

<b>Sector</b>	Agro and Food Processing
<b>Sub - sector</b>	Agri Infrastructure
<b>Profile No.</b>	AF-20
<b>Project Title</b>	Terminal Markets at Ahmedabad and Surat

## Project Description

This project proposal is for setting up of horticulture produce Terminal Markets, as a part of agri-infrastructure in Gujarat. On the basis of arrival quantities of fruits and vegetables and strategic locations for development, Terminal markets have been proposed at - Ahmedabad and Surat,

Terminal Markets envisage offering a one-stop solution, starting from facility for cleaning, grading sorting, packaging and palletization of fresh horticulture produce. It will also provide logistic support including transport services, cool chains support and facility for storage (including ware houses, cold storages, ripening chambers, and storage shade etc).

Apart from above facilities, Terminal Markets will also provide state of the art facilities like:

- Electronic Auction Hall
- Processing and Exports,
- Transport including refer vans etc.
- Computer Centre with Internet facility
- CA/MA Cold Storage facility
- Library
- Restaurant / Food Parlour
- Electronic Weigh Bridge
- Banking / ATM Facilities
- Vehicle Parking Facility
- Multipurpose Information - Kiosks
- Advisory on input, price and quality
- Farmer's Training Centre
- Rest House for Farmers

## Project Concept

Terminal market would endeavor to integrate farm production with buyers by offering multiple choices like electronic auctioning to farmers for sale of produce to exporter, processor and retail chain network under a single roof.

In addition, the markets would provide storage infrastructure, thus offering a choice to growers for trading their produce (fruits, vegetables and flowers) at a future date- at their option.

The Terminal Market would operate on a Hub-and-Spoke Format, where in Terminal Market would be Hub - linked to a number of collection centers (Spokes), located at key production centers in the State and growers will have easy access to nearest Terminal Market. In case of two terminal markets proposed in Gujarat, it is suggested to integrate surrounding Districts APMCs with these Terminal markets through modern Agri-market net working. These Terminal markets will also provide extension support and advisory services to farmers at nominal cost or without any direct service charges.

## Market and Growth Drivers

### Market

India is the second largest producer of fruits and vegetables in the world after China. In India, Gujarat is one of the leading states in horticulture production. Gujarat produces wide varieties of fruits, vegetables and flowers and hence there is need for Terminal market other than APMC's working at present, to provide infrastructural support to growers and bring producers and buyers on one platform.

Terminal Market sees itself as a service provider to horticulture growers and buyers of horticulture products in the districts, from where it will be receiving supply. It is proposed to have following hub-and-spoke pattern for Ahmedabad and Surat Terminal Market.

### Suggested Model, Area and Production covered in Ahmedabad and Surat

#### Terminal Markets

Terminal Market will cater to Districts	Fruits		Vegetables		Flowers	
	Area*	Prodn.**	Area*	Prodn.**	Area*	Prodn.**
<b>a) Ahmedabad Hub</b> Ahmedabad, Patan, Mehsana, Banaskantha, Sabarkantha, Gandhinagar, Rajkot, Surendranagar, Kheda, Anand	80444	1656006	169774	2605083	2610	15993
% of State Covered	29.5	41.2	51.2	53.5	37.5	38.3
<b>b) Surat Hub</b> Surat, Valsad, Navsari, Dahod, Panchmahal, Vadodara, Bharuch, Narmada, Dang	119227	2213762	78024	832418	3705	22504
% of State Covered	43.8	55.1	23.5	17.1	53.3	53.8

Source: IMM Analysis of Gujarat State Horticulture Statistics, 2004-2005

NB \* = Area in Hectares, \*\* = Production in Metric Tons

The terminal markets are important hubs in the food chain. They are major distribution centers, whose wholesale distributors buy in bulk (typically tractor-trailer loads at a time) than break the bulk down and sell the products to the end users either processors, exporters or retail chains.

### Growth Drivers

Terminal Market intends to help the market operators and their trading partners to operate more efficiently. These efficiencies will result in greater turnover / profits for the entire supply chain. This will fuel the growth of terminal market activities in the region.

