



***Research Paper***

**IMPACT OF COVID-19 ON INDIAN AGRICULTURE AND ITS SCENARIO**

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**Abstract**

Due to the outbreak of major dangerous corona virus there is a question of existence of human life is creating now. Later it renamed as SARS-CoV-2 by the International Committee on Taxonomy of Viruses (ICTV). Due to SARS-CoV-2 the chain of human life is on the way disposing. Due to arrival of Coronavirus in all over world its great impact on all of the sectors. Agriculture is the most important sector of Indian economy. India is an agriculture based country, where more than 50% population is depend on agriculture. The commitment of agribusiness in the national income in India is all the more subsequently; it is said that the agriculture in India is the backbone for Indian economy. Due to arrival of Coronavirus in all over world its great impact on all of the sectors. The agricultural response & its role is now becoming very important scenario. Due to coronavirus battle the contribution of Agriculture in Indian economy is going of descending order. In the Lockdown period, there were many challenges were created against the agricultural community. It deeply affected on Indian economical system also.

Key words: Covid-19, ICAR, GDP & Lockdown.

**INTRODUCTION**

Already the world is facing against the peculiar dispute like as global warming, inadequacy of renewable energy resources etc. with augmentation in the populace, there is extremity to accomplish their gigantic arrogation for the sources. In accession to these, in the opening of the 2020, there is a colossal warfare is stand against the whole world. A new strife is produced known as the Corona virus disease; due to which plenty of people in the world get deceased. Chinese researcher detached sequencing of Corona virus and World Health Organization (WHO) available it to the research labs in various countries for the (Polymerase Chain Reaction)PCR test.<sup>1</sup>

In Dec.2019, a pneumonia outbreak was reported firstly in Wuhan city, China. The outbreak was traced to a novel strain of corona virus which was given the name 2019-CoV-2 by the World Health Organization (WHO) & later renamed as SARS-CoV-2 by the International Committee on Taxonomy of Viruses (ICTV). The Wuhan strain has been identified as a new strain of Beta corona virus from group 2 beta with the approximation 70% genetic similarity to bat corona virus. The world is suffering from a small pieces of diameter 65-125nm and length of about 26-32 kbs.<sup>2</sup> AS up to date 28 May, in the India there are about 165799 number of cases were confirmed & 4706 were deceased. And Overall in Maharashtra specially 59546 were confirmed & 1982 are deceased. As the symptoms of this infectious disease seems to be normal but its impact is very precarious to human body. The age group of the corona infectious people is superlative begin between the 40 to 60 years. This is the worst intense pandemic, after 1918-19 flu in which almost one third of the world's population was infected and 50 million casualties were reported<sup>2</sup>. Due to swift hike of this virus, the India has also took a great attention & perceptions about this. The Indian government take a first lockdown period from 25 March to 3 May & suggest a social distancing. Now up to date 28 May, 4th lockdown is doing. On the 11<sup>th</sup> March 20, Covid-19 affirmed as pandemic. India is the 2<sup>nd</sup> topmost country in the world as per the population is concern. Analogous to that India took a great contribution to world in the Agricultural scenario also. Due to the lockdown period, the contributions from agricultural sector becoming less now; because some restrictions & problems were created. Due to lockdown announced by the Indian government, the economy may slow over the next few months for most agricultural transport system business. Due to the Corona virus its impact on the Indian economy, International trade, E-Commerce, Industrial Service, Tourism sector & also on the agricultural sector also. The Nation wise lockdown has entrenched the economic system. A sector is facing a lot of trouble with laborers & transport of goods and carriers. All the issues were initiate only due to the SAR-CoV-2 & its meticulous analysis about the agricultural sector were reported in it. The study models local and cross-city transmission of the novel coronavirus in china between Jan 19 & Feb 29, 2020. We examine the role of agriculture sector in the Indian economy.<sup>3</sup>

At the beginning, the Pre- Covid- 19 economy was at the point easing back down, aggravating existing issues of joblessness, low wages, provincial trouble, ailing, health and far reaching disparity.

