Agro and Food Processing
Sector Profile
Overall Snapshot

Indian Agriculture accounts for **~14.6% of Gross Domestic Product (GDP)** and about **12.55 % of total exports**

- India has 157.35 million hectares of agricultural land - 2nd largest in the world after USA

**Largest Producer of Major Agricultural and Horticultural Crops**

- India ranks **first** in production of pulses, milk, cashew, oilseeds, jute and jute like fibers
- India ranks **second** in production of paddy, wheat, rice, fruits and vegetables, potatoes, Onion (Dry), sugarcane, groundnut (in shell), tea and cotton.

- Food grain production of Wheat and Rice in India total to all-time high of 277 million tonnes in **FY17-18* (Feb 2018)**

<table>
<thead>
<tr>
<th></th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kharif</td>
<td>121</td>
<td>118</td>
<td>104</td>
<td>121</td>
<td>131</td>
<td>132</td>
<td>129</td>
<td>126</td>
<td>125</td>
<td>139</td>
</tr>
<tr>
<td>Rabi</td>
<td>110</td>
<td>116</td>
<td>114</td>
<td>124</td>
<td>128</td>
<td>124</td>
<td>126</td>
<td>126</td>
<td>126</td>
<td>137</td>
</tr>
</tbody>
</table>

**Production of food grains (million tonnes) in Kharif (Rice) and Rabi (Wheat) Seasons**

*Sources: Ministry of Agriculture, Government of India*
Horticulture Crops

Fruits | Vegetables | Flowers and Aromatics | Spices | Plantation Crops

- Horticulture crops registered production of 305.4 million metric tonnes (MMT) in 2017-18, with an CAGR of 5.5% over the last ten years; Share of horticulture output in Agriculture is approximately 30%;
- Union Budget 2018-19 announced “Operations Green” – To curtail price volatility of perishable commodities like Tomato, Onion and Potato (TOP) which has been earmarked with a corpus of US$ 76.92 million

**FRUITS:**
- India is largest producer of fruits
- India stands first in production of fruits like mango, banana, guava, papaya
- Mangoes, Walnuts, Grapes, Bananas, Pomegranates are majorly exported
- Export destinations for fruits and vegetables are UAE, Bangladesh, Malaysia, UK, Netherlands, Pakistan, Saudi Arabia, Sri Lanka and Nepal

**VEGETABLES:**
- India is 2nd largest producer of vegetables
- India also occupies first position in production of okra and ginger
- Ranks second in potatoes, onions, cauliflower, brinjals and cabbage and third in potato and tomato in the world
- Onions, Okra, Bitter Gourd, Green Chilies, Mushrooms and Potatoes are mainly exported from India

**SPICES:**
- India is the largest producer, consumer and exporter of spices and spice products in the world
- India produces a wide variety of spices like black pepper, chilies, ginger, turmeric, garlic, coriander, tamarind, cumin, cardamom & a variety of tree and seed spices

Sources: Indian Horticulture Database 2017, Agricultural and Processed Food Products Export Development Authority and National Horticulture Board, Assorted Articles, FAO Stat,
# Horticulture Crops

## Production % of various Horticultural Crops

<table>
<thead>
<tr>
<th>Year</th>
<th>Spices</th>
<th>Plantation Crops</th>
<th>Flowers</th>
<th>Vegetables</th>
<th>Fruits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>60.30%</td>
<td>32.10%</td>
<td>5.50%</td>
<td>30.20%</td>
<td>0.00%</td>
</tr>
<tr>
<td>2013-14</td>
<td>60.30%</td>
<td>32.10%</td>
<td>5.50%</td>
<td>30.20%</td>
<td>0.00%</td>
</tr>
<tr>
<td>2014-15</td>
<td>60.30%</td>
<td>32.10%</td>
<td>5.50%</td>
<td>30.20%</td>
<td>0.00%</td>
</tr>
<tr>
<td>2015-16</td>
<td>60.30%</td>
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<td>5.50%</td>
<td>30.20%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

## Opportunities within Horticulture includes:

- Cold chain & pack-houses- Farm level, logistics, end product storage and at point of retail
- Packaging technology
- Food testing labs with latest equipment and technology
- New product development – Health food, traditional food and nutraceuticals

*Sources: Ministry of Food Processing Industries (MoFPI) and National Horticulture Board-2017, Ministry of Agriculture, Ministry of Food Processing, Government of India, Department of Industrial Policy and Promotion, World food India, National Horticulture Board, Study by the central institute of post harvest engineering and technology, Ludhiana 2015*
Dairy and Animal Husbandry

