



Economic Shifts in India Due to COVID-19: An In-Depth Look at the Pre and Post-Pandemic Conditions Highlighting the Farmer's Perspective

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ABSTRACT

In 2019-20, the global economic sky overcasted with COVID-19, a virus of the size of 0.12 microns. The global pandemic has produced a variety of unanticipated shocks to the economies around the world. It adversely affected the Indian economy also. The year 2021 has commenced with both

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hope and fear – several parts of the world are locking down and bracing against new waves of infections and speedily communicable mutations. The main objective of this study is to explore the impact of the novel coronavirus pneumonia on the economy of India and the government response to it. The pandemic has drastic impact on different aspects of economy – GDP, GVA, agriculture, trade, employment, service, industry. India's GDP growth rate faced a drastic decline of -7.25 per cent in FY 2020-21 as compared to previous year, with a V shaped recovery. Due to the restrictions imposed by the government, the availability of agricultural inputs decreased leading to the hike in the prices. The agricultural producers throughout the country faced various marketing problems. Also, the farmers of Himachal Pradesh were also affected in various terms. Based on a survey among smallholder farmers of Himachal Pradesh, it was concluded that the main impact of the pandemic was witnessed by lack of financial assistance, restricted movement during marketing of produce, packaging problem and postharvest loss of the produce. The growth rate change (Y-O-Y) in 2020-21 over 2019-20 in different sectors of Indian economy declined, including GVA (-6.61), agriculture (3.63), industry (-6.37%), service (-8.38) and GDP (-7.25). In 2020, unemployment was high from April (23.52 %), May (22.75 %) and June (10.10 %) due to the lockdown, whereas, during 2021, it was higher in May (11.84%) and June (9.17%) months. The pandemic has negative impact on trade as depicted by the Y-O-Y per cent change in export and import during 2019-20 (-5.06%) and 2020-21 (-6.88%). The central and state governments have recognized the challenge and have responded and the policy makers need to be prepared to scale up the response so as to minimise the impact of the shock on all the sectors and pave the way for a V-shaped recovery.

Keywords: COVID-19; impact; economy; sectors; agriculture; service; employment; trade.

1. INTRODUCTION

“The world has witnessed an outbreak of several epidemics, some of which include the Spanish Flu of 1918, Ebola, HIV/AIDS, MERS (Middle East Respiratory Syndrome). Also, India has dealt with many diseases such as the plague, smallpox, polio, etc. The novel Coronavirus (COVID-19) pandemic has rapidly spread across the world, adversely affecting millions of lives. Individually, all of these have been pretty severe episodes. However, the Covid-19 which originated in China in December 2019 and over the next few months rapidly spread to almost all countries of the world potentially turned out to be the biggest crisis in history. Many experts called this a Black swan event for the global economy. According to a report by IMF, the the global economy contracted 3.5–4.3 per cent due to the pandemic in 2020, which is considered as the steepest slowdown since the Great Depression of the 1930s. Demand compression coupled with supply disruptions led to contraction in fixed investment, private consumption, and exports. India recorded the first case of the disease on January 30, 2020. The global pandemic inflicted two kinds of shocks: a health shock and an economic shock. Given the nature of the disease which is highly contagious, the ways to contain the spread include policy actions so, the Government imposed a strict 21 days nationwide lockdown from 25th March, 2020, under the Disaster Management Act, 2005. India's public

health system is relatively weaker than other countries. The government spends only 1.5 per cent of the total GDP on public health as a result of which the system remains grossly under-prepared to deal with such a health crisis. Therefore cases increased at a very higher rate. The unprecedented lockdown has had a significant adverse effect on the economy. Millions of jobs and livelihoods are now at stake. According to the Economic Survey, 2019-20, an activity around the country came to a halt, with no job or income, more than 50 million migrant workers either returned to their native villages or shifted to camps inside the cities because state borders were sealed. Given that the disease is highly contagious, the much-needed nationwide lockdown was enforced starting March 25, 2020, to contain the spread of the COVID-19 pandemic. Unfortunately, the latest covid-19 epidemic shook both human life and related affairs, including the economy” [1]. “The pandemic adversely affected the global economy as well as the national economies” [2]. “The negative impact of the pandemic on the economy can be witnessed by the reduction in production, tax collection, exports, and a significant increase in the unemployment rate, etc. Altogether, it has crippled the economy of India. The supply chain disruptions, fluctuations in the demand and supply, low profits, and other such difficulties were faced by many sectors of the economy at various levels” [3]. In India, there was a single-day spike of more than 4 lakh people during the

first week of May 2021, India's second wave was recorded to be much stronger and more intense than the first one. The hike in the daily cases was roughly about four times that of the highest daily cases recorded during the first wave. Eventually, 2020 has gone down in human history as the year of the 'Great Lockdown', with output losses dwarfing those suffered during the global financial crisis (GFC) of 2008-09. As per the IMF report, there was a decline of 8.5 per cent in world trade, with the contraction in services trade outpacing the fall in merchandise trade. During the first wave, a gradual decline in GDP was there due to the disruption of economic activities and supply-chains. With the easing of the lockdown, the economy and other major sectors started to recover.

2. IMPACT OF COVID 19 ON THE INDIAN ECONOMY

This crisis came at a time when India's GDP growth was slowing down and unemployment was on the rise owing to poor economic performance over the last several years. The precarious situation that the economy was in before worsened the effect of the shock. This is especially because the financial sector which is the brain of the economy has not been functioning properly. The Indian economy was primarily experiencing a demand slowdown whereas now both demand and supply have been disrupted. There are four channels through which the impact of the pandemic is getting transmitted to output growth which are constraints to external supply and demand, disruption of global supply chains, domestic supply disruptions and decline in domestic demand. The economic shock is impacting both formal and informal sectors.

