

AGRICULTURAL AND FARMING SECTOR



- Agriculture is the primary source of livelihood for about 60 per cent of India's population, contributing about 18 percent to India's GDP.
- The real gross value added by agricultural sector in India in fiscal year 2018 amounted to about 20.7 trillion INR.
- The growth rate of GVA in the agricultural sector has decreased to about two percent in fiscal year 2018 from about five percent in fiscal year 2017.
- India is among the 15 leading exporters of agricultural products in the world.
- The Indian food industry is poised for huge growth, increasing its contribution to world food trade every year due to its immense potential for value addition, particularly within the food processing industry.
- Indian food and grocery market is the world's sixth largest, with retail contributing 70 per cent of the sales. The Indian food processing industry accounts for 32 per cent of the country's total food market, one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth.

TOTAL CULTIVATED AREA IN FY 2015

155.2m ha

TOTAL WILD HARVEST AREA

3.5m ha

TOTAL ORGANIC AREA

5.7m ha

GVA from agriculture, forestry and fishing

23tr INR

Market value of agricultural products

276.7bn USD

Highest market share in agricultural products

Cereals

- Arable land area: second largest in the world
 - Total cultivated land area (2016): 1.5 million hectares
- According to the World Bank, as of 2015, approximately 38 percent of the land area in India is suitable for agriculture.
 - Decreasing suitable land due to urbanization.
 - Cereals account for almost 46 percent of the Indian agricultural market.
 - The total organic area is about 5.71 million hectares.
- Rice and wheat are the two main food staples for Indians. India is the second largest producer of both rice and wheat across the world.

AGRICULTURE BUSINESS CATEGORIES



Agriculture Business can be divided into three broad categories and they are as follows:

01

Productive Resources like feed, seed, fertilizer, equipment, energy, machinery etc.

02

Agricultural Commodities like raw and processed commodities of food and fiber.

03

Facilitative Services like credit, insurance, marketing, storage, processing, transportation, packing etc.

BUSINESS OPPORTUNITIES

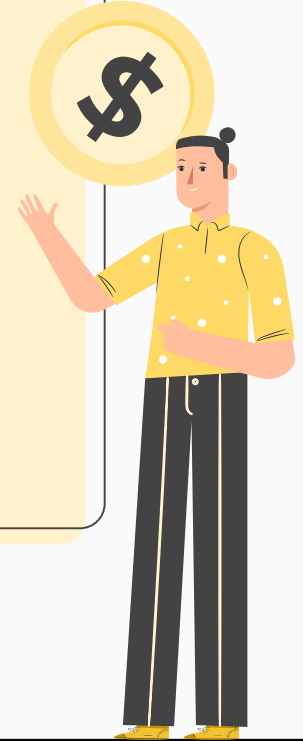


Challenges in traditional methods

- Rising cost of supplies
- a shortage of labor,
- changes in consumer preferences for transparency and sustainability.

Changing trends

- A huge growth in investment, with \$6.7 billion invested in the last 5 years and \$1.9 billion in the last year alone
- Technology innovations
 - indoor vertical farming,
 - automation and robotics,
 - livestock technology,
 - modern greenhouse practices,
 - precision agriculture and artificial intelligence, and
 - Blockchain
 - Crop Sensors ..and many more!



GOVERNMENT SCHEMES AND LICENSES REQUIRED

Initiatives taken:

100 percent FDI in marketing of food products and in food product E-commerce under the automatic route.

The Government of India is going to provide Rs. 2,000 crore (US\$ 306.29 million) for computerization of Primary Agricultural Credit Society (PACS) to ensure cooperatives are benefitted through digital technology.

In May 2020, the Government announced the launch of an animal husbandry infrastructure development fund of Rs 15,000 crore (US\$ 2.13 billion).

...and many more!





- Animal husbandry infrastructure development fund
- National Animal Disease Control Programme (NADCP)
 - Pradhan Mantri Samman Nidhi Yojana
- Transport and Marketing Assistance (TMA) scheme
 - Primary Agricultural Credit Society (PACS)
 - Pradhan Mantri Krishi Sinchai Yojana (PMKSY)
- Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters (SAMPADA)

...and many more!

source: thefarmpedia.com, best-agricultural-business-ideas-in-india-earn-profits



PLANT AND MACHINERY REQUIRED

- Agricultural Sprayers
- Power Sprayers
- Agro Shade Net
- Agricultural Equipment
- Agricultural Machinery
- Seeding Machine
- Cutting Machine
- Fertilizer Machinery
- Greenhouse Accessories
- Agricultural Ground and Crop Covers
- Disk Harrow
- Agricultural Pipes
- Tiller
- Grain Processing Machines
- Disinfectant Sprayers
- Planter Machines

and many more..!!