**Dairy:**
- India is the largest producer of milk with **20%** share in total milk production in the world; Milk production – **165.4 million tonnes** in 2016-17
- India is also the largest exporter of dairy products and exported 66 MT of dairy products worth US$ 136 million in 2016-17
- The top 5 highest milk producing states are Uttar Pradesh, Rajasthan, Gujarat, Madhya Pradesh and Andhra Pradesh
- Major Export Destinations: UAE, Pakistan, Bangladesh, Bhutan, Nepal

**Animal Husbandry:**
- India has the largest population of milch animals (buffaloes, goats and sheep's) in the world
- India’s exports of Animal Products was US $ 3934 million in 2016-17 which includes major products like Buffalo Meat, Sheep/ Goat Meat, Poultry Products, Dairy Products, Animal Casing, Processed Meat, Albumin (milk and eggs) and Natural Honey
- India has exported Poultry products worth US $ 79 million during year 2016-17. The poultry products include live poultry, poultry meat and eggs (dried, cooked, frozen and preserved)
- India is largest producer of Buffalo meat (1.3 Million Tonnes) in 2016-17, major export destinations include Vietnam Social Republic, Malaysia, Egypt Arab Republic, Indonesia and Saudi Arabia.

**Sources:** National Dairy Development Board, Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture, GoI
Fisheries

India produces 9.6 million MT and is the 2nd largest fish producer in the world

- Marine Fish Production (3.5 Million MT): Top five states Gujarat ranks first followed by, Kerala, Maharashtra, 74% Andhra Pradesh and Tamil Nadu, contributing close to the total production
- The top five states for fisheries production in 2016-17 in terms of quantity are Andhra Pradesh (20.18%), West Bengal (15.81), Gujarat (7.93%), followed by Kerala and Tamil Nadu with a combined share of around 60% of the total fish production
- The export market is valued at $ 5.9 bn (2016-17) with exports over 1.18 MMT

- Most exports currently are in frozen and canned form and hence creating huge opportunities in cold chain, export, packaging innovations, product differentiation
- Frozen shrimp has maintained its position as the top item of export, accounting for 38.28% in quantity and 64.50% of the total earnings in US$ as on 2016-17.
- USA was the largest market for frozen shrimp (1, 65,827 MT), followed by the EU (77,178 MT), South East Asia (1, 05,763 MT), Japan (31,284 MT), Middle East (19,554 MT), China (7818 MT) and other countries (27,063 MT)
- Frozen Fish was the second largest export item, accounting for a share of 26.15% in quantity and 11.64 % in value

Sources: Ministry of Agriculture, Ministry of Food Processing, Government of India, Department of Industrial Policy and Promotion, World food India, National Horticulture Board
Exports of Agriculture Products

- India’s agro exports during 2017-18 touched $ 28 billion; Government of India aims to achieve USD 60 billion in exports by 2022
- Major export products from India are: Marine products, Basmati Rice, Meat & Meat preparations, Rice other than Basmati, Cashews, Fresh Vegetables, Fresh Fruit
- India exported fruits and vegetables worth US$ 1563.75 million; Fruits - US$ 670.71 mn.; Vegetables - US$ 894 mn.

Sources: Ministry of Food Processing Industries (MoFPI), Agricultural and Processed Food Products; Export Development Authority, IBEF *Data is for April – December 2017
Food Processing

India’s Food Processing Sector registered a annual growth rate of 7% in 2015-16

- Indian Food services market is projected to reach USD 81.07 billion by FY2022
- Only about 1/10th of India’s agriculture is produce goes under food processing; this unleashes umpteen opportunities and strengthen the supply chain of the Indian agriculture
- Food services sector is expected to generate direct employment of 9 million person days by 2021

Segmentation of Different Sectors in Food Processing Industry

- **Dairy**
  - Whole and Skimmed Milk Powder, Condensed milk, Ice Cream, Butter, Ghee, Cheese

- **Fruits & Vegetables**
  - Beverages, Juices, Pulps, Slices, Frozen and dehydrated products, Potato Wafers/ Chips etc

- **Grains & Cereals**
  - Flour, Bakery, Starch Glucose, Cornflakes, Malted Foods, Vermicelli, Beer and Malt extracts, Grain based Alcohol

- **Fisheries**
  - Frozen and Canned products mainly in fresh form

- **Consumer Foods**
  - Snack Food, Biscuits, Ready to eat food, Alcoholic and Non-Alcoholic beverages

- **Meat & Poultry**
  - Frozen and packed – mainly in fresh form

Sources: Minister of Food Processing Industries (MOFPI), FICCI Technopak, IBEF
Exports of Processed Food

Value of exports of processed food has steadily increased with a CAGR of 8.71% for five years ending 2016-17.