### **#Impacts:-**

The impact of COVID-19 on the economy is no doubt devastating. No sector has free its impact. Its impingement on agriculture is critical and varied across the disparate segments that form the agricultural value string. Alike amid the different segments, its impact extensively among the various quarters and the producers and agricultural wage laborers. This impact will reverberate athwart the huge economy and will lengthy than few months. <sup>4</sup>Agriculture is the most crucial sector of Indian economy. Indian agriculture sector accounts for 18 per cent of India's gross domestic product (GDP) & provides employment to 50% of the countries workforce. India is the world's largest manufacturer of pulses, rice, wheat, spices & spice products. India has lot of field to cast for business such as dairy, meat, poultry, fisheries, & food grains etc. India has materialize as the second largest producer of fruits & vegetables in the world. <sup>5</sup>

### **#Impacts on Indian Agriculture:-**

#### **# Double hit due to lockdown:-**

Indian agriculture quarter, which deteriorate latterly due to uneven monsoon, will face another hit due to the interruption from the corona virus. As rabbi harvest season, farmer worry about their standing crops. Farmers growing wheat, mustard, pulses, already complained about their crops damage due to untimely & heavy rainfall recently. This leads to the farmer's lockdown most of the laborers available goes to their homes. Moreover farmer fear the sowing of summer season crops none of shop selling seeds, fertilizer & other vital inputs. Besides several farm machines like combine & harvesters lie stranded on the highways as there is no one to operate them. <sup>6</sup>

The Union Home Ministry, in an extremely noteworthy move, has informed to reject development of ranch workers, and collecting and planting related machines from the domain of lockdown. Making the nourishment grains, products of soil and other basic things accessible to shoppers, both in provincial and urban regions, is the most basic test for Government hardware during the lockdown time frame. <sup>7</sup>During this challenging times, how does Indian agriculture respond to the crisis and how do government measures the affect the 140 million farm households across the country

and thereafter impact the economy of a very important country in the developing world? We assess the immediate challenges that COVID-19 has posed to the farm sector and suggest the mitigation measures to ensure a sustainable food system in the post crisis period. The Indian Finance Minister declared an INR 1.7 trillion package, mostly to protect the vulnerable sections including farmers from any adverse impacts of the corona pandemic. The announcement, among a slew of benefits, contained advance release of INR 2000 to bank account of farmer as an income support under PM KISAN scheme. The government also raised the wage for workers engaged under the NREGS, world's largest wage guarantee scheme. Under the special scheme to take care of the vulnerable population, Pradhan Mantri Garib Kalyan Yojana, (Prime Minister scheme for welfare of the poor ), has been announced. Additional grain allotments to register beneficiaries were also announced for the next three months cash and food assistance to persons engaged in the informal sector mostly migrant laborers , have also been announced for which a separate PM- CARES (Prime Minister Citizen Assistance and Relief in Emergency Situations) fund has been created.

The Indian Council of Agricultural Research (ICAR) has broadcast state wise guidelines for farmers to be pursued during the lockdown era. The advisory mentions distinct practices during harvest and threshing of various rabi (winter sown) crops as well as post -harvest, storage and marketing of the farm produce.<sup>8</sup> Despite of many setbacks, Indian agricultural scenario agriculture as surely undergo many drastic changes & has achieved many milestones. The green revolution (1907-1978) transformed India from a food deficient stage to surplus food market. In span of three decades; India established itself as a net exporter of food grains .As now in terms of agricultural output, India is ranked in the world. India is also the largest producer in the world. For milk, cashew nut, coconut, tea, ginger, turmeric, black pepper, etc.<sup>9</sup>

The rabi crop stood ready for harvest in many fields like when the Covid-19 crisis brought everything; this is also the time for harvest of plantation pepper, coffee banana. In the aftermath of the lockdown, harvest of the rabi crops has been delayed due to non -availability of labor, machinery, (harvesters, threshers, tractors), transport facilities and restrictions on movement: farmers of perishable commodities like fruits, vegetables and flowers in a particular have been incurring losses. This is peak flowering season when the demand is also high. Many of small farmers in Tamil

Nadu who cultivate flowers as a cash crop in their farming system have incurred loss in what would otherwise have been period of peak earning from sale flowers. Harvest of plantation crops in Kerala & Tamilnadu has been similarly delayed, affecting the cash flow of the farmers and farm labor. Agriculture laborers are not able to go to work due to lack of transport. Labor work under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS) has stopped. COVID -19 data from India is compared against several countries as well as key states in the US with a major outbreaks.