3. PRE-COVID-19 PERIOD

The gross domestic product (GDP) growth rate has been on a downward trajectory since 2015-16. According to the official statistics, GDP growth slowed down to 4.2 per cent in 2019-20, the lowest level since 2002-03. The Industry sector accounts for 30 per cent of GDP shrank by 0.58 per cent in the fourth quarter of 2019-20. Unemployment reached a level highest of last 45 years. Among all countries of the world, India has a vast informal sector, employing 90 per cent of its working population and contributing more than 45 per cent to its overall GDP. This sector was hit by two consecutive shocks from 2016 to 2019, the first being the demonetization in

November 2016 when 86 per cent of the money in the economy became unusable overnight, owing to a government decree, followed by the introduction of the GST. Now we have an opportune moment to analyse the economic impact of COVID-19 and to study the affected sectors of the economy as well as the measures taken by Indian government in this regard.

4. METHODOLOGY

The CAT (Content Analysis Technique) was used by comprehensively studying the available issue on the concerned issue [4]. This technique is widely accepted and is deployed in studies especially those of social sciences. It is used to review and analyze the secondary sources, including newspapers, reports, Government publications and other documents [5]. Both secondary and primary data were used as per the requirement. For the secondary data, facts and related figures were collected from research articles, review papers, newspapers, reports of government agencies and institutions, different ministries of India, World Bank reports, IMF reports, Asian Development Bank and some other documents related to the economy of India. Both secondary and primary data were used as per the requirement. For the secondary data, facts and related figures were collected from research articles, review papers, newspapers, reports of government agencies and institutions, different ministries of India, World Bank reports, IMF reports, Asian Development Bank and some other documents related to the economy of India. The impacts are estimated to be uneven, the base values for scenario forecasting have been estimated with different length of interval amounts [6]. The growth rates are generally calculated for GDP & GVA using 2 methods but here we will use Y-O-Y method:

a) Q-O-Q method

$$\text{GDP growth} = \frac{(GDP_Q - GDP_{Q-1})}{GDP_{Q-1}} * 100$$

b) Y-O-Y method

$$\text{GDP growth} = \frac{(GDP_Q - GDP_{Q-4})}{GDP_{Q-4}} * 100$$

Here Y-O-Y method is used.

$$\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} * 100$$

A survey regarding the perception of farmers about the impact of COVID 19 was conducted telephonically and through online mode. A sample of 60 farmers was surveyed for the questioned framed on the perception about impact of COVID 19 based on 5 point scale [7] and then obtained data were analysed.

For analysis, tools like tabular analysis, simple per cent change method, Likert scale (5 point scale) methods were used.

Per cent change method:

$$\text{Per cent change} = \frac{X_1 - X_2}{X_2} \times 100$$

Where,

X₁= value of parameter under the current year

X₂= value of parameter under the previous year

Likert scale method for analyzing perception of farmers: Means are on a 5-point scale.

a) Mean₁:

$$\text{Mean}_1 = \frac{\sum_{i=1}^5 W_i X_i}{\sum_{i=1}^5 X_i}$$

b) Mean₂:

$$\text{Mean}_2 = \frac{\sum_{i=1}^5 W_i^2 X_i}{\sum_{i=1}^5 X_i}$$

W_i = scale (1, 2, 3, 4 and 5) for Strongly Disagree, Disagree, Neither agree nor disagree, gree, Strongly Agree respectively.

X_i = Total number of respondents.

c) Standard deviation:

$$SD = \sqrt{\text{Mean}_1 - \text{Mean}_2}$$

5. RESULTS AND DISCUSSION

The impact of COVID -19 can be seen in terms of GDP losses, decline in GVA, impact on agricultural factors, increased unemployment, distortions in trade, disruptions in service sector. Almost every sector of the economy got affected due to the pandemic in one or another way.

6. IMPACT ON GDP

This Table 1 shows the growth of the real gross domestic product (GDP) in India from FY 2015-16 to FY 2021-22. GDP refers to the total market value of all goods and services that are produced within a country per year. It is an important indicator of the economic strength of a country. Real GDP is adjusted for price changes and is therefore regarded as a key indicator for economic growth. During the early stages of the COVID-19 pandemic, several financial institutions and rating agencies provided varied economic impact forecasts for India. For instance, ICRA projected a 2% impact on April 7, 2020 [8], while Fitch also estimated a 2% impact on April 10, 2020 [9]. The Asian Development Bank (ADB) anticipated a 4% effect on April 3, 2020 [8] and S&P Global Ratings forecasted a 5.2% impact on March 23, 2020 [10]. Additionally, Goldman Sachs and India Ratings predicted impacts of 1.6% and 3.6% respectively in early April 2020 [11-12]. In 2020-21, India's real gross domestic product growth declined - 7.25 percent as compared to the previous year.

The growth rate of GDP since FY 2015-16 to FY 2019-20 was decreasing but during FY 2020-21, it declined with a negative value (-7.25%) that s V shaped [13] due to COVID-19. During FY 2021-22, GDP growth again started to increased.

7. IMPACT ON GVA AND OTHER SECTORS

Apart from agriculture sector, other sectors (industry and service) were also affected due to COVID 19. The growth rates of these sectors have significantly changed since 2019.

