AGRICULTURE AND ALLIED INDUSTRIES
## EXECUTIVE SUMMARY

### Global standing
- India is the largest producer of spices, pulses, milk, tea, cashew and jute; and the second largest producer of wheat, rice, fruits and vegetables, sugarcane, cotton and oilseeds.
- India is currently the world’s fourth largest producer of agrochemicals.
- India has the largest livestock population of around 535.78 million, which translates to around 31 per cent of world population.

### Favourable conditions
- India has the 10th largest arable land resources in the world. With 20 agri-climatic regions, all 15 major climates in the world exist in India. The country also possesses 46 of the 60 soil types in the world. Growth in Gross Value Added (GVA) by agriculture and allied sectors grew at 2 per cent in Q1 2019-20.
- Strategic geographic location and proximity to food importing nations favour India in terms of exporting processed foods.

### Increasing farm mechanisation
- India is one of the largest manufacturers of farm equipment such as tractors, harvesters and tillers. India accounts for nearly one-third of the overall tractor production, globally.
- Tractor sales in the country grew by 10.24 per cent in FY19 at 878,476 units compared to 20.52 per cent in FY18.

### Rising consumption expenditure
- Consumer spending in in India is likely to reach US$ 3.6 trillion by 2020.
- Private final consumption expenditure (at constant prices) is estimated at Rs 19.74 lakh crore (US$ 282 billion) in Q1 2019-20 as against Rs 19.14 lakh crore (US$ 273 billion) in Q1 2018-19.

### Record production of food grains
- During 2017-18* crop year, food grain production is estimated at record 285.01 million tonnes. In 2018-19, Government of India is targeting food grain production of 283.37*** million tonnes.

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**Note:** *as per final estimates, ***- as per 3rd advance estimates

**Source:** Ministry of Agriculture, Government of India, MOSPI, BCG, Crisil
ADVANTAGE INDIA
ADVANTAGE INDIA

- A large population and rising urban and rural incomes have aided demand growth. External demand has also been growing especially from key markets like the Middle East.
- Demand for processed food rising with growing disposable income, urbanisation, young population and nuclear families.
- Changing lifestyle and increasing expenditure on health and nutritional foods.

- Increasing demand for agricultural inputs such as hybrid seeds and fertilizers.
- Promising opportunities in storage facilities; Agriculture storage capacity in India increased at 4 per cent CAGR between 2014-17 to reach 131.8 million metric tonnes.
- Investment opportunities to arise in agriculture, food infrastructure and contract farming.
- India’s exports of basmati rice are expected to grow 4-5 per cent in 2019-20.

- India benefits from a large agriculture sector, abundant livestock and cost competitiveness.
- Lured by the size and returns of the Indian market, foreign firms have strengthened their presence in India.
- High proportion of agricultural land (157 million hectares), diverse agro-climatic conditions encourage cultivation of different crops.
- Leading producer of spices, jute, pulses; second largest producer of wheat, paddy, fruits and vegetables.

- Schemes like Paramparagat Krishi Vikas Yojana helps in developing organic clusters and make available chemical free inputs to farmers. Setting up of National Mission on Food Processing.
- Government of India is also aiming to double farmers’ income by 2022.
- Promoting rationalisation of tariff and duties relating to food processing sector.
MARKET OVERVIEW - AGRICULTURE
GROWTH IN AGRICULTURE

- Agriculture is the primary source of livelihood for about 58 per cent of India’s population.
- Gross Value Added by agriculture, forestry and fishing is estimated at Rs 18.55 trillion (US$ 265.51 billion) in FY19*.
- Agriculture and allied sector’s GVA at constant 2011-12 prices grew a CAGR of 3.07 per cent between FY12-19.
- As per Union Budget 2019-20, allocation of Rs 140,763.97 crore (US$ 1.95 trillion) was made for the Ministry of Agriculture.
- Agriculture, Forestry and Fishing’ sector grew by 2.0 percent in Q1 2019-20 as compared to growth of 5.1 percent in Q1 2018-19.

Notes: GDP – Gross Domestic Product, MOSPI – Ministry of Statistics and Programme Implementation, * Provisional estimates
There are two major agricultural seasons in India: Kharif and Rabi.

- Kharif season lasts from April to September (summer); rice (paddy) is the season’s main crop.
- Rabi season lasts from October to March (winter); wheat is the season’s main crop.
- India’s wheat production reached 101.20 million tonnes for crop year 2018-19 (July-June).
- As of August 2019, total area sown with kharif crops in India reached 92.6 million hectares.