### Export of Processed Food (USD Million)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Value (USD Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>35.9</td>
</tr>
<tr>
<td>2013-14</td>
<td>38.1</td>
</tr>
<tr>
<td>2014-15</td>
<td>36.2</td>
</tr>
<tr>
<td>2015-16</td>
<td>29.7</td>
</tr>
<tr>
<td>2016-17</td>
<td>33.4</td>
</tr>
</tbody>
</table>

### Major Exports Destinations for processed food based on export value (USD millions) (FY 16)

- Saudi Arabia: 307
- UAE: 232
- USA: 360
- Malaysia: 598
- Iran: 592
- Nepal: 726
- Egypt: 1,120
- Bangladesh: 1,120
- Kuwait: 1228.86

Sources: Minister of Food Processing Industries (MOFPI), IBEF
# Opportunities & Incentives under Food Processing

**FDI & Credit Availability:** 100% FDI is permitted under the automatic route in food processing industries. Soft loan is extended of up to 95% of project cost or 100% FDI is allowed through approval route for trading, including through e-commerce in respect of food products manufactured and/or produced in India.

**Income Tax:** 100% Tax Exemption for first 5 Years of Operation for New units in the business of processing, preservation and packaging of fruits and vegetables.

**Service Tax:** Exemption of service tax for storage, handling and transportation of processed food.

**Customs Duty:** Benefits to projects of cold storage and handling system for processed food.

### Investment Opportunities:

<table>
<thead>
<tr>
<th>Mega Food Parks:</th>
<th>Cold Chain logistics:</th>
<th>Food Processing Machinery:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Storage facilities</td>
<td>• Controlled atmosphere / modified atmosphere storage</td>
<td>• Packaging equipment</td>
</tr>
<tr>
<td>• Food processing equipment's</td>
<td>• Pre cooling at farm</td>
<td>• Water and air pollution control equipment</td>
</tr>
<tr>
<td>• Contemporary plug &amp; play sheds</td>
<td>• Modern pack houses</td>
<td></td>
</tr>
<tr>
<td>• Packaging facilities</td>
<td>• Ripening chambers</td>
<td></td>
</tr>
<tr>
<td>• Cold storage facilities</td>
<td>• Reefer technology</td>
<td></td>
</tr>
<tr>
<td>• Bulk material handling equipment</td>
<td>• Refrigerated transport solutions</td>
<td></td>
</tr>
<tr>
<td>• Grading &amp; sorting facility</td>
<td>• Energy efficiency solutions</td>
<td></td>
</tr>
<tr>
<td>• Enabling infrastructure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Sources: Minister of Food Processing Industries (MOFPI), Technopak, IBEF*
Government of India – Initiatives under SAMPADA Scheme

- Pradhan Mantri Kisan SAMPADA Yojana (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) with an allocation of US $ 882 million for a period 2016-20

- Implementation of Scheme by Ministry of Food Processing Industries (MoFPI)

- The scheme is expected to influence investment of US $ 4618 billion for handling of 334 lakh MT agro-produce valued at US $ 15.31 billion crore, benefiting 20 lakh farmers and generating 5,30,500 direct/indirect employment in the country by the year 2019-20

Sources: Minister of Food Processing Industries (MOFPI), Schemes/pradhan-mantri-kisan-sampada-yojana
### Government of India - Initiatives

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pradhan Mantri Krishi Sinchai Yojana (PMKSY):</strong></td>
<td>Expand cultivable area under irrigation (Water for every farm), Improve on-farm water use efficiency (Jal Sinchan) and Sustainable water conservation practices (Jal Sanchay), Micro irrigation to enhance water use efficiency (Per drop more crop), Faster completion of ongoing major and medium irrigation projects (Acceralated Irrigation Benefit Programme) and Watershed works being implemented (Watershed Development).</td>
</tr>
<tr>
<td><strong>Pradhan Mantri Fasal Bima Yojana (PMFBY):</strong></td>
<td>Provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests &amp; diseases. Ensure flow of credit to the agriculture sector.</td>
</tr>
<tr>
<td><strong>National Agriculture Market (e-NAM):</strong></td>
<td>National Agriculture Market (NAM) is a national e-market platform for transparent sale transactions and price discovery to create a unified national market for agricultural commodities through the existing Agricultural Produce Marketing Committee (APMCs).</td>
</tr>
<tr>
<td><strong>Kisan Suvidha and Pusa Krishi mobile Apps:</strong></td>
<td>Farmers can get easy solutions to their farming problems from scientists and information about weather and can take measures to save crops accordingly.</td>
</tr>
<tr>
<td><strong>Rashtriya Krishi Vikas Yojana (RKVY):</strong></td>
<td>was launched to incentivize the States to increase the share of investment in agriculture in their State plans.</td>
</tr>
</tbody>
</table>