#### **# Immediate challenges:-**

In spite of all these measures and in view of continuing restrictions on movements of people and vehicular traffic, concerns have been raised regarding negative implications of Covid 19 pandemic on the farm economy. This is the peak of rabbi season in India and crops like wheat, gram, lentil, mustard, etc. (Including the paddy in irrigated tracts) are at harvestable stage or almost reaching maturity. This is also the time when the farm harvests reach the market (market yards) for assured procurement operations by designated government agencies. Moreover, any severe disruptions to the supply of perishable fruits and vegetables, dairy products, fish etc. having mobilized to meet the increasing demand from bulging middle class as well as urban and rural consumers, may create irreparable damage to all actors in the supply chain. The migration of workers from far parts to their native place has also triggered panic buttons, as they are crucial for both harvesting operations and post-harvest handling of produce in storage and marketing centers. The Union Home Ministry, in a very significant move, has notified to exclude movement of farmers, farm laborers and harvesting and sowing the related machines from the purview of lockdown.

Making the food grains, fruits and vegetables and other essentials items available to consumers, both in rural and urban areas, is the most critical challenge for Government machinery during the lockdown period. Smooth functioning of the supply chain, with the adequate safety measures for the people involved, is of paramount importance. Transportation of public distribution system (PDS) items to be ensured by respective Government agencies. Distributions of the commodities to

vulnerable population, while maintaining prescribed guidelines and protocol, particularly of social distancing, must be effectively monitored. As the ongoing lockdown coincides with the rabbi harvesting season, farmers across the country look up to the Government to ensure uninterrupted harvesting of the crops as well as the smooth procurement operations. The Union Home Ministry's circular waving restrictions on inter -state movements of farmers or laborers as well as harvesting and related farm machines, is indeed a step in right direction. While ensuring availability of laborers for critical farms operations, their safety (from any COVID infection) and welfare must be prioritized by the government systems.

The sale of dairy products, fish, poultry, etc. has also been hit during the lockdown period as the uptake by the organized industry plays has been affected due to shortage of workforce and transport issues. As weather has been very erratic over past few months in many parts, harvested produce must also be protected from such risk.<sup>11</sup>

#### # Role of agriculture in Indian economy:-

1. A major portion of National income comes from agriculture.
2. Agriculture provides raw materials to industries.
3. It creates employment opportunities.
4. Agriculture plays a crucial role in our international trade.
5. It creates the infrastructural facilities.
6. Importance for industrial development.
7. Agriculture feeds the large population for our country.

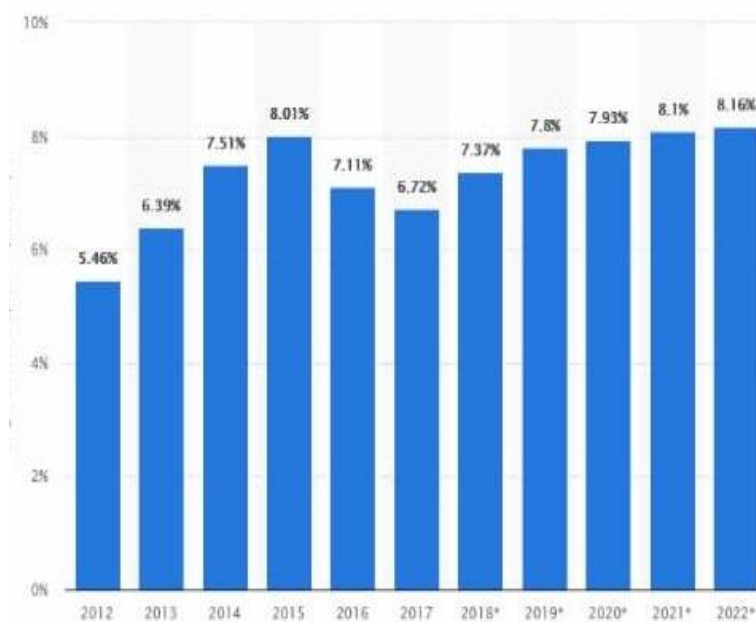
#### # Agriculture in India:-

1. Total Geographical Area- 328 million hectares
2. Net Area Sown- 142 million hectares
3. Gross cropped Area- 190.8 million hectares
4. Provides food to more than 1 billion people
5. Contributes to 1 to 6<sup>th</sup> of the export earnings.