Source: Ministry of Agriculture and Farmers’ Welfare
Since 2010, production as well as yield of both major crops - rice and wheat has increased significantly. As per fourth advance estimates, production of rice is estimated at record 116.42 million tonnes while production of wheat is estimated at 102.19 million tonnes in 2018-19 crop year.

India ranks second in global production of fruits and vegetables and is a leading exporter of mangoes and bananas.

Production of horticulture crops in India is estimated at record 313.9 million metric tonne (MMT) in 2018-19*, implying a CAGR of 3.67 per cent between FY08-19.

Note: *as per 3rd advance estimates, ** as per 4th advance estimate, *** as per 1sr advance estimate of Kharif crops
Source: Ministry of Agriculture and Farmers’ Welfare
India was the ninth largest exporter of agricultural products in 2017.

Total agricultural exports from India grew at a CAGR of 14.61 per cent over FY10-19 to reach US$ 38.54 billion in FY19. In FY20 (till Sept 19) agriculture exports were US$ 17.05 billion.

The Agriculture Export Policy, 2018 was approved by Government of India in December 2018. The new policy aims to increase India’s agricultural exports to US$ 60 billion by 2022 and US$ 100 billion in the next few years with a stable trade policy regime.

The Government of India has come out with the Transport and Marketing Assistance (TMA) scheme to provide financial assistance for transport and marketing of agriculture products in order to boost agriculture exports.

Agri exports from India are expected to reach the export target of US$ 60 billion by the year 2022.

Notes: CAGR is up to FY18
Source: World Trade Organisation, APEDA, DGCIS
Agriculture and Allied Services

SURGE IN DEMAND OF INDIA AGRICULTURAL PRODUCTS...(2/2)

- Marine Products, Buffalo Meat and rice are largest agricultural export items in terms of value. Other major export items are spices, cotton, oil products and sugar.


- Tea exports from India reached to 270.27 million kgs in FY19 while coffee exports stood at 282.87 million kgs in FY19.

- By early 2019, India will also start exporting sugar to China, while exports of Indian grapes to China is expected to increase 200 per cent by 2020. In November 2018, an agreement to export fish meal and fish oil from India to China was also signed.

**Key agricultural and allied sector exports from India in (US$ billion)**

- Marine products: FY18 - 7.4, FY19 - 6.8, FY20 (till September) - 4.2
- Basmati Rice: FY18 - 3.36, FY19 - 4.7, FY20 (till September) - 2.03
- Buffalo Meat: FY18 - 4.0, FY19 - 3.6, FY20 (till September) - 1.6
- Spices: FY18 - 3.6, FY19 - 3.3, FY20 (till September) - 1.96
- Non-Basmati rice: FY18 - 3.0, FY19 - 3.0, FY20 (till September) - 1.02
- Cotton: FY18 - 1.96, FY19 - 1.21, FY20 (till September) - 0.23
- Oil Meals: FY18 - 1.5, FY19 - 1.1, FY20 (till September) - 0.42
- Sugar: FY18 - 0.81, FY19 - 0.81, FY20 (till September) - 0.81

*Source: Ministry of Agriculture and Farmers’ Welfare, APEDA*
MARKET OVERVIEW – FOOD PROCESSING
Indian Food Industry in 2018¹ (US$ billion)

<table>
<thead>
<tr>
<th>Segment</th>
<th>Size</th>
</tr>
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<tbody>
<tr>
<td>Food Industry Output</td>
<td>258</td>
</tr>
<tr>
<td>Food Exports</td>
<td>39.4</td>
</tr>
<tr>
<td>Food Imports</td>
<td>24.5</td>
</tr>
<tr>
<td>Retail</td>
<td>380</td>
</tr>
<tr>
<td>Food Service</td>
<td>48.3</td>
</tr>
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</table>

Infrastructure for Food Processing Industry (as of 2017)

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold Storages²</td>
<td>7,845</td>
</tr>
<tr>
<td>Cold Storages’ Capacity (million MT)³</td>
<td>35.88</td>
</tr>
<tr>
<td>Mega Food Parks Sanctioned³</td>
<td>42</td>
</tr>
<tr>
<td>Agri Export Zones³</td>
<td>60</td>
</tr>
</tbody>
</table>

¹The food and grocery market in India is the sixth largest in the world. The food processing industry contributes 32 per cent of this food market and is also one of the largest industries in the country, contributing 13 per cent of total exports and six per cent of industrial investment.