Government of India - Initiatives

**Soil Health Card Scheme:** Agri-scientists and experts analyze the strength and weaknesses (micro-nutrients deficiency) of the soil based on the soil sample test and suggest in the cards issued to farmers to help boost productivity and bring about increased prosperity.

**Integrated Scheme for Agricultural Marketing (ISAM):** To support framing of grade standards and quality certification of agricultural commodities to help farmers get better and remunerative prices for their graded produce.

**National Mission for Sustainable Agriculture (NMSA):** Primary objective is to ensure food security and protect various resources such as land, water, biodiversity and genetic resources along with facing challenges and threats such as climate change.

**Integrated Scheme of Oilseeds, Pulses, Oil Palm & Maize (ISOPOM):** Primarily targeted at small and marginal farmers who raise oilseeds under rain fed conditions in arid & semi arid areas. In the 11th plan period, implemented across 14 states for oilseeds and pulses, 15 states for maize and 9 states for palm oil.

**National Food Security Mission (NFSM):** was launched in 2007 to improve country’s overall crop production especially rice, wheat and pulses by introducing technological components by restoring soil fertility and productivity at the individual farm level.
Gujarat Scenario
Gujarat’s Agriculture Sector : Overview

- During the period 2011-12 to 2016-17(Q), the GSDP for agriculture sector including animal husbandry sector had increased from US$ 148 billion to US$ 175 billion at constant (2011-12) prices.
- Major agricultural produce of Gujarat includes cotton, groundnut (peanuts), dates, and sugar cane, milk and milk products.
- Leading producer of tobacco, cotton, and groundnuts in India.

Source: Socio-Economic Review, Gujarat State, 2017-18 Directorate of Economics & Statistics, Govt. of Gujarat
Agriculture Clusters in Gujarat

**Advantage Gujarat**
- 8 Agro-climatic zones
- Diversity of climate and cropping
- 40+ major crops
- Strong market infrastructure system
- Increasing adoption of Hi-tech Agriculture
- 1600 km of long coastal belt
- Total Geographical Area: 19.6 million ha.
- Net Area Sown: 9 m ha.
- Total Cropped Area: 13.9 m ha.
- Net Irrigated area: 4.32 m ha.
Gujarat: Agriculture and Horticulture sector

Key facts:

- 30% of total cotton production of India
- 40% of groundnut production of India
- 84% of castor production of India
- 90% of India’s total Fennel production
- Highest production of Cumin
- Largest Onion Dehydration in India
- Monopoly in India in Psyllium processing
- GIR’s Kesar Mango is the specialty of the state with Geographical Indication (GI) status

Sources: Psyllium- Isabgul Socio-Economic Review, Gujarat State, 2017-18
Gujarat: Agriculture and Horticulture sector

**Major Fruits:** Banana, Pomogrante, Mango, Citrus, Papaya and Sapota (Chiku)

**Major Vegetables:** Onion, Potato, Brinjal, Tomato, and Cucurbit

**Major Spices:** Cumin, Fennel

**Major Flowers:** Rose, Marigold, Lilly

- **Gujarat State Horticulture Mission (GSHM),** a registered society has been formed for the implementation of “National Horticultural Mission (NHM)” in the state
- The aim is to double the horticulture production and income by the development of infrastructure and market facilities. The mission is being implemented in 21 potential districts and covers important crops infrastructure and marketing facilities
- A Dutch subsidiary is working closely with cold storage owners in Mahua Gujarat, which is expected to have its ‘Operation Green’ in the next few years*

<table>
<thead>
<tr>
<th></th>
<th>2015-16</th>
<th>2016-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables</td>
<td>126.82</td>
<td>131.61</td>
</tr>
<tr>
<td>Fruits</td>
<td>85.05</td>
<td>89.53</td>
</tr>
<tr>
<td>Spices</td>
<td>8.33</td>
<td>9.23</td>
</tr>
<tr>
<td>Flowers</td>
<td>1.84</td>
<td>1.95</td>
</tr>
</tbody>
</table>