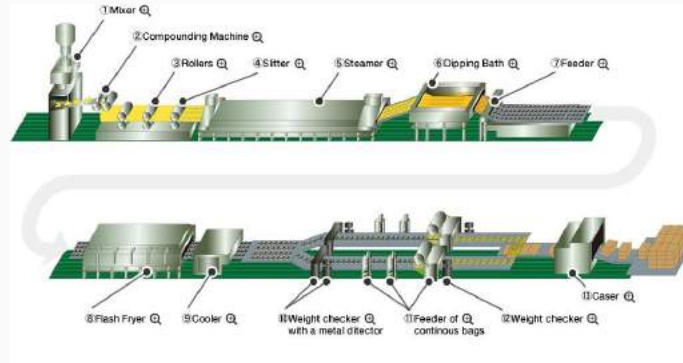


MANUFACTURING PROCESS

There are various steps involved from the production of crop to obtaining a product to sending it to customers.

Example of the manufacturing process of instant noodles using this machine:

- Mixing and kneading
- Forming noodle belt
- Weight checker with a metal detector
- Rolling
- Slitting
- Steaming
- Dipping bath
- Molding
- Dehydration
- Cooling
- Feeder of continuous bags
- Weight checker
- Caser



Example of the manufacturing process of coffee, from sowing seed to bringing it to a consumer's cup.

- *Drying and husking the cherries*
- *Cleaning and grading the beans*
 - *Decaffeinating*
 - *Roasting*
- *Instant coffee packaging*

CROPS THAT OFFER OPPORTUNITIES FOR VALUE ADDITION FOR VARIOUS INDUSTRIES



- Wheat flour and other ingredients.
 - Paddy
 - Soya
- Dry Coconut
- Coffee
- Pulses
- Wheat Seeds
 - Fruits
- Ginger & Garlic
 - Jackfruit
 - Sugarcane
- Fruits and other ingredients
 - Mustard seeds
- Fruit & Vegetables and more..!!

IDEAL LOCATION

01 GEOGRAPHIC CHALLENGES

- distance to sources of raw materials
- transportation infrastructure
- a reasonable employee commute.
- transporting materials and finished products to and from the site,

04 UTILITIES

- adequate electricity, gas, water and sewer access.

02 GOVERNMENT INCENTIVES

- tax breaks for economic improvement zones
- lower impact fees or a stipend to cover the cost of training the population.

05 FACILITY TYPE

- food safety, processing and structural requirements

03 ENVIRONMENTAL CONSIDERATIONS

- Waste water
- Air emissions

06 OTHERS

- Government regulations
- Economic Benefits and Challenges

MINIMUM INVESTMENT REQUIRED

The investment varies from

- Small scale plant to large scale plant
- Fixed cost and Non-recurring cost
- Area and availability of utilities: Weather, Land, Water
- Land Procurement: Buy/Rent
- Lab for growing crops
- Raw material procurement cost
- Packaging of the product
- Technology used
- Storage/ Warehouse



- Obtaining DSCs and DINs/DPINs for the directors/designated partners [Form DIR-3]
- Applying for name approval and reservation [Form-1 (for LLP) or Form INC-1]
- Preparing all documents required for registration, such as MOA & AOA/LLP Agreement, Consent Letters, Affidavits, Powers of Attorneys, etc.
- Filing application for registration of the desired type of company [through Form INC-2/INC-7/Form-2 (in case of LLP)]
- Filing all other forms with the concerned ROC.
- Making PAN, TAN, GSTIN, Bank Account, Import-Export Code, etc., for the agriculture company
- Getting necessary approvals and licenses from diverse regulatory or Governmental authorities
- Registering the trademarks and patents for the agriculture company
- Drafting flawlessly all legal and commercial documents, such as contracts or agreements related with marketing & sales, franchising, commercial dealings and transactions, etc.
- Mandatory compliances with various regulatory authorities
- And, many other tasks and activities associated with business management and corporate governance.

The process may differ for different business in agricultural sector.