²Dairy sector’s revenue in India were estimated⁴ at Rs 5.7 lakh crore (US$ 88.44 billion) in FY18 and are expected to reach Rs 7.5 lakh crore (US$ 116.37 billion) by FY21. The dairy sector witnessed a growth rate of 6.4 per cent annually in the last four years against the global growth rate 1.7 per cent.

³India also has the required infrastructure to enable the growth of food processing industry with 7,845 cold storage chains with a capacity of 35.88 million tonnes and 42 mega food parks sanctioned as of 2017. Out of these, 25 mega food parks will be operationalised by 2018 end.

⁴There are more than 39,748 food processing units in India, as per 2016-17 as per Annual Survey of Industries.

⁵Foreign direct investments (FDI) in India’s food processing sector is stood at US$ 628.24 million in 2018-19.

⁶According to National Accounts Division, Ministry of Statistics and Programme Implementation, food processing units in India is growing at 7.68 per cent annually.

Source: ¹USDA - India’s Food Processing Sector Poised for Growth 2019, ²Ministry of Agriculture and Farmers’ Welfare, ³ Ministry of Food Processing Industries, ⁴Crisil
Sales of Processed Foods in India

<table>
<thead>
<tr>
<th>Product</th>
<th>2017 Sales (US$ billion)</th>
<th>Growth compared to 2013 Sales (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oils &amp; Fats</td>
<td>20.74</td>
<td>144.02</td>
</tr>
<tr>
<td>Dairy</td>
<td>18.53</td>
<td>79.54</td>
</tr>
<tr>
<td>Rice, Pasta, and Noodles</td>
<td>5.83</td>
<td>98.74</td>
</tr>
<tr>
<td>Sweet and Savory Snacks</td>
<td>4.56</td>
<td>110.62</td>
</tr>
<tr>
<td>Biscuits and Snack Bars</td>
<td>4.44</td>
<td>49.22</td>
</tr>
<tr>
<td>Confectionery</td>
<td>4.06</td>
<td>77.33</td>
</tr>
<tr>
<td>Sauces, Dressings, and Condiments</td>
<td>2.49</td>
<td>98.03</td>
</tr>
<tr>
<td>Baked Goods</td>
<td>2.27</td>
<td>48.58</td>
</tr>
<tr>
<td>Ice Cream and Frozen Desserts</td>
<td>1.81</td>
<td>84.59</td>
</tr>
</tbody>
</table>

- Sales of processed food in the domestic market have been increasing at a fast pace. Packaged food industry in India is expected to cross US$ 65 billion by 2020 and become the third largest market for packaged food.

- The sector has also witnessed sharp increase in investments with cumulative FDI inflows reaching US$ 9.41 billion between April 2000 and June 2019. Organised dairies in the country are expected to invest Rs 14,000 crore (US$ 2.17 billion) over FY18-21.

Source: 1 USDA - India’s Food Processing Sector Poised for Growth 2018; exchange rate 64.80, 2DIPP, 3 German Engineering Federation, 4 Crisil
EXPORTS OF PROCESSED FOOD AND RELATED PRODUCTS

- Processed fruits & juices exports in FY18 reached US$ 646 million, followed by miscellaneous processed items at US$ 574 million and processed vegetable exports at US$ 283 million.

- Exports of ready to eat items from India reached US$ 689.80 million in FY18 and have reached US$ 681.95 million in FY19 (up to February 2019). Main export destinations for processed food products from India in FY18 were USA, EU and Middle East.

- The Indus Food – an international food and beverage trade show was organized in January 2018, witnessing participation from around 500 prominent global buyers from the food and beverage industry.

- India’s export of processed food stood at Rs 31,111.90 crores (US$ 4.45 billion) in 2018-19.