Table 2 shows that the value (INR crore) at base year price decreased for GVA and most of the sectors during 2020-21. The value for GVA decreased from 2019-20 (Rs.13271471 crore) to 2020-21(Rs.12453430 crore). Similarly, all sectors witnessed a negative growth rate from 2019-20 to 2020-21.

Fig. 2 shows the magnitude of growth rate in various sectors from FY 2015-16 to FY 2020-21. The negative growth rates in 2020-21 show that almost every sector was affected due to COVID-19. The maximum growth rate decline was seen in construction (-8.61%), mining (-8.53%), manufacturing (-7.15%) and industry (-6.37%). The overall GVA value also faced a negative growth rate of -6.16 % during 2020-21.

Table 1. India's Real GDP growth rate from FY 2015-16 to FY 2021-22 (Y-O-Y)

Year	GDP growth rate at base year price					(Per cent %)
	Q1	Q2	Q3	Q4	Total	
2015-16	7.59	8.03	7.20	9.09	8.00	
2016-17	8.68	9.67	8.58	6.29	8.26	
2017-18	6.11	5.32	6.67	8.93	6.80	
2018-19	7.56	6.49	6.33	5.84	6.53	
2019-20	5.39	4.61	3.28	3.01	4.04	
2020-21	-24.43	-7.44	0.46	1.64	-7.25	
2021-22	20.13	-	-	-	20.13	

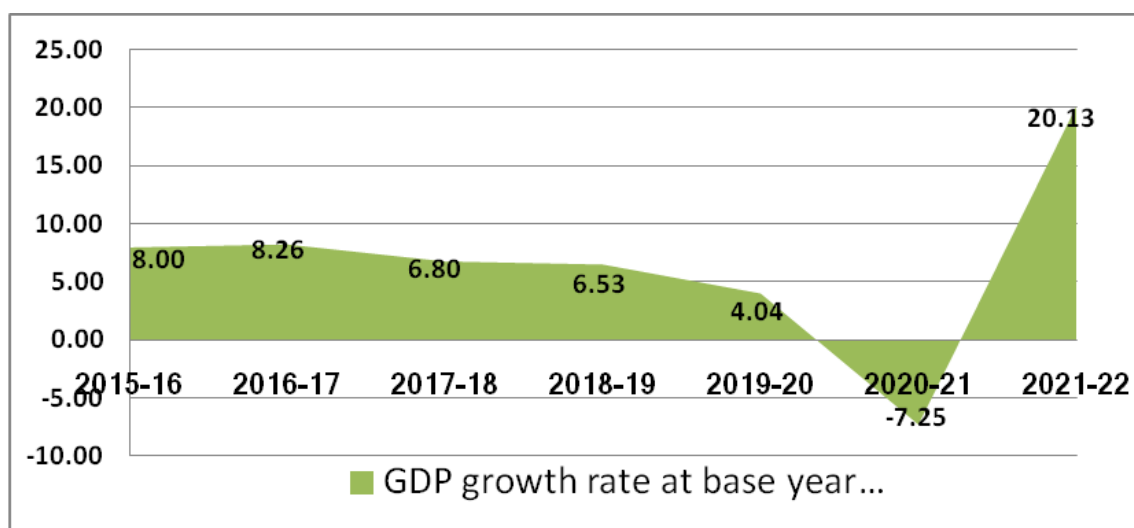


Fig. 1. India's Real GDP growth rate from FY 2015-16 to FY 2021-22

Table 2. India's Real GVA from FY 2015-16 to FY 2021-22 (Y-O-Y)

GVA at Basic Prices (Base Year : 2011-12) Constant Prices							Crore INR
Items/Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
Agriculture, Forestry and Fishing	1616146	1726004	1840023	1887145	1968571	2040079	
Industry	2445981	2650508	2811690	2951076	2892072	2707966	
Mining & Quarrying	317974	349248	329612	330521	322116	294644	
Manufacturing	1903850	2054764	2209428	2326067	2269424	2107068	
Electricity, Gas, Water Supply & Other Utility Services	224158	246496	272650	294488	300532	306254	
Services	6429743	6951772	7382458	7905981	8410827	7705385	
Construction	865335	916445	964306	1025446	1035534	946396	
Trade, Hotels, Transport, Communication and Services Related to Broadcasting	1992825	2146379	2368419	2537419	2699797	2208388	
Financial, Real Estate & Professional Services	2294787	2492967	2537190	2718784	2916509	2872815	
Public Administration, Defence and Other Services	1276797	1395982	1512542	1624331	1758987	1677786	
GVA at Basic Prices	10491870	11328285	12034171	12744203	13271471	12453430	