With the availability of Narmada Canal Irrigation facilities in approx. 18 lakh hectares agriculture land in Gujarat, the second agriculture revolution is certain in the coming period and that will also include range of horticulture crops, as they are giving higher returns against the conventional agriculture

crops. This will also facilitate growth of terminal market activities and operations. In short terminal markets will fulfill the aspiration of horticulture growers in the state and it will further enhance activities of terminal market in the region.

## **Why Gujarat?**

- India is one of the largest producers of fruits and vegetables in the world, yet lacks basic marketing infrastructure like Terminal Market. Gujarat has always taken the lead in introducing new concepts in agriculture marketing and hence is most suitable for starting horticulture terminal market in the state.
- Gujarat is poised for second agriculture revolution with the availability of Narmada Canal Irrigation facilities in 18 lakh hectare areas. This will boost horticulture production in the State as it is giving much higher returns to growers as compared to conventional agriculture crops. This will provide attractive volumes for Terminal Market operation.
- In India, Gujarat ranks third in the production of Banana, sixth in production of Mango, second in Papaya and Sapota production.
- Technical manpower for such terminal market operations is easily available in Gujarat as it is having a well established system of APMCs all over the state operating since more than two decades. These APMCs are working in the interest of growers and have cooperative structure.
- Well developed transport infrastructure like road, rail, port and air connectivity. Further, this infrastructure will be supported by Terminal Markets and port/airport based perishable export cargo handling facilities.

## **Modus Operandi for Terminal Markets**

The Terminal Market would be linked to a number of collection centres. The collection centres would be located at key production centres to establish backward linkage with growers and to allow easy access to farmers for marketing of their produce.

It is suggested to have a Special Purpose Vehicles (SPV) formed that will be responsible for the acquisition of land for setting up of the Terminal markets and also for the Collection centres. It will obtain necessary licenses, clearances and approvals for the establishment and operation of the proposed Terminal Markets. It is suggested to have Public / Private partnership model through SPV, for ultimate operation of Terminal markets as an independent profit centre.

For the successful operation of the Terminal Market Project, the role and responsibility of the concerned agency /enterprise will be mandatory in terms of providing the basic infrastructure facilities and services like Electronic auction facility, Computer with Internet facility, Grading, washing and packing lines facility, Processing and exports facility, Banking, ATM facility, Cold Storage facility, Transport including reefer vans etc. Advisory on input, price and quality through multipurpose Information – Kiosks, Rest House for Farmers, Restaurant, Farmer's Training Centre, Vehicle Parking Facility etc.

The terminal market would have the option to provide additional facilities to render complimentary services such as input supply, processing, agro machinery and equipments, durables etc.

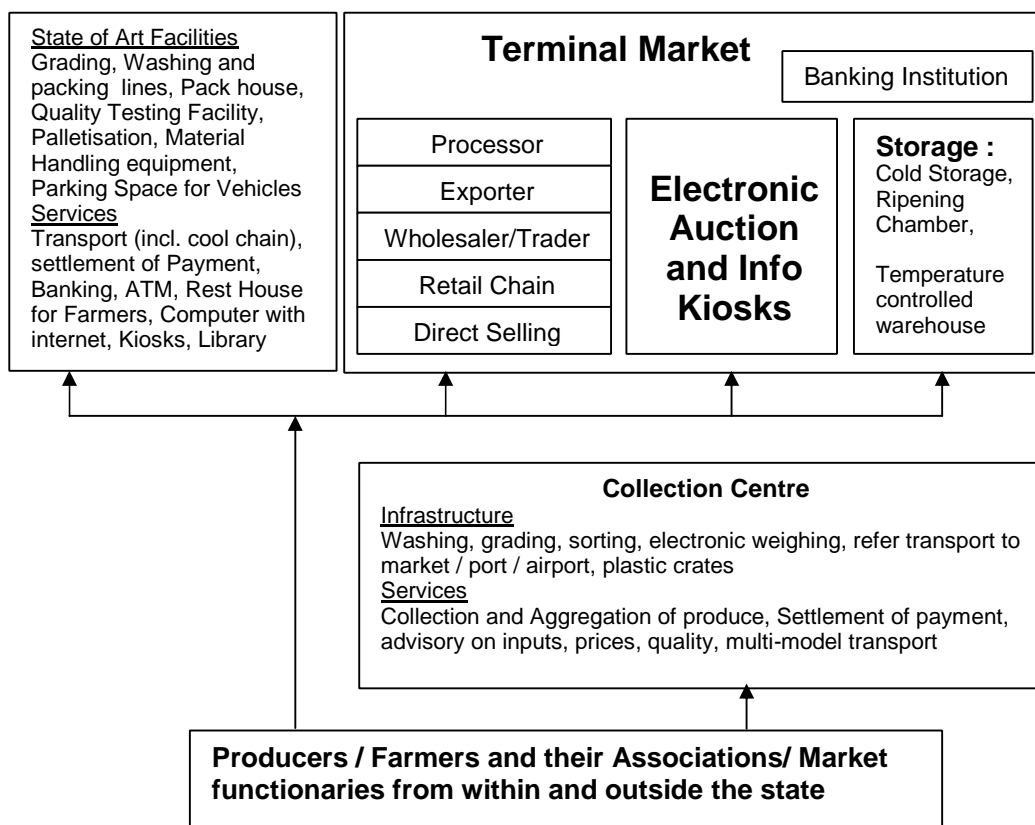
The Terminal Market will have the freedom to buy the commodities from the farmer directly or through collection centre. The terminal market will facilitate the farmers in making direct supply to processing units, retail chains and exporters, at their choice.