Source: APEDA
## FOOD PROCESSING SEGMENTS and PRIVATE PLAYERS

<table>
<thead>
<tr>
<th>Segments</th>
<th>Private Players</th>
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<tbody>
<tr>
<td>Fruits, Vegetables and Processed Grains</td>
<td>Dabur</td>
</tr>
<tr>
<td>Milk and Milk Products</td>
<td>Godrej</td>
</tr>
<tr>
<td>Meat, Poultry and Marine Products</td>
<td>ITC Limited</td>
</tr>
<tr>
<td>Consumer Food</td>
<td>Vadilal</td>
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<td>Nestle</td>
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RECENT TRENDS AND STRATEGIES
### RISING DEMAND OF INDIAN PRODUCTS IN INTERNATIONAL MARKET…(1/2)

**Changing consumer tastes**
- Wide array of products, coupled with increasing global connectivity, has led to a change in the tastes and preference of domestic consumers
- This trend has been bolstered by rising incomes, increasing urbanisation, a young population and the emergence of nuclear families. Consumer preference is moving towards healthier snacks.

**Expansion of international companies**
- Liberalisation and growth of organised retail have made the Indian market more attractive for global players
- With a large agriculture sector, abundant livestock, cost competitiveness, India is fast emerging as a sourcing hub of processed food. Danone, Nestle, Kraft Foods, Mondelez International, Heinz are the international players in food processing market in India
- Italian confectionery manufacturer Ferrero will invest Rs 2,000 crore (US$ 310.3 million) by 2021 to make India a hub for developing new products.
- Nestle India to invest Rs 700 crore (US$ 100.16 million) in construction of its ninth factory in Gujarat.

**Rising demand on Indian products in international market**
- Strategic geographic location and continuous increase in raw material production help India to supply cheaper products to other countries
- In November 2019, Haldiram entered into an agreement for Amazon’s global selling program to e-tail its delicacies in the United States.

**Emphasis on Healthier Ingredients**
- Food processing companies are serving health and wellness as a new ingredient in processed food, given that health conscious consumers prefer food products with lower carbohydrate content and with low cholesterol edible oils. e.g. zero-per cent trans fat snacks and biscuits, slim milk, whole wheat products, etc. ITC is planning to launch multigrain Bingo to increase its share in healthy snacks market.

*Source: Ministry of Agriculture and Farmers’ Welfare, Government of India, News Sources*
### Higher Consumption of Horticulture Crops
- There is a surge in demand for fruits and vegetables as a result of a shift in consumption. Accordingly, Indian farmers are also shifting production towards horticulture crops to cash in on the growing demand.
- Fresh fruit exports from India reached US$ 248 million while fresh vegetable exports reached US$ 316 million in FY20 (till August).
- Coca Cola is aiming to improve its sourcing of fruits for aerated drinks and juice beverages categories. In November 2019, Coca-Cola launched ‘Rani Float’, fruit juices to step out of its trademark fizzy drinks.

### Product Innovation as the Key to Expansion
- In September 2019, World Bank agreed to sanction Rs 3,000 crore (US$ 430 million) for the Ministry of Food Processing to enable it finance mini and mega food parks across the country.
- Heritage Foods, a Hyderabad-based company, has plans to add five more milk processing units in the next five years for an investment of US$ 22.31 million, being a part of the former expansion plan to achieve US$ 1 billion turnover by 2022.
- In the first half of 2018, venture capital investments in startups working in agriculture and allied areas reached US$ 32 million.

### Strengthening Procurement via Direct Farmer-Firm Linkages
- Contract farming has been operational in India for a long time now; however, the experience of the private sector players involved therein has been a mixed bag of successes and failures.
- Largely, it has helped both the processing companies, via increasing sales and therefore augmenting their incomes, as well as providing access to better technology and fetching better prices by securing an assured market for Indian farmers.

### Agriculture Output/Outlook
- Sugar production in India has reached 33.16 million tonnes (MT) in 2018-19 sugar season and is expected to produce 26.85 MT in 2019-20, according to the Indian Sugar Mills Association (ISMA).
- India’s exports of basmati rice are expected to grow 4-5 per cent in 2019-20, on the back of higher average realisations, strong demand from Iran and steady rise in paddy prices.

**Source:** Ministry of Agriculture and Farmers’ Welfare, Government of India
### STRATEGIES ADOPTED

#### Rising business and product innovation
- Companies have been moving up the value chain; for example, cooperatives are transitioning from being pure producers of milk to offering a wide range of dairy products.
- Both domestic and global firms have been focusing on product innovation to cater to domestic tastes, while also introducing international flavours; for example Ruchi Soya is innovating by entering into the ready-to-cook segment to meet the needs of people with significant time constraint to provide a rich source of protein in the breakfast category

#### Low - cost price strategy
- Low-cost price strategy is adopted so as to make the product affordable to the consumers by guaranteeing them value for money. The main aim is to provide quality products to the consumers at minimum cost, e.g., Amul Milk. Parle and Sunfeast works on their pricing and costs so as to make the products available at economical prices.

