

Sector	Project Title
Agriculture/Food Processing	IQF and Frozen Food Processing Project

Project Description

The Agricultural sector contributes approximately 15.7% of India's GDP. India is the world's largest producer across a range of commodities due to its favourable agro-climatic conditions and rich natural resource base.

The Food Processing sector is a highly fragmented industry and widely comprises of the following sub-segments:

- Fruits and Vegetables,
- Milk and Milk products,
- Beer and Alcoholic beverages,
- Meat and Poultry,
- Marine products,
- Grain processing,
- Packaged or Convenience food and Packaged drinks.



It accounts for more than 70% of the sector's output in terms of volume and 50% in terms of value. Though the organized sector seems comparatively small, it is growing at a much faster pace.

IQF (Individually Quick Frozen) method has been a freezing method for seasonal products such as fruits and vegetables. Over the years, it has been further developed to cover a broader range of other product types such as diced meat, shrimps, pasta and rice.

At present about 50 IQF units are operating in India. There exists ample scope for establishing more IQF units bright since the preference in importing countries is towards IQF products. The range of products that are covered under the IQF are:-

- Vegetables
- Fruits
- Meat Products
- Dairy Products (Cheese) etc

To realize the present and upcoming opportunities in agro and food processing sector IQF based food processing, the proposed project envisages setting up of such IQF and food processing units in the State of Madhya Pradesh.

Project's Value Proposition

The advantage that IQF has over block freezing is that the product loses its identity and the consumer is forced to buy the product in bulk. Also in cases where reprocessing is involved the quality of end product is affected. Hence these factors necessitated the introduction of Individually Quick Frozen products. Direct production of IQF products eliminates reprocessing and the drop loss during thawing and refreezing is considerably reduced. The preference of the individual consumer in importing countries is also towards IQF products as they can avoid purchase in bulk packages. The IQF products also fetch a better price in the international market.

India is one of the world's major food producers but accounts for less than 1.5 % of international food trade. This indicates vast scope for both investors and exporters.

In order to further boost the growth of the Food Processing industry, the Government of India has formulated a Vision-2015 action plan under which specific targets have been set. This includes:

- Trebling the size of the food processing industry from around US\$ 70 billion to about US\$ 210 billion
- Raising the level of processing of perishables from 6% to 20%
- Increasing value addition from 20% to 35%
- Enhancing India's share in global food trade from 1.5% to 3%

India annually produces 105 million tonnes of milk (highest in the world) as well as 150 million tonnes of fruits & vegetables (2nd largest). While its agricultural production base is strong, at the same time wastage of agricultural produce is massive and the processing levels are very low - around 2.2% for fruits & vegetables compared to countries like USA (65 %), Philippines (78%) and China (23%). The share of India's export of processed food in global trade is only 1.5% at present. Even, within the country, the share of fruits and vegetables processed is much less when compared to other agricultural products such as milk (35%) and marine products (26%). More importantly the lack of processing and storage of fruits and vegetables results in huge wastages estimated at about 35%, the value of which is approximately Rs.500 billion annually.

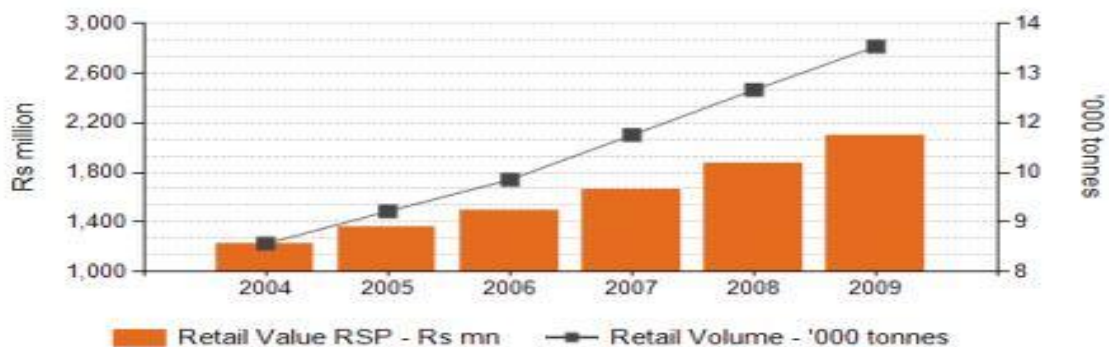
Frozen processed food industry increased by 12% in current value terms in 2009 to reach value sales of Rs2.1 billion.

The major market segments for IQF are: -

- Retail outlets for direct consumption
- Hotels, restaurants, caterers and eateries
- Food industries which use fruits and vegetables as raw material and want to process during the lean season
- Good export potential

Frozen processed food is expected to post a constant value CAGR of 8% over the forecast period.