The terminal market will provide advisory services to farmers on inputs, prices, quality, multi-model transport and exports.

The Terminal Market will operate on collection of nominal user charges (determined by commercial considerations) from market participants and producers and other stake holders for the infrastructure and services provided by it. The charges will be for providing the basic services of aggregation at collection centres and auction at the Terminal market.

Farmers would be free to sell their produce either through the Collection Centre / Terminal Market or through Terminal market directly to processors, exporters or to the retail chain or to any other marketing channel within India or for export to international market.

**A typical Terminal market model has been schematically shown in following diagram:**



## Suggested Project Size, Locations and Project Cost

The Terminal Market will be created after careful feasibility study to have adequate facilities for handling Fruits, Vegetables and Flowers, quantities as mentioned previously in the table.

Estimated indicative project cost for setting up of each of Terminal Market with suggested facilities and structure, the project cost estimated for each location is as shown below:

Ahmedabad : Rs. 500 Million (i.e. US \$ 11.10 Million)

Surat : Rs. 450 Million (i.e. US \$ 10.00 Million)

## **Project Time Line**

The proposed project will have project timeline of 6 to 8 months in obtaining necessary clearances from various authorities and it will have project implementation period of approx. 14 to 16 months.

## **Financial Indicators**

Since this will be an agri infrastructure project it will have different funding pattern than normal commercial establishments. Being an agri infrastructure project, It is suggested to have Debt equity ratio of 4.0:1.0, which is normally adopted for such basic agri infrastructure projects like APMCs- being set up under the cooperative structure.

The suggested project will have an indicative IRR of 14 to 16%, as per present infrastructure project funding norms of cooperative financial institutions.

## **Clearances Required**

It may be noted that for setting-up Terminal Markets in Gujarat there will be need to have APMC Act Reforms done in Gujarat prior to inviting public-private partnership for this project.

The State Government would play a crucial pro-active role and constitute a committee for setting up of terminal markets and will initiate suitable measures to provide necessary legal frame work and status for this.

The State Government, besides providing required land for the Terminal Market, may also provide seed capital and equity contribution for this innovative concept. The Government may provide additional equity and act as a facilitator in the interest of horticulture growers of the state. The Government will bring about necessary changes in the existing Agricultural Produce Marketing rules and regulations, exemption of levy or cess and fully exempt activities of the proposed Terminal Market from local laws and regulations.

The State Government may act proactively in this regards, through State Agro Industries Corporation and /or State Co-operative Agriculture Marketing Board.

The proposed SPV for Terminal market may approach the State Office of National Horticulture Board for availing incentives under their different schemes for cold storage and other post harvest infrastructure facilities including cool chain for horticulture produce transportation from spokes (collection centers) to hub (terminal markets) .

## **Agencies to be contacted**

Industrial Extension Bureau

Mott MacDonald India

Gujarat Agro Industries Corporation Ltd.