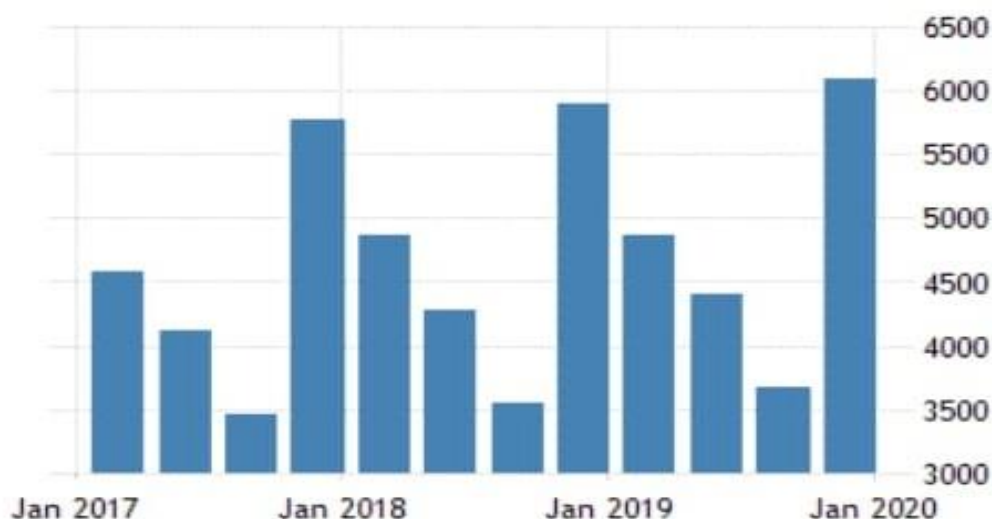
#### # India in world of agriculture:-

- Largest producer of milk, cashew nuts, coconut, tea, Ginger, Turmeric & Black pepper etc.
- Largest cattle population – 281 million.
- Second largest producer of wheat, Rice, Sugar, Groundnut & pulses.
- Third largest producer of Tobacco.
- Third largest in implementation of mechanization.<sup>12</sup>

The GDP of agriculture in Indian Economy is described statistically as follow as;







The actual GDP growth as year -wise is given below as ;



#### # India's Response:-

The ongoing health crisis around Covid 19 has affected all walks of life. Protecting lives of people suffering from the disease as well as frontline health responders have been priority of nations. The Governments have been priority of nations. India declared a three week nationwide lockdown till mid- April in the initial phase which was subsequently.

During these challenging time, how does Indian agriculture respond to the crisis & how do government measures the affect 140 million farm house hold across the



country in the developing world? We assess the immediate challenges that Covid 19 has posed to the farm sector & suggest mitigation measures to ensure a sustainable food.<sup>13</sup>

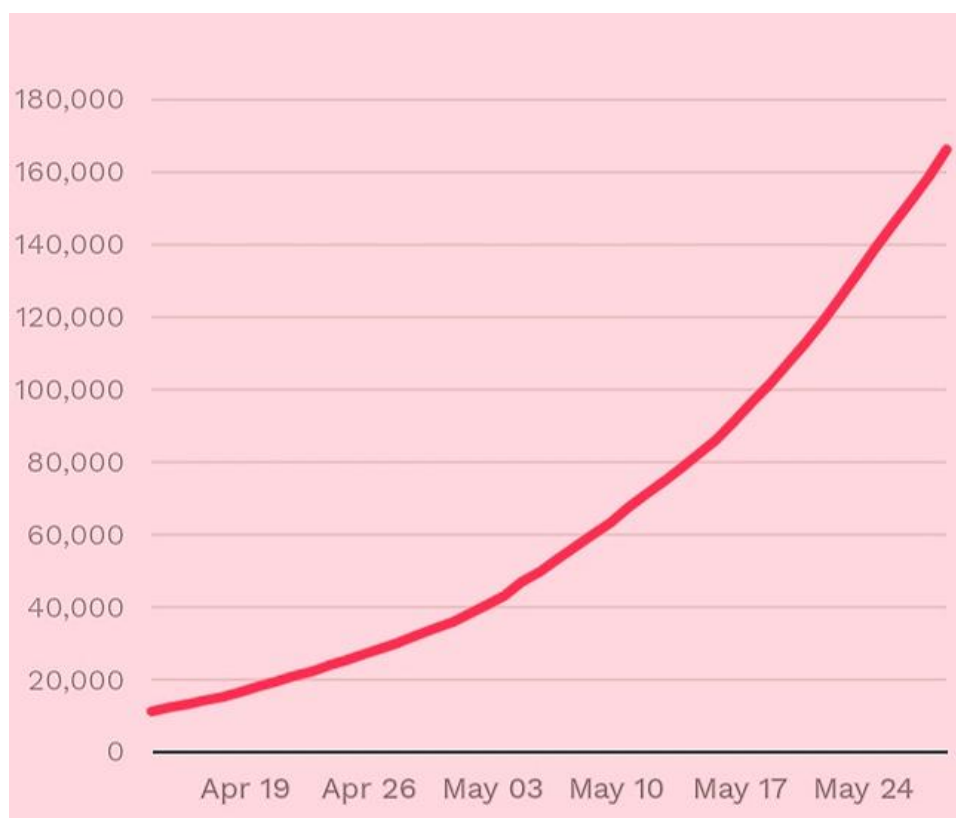
# Government support to the Indian Agricultural sector:-

