

# Global Statues Of Agriculture And Its Revolution During Covid19

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## ABSTRACT

Agriculture is the backbone of the Indian economy. We assess the immediate challenges that covid19 has posed to the farm sector and suggest mitigation measures to ensure a sustainable food system in the post-crisis period.. Nearly 70% of the total population derived their livelihood from agriculture itself. The ongoing health crisis around covid19 has affected all walks of life effecting the economy of all the countries. We assess the immediate challenges that covid19 has posed to the farm sector and suggest mitigation measures to ensure a sustainable food system in the post-crisis period. Major crops of India are wheat, rice, maize and millets, Jute and cotton, tea and coffee etc. It should be noticed that in the year 2018, the agriculture in India had contributed 50% of the nation's total employment, 18% of the country's gdp. It has covered up 43% of the country's land, holding 1<sup>st</sup> position in world in terms of net cropped area. Agriculture has the potential to contribute 25-30% of the country's GDP providing employment upto 70-75% & upto 20% of the total exports by the year 2022 if we make proper use of the pandemic. During crunch time of covid-19 & such pandemic, with a scenario of lockdown & social distancing, the whole world is struggling to maintain its economy. The objective of this paper is to focus on economic growth in India with Agriculture.

**KEYWORD:** Agriculture Revolution, Agriculture practice, Agricultural growth, Agriculture in GDP, covid19.

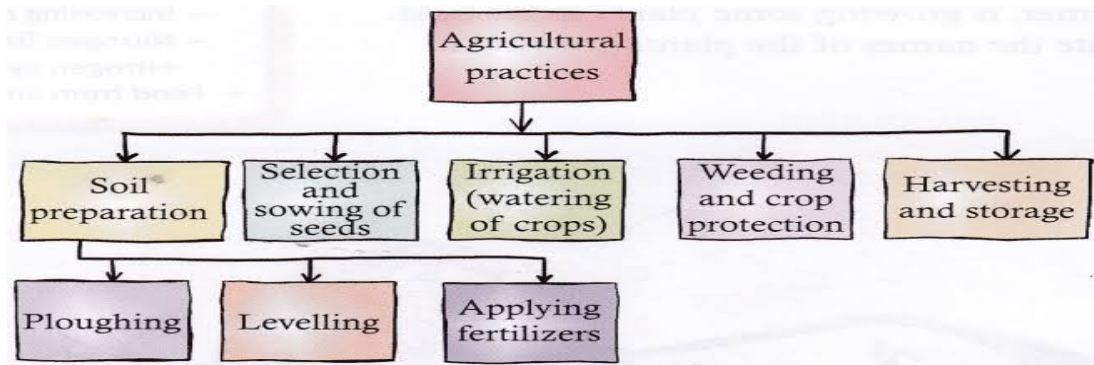
## INTRODUCTION

In India 70% of people depends on agriculture. The geographical position of our country has been very congenial to agricultural activities. The present state of Indian agriculture has come through gradual changes and it is hard to believe what the position of our agriculture had been before COVID-19. For most of the farmers, agriculture was a means of subsistence. Nearly 50% of the total population derived their livelihood from agriculture itself (Aiyer 1949). The villagers were self-sufficient to barter their products with each other.

During these challenging times, how does Indian agriculture respond to the crisis and how do government measures affect 140 million farm households across the country and thereafter impact the economy of a very important country in the developing world? The agricultural sector gained a respectable place as an agent of economic development only after the success of the green revolution in developing countries (Dhawan. 1988, Papen 1976).. This is mainly because of several perceived shortcomings of the agricultural sector, such as its high dependence on natural resources to generate low-value products and susceptibility to economic fluctuations. Other reasons included low price, income elasticity of demand, poor linkage with other sectors and its extensive nature of cultivation. The ongoing health crisis around covid19 has affected all walks of life.

## AGRICULTURE IN PRACTICE

India’s agricultural sector depends on migrant labourers for several agricultural practices (Mishra, 2009, 2013., 2015) Besides, Several irrigation practices are also employed (Rajapure 2012) They account for agricultural practice recorded about 11% of the non-self-employed labour force (Figure 1). The types of seasonable crops produced in India shown in Table 1. Reverse migration due to covid-19 provides an opportunity for hinterland administration to engage the returned labourers in gainful employment, and the sole short-term option is to leverage the potential of agriculture.



