

1. With the help of suitable examples, explain the concepts of backward and forward integration in the food processing industry.

Demand of the question:

It expects students to give a clear account of the concepts of backward and forward integration in the food processing industry. It also expects students to clarify with relevant examples.

Introduction:

The food processing industry is one of the sunrise (emerging) sectors in India considering its linkage to agriculture and food consumption. It employs 13 million people directly and about 35 million people indirectly. The Indian food processing market was worth INR 24,665 Billion in 2018. Looking forward, the market is projected to reach INR 50,571 Billion by 2024, exhibiting a CAGR of 12.4% during 2019-2024.

Body:

For any industry, backward linkages are directed towards suppliers; while the forward linkages are directed towards consumers. With respect to food processing industry, a Food Processing Unit sets up strong backward linkages with the farmers, farmer producer organizations, farmer's groups etc. Further, to be able to sell its processed food, it develops strong forward linkages with wholesalers, retailers, exporters etc.

Concepts of backward and forward integration in the food processing industry:

- In food processing industry, the inputs such as fruits, vegetables, dairy products, meat, poultry and fish are so much perishable that lack of transportation and backward links would result in their waste.
- Further, for industry players, effective links add value to the brand by ensuring high quality end to end and better control over the factors of production resulting in cost saving and enhanced efficiency.
- Backward Integration refers to that integration where Company expands its activities to upstream areas. Company aims to get raw material at cheap rates, uniform quality, steady supply and eliminate any middlemen. e.g. Starbucks (chain of coffee bars) buys coffee plantations in Central America.
- Forward Integration refers to that integration where Company expands its activities to downstream areas. Company aims to get more control over sales, consumer-contact and eliminate any middlemen, wholesaler, retailer. e.g. Amul has its own pizza outlets and ice cream parlours.
- For a broader understanding one more large scale example can be cited of Mega food parks promote the backward linkages while Rythu bazar scheme of Andhra Pradesh which helps farmers to directly sell their produce to customers promotes forward linkages.

Effective and seamless backward and forward integration in food processing industry plug gaps in supply chain in terms of availability of raw material and linkages with the market. Hence, It benefits the economy in following ways:

- Food processing industry drives rural economy by increasing consumption due to increased income, essential for sustaining economic growth. Decrease in post-harvest wastage losses due to better technologies and improved logistics.
- Better compliance to food quality standards and thus expand market base.
- Stabilize food prices in the economy (food inflation). Consumers will be benefited with access to larger variety of products at reasonable prices.
- However various challenges still remain owing to Lack of infrastructure, large no. Of intermediaries, lack of testing and grading facility and land reform issues.
- Food processing firms, particularly Small and Medium Enterprises (SMEs), have difficulties in accessing finance.

Government Policy around Forward and Backward Integration in Food Processing Industry:

- Currently, the government is running a scheme called Scheme for Creation of Backward and Forward Linkages to provide effective and seamless backward and forward integration for processed food industry.
- At the same time, NITI Aayog has consistently pushed for contract farming, opening of multi brand retail for 100% FDI through automatic route etc.
- Recently promulgated "The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, 2020." is likely to strengthen the Food processing Industry by strengthening its forward and backward linkages.

Conclusion:

Rising per-capita income, changing life style and food habits provide significant opportunities for the growth of Food processing industry. Recently promulgated ordinances and the schemes such as SAMPADA, Mega food park etc. are likely to strengthen backward and forward linkages in turn help the Food processing industries to grow from present 2% of GDP to optimise high output of farming sector.

2. Examine the strength, potential and challenges of the organic food sector in India.

Demand of the question:

It expects students to be expected to investigate and establish the key facts and issues related to the strength, potential and challenges of the organic food sector in India. It also means to probe deeper into the topic i.e. organic food sector and elaborate it in detail.

Introduction:

In Organic food production synthetic inputs (such as fertilizers, pesticides, hormones, feed additives etc) are avoided and it relies upon crop rotation, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection.

