Agricultural Production, Marketing and Food Security in India

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Abstract

Providing food for all has continued in the forefront of agricultural and development policy in India. With the research and development policy efforts, the country has achieved self-sufficiency in food grain production but still depends on imports for pulses and edible oils. Food security for everyone is a basic need and ensuring it is the primary responsibility of all governments. Providing food to each and every person is the most important issue for the Indian government, where more than 15 per cent of its total population is still undernourished and nearly 40 per cent of its children have suffered from malnourishment over the last many decades (FAO, 2016). Further, it is also higher by 4.50 million tonnes than the average production. Total Pulses production during 2019-20 is estimated at 23.01 million tonnes which is higher by 2.19 million tonnes than the Five years’ average production of 20.82 million tonnes. Total Oilseeds production in the country during 2019-20 is estimated at record 33.50 million tonnes which is higher by 1.98 million tonnes than the production of 31.52 million tonnes during 2018-19. Further, the production of oilseeds during 2019-20 is higher by 4.10 million tonnes than the average oilseeds production. Total production of Sugarcane in the country during 2019-20 is estimated at 358.14 million tonnes. The achievement of food security requires the utilization of both renewable and non-renewable agricultural resources and carries the risk of environmental degradation if managed inappropriately. India is home to about 25 per cent of the world's undernourished population. The world produces enough food to feed everyone, but the distribution of food is not ensured properly leading to food starvation for many in different countries. Food availability is a necessary condition for food security. India is
more or less self-sufficient in cereals but deficit in pulses and oilseeds as well as in livestock products.

**Key Words:** Agricultural production, marketing and food security in India: Hunger, Starvation and Etc.

### I. INTRODUCTION

The concept of providing people with food security extends from the individual and local community. Agricultural marketing covers the services involved in moving an agricultural product from the farm to the consumer. These services involve the planning, organizing, directing and handling of agricultural produce in such a way as to satisfy farmers, intermediaries and consumers. Numerous interconnected activities are involved in doing this, such as planning production, growing and harvesting, grading, packing and packaging, transport, storage, agro- and food processing, provision of market information, distribution, advertising and sale. Effectively, the term encompasses the entire range of supply chain operations for agricultural products, whether conducted through hoc sales or through a more integrated chain, such as one involving contract farming. Individuals within a society become more specialized in their economic activities; they come to rely upon others to supply at least some of the products and services which they need. Thus begins a process of exchange between buyers and sellers. For a while buyers and sellers remain in immediate contact and each party is able to determine what the other needs and values and, therefore, will be willing to exchange. As the economy develops the number and types of exchanges expand, there is a concomitant need for increasingly specialized marketing services such as physical distribution, storage, grading, and market information gathering and so. This leads into an explanation of the concept of marketing. The nature of marketing systems is also discussed. This is followed by a description of the principal functions of marketing and suggestions as to how these can be conducted in a customer orientated fashion. Consideration is then given to the changes that development will bring to the food industries of developing countries and the implications for agriculture as the supplier of raw materials to these industries. The opening section pursues and argument as to why marketing is of increasing importance to the food and agricultural sectors in developing. The remainder is devoted to an overview of the operations of the principal forms of agricultural and food marketing enterprise to be found in developing. In addition to private enterprise, the operations of marketing boards and co-operatives are discussed.

### II. OBJECTIVES

This Paper is intended to help the reader understand:

1. The relevance of marketing to the agricultural and food sectors in developing.
2. Why it is necessary to implement the marketing concept throughout food and agricultural marketing systems
3. The modes of operation of some of the major types of agricultural and food marketing enterprises
Data and Methodology

Definitions of Agricultural Marketing
The term agricultural marketing is composed of two words- agriculture and marketing. Agriculture, generally means growing and/or raising of crops and livestock while, marketing encompasses a series of activities involved in moving the goods from the point of production to point of consumption. Many scholars have defined agricultural marketing and incorporated essential elements of time, place, form and passion utility. Some of the definitions of agricultural marketing are given below;

- Human activity directed at satisfying the needs and wants through exchange process Performance of business activities that directs the flow of goods and services from producers to users.
- The study of agricultural marketing comprises all the operations, and the agencies conducting them, involved in the movement of farm produced foods; raw materials and their derivatives, such as textiles, from the farms to the final consumers, and the effect of such operations on the farmers, middlemen and consumers (Thomsen). This definition does not include the input side of agriculture.
- Agricultural marketing is a process which starts with a decision to produce a saleable farm commodity, involves all the aspects of market structure or system, both financial and institutional, based on technical and economic considerations, and includes pre- and post-harvest operations, assembling, grading, storage, transportation and distribution (National Commission on Agriculture, 1976).