- Government to expend Rs.15 lakh Crore amid farmer as ascribe for the year 2020-21.
- Renouncing the blue print of National bank for agriculture and Rural Development (NABRD) will be more expanded.
- Reassuring states to initiate agricultural laws, measures for the 100 water-underline districts, PM Kusum scheme and equitable use of fertilizer.
- Krishi UDAAN game plan will be by Aviation Ministry.
- Horticulture zone with its current produce outstrip production food grains.
- Augmentation in the milk production of 5.3 million tons to 103 million tons by 2025.
- Government will embroil youth in fishery sector.
- The government allocated 2.83 lakh crore rupees for agriculture and allied activities, irrigation and rural development in 2020-2021 budget by Nirmala Sitaraman.
- One product One District for immense spotlight to give strength to horticulture.
- Sagar Mitra for coastal states like Bengal and Tamil Nadu; interest coastal youth by dint of jobs and entrepreneurship in fish processing.
- Artificial insemination for domestic to be increased to 70% from the present 30%times.<sup>14</sup>

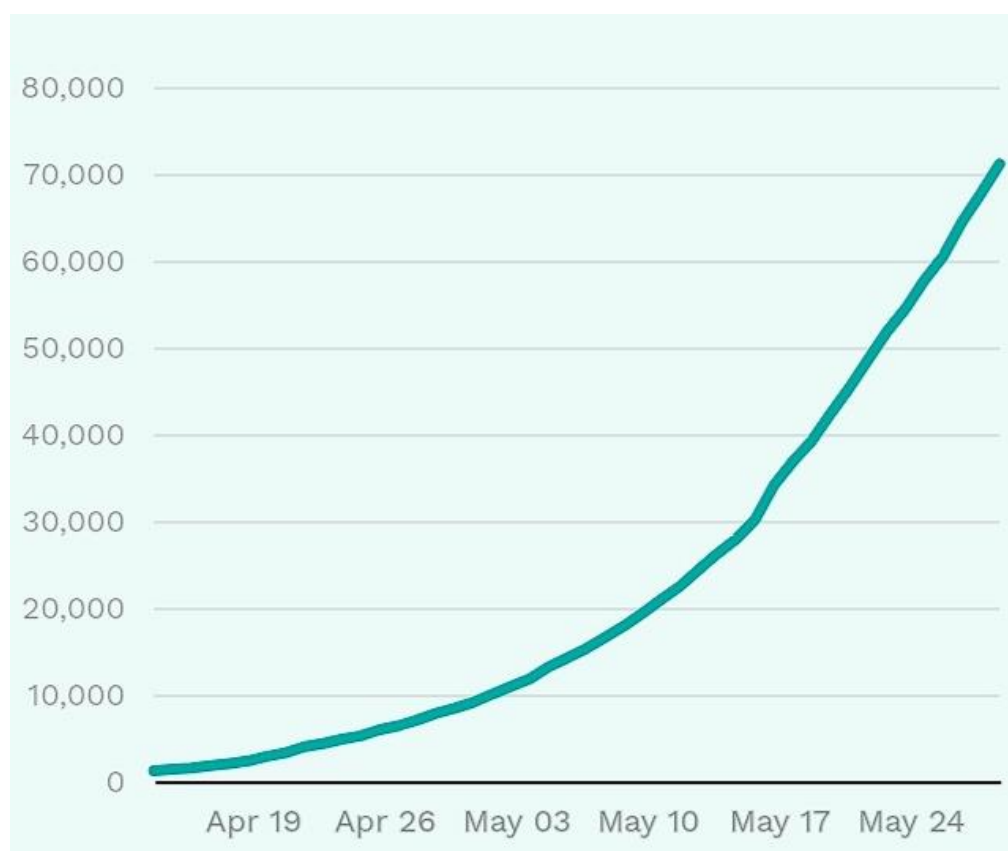
The government initial announcement of RS. 1.74 lakh crore in funds & measure to provide extra ratios through its targeted public distribution system (TPDS). For the first three months doubling the quantity & free distribution of 5 kg of rice or wheat & 1kg. Of pulses and additional provision of Cash, have been very helpful to poor & vulnerable families. This food package has been extended for two or more months with an additional economic stimulus. Indian PM announces economic relief package worth Rs. 20 lakh Crore. Lockdown 4 will be in a new form with new rules and guidelines will be announce before 18 Mays , says PM in his address to the nation . Special economic package is for our laborers, farmers, honest taxpayers, MSMEs and cottage industry.<sup>15</sup>