Body:

Organic food sector primarily aims at cultivating the land and raising crops in such a way that it keeps the soil alive and in good health by use of organic wastes (crop, animal and farm wastes, aquatic wastes) and other biological materials along with beneficial microbes (bio fertilizers) to release nutrients to crops for increased sustainable production in an eco-friendly and pollution-free environment.

Strength & Potential of Organic food sector:

- It relies on traditional techniques such as crop rotation, green manure, compost and biological. It is accomplished by using farm agronomic, biological and mechanical methods in exclusion of all synthetic off farm inputs.
- It protects the long term fertility of soils by maintaining organic Matter levels and encouraging soil biological activity. It often involves vermiculture and vermi-composting too.
- The biological processes, driven by mycorrhiza, allow the natural production of nutrients in soil throughout growing season.
- Crop Rotation supports a wider range of beneficial insects, soil micro-organisms, and hence, protects species from going extinct.
- It improves soil health and fertility. It requires careful use of water resources hence lead to conservation of water.
- Sustainable and environmentally friendly production method, which has particular advantages for small-scale farmers.
- It helps in conserving bio-diversity and nature resources on the farm and in the surrounding area.
- Farmers in India's poorest region are recording record rice yields, organic banana yields, etc.
- India has the 9th largest World's Organic Agricultural Land and the largest number of producers Sikkim has become India's first fully organic state by converting around 75,000 hectares of agricultural land into sustainable cultivation.

- As per Economic Survey 2018-19 states that Size of the Indian organic food market is Rs. 100 crore & Number of organic food farmers in India are 570,000. Hence, India has great potential to expand the organic food market in coming future.

However, the emerging threats such as climate change induced global warming, flooding, relative market demand etc. pose serious challenge for the growth & development of organic food sector.

- The cost of cultivation increases as it takes more time and energy to produce than its synthetic input intensive counterpart.
- Specialised farmer training costs, higher processing and inventory holding costs, and increased packaging, logistics and distribution costs add to the price of end products.
- There is low awareness at the producer level on the difference between conventional farming and organic farming.
- At the consumer side there is confusion between natural and organic products and limited understanding of the health benefits of organic food products.
- Growing demand and low supply has further created an inflationary pressure on organic food products, it leads to customer opting for non-organic cheap products.

Hence, it becomes imperative to incentives farmers for input procurement, value addition including post-harvest infrastructure creation, packaging, branding, publicity, transportation, organic fairs etc. Some government initiatives and local level innovations can help to achieve this objective in following ways:

- Organic farming schemes such as the National Mission for Sustainable Agriculture (NMSA) that promotes "location specific" farming systems, it helps make agriculture sustainable.
- Also, Paramparagat Krishi Vikas Yojana (PKVY) that promotes various organic farming models through adoption of organic village by cluster approach and PGS certification.
- It is critical for companies involved in the organic food business to increase awareness among consumers in non-metro cities.
- Creating community-supported agricultural farms or with "grow your own food" programmes.
- Mission Organic Value Chain Development for North East Region (MOVCD-NER) is a Central Sector Scheme, a sub-mission under National Mission for Sustainable Agriculture (NMSA), aims for development of certified organic production in a value chain mode to link growers with consumers and to support the development of entire value chain starting from inputs, seeds, certification, to the creation of facilities for collection, aggregation, processing, marketing and brand building initiative.
- Ministry of Food Processing and Ministry of Women and Child Development jointly initiated the National Organic Food Festival aimed at strengthening

organic food produce in the country. It also aimed at encouraging women entrepreneurs in manufacturing organic produce

Conclusion:

Organic food production because of its innovative nature, less harm to environment ,and cost effectiveness holds immense potential in the time of rising environmental and global market chain challenges. Hence, Organic food sector can be promoted as brand for "local to global" programme besides it will also help to give boost to rural economy and increase farmers income.



3. What role do progressive land laws play in the ease of doing business? Explain. What recent measures have been taken by the government in the area of land reforms. Examine.

Demand of the question:

It expects students to clarify with relevant facts and implications role played by progressive land laws in the ease of doing business. It also expects student to investigate and establish the key facts and issues related to the recent measures taken by the government in the area of land reforms.