*Sources: Socio-Economic Review, Gujarat State, 2017-18; *as per the Union Budget*
Gujarat: Dairy sector overview

- Total milk production of Gujarat in 2016-17 is 12.87 Million tonnes (MT) with 20% of total milk production in the world
- Dairy sector in Gujarat is majorly dominated by 19,788 cooperative societies, private players have been expanding their production and leverages the increased domestic demand;
- Gujarat has 51 dairy plants, 2nd highest in the country
- Anand city of Gujarat is known as the milk capital of India

1. District Co-op. Milk Producer Unions: 20
2. Milk Co-operative Societies: 19,788
3. Members: 33.37 Lakh
4. Installed Capacity: 187.98 Lakh Litre Per Day (LLPD)
5. Milk Procured: 166.91 LLPD

The top 5 exporting countries for dairy products in 2017-18 include USA, UAE, Egypt, Bhutan and Nepal with a total export share of 70.2% of in quantity and USD 233.36 million

Sources: Socio-Economic Review, Gujarat State, 2017-18
Gujarat: Animal Husbandry overview

Animal husbandry plays a vital role in Gujarat’s rural economy, while contributing nearly 12.4% to the state GSDP

- 12 Intensive Poultry Development Projects (IPDP), 5 District Poultry Extension Centres, 85 Poultry Service Centres and 26 Intensive Cattle Development Projects (ICDP) are functioning in the state
- During the year 2016-17, 12107 Animal Health Camps (Pashu Arogya Mela) were held in which 9.24 million animals were treated

<table>
<thead>
<tr>
<th>Production of Major Livestock Products</th>
<th>2014-15</th>
<th>2015-16</th>
<th>2016-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk (In million tonnes)</td>
<td>11.69</td>
<td>12.26</td>
<td>12.87</td>
</tr>
<tr>
<td>Eggs (In million numbers)</td>
<td>1656.84</td>
<td>1721.59</td>
<td>1794</td>
</tr>
<tr>
<td>Wool (In million kilos)</td>
<td>2.58</td>
<td>2.28</td>
<td>2.67</td>
</tr>
</tbody>
</table>

Sources: Socio-Economic Review, Gujarat State, 2017-18, Agricultural and Processed Food Products Export Development Authority
Gujarat: Fisheries

- Gujarat accounts for **8.5% of India's total fish production** (Marine + Inland)
- Gujarat accounts for **20% of India’s marine fish production; highest** among all Indian states
- **Marine fish** production constitutes **86% of total fish production** of Gujarat
- Continental shelf – 1.64 lakh sq. km. (32% of India)
- Exclusive Economic Zone – 2.14 lakh sq. km. (11% of India)
- Number of Fish Landing Centers – 123 (7.8% of India)
- No of Fish Farmers Development Agencies (FFDAs) – 21
- Important commercial varieties of fish include: Pomfret, Jew fish, Bombay duck, Shrimp, Lobster, Squid, Cuttle fish, Silver bar, Hilsa, Shark, Catfish, Mullets

Sources: Socio-Economic Review, Gujarat State, 2017-18
Gujarat’s share in India’s exports of Marine Exports

- Export of fisheries has increased from USD 175 million in 2007-08 to USD 5.9 billion in 2016-17, a CAGR of 18%; it contributes 23.35% in the Nation’s overall value added marine products exports

Source: DGCIS, Govt. of India
Gujarat’s share in India’s exports of Food Processing

- Gujarat host more than 10,000 companies in the food processing sector
- Export products from Gujarat under Food processing is taken into account considering the processed Vegetables, Fresh Fruit and Juices

Source: DGCIS, Govt. of India, Indian Brand Equity Foundation
Gujarat : Food Processing Clusters

The major production clusters of Gujarat

Home to more than 10,000 Companies in the Food Processing Sector

Production Clusters

Processing Clusters

- Fish and Fish Products
- Milk Processing
- Bakery Products
- Prepared Food
- Rice Mills
- Psyllium (Isabgol)
- Husk Processing
- Cereals Processing
- Fruits and vegetables processing
# Food parks and Areas : Gujarat

## Infrastructure availability in the State

![Infrastructure Clusters Map](image)

## Prominent food parks in the state

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Industrial Park</th>
<th>Location</th>
<th>Type (Multi/single product)</th>
<th>Total Land Area (in Ha)</th>
<th>Total Land Area (in Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fanidhar Mega Food Park Pvt. Ltd.</td>
<td>Mehsana</td>
<td>Multi products</td>
<td>31</td>
<td>52</td>
</tr>
<tr>
<td>2</td>
<td>Gujarat Agro Infrastructure Mega food Park Private Limited</td>
<td>Surat</td>
<td>Multi products</td>
<td>29.39</td>
<td>70</td>
</tr>
</tbody>
</table>