#### Mergers and Acquisitions
- In 2017, agriculture sector in India witnessed 18 M&A deals worth US$ 251 million.

#### Research
- Crop protection, soil enhancement, increased productivity are the major segments for the industry.
- Rallis acquired a research-led seeds company ‘Metahelix’ and launched a PGN product in the name of ‘RalliGold’.
- In September, 2019, Prime Minister, Mr Narendra Modi launched the National Animal Disease Control Programme (NADCP), expected to eradicate foot and mouth disease (FMD) and brucellosis in livestock.
- Two diagnostic kits developed by Indian Council of Agricultural Research (ICAR) - Indian Veterinary Research Institute (IVRI) and the Japanese Encephalitis IgM ELISA launched in October, 2019.

*Source: Ministry of Agriculture and Farmers' Welfare, Government of India*
GROWTH DRIVERS
GROWTH DRIVERS OF INDIAN AGRICULTURE

- **Demand-side drivers**
  - Population and income growth
  - Increasing exports
  - Favourable demographics

- **Supply-side drivers**
  - Hybrid and genetically modified seeds
  - Favourable climate for agriculture; wide variety of crops
  - Mechanisation
  - Irrigational facilities
  - Green Revolution in Eastern India

- **Policy support**
  - Growing institutional credit
  - Increasing MSP
  - Introduction of new schemes like Paramparagat Krishi Vikas Yojana, Pradhanmantri Gram Sinchai Yojana, Sansad Adarsh Gram Yojana
  - Opening up of exports of wheat and rice
  - Approval of National Mission on Food Processing.

**Source:** Note: MSP - Minimum Support Price
GROWING AREA UNDER IRRIGATION

- Gross irrigated area under food grains is estimated to have grown to 68.4 million hectares in FY18*.
- Of the wide variety of crops in India, rice and wheat are the most irrigated.
- With growing investments in irrigation, the dependence on monsoons has declined considerably over the years.
- As per Union Budget 2019-20, Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) will be implemented in the country for which Rs 3,949.93 crore (US$ 565.16 million) has been allocated.
- A long-term irrigation fund has been set up in NABARD. In Union Budget 2017-18, addition of US$ 3.10 billion to this corpus was announced. Also, a dedicated micro irrigation fund will be set up in NABARD to achieve the goal, ‘per drop more crop’. The initial corpus of the fund will be US$ 775.67 million.
- Around 285 new irrigation projects will be undertaken in 2018 to provide irrigation for 18.8 million hectares of land.
- In May 2019, NABARD announced an investment of Rs 700 crore (US$ 100 million) venture capital fund for equity investments in agriculture and rural-focused start-ups.

Agricultural credit disbursal target of Rs 10 trillion (155.16 billion) was met for 2017-18.

In FY19, credit of Rs 11.11 trillion (US$ 159 billion) was deployed to agriculture and allied activities in India.

Agrifood start-ups in India received funding of US$ 1.66 billion between 2013-17 in 558 deals. In December 2018, Ninjacart received funding of US$ 35 million, making it the biggest investment round in India’s agritech sector.

Source: Ministry of Agriculture and Farmers’ Welfare, RBI, VCC Edge’s Food and Agri Report 2018, AgFunder
**RISING INCOME AND GROWING MIDDLE CLASS TO DRIVE DEMAND FOR PROCESSED FOOD**

- Strong growth in per-capita income has resulted in greater demand for food items.
- Per capita GDP of India is expected to reach US$ 3,277 in 2024 from US$ 2,036 in 2018.
- Packaged food industry in India is expected to cross US$ 65 billion by 2020 and become the third largest market for packaged food.
- Ministry of Food Processing has been allocated Rs 1196.60 crore (US$ 171.21 million) in Union Budget 2019-20.
- There has also been a shift in demand:
  - From carbohydrates to meat products (in line with the various phases of economic growth); &
  - To convenience foods, and organic and diet foods

*Source: International Monetary Fund, World Economic Outlook Database, April 2019, Euromonitor*
COMPETITIVE ADVANTAGE

- India's comparative advantage lies in its favourable climate, large agriculture sector and livestock base, long coastline and inland water resources.
- India also has an edge in cost of production compared to its competitors in Asia and the developed world.