Introduction:

At the time of independence ownership of land was concentrated in the hands of a few. This led to the exploitation of the farmers and was a major hindrance towards the socio-economic development of the rural population. Equal distribution of land was therefore an area of focus of Independent India's government, and land reforms were seen as an important pillar of a strong and prosperous country.

Body:

'Ease of doing business' refers to the regulatory environment in a country to set up and operate a business. India jumped to 63rd position in World Bank's Ease of Doing Business 2021 report from previous position of 100. In the same report, the World Bank placed India at 163 and 154 positions, respectively, on enforcing contracts and registering property.

Progressive land laws role in ease of doing business:

- Property registration and Land acquisition, is a cumbersome and costly process. Simplifying property registration and acquisition of land by introducing reforms can help companies set up or expand in India faster.
- This can be achieved by introducing reforms such as allowing industries to buy land directly from farmers; rationalising stamp duty across states; digitising and integrating land records at various levels; and setting up a single window in each state for all land-related information, transactions, digitised records and land titles.
- Land ceiling: With a cap on the size of land holding an individual/family could hold equitable distribution of land was possible to an extent. Land ceiling ensured that the poor destitute farmer can cultivate the land and get benefits from it.
- Land possession: Land is a source of economic income. So, when a marginal farmer once got the possession of the land comes in capacity to utilize the land as per her/his choice. e.g. Growth of MSME's through PM-MUDRA yojna.
- Increased productivity: More land came under cultivation and since tillers themselves became the landowners, productivity increased. It also ensured that a tiller can be business oriented farmer or business person, by utilizing his non-agricultural land for the other entrepreneurial use.

- Developing cooperative farming-businesses: As land comes under cooperatives, farmers economic growth is ensured with the parallel growth of cooperatives.
- Land reforms were also for non-agricultural purposes like development and manufacturing. It helped to set up Industrial development cluster adjacent to cities. Culminating in to more employment generation, and regional economic development.
- Reforms in land management and enforcing contracts helps to expedite the process of land management and setting up businesses.
- With regard to land management reforms, digitisation of the land data and making the data readily available throughout India facilitates the buying and selling of land.

For a self-reliant, globally competitive India, the facilitative reforms for ease of doing business are the need of the hour. Hence, Under the Atmanirbhar Bharat package, Government of India has introduced some reforms for ease of doing business in India.

- At the state level Karnataka government introduced that Industries will get 3-yr window for approvals in Karnataka.
- Karnataka government also proposed to amend the Industrial Facilitation Act, as per the proposed amendment once an investor gets the acknowledgement of approval from any of these committees, he/she can start the operations without waiting for clearance from other departments.
- Also, Department for Promotion of Industry and Internal Trade (DPIIT) identified enforcing contracts, resolving insolvency, starting a business, registering property, paying taxes and trading across borders as six areas that need improvement.
- The Department for Promotion of Industry and Internal Trade is also following reform activities related to registering property and starting a business in Kolkata and Bengaluru as these two cities are included by the World Bank this year besides Delhi and Mumbai for preparing the ease of doing business report, with a view to provide a holistic picture of business environment in India.
- Rs 10,000 crore scheme for formalization of Micro Food Enterprises. This scheme promotes 'Vocal for Local with Global Outreach' vision. The scheme, government said, will help 2 lakh MFEs, farmer producer organization, self help groups and cooperatives in technical up gradation, improved incomes, better health and safety standards and integration with retail markets.
- Similarly under the 'registering property' criterion, the focus would be on land titling legislation by all the four cities, land records to reflect actual ownership, and timely disposal of property disputes.
- The interventions listed for 'starting a business' include integrated registration for ESIC, EPFO, GST, profession tax with company registration.

The recent reforms exercise assumes significance as the government is targeting to take India among top 50 in the ease of doing business ranking.

Conclusion:

Hence, with respect to India land reforms played a crucial role in changing the economic & social structure of India and promoted ease of doing business. Proposed land reforms are the crucial steps in the right direction to give shape to the dream of 'Vocal for Local with Global Outreach' vision.