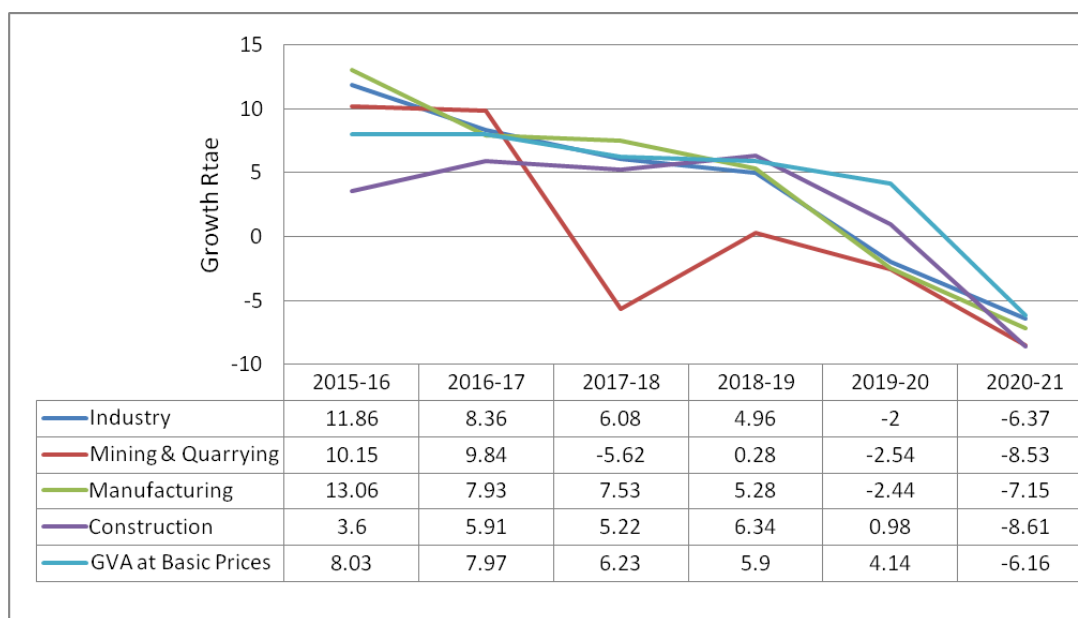


Fig. 2. Magnitude of growth rate in various sectors from FY2015-16 to 2020-21

8. IMPACT ON AGRICULTURE

The agriculture sector is critical in India as a large number of workers and the entire country's population is dependent on this sector. The outbreak of Covid-19 worsened the situation in rural India significantly. COVID-19 induced lockdown in India disrupted food markets which forced consumers to alter their consumption patterns. Consumers prioritized what they wanted and what they really needed. Various surveys reported that individuals lost their jobs or their income decreased during the lockdown. The lockdown coupled with sudden negative income shocks posed serious concerns about food and nutrition security in India. As per a report of NABARD 2020-21, in India, out of the total 560 districts, the agricultural production has decreased, increased and remained constant in 263, 108 and 189 districts respectively. There is a decline in the production of agriculture (2.7 %), horticulture (5.7 %), poultry (19.6 %), dairy (6.6 %) and fisheries (13.6%). Maximum decline in agricultural production as compared to previous years was seen in Telangana (23 %). However, in case of horticultural crops, maximum decline was in Himachal Pradesh (18 %) followed by Chattisgarh (17.9 %). Highest decrease in poultry was observed by Haryana (33.3 %) and Bihar (29.9 %). Manipur faced the maximum decline in the production of dairy production (16.7 %). There was an increase in the farm gate prices in 129 districts of India, whereas, decrease in 303 districts. The food grain procurement was

adversely impacted in 247 districts, whereas, remained the same in 245 districts. Same number was seen for the impact of COVID-19 on farmers' ability to take the produce to APMC's. Farmers' Access to Credit through KCC was badly affected in 330 districts. The microfinance activities also reduced by 6.15 per cent. The prices and availability of agricultural inputs were also affected adversely.

Fig. 3 reveals that all the inputs had witnessed an increase in the magnitude of prices with livestock feed showing the highest increase of 11.6per cent followed by rent of agri-machinery with an increase of 10.4 per cent. The magnitude of increase in price was marginally less for seeds which had increased by 8.8per cent. The reasons for increase in prices of agri-inputs included lower availability due to disruption in supply, closure of markets and shops and decline in purchasing power of farmers as they were facing difficulty in marketing of their produce.

It can be inferred from Fig. 4 that the aggregate availability of agri-inputs at all-India level was reported to have declined across all subsectors. The sharpest decline was in the availability of fertilizers (11.2%) followed by fodder/cattle feed (10.8%) and rental agricultural machinery (10.6%). Significant decline was also reported in the availability of pesticides (9.8%) and seeds (9.1%). The reasons for decline in availability of inputs were disruption in supply due to restrictions on movement of vehicles, closure of shops and markets, etc.

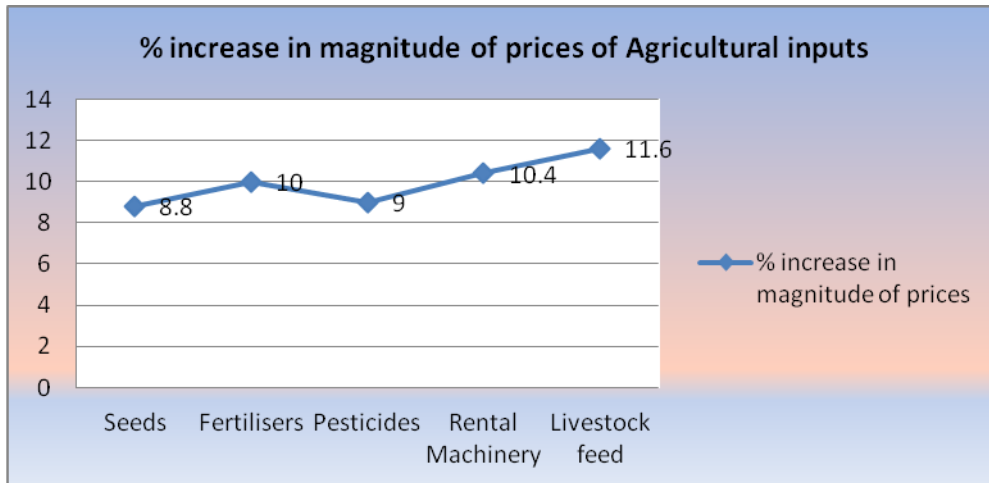


Fig. 3. Increase in the magnitude of prices of Agricultural inputs (%) compared to previous year