**Figure 1:** Various steps of agriculture practice.

CASH CROP	MAJOR PRODUCING STATES-WISE	SUITABLE SOIL TYPE	CLIMATIC CONDITIONS AND TEMPERATURES	POSITION OF INDIA IN WORLD
Jute	West Bengal, Bihar	Jute grows well on alluvial soil	Jute requires high temperature, heavy rainfall and humid climate.	1 <sup>st</sup> position in production and exporter
Cotton	Gujarat, Maharashtra	Cotton grows best on black and alluvial soils.	Cotton requires high temperature, light rainfall, two hundred and ten frost-free days and bright sunshine for its growth.	1 <sup>st</sup> position in production and 3 <sup>rd</sup> position in exporter
Sugarcane	Uttar Pradesh, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Bihar, Punjab and Haryana.	It can be grown on a variety of soils and needs manual labour from sowing to harvesting.	It grows well in hot and humid climate with a temperature of 21°C to 27°C and an annual rainfall between 75cm. and 100cm. Irrigation is required in the regions of low rainfall.	1 <sup>st</sup> position in production and 3 <sup>rd</sup> position in exporter

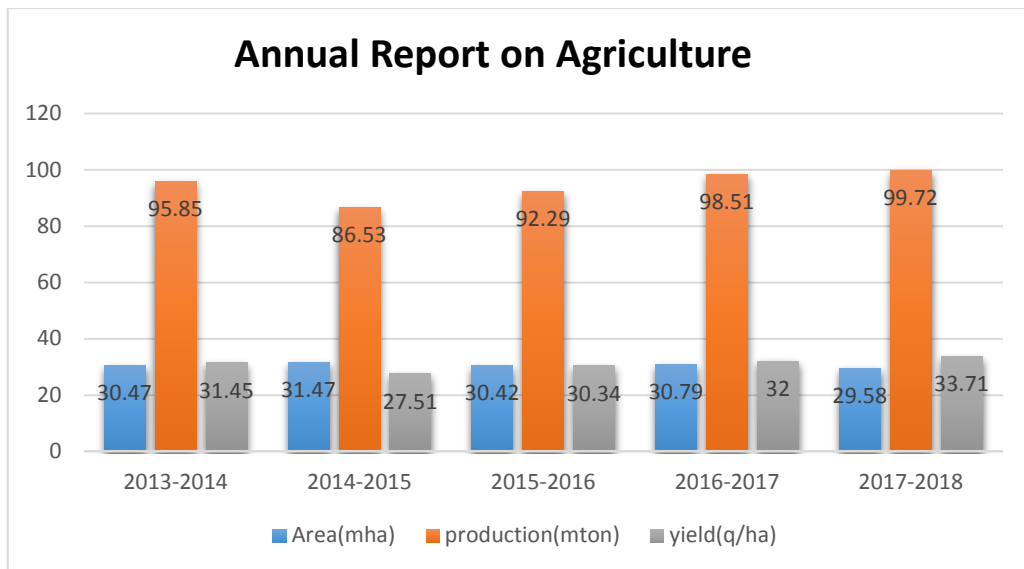
**Table 1:** Illustration of varied crops status in india with climatic scenario (Indian Brand Equity Foundation & Monal 2015)

<b>FOOD CROPS</b>	<b>TOPPRODUCING STATES IN INDIA</b>	<b>SUITABLE SOIL TYPE</b>	<b>CLIMATIC CONDITIONS AND TEMPERATURES</b>	<b>POSITION OF INDIA IN WORLD</b>
Wheat	Uttar pradesh, punjab and madhya pradesh	Thrives best in well drained loamy soil.	Wheat requires moderate temperature and rainfall during growing season and bright sunshine at the time of harvest.	2 <sup>nd</sup> position in production
Rice	West bengal, uttar pradesh, andhra Pradesh	Grows best in alluvial clayey soil, which can retain water.	Rice needs high temperature, high humidity and rainfall.	2 <sup>nd</sup> position in production and 1 <sup>st</sup> position in exports
Millets	Rajasthan, maharashtra, Gujarat	Millets grow well on well-drained loamy soils. They will not tolerate water-logged soils or extreme drought. Proso millet does not perform well on coarse, sandy soils.	Millets require warm temperatures for germination and development and are sensitive to frost.	1 <sup>st</sup> position production and 1 <sup>st</sup> position in exports
Gram	Madhya pradesh, tamil nadu	Fertile sandy & loam soil in various parts of india provide perfect condition for chickpea growth.	It is mostly grown under rain fed conditions in arid and semi-arid areas around the world.	1 <sup>st</sup> position in production and 8 <sup>th</sup> position in exports
Pulses	Madhya pradesh, uttar pradesh, rajasthan, maharashtra and karnataka.	Pulses need less moisture and survive even in dry conditions.	All these crops except arhar help in restoring soil fertility by fixing nitrogen from the air	1 <sup>st</sup> position in production and exporter