AGRO ORGANIZATIONS & PROFESSIONAL SOCIETIES AT THE INTERNATIONAL LEVEL

- Tropical Agricultural Association (TAA)
- Biotechnology Industry Organization
- Asian Association for Agricultural Engineering (AAAE)
- World Sustainable Agriculture Association (WSAA)
- Agricultural Biotechnology Center
- Agricultural Biotechnology for Sustainable Productivity (ABSP)
- Consultative Group on International Agricultural Research (CGIAR)
- Consortium for International Crop Protection (CICP)
- Council for Agricultural Science and Technology

AGRO ASSOCIATIONS/ORGANIZATIONS AT THE NATIONAL LEVEL

- All India Shrimp Hatcheries Association
- Cashew Export Promotion Council
- Fertilizer Association of India
- IDA - Indian Dairy Association
- IPCA - Pest Control Association of India
- Indian Bio Organic Tea - Organic tea producers association
- Indian Center for Aquaculture & Fisheries Trade - Aquaculture industry association
- Jute Manufacturers Development Council - National agency for promotion of Jute

AGRO ASSOCIATIONS AT VARIOUS STATE LEVELS IN INDIA

- BOOE - Oilseeds and Oils Exchange of Mumbai
- Maharashtra State Agricultural Marketing Board
- Maharashtra Association For The Cultivation Of Science
- Marathawada Association of Small Scale Industries and Agriculture
- Calcutta Tea Traders Association
- Darjeeling Planters Association

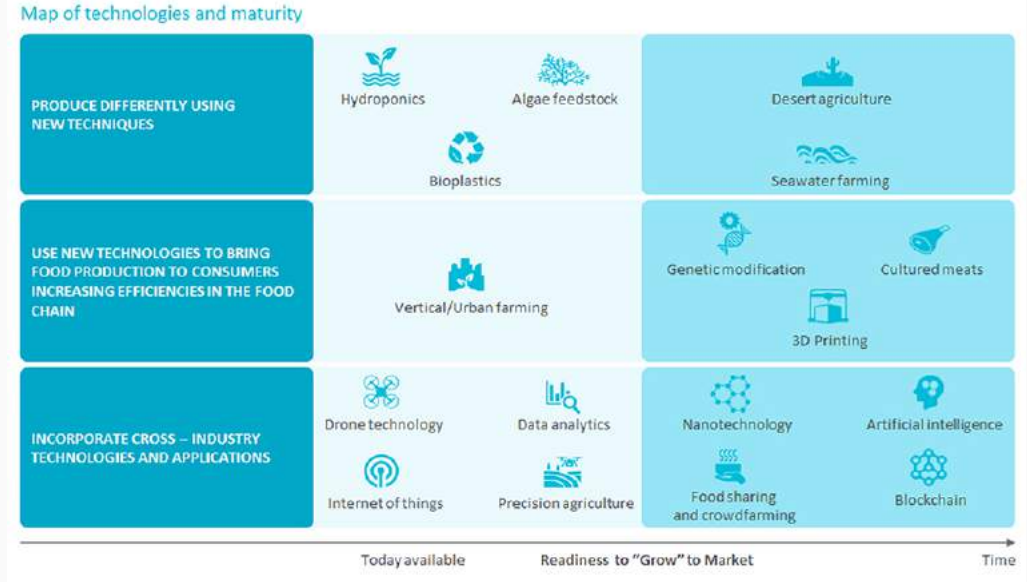
FUTURE OF THE INDUSTRY?

According to a report "*Agriculture 4.0 - The Future Of Farming Technology*", by World Government Summit in collaboration with Oliver Wyman in 2018. four main developments placing pressure on agriculture to meet the demands of the future:

- Demographics,
- Scarcity of natural resources,
- Climate change, and
- Food waste

Facts stated in the report:

- Demand is continuously growing: by 2050 we will need to produce 70 percent more food
- Agriculture's share of global GDP has shrunk to just 3 percent
- Roughly 800 million people worldwide suffer from hunger



Source: Oliver Wyman - Agriculture 4.0 - The future of farming technology

New technologies in market

- IoT sensors in field and on livestock
- Improved precision agriculture and the benefits
- The role of big data

MARKETING OF THE BUSINESS?

Agricultural marketing - buying and selling of agricultural products.

