ABSTRACT

The first case of COVID-19 was detected in Wuhan city of China. The mysterious virus believed to have been spread by the sea food or bat. In a few days, it gripped the entire world. Consequently, WHO (World Health Organisation) had to declare it a pandemic. There was no option before the world except social distancing and lockdown to keep safe from it. There are a number of issues such as disruption of supply chain, shutdown of core manufacturing sectors, loss of revenues from railways, aviation, tourism, unemployment, problems of the migrant workers, poverty, collapse of informal sectors, Micro Small and Medium enterprises and e-commerce.

There are challenges before the country to deal with these issues as how to manage the survival, provide employment, eradicate poverty and improve the health sector. The country can seek various opportunities from lockdown such as utilisation of manpower, information and machine technology. The positive impact of lockdown has fallen on environment. Pollution levels have come down. Air has cleaned and Air Quality Index has improved. The paper examines the impact of lockdown, issues of economic growth as well as the opportunities wrought from the crisis.

Keywords: COVID-19, GDP, Lockdown, Pandemic, Social Distancing, Unemployment

INTRODUCTION

The sectors of Indian economy are badly hit. The supply chain has been adversely affected such as India shares 73 per cent of electronics parts followed by mobiles, auto parts, pharmaceuticals, herbal drugs, organics cement and steel and many other small to big Chinese goods. Seventy two per cent of Indian companies of manufacturing, services, IT (Information and Technology), BPO (Business Process Outsourcing), logistics are set up in key cities like Shanghai, Beijing. Indian MNCs (Multi national corporations) in the sectors
such as manufacturing, services, IT (Information and Technology), BPO (Business process outsourcing), Logistics, Chemicals, Airlines, tourism, shipping, textiles, etc. have been badly hit by the lockdown. The impact of lockdown on domestic business, home trade, manufacturing, construction and service sectors are apparent with the issues of unemployment, poverty, Starvation, recession and low economic growth of the country (United Nations, 2000).

The world can undergo the worst recession. The crisis is regarded as Human economic financial crisis (International Monetary Fund, 2020). The jobless rate has swelled 23 per cent and above and poverty increased by 20% in India (Nag, Prabhash, 2020). In order to combat the issues the central government announced packages of cash and food to the poor to meet the challenges of unemployment and poverty and the government sanctioned funds to the bank for investment in financial institutions and companies to build India financially strong. India requires to maintain development momentum amid COVID-19 through fiscal deficit of merely 1 per cent of GDP, social dialogues between employees and employers for their security Anirab, Sircar(2020). India has an opportunity of a new orientation to digital economy with some innovations and incorporation of latest technological trend as well as development of the effective system or special office apps by the public and private organisations for a better use of information technology for a sound smart work from home as much as possible to save employment and by training them for digital operation. There is another opportunity to focus on the Health and Medical sectors to improve the skills of health worker and utilise the medical students and doctors to improve the medical conditions of remote villages, hospitals with latest equipments, beds, ventilators and provide ample facilities to doctors and medical staff to render the service happily with energy and efficiency.

The country needs to develop advanced medical infrastructure everywhere in the state at a large scale and how to create make shift arrangements instantly at the time of emergency.

The research paper observes that COVID-19 is devastating without having to spare anyone until away from market, offices and religio-social gatherings. Keeping aloof or social distancing is the only cure. It means either work from home. Human activities and religio-social gatherings are adversely affected. The incomes of the people such as priest, preachers, and those who deliver sermons, run marriage homes, deal in decoration, catering, restaurants, flowers, vegetables, meat, fish, milk and sweets have a negative impact.
unemployment and poverty are on rise. It is a big challenge for the country to fight with the situation. India can seek opportunities and build herself financially strong.

**LITERATURE REVIEW**

Anirab, Sircar(2020) discussed how the economic reforms freed private sector from the clutch of the government and deregulated financial markets, reduced import tariff, opened FDI(Foreign Direct Investment) , abolished licensing to foster competition. Similarly, in the present scenario, suggested to overhaul fiscal policies, attract long term foreign capital to plug the domestic saving investment gap.

Deepak(2020) regarded the crisis as Human Economic financial (HEF) and suggested to strengthen the financial sector, regulation of NBFC(Non Banking Financial Companies, remove complicated tax rules, security of food and life to workers, work of PPP(public and private Partnership).

Gaurav, Yogima(2020) observed its impact on services -tourism, aviation, hospitality, trade, manufacturing , agriculture, pharmaceuticals and Non-Performing Asset (NPA) and suggested to lower down Repo Rate and fiscal deficit on 25 basis point of GDP(Gross Domestic Product).