<table>
<thead>
<tr>
<th>Product</th>
<th>Production in 2018-19 (million tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>176.3</td>
</tr>
<tr>
<td>Pulses</td>
<td>23.40</td>
</tr>
<tr>
<td>Meat</td>
<td>7.7</td>
</tr>
<tr>
<td>Banana</td>
<td>31.74</td>
</tr>
<tr>
<td>Mango</td>
<td>20.79</td>
</tr>
<tr>
<td>Tea (million kgs)</td>
<td>1350.04</td>
</tr>
<tr>
<td>Rice</td>
<td>116.42</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>400.15</td>
</tr>
<tr>
<td>Wheat</td>
<td>102.19</td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture and Farmers' Welfare, Tea Board, Department of Animal Husbandry, Dairying & Fisheries
FAVOURABLE POLICIES ARE SUPPORTING THE SECTOR GROWTH … (1/2)

<table>
<thead>
<tr>
<th>Policy/Programme</th>
<th>Details</th>
</tr>
</thead>
</table>
- Targets increasing India’s agricultural exports to over US$ 60 billion by 2022. |
| **Pradhan Mantri Kisan Samman Nidhi Yojana (PM-Kisan)** | - Prime Minister of India, launched the Pradhan Mantri Kisan Samman Nidhi Yojana (PM-Kisan) and transferred Rs 2,021 crore (US$ 284.48 million) to the bank accounts of more than 10 million beneficiaries on February 24, 2019.  
- After the budget announcement of Pradhan Mantri Samman Nidhi Yojna, eligible farmers will get Rs 6,000 (US$ 85.84) in three instalments. |
| **Pradhan Mantri Annadata Aay SanraksHan Abhiyan’ (PM-AASHA)** | - In September 2018, the Government of India announced Rs 15,053 crore (US$ 2.25 billion) procurement policy, under which states can decide the compensation scheme and can also partner with private agencies to ensure fair prices for farmers in the country. |
| **Pradhan Mantri Krishi Sinchai Yojana (PMKSY)** | - The scheme ensures access to the means of irrigation to all agricultural farms in the country to produce ‘per drop more crop’, thus bringing much desired rural prosperity  
- To increase agricultural production and productivity by increasing availability of water and its efficient use.  
- As per Ministry of Agriculture, during 2019-20, Rs 1.50 crore (US$ 0.21 million) has been allocated to state of Andaman and Nicobar as a central share for implementation of per drop more crop component of Pradhan Mantri Krishi Sinchai Yojana (PMKSY). |
| **Model Contract Farming & Services Act 2018** | - In May 2018, Government of India finalised the Model Contract Act, to include all services in the agriculture value chain under its ambit along with contract farming activity. The act has laid special emphasis on protecting farmers’ rights in the country. |

Source: Ministry of Agriculture and Farmers’ Welfare, Union Budget, TechSci Research
**FAVOURABLE POLICIES ARE SUPPORTING THE SECTOR GROWTH … (2/2)**

| APMC farmers go cashless | The Electronic National Agriculture Market (eNAM) was launched in April 2016 to create a unified national market for agricultural commodities by networking existing APMCs. Up to June 2019, 16.4 million farmers, 124,000 traders were registered on the e-NAM platform. 585 mandis in India have been linked while 22,000 additional mandis will be linked in 2021-22.  
Cumulative trade on the platform reached Rs 41,855 crore (US$ 6.49 billion) by March 2018. Interstate trade of agricultural products was started on the e-NAM in January 2019. |
| Focus on R&D and modernisation | Moreover, the government plans to launch a programme named as 'SAMPADA' for food processing sector, with investments worth US$ 892.46 million to integrate current with new schemes, with an aim to reduce waste and double farmer’s income.  
In September 2017, Nestle started India’s first food safety institute in Manesar.  
In October 2018, a world class food testing lab was announced in the state of Goa to be set up by the Export Inspection Agency (EIA) and Quality Council of India (QCI). |
| Focus on infrastructure | The sector has been assigned priority status for bank credit.  
60 Agri Export Zones (AEZ) have been set up across the country  
In Union Budget 2018-19, government has allocated Rs 5.97 lakh crore (US$ 92.22 billion) for the infrastructure sector.  
Between 2014-15 and 2017-18 (up to Dec 2017) capacity of 2.3 million metric tonnes was added in go downs while steel silos with a capacity of 625,000 were also created during the same period.  
Between FY06-17, 4,392 cold storage projects were sanctioned in India and 236 cold storage projects have been approved in 2017 (as of July 27, 2017). |
| National Mission on Food Processing | MOFPI launched a new Centrally Sponsored Scheme (CSS) National Mission on Food Processing to promote facilities for post-harvest operations, including setting up of food processing industries in India. In Union Budget 2019-20, government announced to spend Rs 110 crore (US$ 15.74 million) in Union territories only. |