Market Size of Frozen Processed Food India 2004-2009



Source :Passport Uromonitor International

Forecasted Market Size Frozen Processed Food India 2009-2014



Source : Passport Uromonitor International

A developed food processing industry would not only reduce wastages, but would also increasingly fetch remunerative income to farmers which is another problem before the Agriculture sector at present. Private players can play a key role in the development of the sector and IQF based processing in India.

This project would help in providing the following advantages to the food processing sector:

- Techniques used would reduce the wastage of the perishable products
- Provide better shelf life
- Provide an opportunity to reach the export market with better value proposition and higher demand to the range of products

MP's value proposition

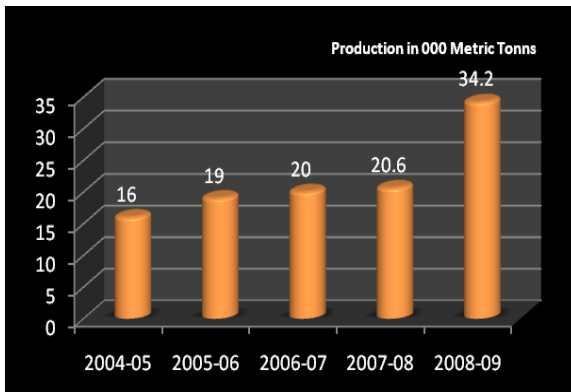
Madhya Pradesh is ideally suited to house this project on account of the following reasons:

Natural resources and abundant raw materials

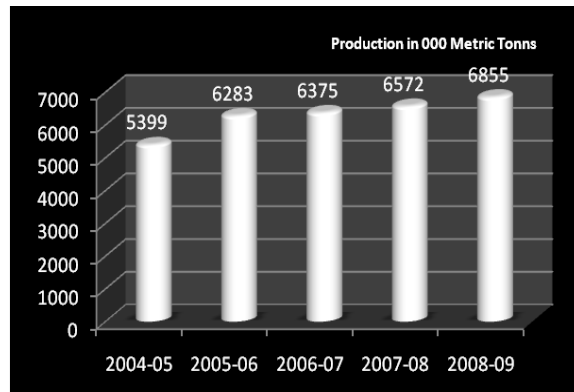
- Presence of 11 out of 18 Agro Climatic zones of India, 5 crop zones, and 4 soil types will suit production of almost any crop
- Established diversified crops - Field Crops, Fruits, Spices, Vegetables, Medicinal and aromatic plants
- Wider combination of soil type, rainfall, sun light, and temperature to suit new crops
- Largest producer of soya bean, garlic, gram and pulses
- Second largest producer of lentils
- MP shares 15% of pea production of India
- Around 100 agricultural farms with an area of over 20,000 acres which is available on lease to investor
- Highest cattle population in India (1.85 crore)
- Enhancement of Milk Production by more than 25% in 2008-09
- Marketable surplus in several key commodities

Crop	Paddy	Maize	Soyabean	Sesamum	Wheat	Cotton	Gram	Mustard
Production (in lakh MT)	13.7	8.4	47.8	0.88	73.3	8.65	21.4	6.9
Surplus (in lakh MT)	5.0	2.3	43.0	0.68	38.1	7.74	8.5	6.2

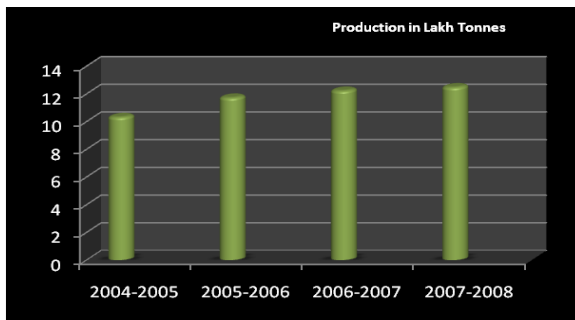
Increasing Production in Meat, Dairy, Fruits & Vegetables