### **Agriculture grow in Indian Economy during pandemic situation**

Notwithstanding the many lacunae in this model, India is today a global leader in their production. Most of the Indians are directly or indirectly depending on the agriculture. Some are directly attached with the farming and some other people are involved in doing business with these goods. India has the capacity to produce the food grains which can make vast difference in Indian Economy. According to the fourth Advance Estimates of Production of food grains for 2013-14, aggregate food grain production is assessed to be 264.77 million tons (MT).Export of spices from India are relied upon to reach US\$ 3 billion by 2016-17, on

the back of imaginative promoting strategies, inventive bundling, quality in quality and an in number appropriation system (Figure 2). The Indian flavors business is pegged at Rs 40,000 crore (US\$ 6.42 billion) every year (Arjun 2013), of which the marked portion represents 15%.Economic development also requires a growing labour force. In an agricultural country most of the workers needed must come from the rural population.. It may do so by substituting animal power for human power or by gradually introducing labour-saving machinery. A country seeking to develop its economy may be well advised to give a significant priority to agriculture. Experience in the developing countries has shown that agriculture can be made much more productive with the proper investment in irrigation systems, research, fertilizers, insecticides, and herbicides. As a result, employment shall also increase & thus the problem of unemployment can be reduced to a large extent. This will result to surplus of crops production that will lead to exports which in return will bring foreign reserves (Sharma et al. 1998, Yadav et al. 2012, Williy et al 1979). This shall benefit the country’s economy & also upgrade the standard of living of the farmers. Another benefit of this will be that the unused land shall turn into cultivable land & that will take a step further to restrict soil pollution.

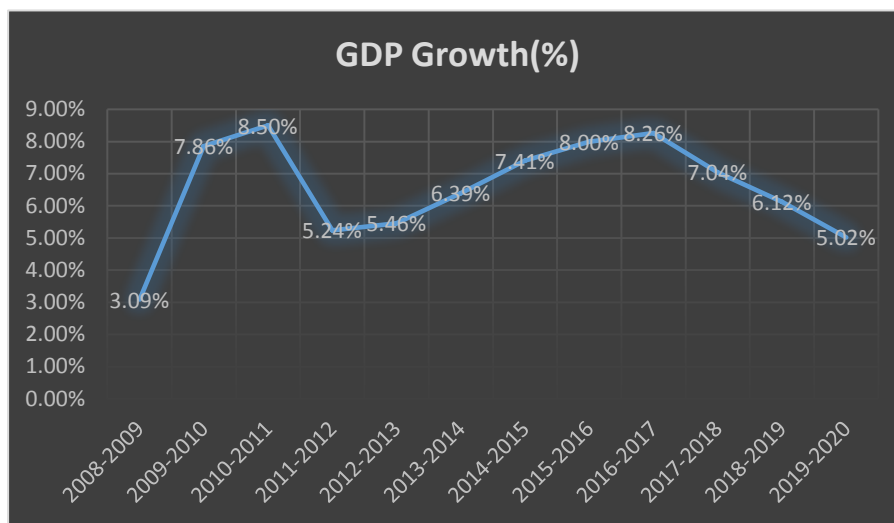


**Figure 2:** Annual report Indian Agriculture through farming. (Agriculture Statistics by Department of Agriculture and cooperation)

### Status of GDP Rate Growth in India

Being an agriculture oriented nation, India can emphasize on farming & rise newer heights fulfilling the needs of its citizens & along with supplying to other parts of the world. In India, the growth rate in GDP measures the change in the seasonally adjusted value of the goods and services produced by the Indian economy during the quarter. India is the world’s tenth largest economy and the second most populous.. Indian Agriculture is playing a very important role both in the internal and external trade of the country. Agricultural products like tea, coffee, sugar, tobacco, spices, cashew-nuts etc. are the main items of our exports and constitute about 50 per cent of our total exports. Besides manufactured jute, cotton textiles and sugar also contribute another 20 per cent of the total exports of the country (Ministry of External Affairs (2015)) (Indian GDP growth rate 1961-2020, NABARD 2018-2019). Thus nearly 70 per cent of India’s exports are originated from agricultural sector. Further,

agriculture is helping the country in earning precious foreign exchange to meet the required import bill of the country. Agriculture employs country's 50% population. And yet it produces only 15–17% of the country's GDP. The Industries Employ about 25–30% of the Indian population and produce around 25–30% of the country's GDP. Services employ around 20–25% of the country's population and produces 50–60% of the country's GDP Growth of agriculture sector has been fluctuating: it increased from -0.2% in 2014-15 to 6.3% in 2016-17, and then declined to 2.9% in 2018-19 (/Figure 3).. The contribution of agriculture to the GVA has decreased from 15% in 2015-16 to 14.4% in 2018-19. Growth of agriculture sector has been fluctuating: it increased from -0.2% in 2014-15 to 6.3% in 2016-17, and then declined to 2.8% in 2019-20. The contribution of agriculture to the GVA has decreased from 18.2% in 2014-15 to 16.5% in 2019-20.



**Figure 3:** Growth rate of GDP in India

## CONCLUSION

During covid-19, the whole world is struggling to maintain its economy. The time has arrived when we shall be ready for such scenario on the earth. This will be possible by joint efforts at governmental & public level. Steps needed to be taken by govt. to encourage regular & non practicing farmers. When more support & opportunities arises in the local area of a person, he/she shall live in their native & shall stay safe & secured at their home. We can see the pathetic condition of the migrant labourers during covid-19 pandemic. Thus, the suggested practice can give a multidimensional benefit to the country & its people. Thus agriculture must not only supply a surplus of food for the towns, but it must also be able to produce the increased amount of food with a relatively smaller labour force.

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