Manmohan (2020) discussed economic slowdown with lack of confidence among investors losing risk appetite, lack of jobs, incomes , consumption which resulted into lack of demand and lack of private investments. He proposed contingency plan to combat COVID-19.

Nag(2020) witnessed more than twenty per cent rise in unemployment during lockdown which is higher ever in forty five years. Hundred million workers lost their jobs in mining, construction, manufacturing and service sectors.

Prabhash(2020) noticed effects on construction sector which accommodates the largest share of employment and an impact on Investment as India being among Fragile five club.

Sharma(2020) examined the constant downward trend of employment. Bank and EMI(Equated Monthly Instalment) defaults, impacts on banks ,infrastructure and Auto (which recovered as it has no leverage) and lack of skills in investors and professionals to navigate such situations.
Tanvee(2020) predicted negative growth trend and decline in consumption, employment and income.

**METHODOLOGY**

The research is based on the secondary data collected from the websites, online articles in Economic Times, Bloomberg, reports of business federation such as FICCI(Federation of Indian Chambers of Industry and Commerce), ASSOCHAM(The Associated chamber of Commerce and Industry of India), business today, and rating agencies like Crisil, Care, Moody ,ICRA and international organisations i.e. IMF(International Monetary Fund), WHO(World Health Organisation) and IBRD (International Bank for Reconstruction and Development) or World Bank, RBI(Reserve Bank of India) report, UN(United Nations) report, Niti Ayog report, Economic & Statistical survey, Ministry of commerce and Industry, etc. ANOVA (F-test) has been conducted to know the significance of result of the variables.

**ANOVA (F-TEST)**

<table>
<thead>
<tr>
<th>Core Sectors production growth</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 4.4</td>
<td>4.2</td>
</tr>
<tr>
<td>2020 0.6</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Step 1: Mean of all data

\[
X_{2019} = 4.3 \\
X_{2020} = 1.2
\]

\[\bar{X} = \frac{5.5}{2} = 2.75\]

Step 2: Sum of square errors

\[
2000 \ (Vi-X)^2+(Vii-X)^2 \\
(4.4-4.3)^2+(4.2-4.3)^2 \\
0.01 + 0.01 = 0.02
\]

\[
2020 \ (Vi-X)^2+(Vii-X)^2 \\
(0.6-1.2)^2+(1.8-1.2)^2 \\
0.36 + 0.36 = 0.72
\]

\[\epsilon(0.02+8+0.72)=0.74\]
Step 3: Sum of squares treatment

\[ 1[(4.3 - 2.75)^2 + (1.2 - 2.75)^2] \\
\quad 1[(2.40 + 2.40)] \\
= 4.80 \]

Step 4: Mean Squares

Value of F = \frac{4.80}{0.37} \ast \\
= 12.97

\ast \frac{0.74}{2} \text{ Sum of squares error/(Degree of Freedom i.e. total variables of all groups- total no. of groups)}

\text{p-value} \\
= 0.069194

RESULTS & DISCUSSION

The core sectors of Indian economy have been badly hit. India is facing a great revenue losses from railways, aviation, tourism, Pharmaceutical which largely depends upon imports (Gaurav, Yogima, 2000) and most importantly construction which employs the largest share of employment. (Prabhash, 2000) Production by the seven core industries has gone into negative.

---

**Fig. 1**

Production by Core Industries during Lockdown

Source: Ministry of Commerce and Industry

Eight key core industries contracted by 6.5 per cent. They contribute 40.27 per cent by India’s Index of Industrial production (IIP). Cement industry fell maximum by (-24.7) per cent followed by Natural Gas and Steel by (-15.2) per cent and (-13) per cent respectively.
Fertilisers, electricity and crude oil are decelerated by (-11.9) per cent, (-7.2) per cent and (-5.5) percent. The refinery products decreased lowest by (-0.5) per cent while only coal was in positive with 4 per cent. They are affected during lockdown by weak demand, labour constraints, shortage of logistics, etc. However, the situation before lockdown although not good, yet it so not so much worse than the present.

Before the lockdown the eight core industries grew at 0.6 per cent, although the lowest in eight years. The growth was the highest with 5 per cent in 2015 followed by 4.9 per cent in 2017, 4.4 per cent in 2019 and 4.2 per cent in 2018. It was 3.9 per cent and 3 per cent in 2013 and 2016 respectively whereas 2.03 in 2014. However, it remained 0.6 per cent in 2020 before lockdown. The condition of unorganised sector is pathetic. Millions have people have lost their jobs and the small retailers are acutely affected. The supply chain is disturbed. The demand has declined. IMF(International Monetary Fund) global growth projection predict the worst recession since great depression far worse than the global financial crisis and the global GDP growth loss of $ 9 trillion. However, India’s growth is positive at 1.9 per cent growth which is the highest among G-20 countries. Even then, India’s GDP(Gross Domestic Product) growth will see a great impact. The crisis is regarded as a Human Economic Financial (HEF) crisis (Deepak, 2000), quite different from Global Financial crisis of 2008 in