## Industrial Estate

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location</th>
<th>Type (Engineering, Food Processing)</th>
<th>Land Area (in Ha)</th>
<th>Land Area (in Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kutch</td>
<td>Engineering, Food Processing</td>
<td>4.48</td>
<td>4.48</td>
</tr>
</tbody>
</table>
Gujarat’s export in Food Processing

- Over INR 8000 crore worth of processed food & dairy products were exported from Gujarat in 2016-17
- The exports from Gujarat increased by 22% from INR 6579 crore in 2015-16 to INR 8049 crore in 2016-17
- Gujarat’s share in the total processed foods & dairy products exported from India increased from 22% in 2012-13 to 30% in 2016-17

Sources: Agricultural and Processed Food Products Export Development Authority (APEDA); KPMG Analysis
Conducive Ecosystem for Agriculture

Main Processes

Inputs
- Seed, Fertilizers and Farming Tools

Production
- Farmers, Co-operative societies and Private Organizations

Procurement & Storage
- Cold Storage and Warehouse

Processing
- Grading, Sorting, Packaging

Retailing
- Retailers, Super Markets

Key Companies

- Indian Farmers Fertilizer Cooperative Limited (IFFCO)
- Amul, ITC, Coca-cola India
- Food Corporation of India, NCMSL
- Cargill, Adani enterprises, Balaji Wafers, McCain Foods (India), Rasna, Parle, Amul, Flourish
- Gujarat Agro Infrastructure Mega Food Park, Retail Stores, Super Markets
Incentives offered under Agro Business Policy 2016-2021

**Capital Investment Assistance**
- 25% of project cost subsidy
  - For New/ expansion of Agro and Food Processing Units
  - For Cold Chain, Food Irradiation Processing Plants & Pack Houses
  - For Creating Primary Processing Centers/ Collection centers in Rural Areas
  - Reefer Vehicles

**Assistance of Back Ended Interest**
- 7.5% interest assistance
  - For Agro and Food Processing Units
  - For Agro and Food Processing Infrastructural Projects - CA Cold Storages, Food Irradiation Processing Plants, Silos, Pack houses, Food Parks, Reefer Vans etc.

**Additional Back Ended Interest**
- 1% additional interest subsidy
  - For SC/ST, physically challenged or women entrepreneurs,
  - For Entrepreneurs below 35 age

**Assistance for Freight Subsidy**
- Available for MSME Units
  - Air freight Subsidy 25% to 40%
  - Sea-Freight Subsidy 25% to 40%
## Incentives offered under Agro Business Policy 2016-2021

### Other Schemes

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scheme for Skill Development</strong></td>
<td>50% of training cost sub to max INR 10,000 per person and INR 0.5 lakhs per Food Processing Units per year</td>
</tr>
<tr>
<td><strong>Quality Mark Certification</strong></td>
<td>50% (maximum of INR 5/-lakh) assistance of expenditure incurred by institute/entrepreneur will be granted for obtaining certification mark</td>
</tr>
<tr>
<td><strong>Power Tariff &amp; Electricity Duty Incentive</strong></td>
<td>INR 1.00 per unit maximum for 5 years and 100% exemption on electricity duty for first 5 years</td>
</tr>
<tr>
<td><strong>Registration / Stamp Duty Concession Scheme</strong></td>
<td>100% stamp duty reimbursement to infrastructure projects and 50% stamp duty reimbursement to agro and food processing units</td>
</tr>
</tbody>
</table>
Specialized Agricultural Universities

Junagadh Agricultural University
- Offers courses in agriculture, agricultural engineering, and technology and fisheries, veterinary science, animal husbandry, and fisheries.
- Offers MBA in Agri Business Management.
- PhD in Agriculture Economics

Navsari Agricultural University
- Has faculties of agriculture, horticulture, veterinary science, fisheries, and forestry.
- Has 29 research centers offering opportunities across sector including soil science, agriculture research, water management research.

Anand Agricultural University
- Offers courses in agriculture engineering, horticulture, dairy science, veterinary science, animal husbandry, agribusiness management.
- 7 colleges, 17 research centers, 6 extension education institute in 9 districts.

Sardarkrushinagar Dantiwada Agricultural University
- Offers courses in agriculture, horticulture, veterinary science, and animal husbandry.
- Has 28 research centers in agriculture and allied sciences.