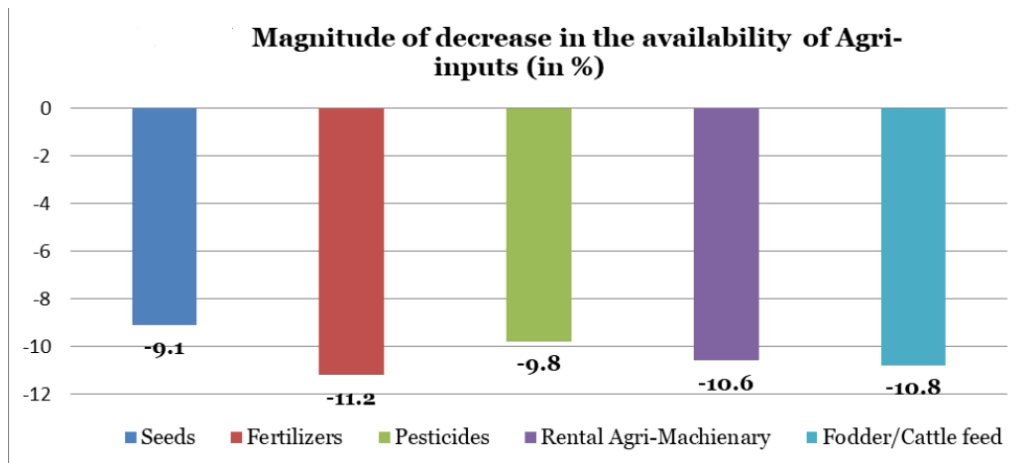


Fig. 4. Decrease in the magnitude of availability of agricultural inputs (%) compared to previous year

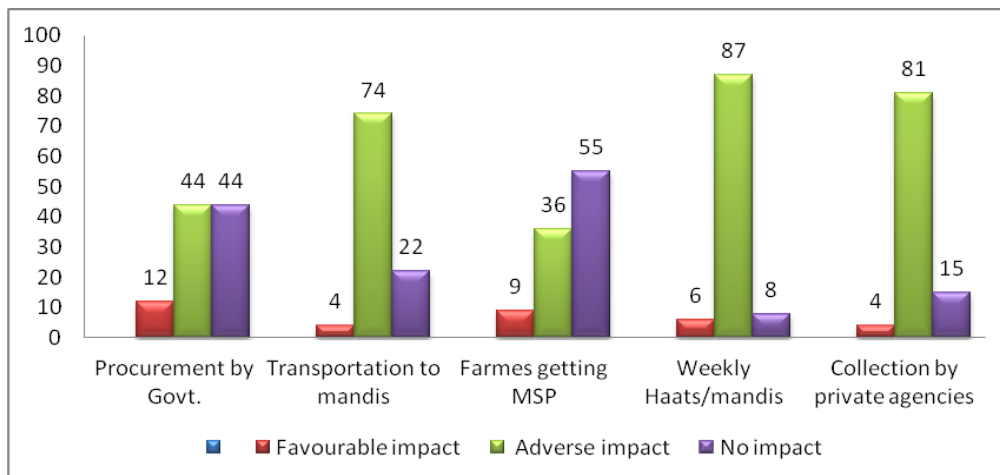


Fig. 5. Impact on marketing of agricultural produce (% of total districts) compared to previous year

Fig. 5 can be interpreted as the adverse impact on procurement by govt. agencies had been much lower as compared to other aspects of marketing because extensive steps were taken by govt. to expand procurement of food grains. The marketing of the harvested produce had been impacted adversely due to limitations of road transportation in many regions of India. The government had exempted (with initial restriction for 4-5 days) movement of essential goods from the restrictions imposed during the lockdown, thereby reducing the extent of adverse impact on ability of farmers to take the harvested produce to APMCs/ Mandis through roads. Although movement of essential goods was exempted from the restrictions imposed during the lockdown, private transporters may have faced restrictions while travelling from cities to rural areas, thereby leading to a higher adverse impact on collection of harvested produce by private agencies.

9. IMPACT ON FARMERS IN HIMACHAL PRADESH

A survey was conducted among the respondents of a sample of 60 smallholder farmers of Himachal Pradesh about their perceptions of the pandemic's impact and analysis was done [7]. The results of the analysis are shown in the Table 3.

Table 3 shows that the response categories are on a 5-point scale, from 1 = "strongly disagree" to 5 = "strongly agree." Based on this scale, the highest means for the responses are "Lack of financial assistance" (6.03), "Restricted movement during marketing of produce" (5.93), and "Packaging problem" (5.80), "Postharvest loss of the produce" (5.78), whereas, lowest means for the responses are "Reduction in the production of agricultural produce" (3.17) and "Reduction in the ability to feed my livestock" (3.45).

Table 3. Analysis of perception of small hold farmers about impact on agriculture