Problems in agricultural marketing in India
Indian system of agricultural marketing suffers from a number of defects. As a consequence, the Indian farmer is deprived of a fair price for his produce. The main defects of the agricultural marketing system are discussed here. Improper Warehouses: There is an absence of proper ware housing facilities in the villages. Therefore, the farmer is compelled to store his products in pits, mud-vessels, storehouses, etc. These unscientific methods of storing lead to considerable wastage. Approximately 1.5% of the produce gets rotten and becomes unfit for human consumption. Due to this reason supply in the village market increases substantially and the farmers are not able to get a fair price for their produce. The setting up of Central Warehousing Corporation and State Warehousing Corporation has improved the situation to some extent organic farming represents a special sector within the agriculture industry which is currently gaining more and more popularity. It applies a method of crop production which abstains the use of pesticides, fertilizers, antibiotics, and growth hormones.
Importance of Agricultural Marketing in India

Agricultural marketing plays an important role not only in stimulating production and consumption, but also in accelerating the pace of economic development. It is the most important multiplier of agricultural development. In the process of shifting from traditional to modern agriculture, marketing emerges as the biggest challenge because of production surpluses generated by the shift. The importance of agricultural marketing is revealed from the following:

1. Increase in Farm Income
   An efficient marketing system ensures higher levels of income for the farmers reducing the number of middlemen or by restricting the cost of marketing services and the malpractices, in the marketing of farm products. An efficient system guarantees the farmers better prices for farm products and induces them to invest their surpluses in the purchase of modern inputs so that productivity and production may increase. This again results in an increase in the marketed surplus and income of the farmers. If the producer does not have an easily accessible market-outlet where he can sell his surplus produce, he has little incentive to produce more.

2. Widening of Markets
   An efficient and well-knot marketing system widens the market for the products by taking them to remote corners both within and outside the country, i.e., to areas far away from the production points. The widening of the market helps in increasing the demand on a continuous basis, and thereby guarantees a higher income to the producer.

3. Growth of Agro-based Industries
   An improved and efficient system of agricultural marketing helps in the growth of agro based industries and stimulates the overall development process of the economy. Many industries like cotton, sugar, edible oils, food processing and jute depend on agriculture for the supply of raw materials.

4. Price Signals
   An efficient marketing system helps the farmers in planning their production in accordance with the needs of the economy. This work is carried out through transmitting price signals.

5. Adoption and Spread of New Technology
   The marketing system helps the farmers in the adoption of new scientific and technical knowledge. New technology requires higher investment and farmers would invest only if they are assured of market clearance at remunerative price.

6. Employment Creation
   The marketing system provides employment to millions of persons engaged in various activities, such as packaging, transportation, storage and processing. Persons like commission agents, brokers, traders, retailers, weigh men, hamals, packagers and regulating staff are directly employed in the marketing system. This apart, several others find employment in supplying goods and services required by the marketing system.
7. Addition to National Income

Marketing activities add value to the product thereby increasing the nation's gross national product and net national product.

8. Creation of Utility

Marketing is productive, and is as necessary as the farm production. It is, in fact, a part of production itself, for production is complete only when the product reaches a place in the form and at the time required by the consumers. Marketing adds cost to the product, but, at the same time, it adds utilities to the product. The following four types of utilities of the product are created by marketing:

Agricultural Products and Production in India

The subject of agricultural marketing has been treated as separate discipline because agricultural commodities possess special characteristics than manufactured commodities. The special characteristics of agricultural commodities are given below:

1. Seasonality of production

Farm products are produced in a particular season of the year. They cannot be produced throughout the year. It leads to intra-year seasonality in the prices. In the harvest season, prices of farm products fall. But the supply of manufactured products can be adjusted or made uniform throughout the year.

2. Bulkiness of products

The characteristics of bulkiness of most farm products make their transportation and storage difficult and expensive. This fact also restricts the location of production to somewhere near the place of consumption or processing. The price spread in bulky products is higher because of the higher costs of transportation, handling and storage.