Kamdhenu Veterinary University
- Set up in 2009-10 for the development of research, education, and extension in the field of Animal Husbandry, Dairy Development and Fisheries.
- Specific research opportunities offered at College of Dairy Science, Amreli, and Polytechnic in Animal Husbandry, Himmatnagar.
Educational facilities / R&D

Specialized Courses in Agriculture

- Indian Institute Of Management Ahmedabad: PG Programme in Agri Business Management (2 yrs)
- Dhirubhai Ambani Institute of Information and Communication Technology: M.S. in IT – Agriculture
- Sheth M C college of Dairy Science, Gujarat Agriculture University: B.Sc and M.Sc in Dairy Technology
- Sardar Krushinagar Dantiwada University: B.Tech in food engineering, M.Tech in agriculture process and food engineering
- Advanced Research and Educational Centre for Horticultural Crops, Navsari
- Veer Narmada South Gujarat University: M.S. in Bioscience, Bachelors and Masters in Rural Studies

WTO Cell, Junagadh
- Centre of Excellence on Biotechnology, Anand
- Centre of Excellence on Post Harvest Technology, Navsari
- Centre of Excellence on soil and water Management, Junagadh
- Centre for Excellence on Castor, Sardar Krushinagar
Gujarat has the following marketing facilities for the Agricultural Value Chain

- **Agriculture Produce Market Committee (APMC)**
  - 194 APMC market yards and sub-market yards

- **Food Processing Units**
  - More than 30,000 food processing units employing over 1 Million people
  - 560 cold storage and fish processing units with capacity of 2 Million Metric Tonne

- **Export Zones**
  - 20 agro-export zones with focus on Mango, Vegetables and sesame seeds

- **Cold Storages**
  - 207 warehouses across 45 centers and one irradiation unit in Bavla, Gujarat

- **Warehouses**
  - Air cargo complex for food exports

**Sources:** Ministry of Food Processing Industries, Government of India; Agricultural and Processed Food Products Export Development Authority, ASSOCHAM
Investment Opportunities in Food Processing: Gujarat

Agricultural/Horticultural Infrastructure Projects
- Cold Chain Terminal Market in DMIC Corridor in Surat
- Mechanized Grain Handling and Storage Unit at Port in Kandla & Rozi/Bedi
- Cold Storage Unit For Fresh Onions in Bhavnagar

Export Oriented Processing
- Peanut Butter Manufacturing Unit in Pipavav, Saurashtra
- Hand-Picked and Selected Groundnut Processing Unit across Saurashtra
- De-hulled Sesame Seed & Roasted Sesame Oil Unit across Amreli, Bhavnagar, Surendranagar, Rajkot & Jamnagar

Food Processing
- Health Drink Manufacturing Plant in Savli, Vadodara
- Fruit Processing Unit in Food Park, Surat
- Castor Oil Derivatives Perfumery Raw Materials Unit in Mehsana

Animal Husbandry
- Cattle Feed Manufacturing and Processing Unit in Mehsana
- High-Tech Dairy Farming Unit in Madhapur, Kutch
- Organic milk and milk product manufacturing and processing unit in Anand

Newer Technology-Based Projects
- Biodegradable Packaging for Food Products in Surat
- Instant Vegetables in Retort Pouches in Mangrol, Surat
- Freeze Dried Fruit Processing Unit in Surat
- Banana Fibre Extraction and Textiles Production Unit in Palasana & Hazira Surat

Natural Resources - Based Opportunities
- Neem/tobacco oil based bio pesticides in Mithi rohar, Kutch
- Medicinal Herbs Extraction Unit in Narmada, Surat, Navsari & the Dangs

Sources: Ministry of Food Processing Industries, Government of India; Agricultural and Processed Food Products Export Development Authority, ASSOCHAM
## State Government Initiatives