Outcomes	SA	A	N A nor DA	DA	SDA	Mean
Reduction in the production of agricultural produce	18.00 (30.00)	14.00 (23.33)	0.00 (0.00)	16.00 (26.67)	12.00 (20.00)	3.17 (3.06)
Reduction in the access to agricultural inputs (e.g. seeds, fertilizers etc)	25.00 (41.67)	18.00 (30.00)	2.00 (3.33)	12.00 (20.00)	3.00 (5.00)	5.75 (3.26)
Reduction in the availability of labour	21.00 (35.00)	17.00 (28.33)	2.00 (3.33)	11.00 (18.33)	9.00 (15.00)	5.25 (3.04)
Packaging problem	24.00 (40.00)	21.00 (35.00)	3.00 (5.00)	7.00 (11.67)	5.00 (8.33)	5.80 (3.29)
Not aware of facilities available	21.00 (35.00)	18.00 (30.00)	3.00 (5.00)	10.00 (16.67)	8.00 (13.33)	5.35 (3.07)
Lack of financial assistance	27.00 (45.00)	22.00 (36.67)	0.00 (0.00)	7.00 (11.67)	4.00 (6.67)	6.03 (3.41)
Reduction in the ability to rent machinery for the planting season.	22.00 (36.67)	20.00 (33.33)	0.00 (0.00)	12.00 (20.00)	6.00 (10.00)	5.50 (3.15)
Reduction in the ability to plant crops.	17.00 (28.33)	28.00 (46.67)	0.00 (0.00)	10.00 (16.67)	5.00 (8.33)	5.55 (3.12)
Reduction in the ability to feed my livestock	7.00 (11.67)	5.00 (8.33)	6.00 (10.00)	23.00 (38.33)	19.00 (31.67)	3.45 (1.88)
Reduction in the access to inputs for my livestock (e.g., water, labor, feed, etc.)	19.00 (31.67)	25.00 (41.67)	2.00 (3.33)	9.00 (15.00)	5.00 (8.33)	5.60 (3.16)
Restricted movement during marketing of produce	25.00 (41.67)	23.00 (38.33)	0.00 (0.00)	8.00 (13.33)	4.00 (6.67)	5.93 (3.35)
Post harvest loss of the produce	20.00 (33.33)	28.00 (46.67)	0.00 (0.00)	7.00 (11.67)	5.00 (8.33)	5.78 (3.25)

Figures in parenthesis represents percentage of total. Means are on a 5-point scale (1 = Strongly Disagree to 5 = Strongly Agree)

10. IMPACT ON SERVICE SECTOR

Table 4 reveals that the growth rate of every service declined due to the pandemic but the maximum decline was seen in services related to Trade, Hotels, Transport, Communication and Broadcasting (-18.20%) followed by Public Administration, Defence and Other Services (-4.62%) and Financial, Real Estate & Professional Services (-1.50%). The lowest decline was in Electricity, Gas, Water Supply & Other Utility Services and it was a positive value (1.90%). Similar results were concluding by [14-16].

Fig. 6 shows that before the emergence of COVID-19, almost every service was having

positive growth rate. But, after the emergence of the pandemic, service sector witnessed a drastic decline in the growth rate.

11. IMPACT ON UNEMPLOYMENT

The data from the Consumer Pyramid household level survey of the Centre for the Monitoring of Indian Economy (CMIE) showed that the unemployment rate in urban areas increased sharply to 30% in the week ending March 29th 2020, about 3.5 times the rate of 8.75 per cent for the week ending March 22nd 2020. For rural areas, the corresponding figures were 21 per cent and 8.3per cent. The overall unemployment rate increased from 8.75 per cent to 22.75 per cent.

Table 4. Growth rate of Service sector of economy at 2011-12 constant prices (Y-O-Y)

Sectors	Financial Years					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
A	10.24	7.71	10.34	7.14	6.40	-18.20
B	10.66	8.64	1.77	7.16	7.27	-1.50
C	6.12	9.33	8.35	7.39	8.29	-4.62
D	4.72	9.97	10.61	8.01	2.05	1.90

A:Trade, Hotels, Transport, Communication and Services Related to Broadcasting, B: Financial, Real Estate & Professional Services, C:Public Administration, Defence and Other Services, D:Electricity, Gas, Water Supply & Other Utility Services

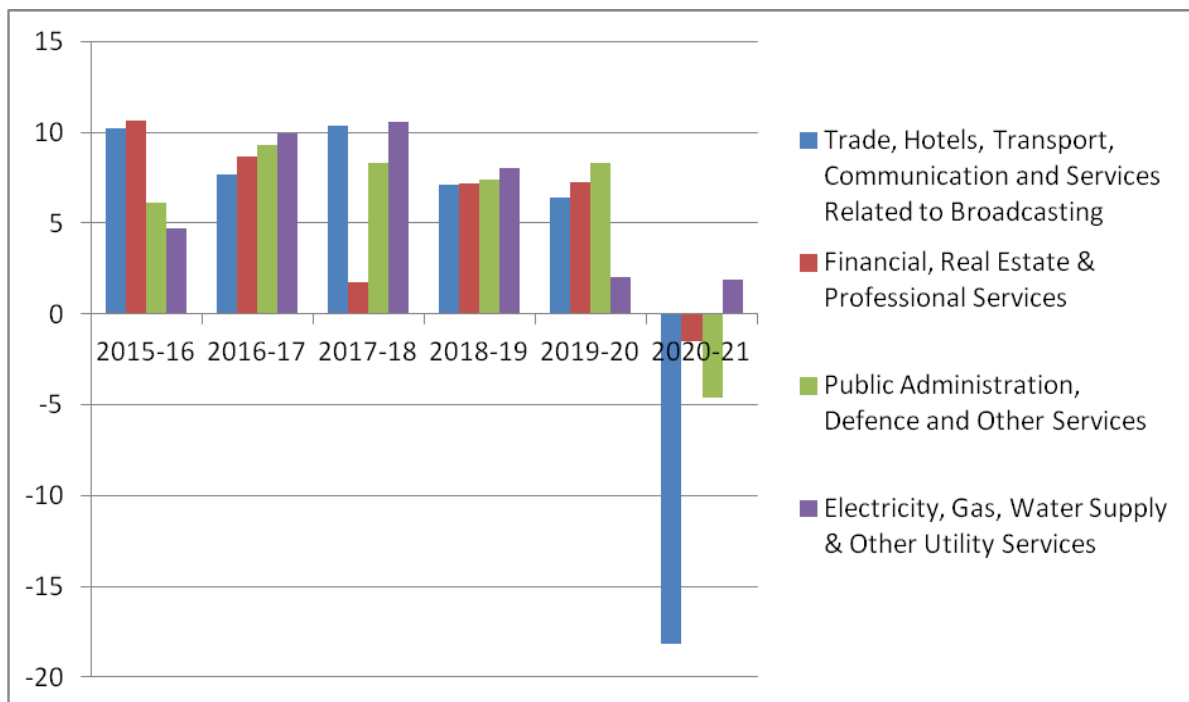


Fig. 6. Growth rate of Service sector of economy at 2011-12 constant prices (Y-O-Y)

