallholders.

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Develop responsible consumer education programs for deeper engagement.

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Enhance multilateral and bilateral agencies' role in building social capital and social infrastructure to directly link with consumers.

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Develop commodity-specific systems of measurement of food waste at each level of supply chain and value chain and bring the circular economy principles into practice.

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