Due to the SARS-CoV-2; up to date 17 may the statistical data of corona cases is plotted as given below;

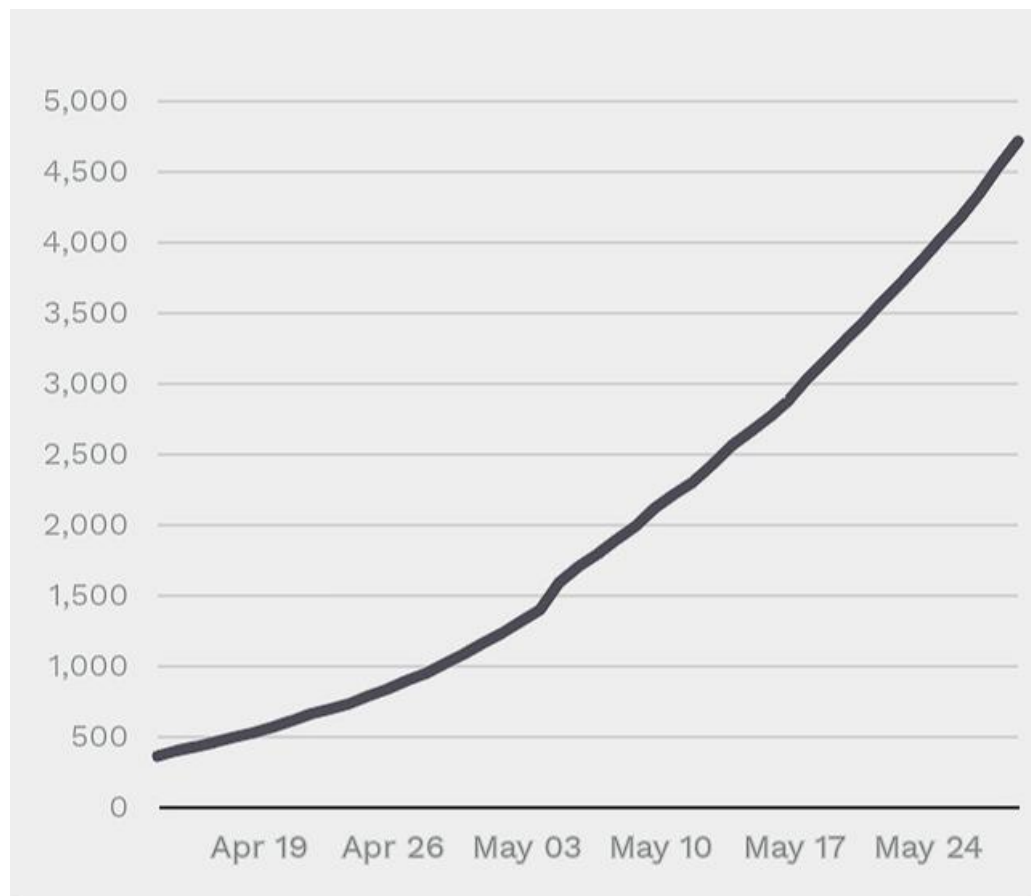
1. Total confirmed cases:-



2. Total covered cases :-



### 3.Total deceased cases :-



### CONCLUSION:

Due to such major battle like as the corona virus, it deeply affected on the human life. There is not only question of human struggle for existence is doing but also there is a disturbance on various factors one of them is its impact on Indian Agriculture. The Indian Government deliver message to all Indians as “Stay Home Stay Safe” to aware from this battle. There is much great contribution of Agriculture sector in Indian economy but due to lockdown its impact & some challenges were stands which all reported in it. But the great one thing is there is a big support gives to agriculture sector by Indian Government they were also reported. All Indians are thankful for that.

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