

Total Solution for Smallholder Farmers

An integrated project should provide end-to-end support to producers of high-value agricultural produce [fruits & vegetables (F&V), milk (dairy) and sheep, pigs, goats, poultry (animal rearing)]. The key activities are the project production support, aggregation of produce, value-addition of produce, trading and marketing (product development, packaging, branding, distribution, and retailing).

The above project could leverage the existing infrastructure for postharvest processes like storage, primary value-addition, and higher-level processing. Nevertheless, infrastructure for postharvest operations, wherever inadequate for ensuring quality, could be set up close to the point of aggregation for minimising deterioration during transport, handling and storage.

Supply chain management, as proposed under this project, would be a powerful tool in linking farmers to the markets, for sustainable income generation.

Well established practices like supply-demand matching, collaborative forecasting, sharing of market information and efficient transport scheduling are yet to find their way into the Indian food supply chains. The recent developments in the processing and retailing sectors have resulted in new marketing and trading opportunities, but the challenge lies in linking farmers with these emerging markets in order to make the process inclusive, competitive, sustainable, and scalable.

Concepts for the Supply Chain

“From Fork to Fields” – This implies that consumers should hold the centre-stage when it comes to production by farmers. Consumer demand in terms of nature (safe/low chemical input-based), form (ready-to-use) and time utility (round-the-year) of Vegetable produce has to guide the operations and strategy of the proposed Farmer Producer Company “Differentiation of Produce” –Organic produce poses a double hazard as it has limited scalability for a farmer and poor affordability for a middle-class (mass) consumer. When the key driver of demand for such produce is the concern about pesticides and toxic chemicals, it would be worthwhile to promote pesticide-free crop production. A label and a well-defined system for safe production (free of pesticides and toxic chemicals) could be encouraged among farmers as the initial step towards organic farming. Produce from safe production system could be certified on the basis of internal control systems similar to organic farming but where the onus is on peer monitoring by farmers instead of sole monitoring and certification by an external agency, the safety of the produce could be verified through pesticide-residue tests by competent agencies of international stature like SGS, Intertek etc.

“Localisation of Postharvest Facilities” –The fragmentation and dispersion of farmers in India necessitates that facilities for collection, cleaning, sorting, grading, drying, transit storage and basic packing are brought within the reach of the small and marginal farmer. In regions where a particular commodity is either grown in huge quantities or has a distinct identity of its own, intermediaries and processors will compete to procure the produce from the farm-gate or doorstep of the farmers including the small and marginal cultivators. But for regions that do not enjoy such advantages, sale of agricultural produce in its raw form without basic value-addition, severely limits income for a small and marginal farmer. The identification of the numbers and the appropriate physical locations for establishing Post-harvest Value-addition Centres (PVC) can be undertaken through a participatory exercise with farmers. Improved postharvest handling and marketing can help in disintermediation and strengthening of the agricultural supply chain through better linkages between producer groups and large commodity players.

“Holistic End-to-End Approach”– The project seeks to take into account the entire gamut of horticultural development where farmer would not only have access to modern farm practices, latest agri-inputs and credit linkages but also vital intangible value enhancers like real-time market

information, risk management tools and leading industry certifications (GAP). Practices like supply-demand matching, collaborative forecasts, market intelligence and efficient transport scheduling would be employed to improve the efficiency of supply chain.

“Focus on Retail for Long-term Profitability” –Operating in the prime retail space makes it possible for a marketing entity to compete for a higher share in the disposable incomes of the affluent consumers. In this direction, retail outlets need to be set up in the key urban centres. The existing outlets for these produce could be SAFAL (Mother Dairy) Retail Outlets in Delhi.

“Mechanisation and Technology for Efficiencies”–Farm Mechanization Services (FMS) can go a long way in improving the economic realisation of farmers, particularly the small and marginal farmers by providing them access to vital technology and equipments that are unaffordable to them, due to their higher acquisition costs, higher rentals or simply, poor availability. By fostering the establishment of Equipment and Technology Fleets (ETF) for servicing farms, the project will help in bridging the economic disparities between small and large farmers owing to their differential access to mechanisation and technology. Farmer collectives can be motivated to form such ETFs which can pool agricultural machinery of the constituent farmers and bring in the missing elements by accessing credit and agricultural infrastructure development schemes of the State.

“Farmer-centric Collaborative Value Chain” – This emphasises that collaborative supply chain models are now delivering better performance than a traditional supply chain where each entity is looking to maximise its gains. Though disintermediation has been outlined as one of the key objectives, the role of certain intermediaries is value-enhancing and vital for efficient functioning of the supply chain. The ability of intermediaries to financially and logistically support the operations of proposed Producer Companies will have to be suitably leveraged for mutually beneficial outcomes.

Opportunities in the Agricultural Vertical ⌘ Ensuring consumers with good quality and fresh produce ⌘ Consumer orientation in downstream activities ⌘ Higher efficiency through inter-linked process and stakeholders ⌘ Enabling new value addition opportunities ⌘ Achieving sustainability through regulated (APMC)/ unregulated markets ⌘ Problems of non-regulation, high marketing/transaction and spoilage costs due to large number of intermediaries ⌘ No appreciation of quality and Lack of transparency in pricing ⌘ Lack of infrastructure for grading/sorting ⌘ Non-existent cold chain ⌘ Mismatch between demand and supply leading to high price fluctuations ⌘ High post-harvest losses

- Restructuring and Modernisation in Food Supply chains is urgently needed – Rapid urbanization, Rise of middle class, Dietary diversification has led to emergence of supermarkets linked with improvement in efficiency of agricultural marketing system
- Organised fresh food supermarkets are seen as one of the innovative ways to link farmers to the markets and ensure better margins
- In many cases, supermarkets are investing at all levels and buying fruits and vegetables directly from farmers
- Growth of supermarkets will be very high with the recent permission of FDI in retail in India
- Thus, the future of organised retail may be different in the years to come.
- Agri-food systems are slowly undergoing transformation with supermarkets entry though their procurement operations are still at a nascent stage.
- Supermarkets work with less-resourceful small cultivators through oral, informal, verbal and non-registered contracts due to higher productivity and higher Grossed Crop Area under vegetables.
- Procure only a limited proportion of the grower’s crop without any firm commitment, on a day-to-day basis.
- Supermarkets do not decide upon the procurement regions at random, but chooses the more productive regions and farmers first.
- Farmers report that supermarkets reduce their transaction cost as they pick produce from farmers’ fields saving time and cost of farmers.
- Written agreements with legal binding and assured pricing (formal contract farming) should be the norm.
- Supermarkets should also take responsibility of providing a package of practices for vegetables and encouraging cooperative/ joint farming.
- As farmers rely on local markets, infrastructure of these local markets should be improved to reduce post-harvest losses.

Regulated Markets for fruits and vegetables to reduce farmer exploitation. Perspectives: The Agricultural Supply Chain offers tremendous scope for entry for Joint Liability Groups of smallholder Farmers, for Farmer Producer Organisations, for agro-industries and markets, cold storages and small warehouses, for markets, transporters, infrastructure like roads and bridges for connectivity with markets, etc. The policy initiatives and incentives and innovations for a boost to the rural economy are needed so that the Indian economy is strengthened to levels existing prior to the colonial era after 1750's.