![INTEGRATED PRODUCTION OF CORE INDUSTRIES BEFORE LOCKDOWN](image)

Source: Ministry of commerce and Industry
which at least workers go out to work. (Tanvi, 2000). In banking sector EMI (Equated Monthly Instalments) are not debited which may cause NPA (Non Performing Asset) or bad loan problem. However, Auto sectors can recover as it has no leverage as banks and infrastructure (Sharma, 2000). 400 million people in Informal sector have fell into poverty. Most of them returned to rural areas. (UN, 2000) After the lockdown, e-commerce such as Amazon, Flipkart, Big basket, Sup Daily and many others, suspended their services across the country. Unemployment growth jumped more than 20%. 100 million workers in mining, construction, manufacturing, services, etc have lost their jobs which is 6.1% higher unemployment in 45 years. (Nag, 2000) Perishable items like milk, vegetables, etc were wasted in large quantities because of disturbance in supply chain is affected. NBFCs (Non Banking Financial companies) and MSME (Micro Small and Medium Enterprises) are suffering greatly. According to the statistics by Business today about 300 million informal workers could be vulnerable and seeking help. (Shashikant, 2000) The trade deficit fell to the lowest level of $9.85 billion and the export to (-34.5) per cent. On the direct exports side, a set of commodities may see some disruption where China is an important export destination. China is also an important source of critical inputs for various sectors.

**Fig.3.**

**India’s Import**

India imports one third of machinery and two third of organic chemicals from China. For automotive parts and fertilisers China’s share in India’s import is more than 25%. It also
purchases 70% pharmaceutical ingredients and 90% mobiles from that country. The lockdown in China has resulted in disruptions for many sectors. GDP growth for 2020 declined from 3.5 per cent to 1.8 as rated by Crisil (Credit rating information services for India Limited). It is a permanent loss of GDP with sustainable unemployment and poverty. There is a lack of supply of goods and services, problem of unemployment, low purchasing power, shutdown of industries, small business, shops and unorganised sectors by the lockdown in the country. It is jeopardising the growth prospects of social and economic wellbeing of a large number of people. The adverse impacts of the pandemic on economic activity are being felt far and wide on airlines, travel, tourism and hospitality sectors. A penetrating result will be seen in the April-June quarter (the first quarter of 2020-21), further exacerbating the slowdown in consumption and activity being witnessed in the Indian Economy. Railways has suffered a huge revenue loss of rupees 12000 crore while Tourism rupees 2 lakh crore and 3.8 crore people have gone jobless which constitute 70% of the total workforce in tourism. For aggregate demand, in three sectors, namely transport, tourism and hotels, shows a significant impact. Unprecedented contraction in investment and manufacturing output in two successive quarters dragged down India’s economic growth to a 27-quarter low of 4.7 per cent in the quarter ended December 2019. Looking ahead, GDP growth is set to stagnate at 4.7 per cent in the March quarter (Q4) too, according to the annual estimate of 5 per cent by the National Statistical Office. All the major foreign exchange earners such as petroleum products, engineering goods, and electronic items relist. 20% production of Denim industry suffered owing to import crisis for raw materials logistics such as indigo, 80% Vessel trade comes down daily, pharmaceutical, textiles, solar, electronics and IT (Information and Technology) have got a negative impact. The growth rate has come down to 3%. Hence, the overall economy has been affected by $ 234.4 billion (8.1% of GDP) by June compared to $120 billion earlier. Budget deficit and budget shortfall pushed back at 4.5% and 3% of GDP (Gross Domestic Product) respectively. At the moment, aggregate supply is affected. Both trade and manufacturing of non-essentials have come to a halt. 55 per cent of the economy suffer for three weeks or about Rs 2 lakh crore loss or a larger due to previous partial lockdowns by various state governments. Of course, supply will increase after the lockdown. But, it will be done from the old stock which doesn’t contribute GDP (Gross Domestic Product). It will happen only after the production of new final goods and services. Demand side will see a contraction owing to unemployment at large without earning income.
by a large group of people in the country. The impact will be realised by disruption in supply of goods and services, contraction in aggregate demand because of unemployment, low purchasing power by the majority of the people. Therefore, the government expenditure and the banking sector (which should augment credit) to support these sectors. Banks have been sanctioned 50000 crore rupees to invest in investment grade bonds, commercial papers, Non-convertible debentures of NBFCs. 50 per cent of the fund is to be utilised for small and medium NBFCs and MFIs (Micro Financial Institutions). Further 50000 crore rupees is meant for NABARD (National Bank for Agricultural and Rural Development), SIDBI (Small Industrial Bank of India) and NHB (National Housing Bank) of which 25 per cent to be utilised by NABARD for refinancing RRBs (Regional Rural Banks) and Co-operative banks, 15 per cent to SIDBI to support MFIs and 10 per cent to NHB to support National Housing Corporation. RBI has also reduced fixed rate reverse repo rate by 25 basis points from 4 per cent to 3.37 per cent and increased ways and means advances (WMA) by 30 per cent. LCR (Liquidity credit ratio) fell from 100 to 80 per cent to keep financial system and market sound with good liquidity. The government announced the economic package of rupees 20 lac crore under “Atamanirbhar Bharat” which is 10 per cent of GDP. State’s borrowing limit is reduced from 5 per cent to 3 percent of State GDP. Worth rupees 40000 crore is sanctioned to MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme) besides Budget estimate of rupees 61000 crore. The paper also draws attentions towards the remedies of recovering loss through fiscal and monetary policies to bring in liquidity for credit to the weak and potentially weak sectors, relaxing NPA (Non-Performing Asset) from 90 days to 180 days till 30 September, rupees two trillion expenditure on the poor, removing long term capital gains tax, moratorium for debt serving in order to keep momentum of at least 3% GDP (Gross Domestic Product) under the current situation.