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Soil Health Card</strong></td>
<td>To provide farmers a well monitored report based on analysis, guidance on improving the soil fertility and recommendations of nutrients and fertilizers needed</td>
</tr>
<tr>
<td><strong>Krushi Mahotsav</strong></td>
<td>Guidance to farmers about Agriculture related information and distribution of 10291 free kits to the farmers</td>
</tr>
<tr>
<td><strong>Sardar Sarovar Project (SSP)</strong></td>
<td>Second largest in the world with an aggregate volume of 6.82 million cu. m. with an expectation to provide irrigation benefits in over 74 talukas of 17 districts in the State, provide water to industrial and domestic uses in villages as well as townships</td>
</tr>
<tr>
<td><strong>Sujalam Safalam Yojana</strong></td>
<td>Providing water to dry land and dry underground areas with an estimated investment of ~ USD 10 billion (INR 6500 Crore), the canal links 21 rivers of the state by covering numerous districts, villages and towns</td>
</tr>
<tr>
<td><strong>Sauni (Saurashtra Narmada Avtaran Irrigation) Yojana</strong></td>
<td>Assistance in diverting one MAFt excess over flowing flood water of Narmada allocated to Saurashtra Region and the water will be distributed to 115 reservoirs of Eleven districts of Saurashtra benefitting 10 lakh acre land</td>
</tr>
<tr>
<td><strong>ikhedut Portal</strong></td>
<td>One stop Solution which caters to multiple farmer requirement through one site</td>
</tr>
<tr>
<td><strong>Centre of Excellence for Horticulture Value Chain</strong></td>
<td>To provide farmers a well monitored report based on analysis, guidance on improving the soil fertility and recommendations of nutrients and fertilizers needed</td>
</tr>
</tbody>
</table>

Sources: Ministry of Food Processing Industries, Government of India; Agricultural and Processed Food Products Export Development Authority, ASSOCHAM
## State Government Initiatives

### Micro Irrigation Scheme (MIS)
- To provide farmers professional Services on MIS coupled with required equipment & essential agro-inputs from the MIS Suppliers to improve Agriculture productivity and farmers prosperity at large

### Support for mechanization in agriculture
- Assistance for plough, tractor, power tiller, rotavator, tarpaulin, cultivator rake, decorticator machine,

### Seed assistance
- Assistance in sugarcane tissue culture, wheat seeds, integrated pest management material, fodder kits

### Assistance for use of fertilizer
- Assistance for use of organic fertilizers, gypsum, liquid organic fertilizer, vermicomposting unit

### Support for irrigation facility
- Assistance for open and underground pipelines, electric motor, submersible pump, oil engine

### Assistance for crop protection
- Assistance for knapsack sprayer, crop protection medicines, power operated sprayer

### Assistance for planting tools
- Assistance for multi crop planter sowing machine, seed drill sowing machine, land leveler, power thresher, reaper, power weeder

*Sources: Ministry of Food Processing Industries, Government of India; Agricultural and Processed Food Products Export Development Authority, ASSOCHAM*
Presence of National & International Players

- Amul
- McCain
- ConAgra Foods
- RASNA
- adani wilmar
- FLOURISH
- PARLE
- Vadilal
- BALAJI WAFERS
- Vimal Dairy Ltd.
- LOTTE Confectionery
- Nestle
- ROQUETTE
- INBISCO INDIA
- Freshtrop
- Natural Foods
- Dairy Belt
- Saraf
- Schmitten
- Manpasand
- Kitchen Xpress
# Details of Nodal Department / Agencies

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Nodal Departments/ Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture and Co-operation Department</td>
</tr>
<tr>
<td>2</td>
<td>Department of Fisheries and Animal Husbandry</td>
</tr>
<tr>
<td>3</td>
<td>Director of Agriculture</td>
</tr>
<tr>
<td>4</td>
<td>Director of Horticulture</td>
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<tr>
<td>5</td>
<td>Director of Animal Husbandry</td>
</tr>
<tr>
<td>6</td>
<td>Commissioner of Fisheries</td>
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<tr>
<td>7</td>
<td>Registrar of Co-operative Societies</td>
</tr>
<tr>
<td>8</td>
<td>Director of Sugar</td>
</tr>
<tr>
<td>9</td>
<td>Gujarat State Seed Corporation Limited</td>
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<tr>
<td>10</td>
<td>Gujarat State Seeds Certification Agency</td>
</tr>
<tr>
<td>11</td>
<td>Gujarat State Land Development Corporation Limited</td>
</tr>
<tr>
<td>12</td>
<td>Gujarat Agro Industries Corporation Limited</td>
</tr>
<tr>
<td>13</td>
<td>Gujarat State Warehousing Corporation</td>
</tr>
<tr>
<td>14</td>
<td>Gujarat State Sheep &amp; Wool Development Corporation Limited</td>
</tr>
<tr>
<td>15</td>
<td>Gujarat Fisheries Central Cooperative Association Limited</td>
</tr>
<tr>
<td>16</td>
<td>Gauseva &amp; Gaucher Vikas Board</td>
</tr>
<tr>
<td>17</td>
<td>Gujarat State Agriculture Marketing Board</td>
</tr>
<tr>
<td>18</td>
<td>Gujarat livestock development board</td>
</tr>
</tbody>
</table>
Thank you