**Notes:** RKVY - Rashtriya Krishi Vikas Yojana  
**Source:** Ministry of Agriculture and Farmers’ Welfare, Union Budget, TechSci Research
FAVOURABLE POLICIES ARE SUPPORTING THE SECTOR GROWTH … (3/3)

Pradhan Mantri Kisan Maan-Dhan Yojana (PM-KMY)

• A minimum fixed pension of Rs 3000 (US$ 42.92) to be provided to the eligible small and marginal farmers, subject to certain exclusion clauses, on attaining the age of 60 years.

• The beneficiary is required to make a monthly contribution of between Rs 55 to Rs 200 (US$ 0.78 to 2.86) to the Pension Fund, depending on the age of entry into the Scheme, with provision of equal contribution by the Central Government.

• The Scheme aims to cover around 3 crore beneficiaries. As on 14th November 2019, 18,29,469 farmers in the country have been registered under the Scheme.

• A budgetary provision of Rs 900 crore (US$ 128.7 million) has been made for the year 2019-20
HIGHLIGHTS OF UNION BUDGET 2019-20

- Under Agricultural Marketing Infrastructure (AMI) scheme 40 lakh MT of storage capacity & 400 other marketing Infrastructure projects are targeted by 2019-20.

- In the 2019-20 budget Government of India allocated Rs 8,078.76 crore (US$ 1.12 billion) to Department of Agricultural Research and Education.

- India is the second largest fish producing nation in the world accounting for 6.3 per cent of global production, to support this sector Government of India increase allocation to the Rashtriya Gokul mission to Rs 750 crore (US$ 107.31 million) in the current year.

- Rs 1.41 billion (US$ 19.54 million) allocated for Ministry of Agriculture and Farmers' Welfare.

- A fund of Rs 60,000 crore (US$ 8.32 billion) is allocated to the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA).

- The Budget 2019 has identified Agriculture Sector as one of the key drivers of the economy.

- As per the Union Budget 2019-20, government will work with State Governments to allow farmers to benefit from e-NAM.

- According to the Union Budget 2019-20, the Agriculture Produce Marketing Cooperatives (APMC) Act should not hamper farmers from getting a fair price for their produce.

Source: Union Budget 2019
OPPORTUNITIES
### OPPORTUNITIES

#### Farm management services
- New agri business, which provides inputs such as seeds, fertilizers along with providing advice and training farmers on latest agricultural practices
- It introduces efficiencies into the whole gamut of agri practices
- Provides assistance to sell products at appropriate prices
- In June 2017, Bhoomee, a startup from Bengaluru created an app which offers a one-stop platform that enables farmers to connect to traders and vice-versa through their online portals and call centers.

#### Potential global outsourcing hub
- Limited arable land against growing population makes agricultural inputs crucial
- Huge opportunity exists for agri input segments like seeds and plant growth nutrients
- In India, commercial seeds only account for minor percentage (25 per cent) and huge demand is expected for quality branded seeds
- Global supermarket majors looking at India as a major outsourcing hub
- The government has helped by investing in AEZs, mega food parks, easier credit
- The establishment of food parks – a unique opportunity for entrepreneurs, including foreign investors to enter in the Indian food processing sector.
- As of July 2018, out of the 42 approved mega food parks in the country, eight had been made operational.
- As of Sept 2019, World Bank to provide Rs 3,000 crore (US$ 429.25 million) to finance mini and mega food parks in the country.