Earlier:

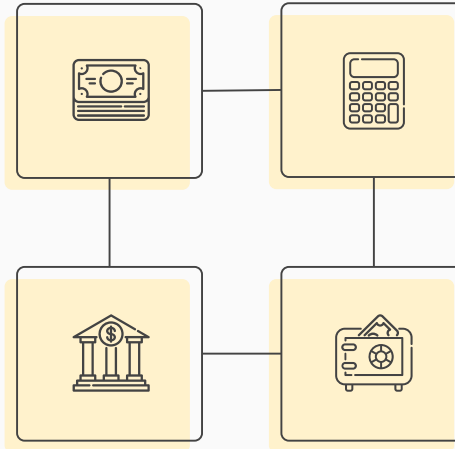
Village economy - more or less self-sufficient -
No difficulty in marketing-
Farmer sold his produce to the consumer on a cash or barter basis.

Today's agricultural marketing:

Undergoes a series of exchanges or transfers from one person to another before it reaches the consumer.

Three marketing functions involved :

- assembling
- preparation for consumption
- distribution



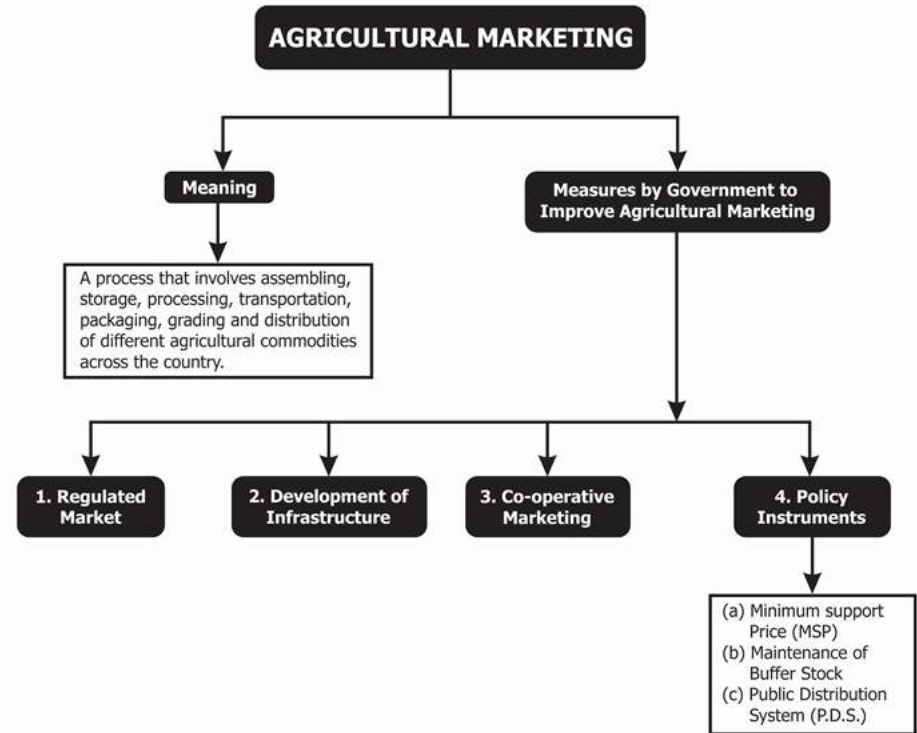
Central government organizations involved :

- Commission of Agricultural Costs and Prices
- Food Corporation of India
- Cotton Corporation of India
- Jute Corporation of India

More information under

- Importance of Agriculture Marketing
- Interests of Farmers, Manufacturers, Traders and Consumers in Agriculture Marketing System
- Functions of Agriculture Marketing
- Agro-business sector is dependent on agriculture produce characteristics which are as follows:
- Agriculture Marketing Jobs

Source: Byjus.com,
commerce,
agricultural-marketing



COLLEGES IN THIS FIELD

Different courses offered in the field of Agriculture:

- BSc in Agriculture
- Diploma in Animal Husbandry & Dairying
- Seed Science
- Bachelor of Agriculture
- Diploma in Horticulture
- Diploma in Organic Agriculture
- Various UG, PG, and PhD programs in the disciplines of:
 - Veterinary Science
 - Dairy Science
 - Fisheries
 - Biotechnology

and more..!

Various Colleges offering Agricultural courses in India:

- ICAR-National Dairy Research Institute (NDRI)
 - ICAR-Indian Agricultural Research Institute
 - GB Pant University of Agriculture & Technology
 - Chaudhary Charan Singh, Haryana Agriculture University
 - Professor Jayashankar Telangana State Agricultural University
 - Punjab Agricultural University
 - Jawaharlal Nehru Krishi Vishwa Vidyalaya
- And many more..!



THANKS