Table 5. Monthly unemployment rate and per cent change 2020-2021

Year (2020)	Unemployment rate	Year (2021)	Unemployment rate	% change in unemployment rate 2021 over 2020
Jan	7.22	Jan	6.53	-9.56
Feb	7.9	Feb	6.95	-12.03
March	8.75	March	6.5	-25.71
April	23.52	April	7.97	-66.11
May	22.75	May	11.84	-47.96
June	10.18	June	9.17	-9.92
July	7.4	July	6.96	-5.95
August	8.35	August	8.32	-0.36
Sept	6.68	Sept	6.86	2.69
Oct	7.08	Oct	7.31	3.25
Nov	6.5	Nov	6.97	7.23
Dec	9.06	Dec	7.91	-12.69

Source: <https://www.statista.com/statistics/1111487/coronavirus-impact-on-unemployment-rate>

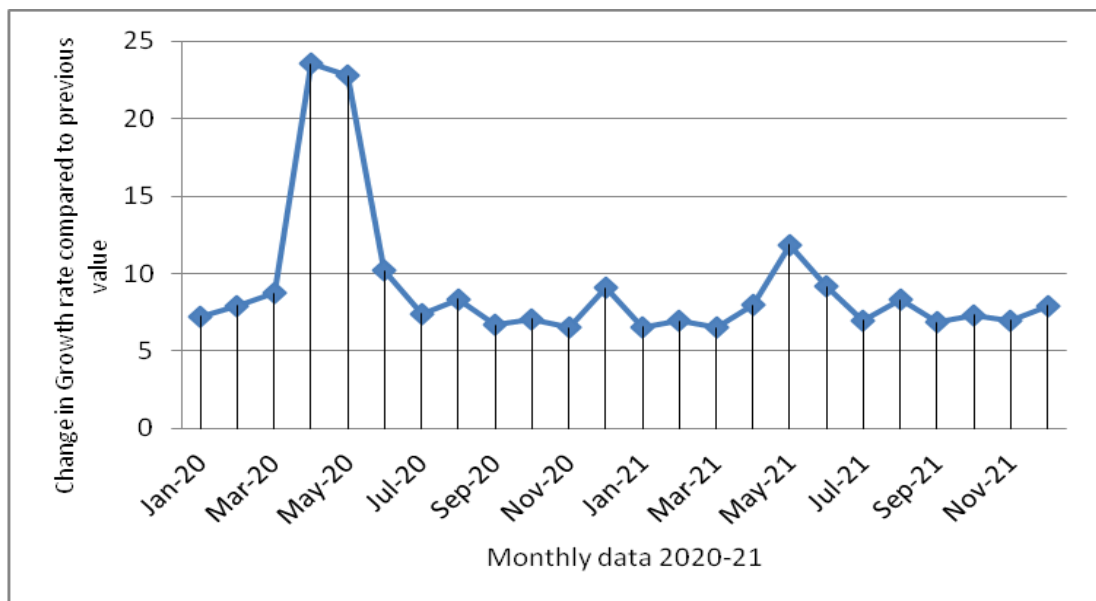


Fig. 7. Per cent change in unemployment rate in India during 2020-2021 (compared to previous)

Table 5 explains the monthly unemployment rate during 2020 and 2021. In 2020, unemployment was maximum from April (23.52 %), May (22.75 %) and June (10.10 %) due to the lockdown, whereas, during 2021, it was maximum in May (11.84%) and June (9.17%) months. “As of December 2021, the unemployment rate in India was recorded at nearly 8 percent, an increase from the previous month. While the unemployment rate had significantly declined over the course of 2021 since having peaked in April 2020, the breakout of new coronavirus variants coupled with recurring lockdowns resulted in a fluctuating trend of unemployment gripping the nation” [16-20].

12. IMPACT ON TRADE

China has been a major market for many Indian products like sea food, petrochemicals, gems and jewellery etc. The outbreak of coronavirus has adversely impacted exports of these items to China. e.g, the fisheries sector is anticipated to incur a loss of more than Rs 1,300 crore due to fall in exports. Similarly, India exports 36% of its diamonds to China [21]. The cancellation of four major trade events between February and April is likely to cause an estimated loss of Rs 8,000-10,000 crore in terms of business opportunity for Jaipur alone. India also exports 34% of its petrochemicals to China. Due to exports

Table 6. Total export, import, trade balance and percent change in India (US \$ Million)

Year to	Exports	Imports	Trade Balance	Rate of change (%)	
				Exports	Imports
2015-16	262290	381006	-118716.00	55.50	32.40
2016-17	276547	382740	-106193.00	5.44	0.46
2017-18	303526	465581	-162055.00	9.76	21.64
2018-19	330078	514078	-184000.00	8.75	10.42
2019-20	313361	474709	-161348.00	-5.06	-7.66
2020-21	291808	394435	-102627.00	-6.88	-16.91