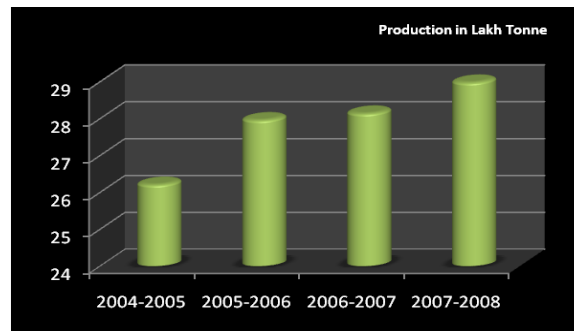
Meat Production



Dairy Production



Fruits Production

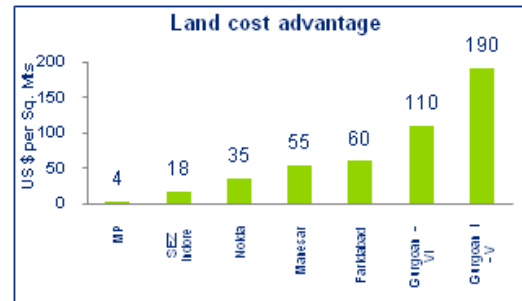


Vegetables Production

Source: Economic Survey, MP 2009-10

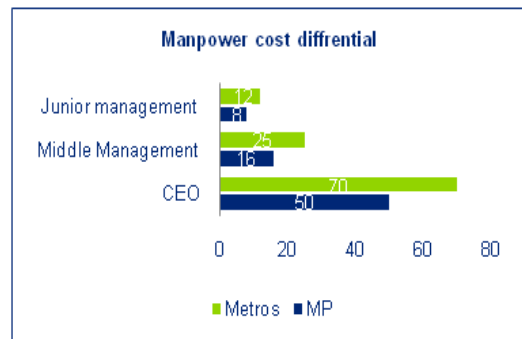
Land cost advantage

- MP offers cheap land cost in comparison to other developed industry centres



Man Power Cost Advantage & peaceful labour environment

- Cost to a company for human resources is cheaper by 30-35% in the State
- Greater saving potential for the executive level on account of cheaper land, cheaper housing and cheaper labour
- Mandays lost over last 5 years < 1% of total available mandays
- One of the most peaceful and labour productive State



Food Parks & supporting infrastructure

- Six food parks are / are being established in MP at:
 - Jaggakhedi – Dist Mandsaur
 - Nimrani – Dist Khargone
 - Babai-Pipariya – Dist Hoshangabad
 - Borgaon – Dist Chhindwara
 - Malanpur-Ghirongi - Dist Bhind
 - Maneri – Dist - Mandla

- These food parks have all the common facilities expected in an industrial park along with common facilities needed for agro industry like:-
 - Cold Storages /modified atmosphere cold storages
 - Warehousing facilities
 - Milk Chilling plants

- All the food parks have excellent rail and road connectivity
- Another 16 food parks have already been planned across the State
- A Centre for Perishable Cargo is being developed at Indore airport
- A Mega Food Park in Jabalpur is proposed, to be developed as an SEZ
- A Multi Modal Logistics Hub to be developed in Pawarkheda, MP.

In fact, Madhya Pradesh is a large supplier of fresh vegetables to both Delhi and Mumbai. A large number of trucks carrying peas and other vegetables go directly from farms/villages to these markets in the season. A number of promoters have already got into this business of frozen foods, particularly for refrigeration of fresh vegetables and meat products and subsequent processing for export purpose.

Policy Initiatives (for developers and food processors)

- 50% of project cost (excluding land cost) upto maximum of Rs. 500 million available from MOFPI under MFP scheme (subject to MFPS guidelines)
- State capital subsidy for SSI up to Rs. 0.5 million
- Central Capital subsidy up to Rs. 5 million
- Entry tax exemption up to five years
- ISO-9000 certification cost reimbursement up to Rs. 75000/-
- Project report cost reimbursement upto Rs. 0.3 million
- Interest subsidy up to Rs. 4 million
- Investment Promotion Assistance
- Concessions to Mega Projects
- Exemption in stamp duty and registration charges
- Interest subsidy on term loan
- Exemption in Mandi fee

Project Specification

The proposed project will have the following specifications:

- **Location:** Project can be located in any of the 6 proposed food parks (Jaggakhedi – Dist Mandausar, Nirmani – Dist Kharagone, Pipariya - Basai – Dist Hoshangabad , Boregoan – Dist Chhindwara, Malanpur-Ghirongi - Dist Bhind and Maneri – Dist – Jabalpur) from where there is ample availability of raw material in nearby area.
- **Capacity:** The rated capacity at a unit is proposed at 400 Mt per day
- **Project Cost:** Major components of the project (for a single unit) and their estimated costs are presented in the table below:

Particulars	Amount (INR in Millions)
Land	21.50
Building	51.95
Plant & machinery	122.95
Misc. Fixed assets/furniture fixtures	24.85
Contingencies	31.39
Pre-operative expenses	17.20
Margin money for working capital	40.63
Total	310.47

Source: - MP Agro

- **Returns:** Internal rate of return is estimated at around **21.50%**

Project Contacts

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