3. Variation in quality of products

There is a large variation in the quality of agricultural products, which makes their grading and standardization somewhat difficult. There is no such problem in manufactured goods because they can be produced of uniform quality.

4. Irregular supply of agricultural products

The supply of agricultural products is uncertain and irregular because of the dependence of agricultural production on natural conditions. With the varying supply, the demand remaining almost constant, the prices of agricultural products fluctuate substantially more than that of manufactured products.

5. Small size of holding and scattered production

Farm products are produced throughout the length and breadth of the country and most of the producers are of small size. This makes the estimation of supply difficult and also creates problem in marketing.
6. Product pricing

Apart from the problem in estimation of total supply in small-farm agriculture, an individual farmer faces a typical marketing situation. As his share in total supply is very small, he cannot influence the market supply. Further, owing to the inelastic nature of demand of most of the farm products, the market price for his product is determined independent of his supply. It is in this context that an individual farmer is supposed to be operating in a buyer's market. Contrary to this, most of the manufacturing firms, owing to their larger share in the market, can control, to some extent, the supply and thus influence the price of the product they sell.

THE SALE AND MARKETING CONCEPTS

We shall once again discuss the Sale & Marketing concepts & see how we can apply these to the local conditions of agricultural products.

The Sale concept

Short term, product oriented, not enough focus on customer satisfaction & continuity of business. One time transaction. This concept is dominating in our markets. In the short term we seek successful sale of the products available.

The Marketing concept

Customer oriented, uses integrated marketing -- the 4 Ps & aims at generating customer satisfaction. Essentially has a long term perspective of continuity of business. In the long term, through use of the marketing concept we seek strengthening of the linkages between the producer, the distribution chain & the buyers enabling them to share mutual benefits, with a long term perspective.

Modes of Marketing

- a) Product (quality) b) Price (affordable & market linked) c) Promotion (for creating awareness) d) Placement (timely & through efficient distribution chain)
- Modes of transportation
- Human /animal mode of transport for smaller quantities / shorter distances?
- Vehicles with enough roads?
- Any other?
- Modes of communication
- Telephones, postal facilities, personal interface etc.?

DRIVERS OF GROWTH OF AGRICULTURAL MARKETING IN INDIA

1. Technological change in Agriculture

Technological developments in agriculture, such as the evolution of high yielding varieties of seeds, increased use of modern inputs and cultivation practices in the agricultural sector, have resulted in substantial increase in farm production. The marketed surplus of agricultural produce has therefore increase. This has resulted into the growth on the marketing system.
2. Specialization

The tendency towards increasing specialization by farmers and regions in certain crops or livestock has resulted in an increase in their efficiency and the breakdown in the self-sufficiency of the family unit. Specialization, thus, has resulted in increased production, which is the base for the growth of marketing and, in turn, of the economy. This has also resulted in improved use efficiency of natural resources like land and water.

3. Urbanization

Urban people are the main buyers of agricultural surpluses. The urban population of India has increased significantly which necessitated a faster growth of agricultural marketing activities. The rate of growth of urban population is much higher than rural population (due to rural-urban migration) which has further increased the importance of marketing system for farm products.

4. Transportation and communication

The increase in transportation and communication facilities has widened the market for farm products. The length and breadth of the market to which a product is taken from the production areas have increased. In the absence of these facilities, the movement of produce from one area to another was limited, and the consumption of a product was restricted only to the areas of production or; at the most, to nearby areas. The scope of marketing has, thus increased manifold.

CLASSIFICATION OF MARKETS

Markets may be classified based the different dimensions as follows;

1. On the basis of location or place of operation

   a. Village market: A market which is located in a small village, where major transaction takes place among the buyers and sellers of a village, is called village market.

   b. Primary market: These markets are located in towns near the centres of production of agricultural commodities. In these markets, a major part of the produce brought for sale by the producer-farmers themselves. Transactions in these markets usually take place between farmers and primary traders.

   c. Secondary wholesale market: These markets are located generally at district headquarters or important trade centres or railway junctions. The major transactions in commodities in these markets take place between primary/village traders and wholesalers. The bulk of arrival in these markets is from other markets. The produce in these markets in handled in large quantities. Therefore, there are specialized marketing agencies (commission agents, brokers, etc) performing different marketing functions.