Source: DGSIS&S and Ministry of Commerce & Industry

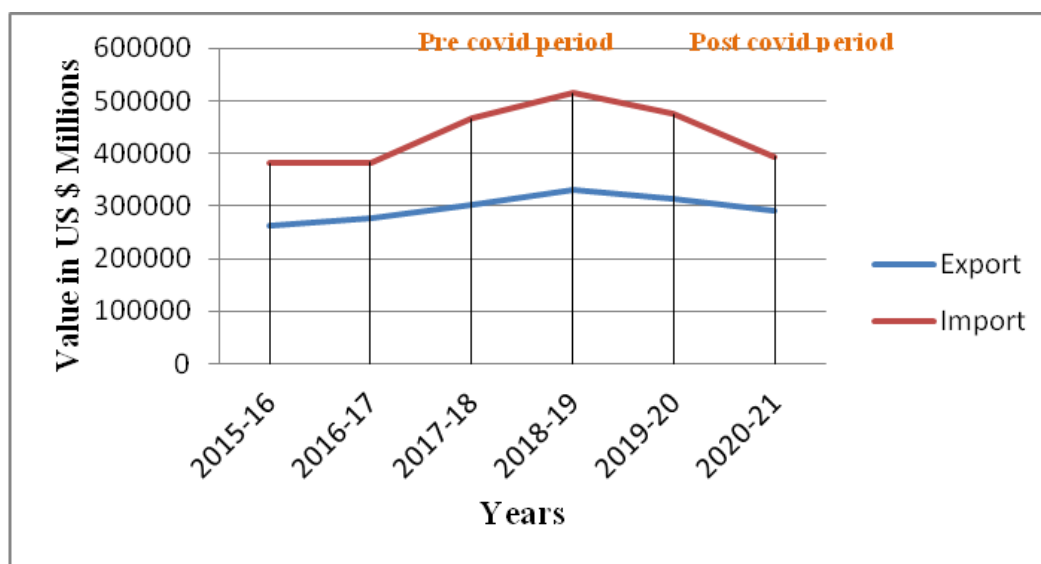


Fig. 8. Export and Import in India from 2015-2021

restrictions to China, petrochemical products are expected to see a price reduction [22-23].

Table 6 shows that the per cent rate of change of export and imports have been declining since 2017 but due to pandemic it turned out to be negative. The negative value of per cent change in the export during 2019-20 (-5.06%) and 2020-21 (-6.88%) shows that pandemic has adversely affected the trade sector.

Fig. 8 depicts that pandemic has resulted in the negative trade balance in 2019-20 (-1661348) and 2020-21 (-102627) which means that there is reduction of the export of goods and services from India. This can be attributed to the restrictions, barriers and reduced movement as per the Government orders.

13. MEASURES TAKEN BY THE GOVERNMENT

The Government of India (GOI) has announced a variety of measures to tackle the situation. The

immediate objective of the policy responses to the economic impact of Covid-19 is to ameliorate the effect of the shock on economic agents in both the formal and the informal sectors and to help them tide over the crisis. The central government and RBI have announced fiscal and monetary policies respectively. Further, the Government of India (GoI) and many state governments have designed several measures to deal with the impact of the pandemic. On March 20th 2020, the Prime Minister announced a ₹15,000 crore fund for the healthcare sector. On March 26th 2020, the Finance Minister announced a number of economic relief measures for the poor. Rupees 170,000 crore will fund the Pradhan Mantri Garib Kalyan Yojana (PMGKY) which will provide both cash transfer and food security; with the aim that no one goes hungry amidst the lockdown. It includes free additional 5 kg wheat or rice per person for 3 months, 1 kg free pulses per household for 3 months, free LPG for *Ujjwala* beneficiaries for 3 months, Rs.2000 to 87 million farmers under *PM*

Kisan Yojana in 10 days, increase in MGNREGA wages to Rs.202 from Rs.182; Rs.500 per month to 200 million female Jan Dhan account holders for next 3 months, Rs.1000 grant to poor senior citizens, widows and disabled, Non-refundable advances of 75 per cent or 3 months wages from PF account, States to use Rs.31 crore from construction workers welfare fund, States to use district mineral fund for medical activities. Further, India participated in the virtual 'Extraordinary G20 Leaders' Summit'. The G20 nations decided to inject over \$5 trillion into the global economy to counteract the pandemic's impacts. They agreed to work together, to strengthen the World Health Organisation, develop a vaccine and make it available. Prime Minister launched a new fund called PM CARES fund for combating such situations. World Bank approved \$1 bn emergency financing for India to tackle coronavirus labelled 'India COVID-19 Emergency Response and Health Systems Preparedness Project'. Asian Development Bank assured India of ₹15,800 crore assistance in the covid-19 outbreak fight. RBI announced more measures to counter the economic impact of the pandemic including ₹50,000 crore special finance to NABARD, SIDBI, and NHB.

14. CONCLUSION

Covid-19 has posed an unprecedented challenge for India. Given the large size of the population, the precarious situation of the economy, especially of the financial sector in the pre-Covid-19 period, and the economy's dependence on informal labour, lockdowns and other social distancing measures were highly disruptive. Though they have acknowledged the situation and taken action, the federal and state governments' response should only be the first. To minimize the shock's effects on all sectors and create the conditions for a V-shaped recovery, policymakers must be ready to step up their reaction. Meanwhile, they have to make sure that the answers restrict the use of judgment in order to prevent long-term harm to the economy.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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