

Sector:

Agriculture/ Agro Processing

Project Title:

Organic Farming Projects

Project Description:

The global consumer is increasingly becoming health cautious with diet being the most important aspect in health control agenda. Organic food products with high nutritive value and absence of chemicals (with potential carcinogenic and mutagenic properties) are being increasingly preferred over conventional agro products, which are cultivated using insecticides, pesticides and chemical fertilizers.

By virtue of being free from the shortcomings of conventional food products organic food is gaining popularity and their consumer base is rapidly increasing especially in the developed world. With inherent cost advantage, developing countries are adopting organic farming on mass scale and are targeting niche markets for organic food products in the international markets.

Realizing the potential of organic farming, the Government of Madhya Pradesh (GOMP) is keen to facilitate the development of the sector in MP. In this regard GOMP invites participation from private players, organic food processing companies and foreign players etc., to establish organic farm in the State.

Under the development options, large farms ranging from 500 acres to 1000 acres would be earmarked for organic farming. Plots of various sizes, dedicated for specific crops would be leased to individual investors. The operator would be responsible for cultivation of crops and management of farm, planning in terms of crop rotation, product selection and dissemination of organic farming techniques to the local farmers such as production of green/ organic manure, use of natural pesticides and herbicides, biofertilizers etc.

Large size of the farm would facilitate use of mechanized cultivation techniques and optimal utilization of high-end machinery and equipments such as tractors, tillers, disc harrow, harvester, thresher etc.

The farm would have the following facilities:

- Crops specific cultivable plots
- Irrigation facilities
- Duckery
- Warehouse
- Processing machinery etc.

The farm would cater to the following target markets:

- Organized retail store such as “Fresh Food” by Reliance, Big Bazaar etc.

- Health food joints, Star hotels etc.
- Food processing industry
- Export markets

Further, certifications from a central or state agency such as IMO Control, Ecocert etc., would be provided to farmers engaged in organic farming. This would assist in product differentiation between organic and conventional farm products and would assist the former to command greater price (10-15% higher than conventional product) and access the high value organic food products market in India and abroad.

Project Rationale:

Agriculture is one of the predominant sectors of Indian economy and contributes around 24% to the Country's GDP. It not only suffices the food grains need of the Country but also provides employment to around 65% of the Country's population.

Presently, in most part of the Country agriculture is practiced using conventional techniques which lays greater stress on employing expensive fertilizers, pesticides and other chemicals augmenters. The extensive and indiscriminate use of synthetic chemicals leads to decreased soil fertility, low yield, contaminated produce (unacceptable in overseas market) and increased pest resistance. Large part of the farmer's income is spent on procuring these chemicals, which increases additional stress on their already fragile financial health.

The situation is aggravated further, due to unavailability of micro financing and insufficient irrigation options in rural areas. Dependence on high interest credit from local moneylenders coupled with fluctuating agriculture production due to seasonal vagaries, leads to more borrowing to sustain production yield. This vicious cycle operates year-on-year and lead farmers into debt trap of local moneylenders.

Conversely, organic farming techniques are simple, pro farmer and nature friendly. It provides significant advantages in terms of cost savings, environment conservation and health protection, since it is practiced by utilizing locally available inexpensive ingredients such as green manure, biofertilizers etc. Due to these factors it holds immense potential for millions of small and poor farmers of the Country.

MP being predominantly and agrarian economy holds ample scope for adopting organic farming on a large scale. At resent, more than 70% of the State's rural population is dependent on agriculture and mass practice of organic farming can

provide significant economic benefits to them.

MP is a key producer of various agro and horticulture products such as pulses, soybean, potato etc. The organic counterpart of these agro products has huge demand and commands significant price premium in the international and domestic market. By cultivating these crops via organic methods, MP farmers can access this premium market and incur significant monetary advantage.

Further, the State has the lowest per capita consumption of fertilizers per hectare, due to which there is ample availability of less contaminated land suitable for organic farming. Since this shortens the gestation period required to decontaminate the chemical laden land to initiate organic farming.

Thus, MP has significant inherent advantages and compelling reasons to assist in the development of a thriving organic farming practice in the State.