   d. Seaboard markets: Markets which are located near the seaboard and are meant mainly for the import and or export of goods are kwn as seaboard markets.
2. On the basis of area coverage
   a. Local or village market: A market where buying and selling activities are confined among the buyers and sellers belonging to the same village or nearby villages. These markets usually exist for the perishable commodities in small lots.
   b. Regional market: A market in which buyers and sellers for a commodity are drawn from a larger area than the local markets. Regional markets in India usually exist for foodgrains.
   c. National market: A national market, buyers and sellers are spread at the national level. Earlier national markets existed for only durable goods like jute and tea. But, with the expansion of roads, transport and communication facilities, the markets for most of the agricultural commodities have taken the form of national market.
   d. World or international market: A market in which the buyers and sellers are drawn from more than one country or the whole world. These markets exist in the commodities which have world-wide demand and/or supply, such as coffee, machinery, gold, silver, etc. In recent years many countries are moving towards a regime of liberal international trade in agricultural products like raw cotton, sugar, rice and wheat.

3. On the basis of time span
   a. Short period market: The markets which are held only for a day or few hours are called short-period markets. The products dealt with in these markets are of a highly perishable nature such as fish, fresh vegetables and liquid milk. In this market, prices are governed mainly by the extent of demand rather than by the supply of the commodity.
   b. Periodic market: The periodic markets are congregation of buyers and sellers at specified places either in villages, semi-urban areas or some parts of urban areas on specific days and times. These markets are held weekly, biweekly, fortnightly or monthly according to the local traditions.
   c. Long period market: These markets are held for a longer period than the short period market. The commodities traded in these markets are less perishable and can be stored for some time like foodgrains and oilseeds. The prices are governed both by the supply and demand forces.
   d. Secular market: These are the markets for permanent nature. The commodities traded in these markets are durable in nature and can be stored for many years. Examples are markets for machinery and manufactured goods.

4. On the basis of volume of transaction
   a. Wholesale market: A wholesale market is one in which commodities are bought and sold in large lots or in bulk. These markets can be further classified as primary, secondary and terminal wholesale markets.
   b. Retail markets: A retail market is one in which commodities are bought for and sold to the consumers as per their requirement. Transaction in these markets takes place between retailers and the consumers. The retailers purchase the goods from the wholesale market and sell in small lots to the consumers.
c. A retail market means that the buyers are generally the ultimate consumers, whereas in wholesale market the buyers can be wholesalers or retailers. But sometimes bulk consumers also purchase from the wholesale markets. The quantity transacted in the retail markets is generally smaller than the wholesale markets.

5. **On the basis of number of commodities in which transaction takes place**
   a. General market: A market in which all types of commodities, such as foodgrains, oilseeds, fibre crops, gur, etc., are bought and sold is known as general market.
   b. Specialized market: A market in which transactions take place only in one or two commodities is known as specialized market. Eg. Foodgrains markets, vegetables market, wool market and cotton market.

6. **On the basis of degree of competition**
   a) **Perfect markets**: a perfect market is one in which following conditions hold good
      1. There are large number of buyers and sellers
      2. All buyers and sellers have perfect knowledge of demand, supply and prices
      3. Prices at any time are uniform over the geographical area, plus or minus the cost of transportation from surplus to deficit areas
      4. Prices are uniform at any one place over the periods of time, plus or minus the cost of storage from one period to another
      5. Prices of different forms of the product are uniform, plus or minus the cost of converting the product from one form to another
   b) **Imperfect markets**: The markets in which the condition soft perfect competition is lacking are characterized as imperfect markets. Based on the degree of imperfection, following situations may be identified;
      1) Monopoly market: In monopoly market, there is only one seller of a commodity. Indian farmers operate in monopoly marker when purchasing electricity for irrigation. When there is only on buyer of a product, the market is termed as monophony market. The sugarcane farmers in the catchment areas of a sugar factory generally face a monophony market situation.
      2) Duopoly market: A duopoly market is one which has only two sellers of a commodity. The market situation in which there are only two buyers of a commodity is known as duopoly market.
      3) Oligopoly market: A market in which there are more than few but still a few sellers of a commodity is known as oligopoly market. A market having a few (more than two) buyers is known as Oligopoly market.
      4) Monopolistic market competition: When a large number of sellers deal in heterogeneous and differentiated form of a commodity, the situation is called monopolistic competition. The difference is made conspicuous by different trade marks on the product. Different prices prevail for the same basic product. For example. Farmers have to chose between various makes of insecticides, pump sets, fertilizers and equipments.
7. On the basis of nature of commodity

a. Commodity market: A market which deals with the goods and raw materials, such as wheat, barley, cotton, fertilizers, seeds, etc., are termed as commodity market.
b. Capital market: The markets in which bonds, shares and securities are bought and sold are called capital market. Eg. Money market, share market.