#### Supply chain infrastructure and contract farming
- Agriculture storage capacity in India increased at 4 per cent CAGR between 2014-17 to reach 131.8 million metric tonnes.
- Cold storage capacity needs to grow rapidly from the current level of 24 million tonnes
- Private warehouse operators are supported by multiple income streams, subsidy and available of credit
- It is expected that 4 per cent growth in the food grain storage capacity would restructure agricultural sector over the next few years
- Both firms and the government are eager to boost efficiency and access to markets
- Investment potential of US$ 22 billion in food processing infrastructure; 100 per cent FDI in this area
- Firms increasingly taking recourse to contract farming in order to secure supply
- Supply chain infrastructure – this niche has investment potential in food processing infrastructure, the government’s main focus is on supply chain related infrastructure like cold storage, abattoirs and food parks.

**Source:** Ministry of Agriculture and Farmers’ Welfare, Ministry of Food Processing Industries
GOVERNMENT INITIATIVES THAT WILL FURTHER PROP UP THE SECTOR

- In September 2018, the Cabinet Committee on Economic Affairs (CCEA) approved a Rs 5,500 crore (US$ 820.41 million) assistance package for the sugar industry in India.

- In March 2018, the Government of India extended the urea subsidy to the farmers till 2020 with the aim of ensuring supply of urea at statutory controlled prices. Urea subsidy for 2018-19 is estimated at Rs 45,000 crore (US$ 6.95 billion).

- The Coffee Board is positioning India as a “Coffee Nation” and as the drink for Prime Minister Narendra Modi’s vision of New India.

- In December 2017, the Department of Agriculture, Cooperation & Farmers Welfare proposed National Programme on use of Space Technology for Agriculture (NPSTA), which will use integrated space and geospatial tools for mapping, monitoring and management of agriculture.


- The Food Processing Industries have taken few initiatives for developing the food – processing sector that would enhance the exports of agro and processed foods and income of farmers

- Government is planning to invest US$ 8 billion so as to revive four fertilizer plants and setting up two plants to produce farm nutrients

- Financial Outlay of US$ 35.47 million has been announced under the National Dairy Development Board (NDDB) to boost milk output and per animal production of milk

INDUSTRY ASSOCIATIONS
### INDUSTRY ASSOCIATIONS

<table>
<thead>
<tr>
<th>Agency</th>
<th>Contact Information</th>
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<tr>
<td>National Institute of Agricultural Extension Management</td>
<td>Rajendranagar, Hyderabad–500 030, Andhra Pradesh</td>
</tr>
<tr>
<td></td>
<td>Phone: 040-24016702 to 706</td>
</tr>
<tr>
<td></td>
<td>Fax: 040-24015388</td>
</tr>
<tr>
<td>National Institute of Agricultural Marketing (NIAM)</td>
<td>Bambala, Kota Road</td>
</tr>
<tr>
<td></td>
<td>Jaipur–302033, Rajasthan</td>
</tr>
<tr>
<td></td>
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<td></td>
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<tr>
<td>Central Insecticides Board and Registration Committee</td>
<td>Machinery Store Building,</td>
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<tr>
<td></td>
<td>N.H.IV Faridabad</td>
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<td>Coconut Development Board</td>
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<td>National Dairy Development Board (NDDB)</td>
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<tr>
<td>National Horticulture Board (NHB)</td>
<td>Ministry of Agriculture, Government of India</td>
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<td>National Oilseeds and Vegetable Oils Development Board (NOVOD)</td>
<td>Krishi Bhavan, New Delhi 110 114</td>
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USEFUL INFORMATION
GLOSSARY

- **AIBP**: Accelerated Irrigation Benefit Programme
- **Breeder seeds**: Seeds move from germ-plasm (research) stage to breeder stage
- **CAGR**: Compound Annual Growth Rate
- **Certified/quality seeds**: Foundation seeds are further multiplied to get certified seeds, which are sold to farmers
- **FMTTI**: Farm Machinery Training and Testing Institutes
- **Foundation seeds**: Breeder seeds are multiplied as foundation seeds
- **FY**: Indian Financial Year (April to March) – FY12 implies April 2011 to March 2012
- **KCC**: Kisan Credit Card
- **MSP**: Minimum Support Prices
- **NFSM**: National Food Security Mission
- **NMAM**: National Mission on Agricultural Mechanisation
- **PGN**: Plant Growth Nutrients
- **RKVY**: Rashtriya Krushi Vikas Yojana is a central government scheme providing funds to state governments to spend on agriculture
- Wherever applicable, numbers have been rounded off to the nearest whole number
EXCHANGE RATES

### Exchange Rates (Fiscal Year)

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### Exchange Rates (Calendar Year)

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**Source:** Reserve Bank of India, Average for the year
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