Market Potential and Demand Dynamics:

Across the globe organic farming industry is growing at a substantial pace. The demand of organic food products is especially high in North America and European Countries due to increasing health awareness and concerns regarding environmental pollution and conservation.

Presently, the global organic food market is estimated around USD 40 bn and growing at a rate of 13%. Organic foods is outpacing conventional food industry in terms of growth across the world. Presently, Europe, Japan and US are the largest market of organic food products. European organic food market was estimated around USD 12 bn in 2005 and is growing at a rate of 15-20% annually. While US market alone is estimated to generate sales worth USD 32 bn by 2009.

Organic farming has been embraced on a wide scale across various Latin American countries, Asia and Africa. Already China, Turkey and Brazil have become the key suppliers of organic ingredients such as nuts, beans and seeds. While India, Ethiopia and Paraguay have emerged as key supplier of herbs and spices. Other Asian and African countries have also emerged as key supplier of fruits and other horticulture products.

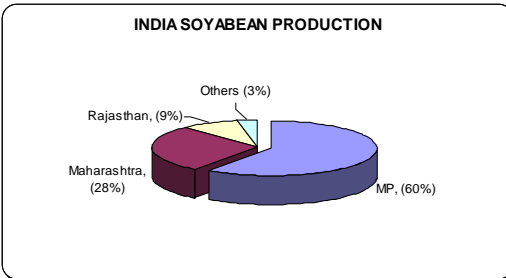
Major Agriculture & Horticultural Crops in MP

Cereals	Wheat, Sorghum (Jowar), Maize, Paddy
Oilseeds	Soybean, Mustard, Linseed
Pulses	Gram, Pigeon Pea (Tur), Lentil (Masoor)
Vegetables	Green Peas, Cauliflower, Okra, Tomato, Onion, Potato
Fruits	Mango, Guava, Orange, Papaya, Banana
Spices	Chillies, Garlic, Coriander, Ginger, Turmeric

In India, Madhya Pradesh has been identified as the fastest mover in agriculture

among all States but it has yet to embrace organic farming on a substantial scale. The State has a well established agriculture and horticulture sector which provides a suitable base to support a vibrant organic farming industry.

MP has a rich production of various agriculture and horticulture crops. It is the largest producer of pulses and oilseeds in the Country. About 25% of pulses and 40% of grams are grown in the MP and it is also the largest producer of soya bean and gram and second largest for jowar and masoor in the Country.



MP leads in spices production with largest production of garlic, accounting for 37% of the total national production. It is the second largest producer of coriander in the Country. Further, its share in the total national production of Pea is 15 %.

The commodities that have immense production potential are potato, spices (in the western parts), pulses (in the central part of the State), wheat (in the western and central regions) and oranges (south districts).

MP has a diversified product portfolio of agriculture commodities which has high demand in the industry and in the international markets. These crops present immense scope and value addition opportunities for farmers by employing organic cultivation techniques.

Why Madhya Pradesh?

- MP is the most biodiverse State in the Country with 11 agro climatic zones, 5 crop zones and 4 zones varying in soil types.
- The soil and agro climatic conditions are suitable for rapid agricultural development.
- The State has a strong base in horticulture.
- The State is in the centre of nation's commercial activities. It is located at an easy distance from all the major agricultural markets in India.
- About 75% of the population of the State is largely dependent upon agriculture for their livelihood. This ensures ample availability of economic manpower.
- The State has a large network of primary agricultural co-operative societies, which plays a crucial role in supplying agricultural inputs including seed, manure etc. in far flung areas.
- The State has sufficient notified agricultural market yards and sub market yards which provide facilities for sale of agricultural produce.
- The State has a well developed mandi system with 299 small and large mandis distributed across the State.

Location Analysis:

Organic farms ranging from 500 to 1000 acres would be developed at various locations across the State, especially in the area where the land is more fertile and farmers are engaged in production of various crops of commercial importance.

Proposed Investment:

For establishing a single farm, the investment is estimated around USD 0.17mn to 0.22 mn. or INR 80 lakhs to 100 lakhs.

Project Feasibility:

The project is estimated to generate an IRR of 16 -18%

Coordinating Agency:

Department of Agriculture, GOMP