CONCLUSION

The influence of corona virus is deep. It has brought the economy at the back foot. The primary sector, Agriculture, is already facing challenges. Now shifting urban employment to that sector adds more challenges. The issues of secondary sector are related to the supply chain and manpower. It has to work out on for procurement and making the resources available. This is a pressing problem before the sector such as Pharma, chemicals, and electronics businesses may face supply constraints which may result prices shoot up by 10%.
percent. GDP (Gross Domestic Product) could fall below 5% in FY 2021, if policy action is not taken urgently. It is suggested that the government should take some strong fiscal stimulus to the extent of 1% of GDP to the poor, which would help them financially and also manage consumer demand. Between October and December the growth is slowed down to 4.7% and the impact of COVID-19 will further be seen in the end of the financial year. About half of Indian businesses have indicated a marked impact of COVID-19 on business operations as surveyed by FICCI (Federation of Indian Chambers of commerce and Industry). It may take up to three months for normalcy to return. Hence, amid the huge crisis, the government announced Rs 1.76 lakh crore relief package followed by 20 lakh crore to largely benefit the unorganised sector workers, especially migrant workers, and urban and rural poor. The government also announced the formation of an economic response task force to help cope with the impact of the pandemic in the flow of goods and services. Furthermore, RBI should relax the non-performing asset recognition norms from 90 days to 180 days till 30 September. A moratorium for debt servicing that includes principal and interest, reduction of interest rates, and rescheduling of loan repayments, should be constituted. The potential measures must be taken on the priority basis to prevent the grave economic crisis that is on the horizon. It is no longer about investors and business. This is about the economic health of the country. The time to take action is right now. Work of taking initiatives should go on a war footing level if it is to save the Indian economy from tanking. The government should consider providing a strong fiscal stimulus to the extent of 1% of GDP (Gross Domestic Product), or ₹2 trillion, to the poor, which would help them financially and also spur consumer demand. The government should also create Contingency plan for the threat of COVID-19 scare (Manmohan, 2000). It is the high time to overhaul fiscal policies, attract long term foreign capital to plug the domestic saving-Investment gap (Anirab, Sircar, 2000). The government should stimulate jobs and security and protect workers at workplace by management through social dialogues between government, employers and employees (UN, 2000). The Financial sector should be built strong else the economy will collapse. NBFC (Non Banking Financial Institutions) needs to be regulated. The complicated tax rules may be abolished. Workers should be assured job, food and life security by the management to resume manufacturing activities. PPP (Public Private Partnership) can play an important role (Deepak, 2000). India can explore new opportunities in the rural areas to utilise human resources as migrant workers for rural development and Agriculture. The opportunities
for e-business and e-commerce widened and innovations in technologies and production pattern can be explored. The medical and health sector has a wide scope to accommodate employment. It needs to build good infrastructure. Its significance and innovation for further development is a new opportunity. The government should focus seriously. India needs to build up financially sound.

REFERENCES


Deepak, P. (2020). It will take India nine months to come out of Virus crisis. *The Economic Times.*


Information and Credit Rating Agency. (2020). COVID-19 to hurt IT Services Sector, Growth may fall to 3.5% in FY 21. *Press Trust of India.*


Sharma, S. (2020). Real Economy is bad shape, don’t get Romantic about this Market Rally. *The Economic Times.*