8. On the basis of stage of marketing

a. Producing markets: Those markets which mainly assemble the commodity for further distribution to other markets are termed as producing markets. Such markets are located in producing areas.
b. Consuming markets: Markets which collect the produce for final disposal to the consuming population are called consumer markets. Such markets are generally located in areas where production is inadequate or in thickly populated urban centres. The urban areas, including cities are consuming markets for agricultural commodities.

9. On the basis of type of population served

a. Urban market: A market which serves mainly the population residing in urban area is called an urban market.
b. Rural market: The word rural market usually refers to the demand originating from the rural population.

10. On the basis of market functionaries and accrual of marketing margins

On the basis of as to who are the market functionaries and to whom the market margin accrue, market may be classified as,

a. Farmers market,
b. Cooperative market and
c. General market.

Indian Agriculture, Modernization and Sustainability

The share of Indian agriculture and allied sector in GVA of the economy stands at 20.2 percent for the year 2020-21 as per the second advanced estimates released by given that an enormous proportion of Indian population is employed in agriculture, development of Indian agriculture is key to progress of the entire nation. This can be done by increasing productivity and efficiency through the usage of advanced technology that maintains sustainable growth, is greener and has smaller carbon footprint. For instance, a research published in Springer studies greenhouse gas mitigation options for rice cultivation in India through machine transplanting (MTR) and direct seeded rice (DSR). The study shows that MTR and DSR technologies hold big potential for lowering GHG emission, reducing labor requirements, increasing yield & profitability and saving seeds compared to conventional transplanting. Therefore,
greener options to substitute and improve agricultural productivity need to be explored. The cumulative rainfall in the country during the monsoon season (June to September, 2019) has been 10% higher than Long Period Average (LPA). Accordingly, the production of most of the crops for the agricultural year 2019-20 has been estimated higher than their normal production. These estimates are subject to revision on account of more precise information flowing over the time. As per 3rd Advance Estimates, the estimated production of major crops during 2019-20 is as under:

**TABLE NO 1**

**AGRICULTURE & ALLIED SECTOR IN TOTAL ECONOMY**

*(AT CURRENT PRICES)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture, Forestry &amp; Fishing</th>
<th>Crops</th>
<th>Livestock</th>
<th>Forestry and logging</th>
<th>Fishing and Aquaculture</th>
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<tr>
<td>2011-12</td>
<td>18.6</td>
<td>12.1</td>
<td>4.0</td>
<td>1.5</td>
<td>0.8</td>
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<tr>
<td>2012-13</td>
<td>18.2</td>
<td>11.8</td>
<td>4.0</td>
<td>1.5</td>
<td>0.9</td>
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<tr>
<td>2013-14</td>
<td>18.6</td>
<td>12.1</td>
<td>4.1</td>
<td>1.5</td>
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<tr>
<td>2014-15</td>
<td>18.2</td>
<td>11.2</td>
<td>4.4</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>2015-16</td>
<td>17.7</td>
<td>10.6</td>
<td>4.6</td>
<td>1.5</td>
<td>1.1</td>
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<tr>
<td>2016-17</td>
<td>18.0</td>
<td>10.6</td>
<td>4.8</td>
<td>1.5</td>
<td>1.1</td>
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<tr>
<td>2017-18</td>
<td>18.3</td>
<td>10.5</td>
<td>5.1</td>
<td>1.4</td>
<td>1.2</td>
</tr>
<tr>
<td>2018-19</td>
<td>17.6</td>
<td>9.7</td>
<td>5.1</td>
<td>1.5</td>
<td>1.2</td>
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<tr>
<td>2019-20</td>
<td>18.4</td>
<td>10.7</td>
<td>5.2</td>
<td>1.3</td>
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**Source:** National Statistical Office (NSO)

As per Second Advance Estimates of National Income, 2020-21 released on 26th February 2021

**Note:** 1. Gross Domestic Product (GDP) includes GVA taxes on Products including import duties and fewer subsidies on Products,
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<td>Paddy</td>
<td>Common</td>
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<td>1815</td>
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<td>1888</td>
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<td>Jowar</td>
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<td>1700</td>
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<td>2550</td>
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<td></td>
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<td>1630</td>
<td>1725</td>
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<td>1900</td>
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<td>1700</td>
<td>1760</td>
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<tr>
<td>5</td>
<td>A (Tur)</td>
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<td>5400</td>
<td>6975</td>
<td>7050</td>
<td>7196</td>
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<td>6</td>
<td>Moong</td>
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<td>7</td>
<td>Cotton</td>
<td>Medium Staple</td>
<td>3860</td>
<td>4020</td>
<td>5150</td>
<td>5255</td>
<td>5515</td>
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<td></td>
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<td>Long Staple</td>
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<td>4320</td>
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<td>4100</td>
<td>5388</td>
<td>5650</td>
<td>5885</td>
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<td>Soya been (yellow)</td>
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<td>3050</td>
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<td>Wheat</td>
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<td>1735</td>
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**Source:** National Statistical Office (MSP)

# Figures in brackets indicate percentage increase. * Including Bonus of Rs. 100 per quintal.
^ Including Bonus of Rs. 200 per quintal.  
^^ Including Bonus of Rs. 425 per quintal.  
@ Including Bonus of Rs. 150 per quintal

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Foodgrain production in the country is estimated at record 295.67 million tonnes which is higher by 10.46 million tonnes than the production of foodgrain of 285.21 million tonnes achieved during 2018-19. However, the production during 2019-20 is higher by 25.89 million tonnes than the previous five years’ (2014-15 to 2018-19) average production of foodgrain. Total production of Rice during 2019-20 is estimated at record 117.94 million tonnes. It is higher by 8.17 million tonnes than the five years’ average production of 109.77 million tonnes. Production of Wheat during 2019-20 is estimated at record 107.18 million tonnes. It is higher by 3.58 million tonnes as compared to wheat production during 2018-19 and is higher by 11.02 million tonnes than the average wheat production of 96.16 million tonnes. Production of Nutri / Coarse Cereals estimated at record 47.54 million tonnes is higher by 4.48 million tonnes than the production of 43.06 million tonnes achieved during 2018-19. Further, it is also higher by 4.50 million tonnes than the average production. Total Pulses production during 2019-20 is estimated at 23.01 million tonnes which is higher by 2.19 million tonnes than the Five years’ average production of 20.82 million tonnes. Total Oilseeds production in the country during 2019-20 is estimated at record 35.50 million tonnes which is higher by 1.98 million tonnes than the production of 31.52 million tonnes during 2018-19. Further, the production of oilseeds during 2019-20 is higher by 4.10 million tonnes than the average oilseeds production. Total production of Sugarcane in the country during 2019-20 is estimated at 358.14 million tonnes. Production of Cotton is estimated at record 36.05 million bales (of 170 kg each) is higher by 8.01 million bales than the production of 28.04 million bales during 2018-19. Production of Jute & Mesta is estimated at 9.92 million bales (of 180 kg each).
III. CONCLUSIONS

Increasing agricultural production is critical for ensuring India’s food security, but this may not be sufficient to meet the increasing demand. Where organizing of cooperatives is a difficult task, it is best to identify & establish separate distribution channels of agents traders. The input suppliers, owing to their contact with the farmers, could be organized to work for promoting business between farmers & farmers. Traders have a far better understanding of business than farmers, who have a producer’s outlook. Traders may also have their own transport & storage facilities or may be able to hire these out. Organized trade can surely boost production & marketing of all crops. The country has achieved a lot towards reducing undernourishment and malnourishment in the country through targeted approach. But still a large section of the population is suffering from undernourishment. The food security programme at present is challenged by multiple factors like limited land and water availability, dwindling natural resources, climate change, labour shortage, etc. To achieve the goal of food security on sustainable basis, food availability needs to be improved through reductions in harvest and post-harvest losses at farm, retail and consumer levels. Agricultural marketing infrastructure and integrating supply chain for food commodities is highly needed, which is gradually improving. Perfect synchronization of institutions,

IV. REFERENCE

1. Course AgEcon530 (Agricultural Marketing): Course instructor: S.K. Srivastava, Scientist (Agril. Economics), NCAP, New Delhi-110 012
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