

ISSN: (P) 0976-9447
(e) 2454-8391
Impact Factor 7.712 (SJIF)

JOURNAL GLOBAL VALUES

A PEER REVIEWED & REFEREED INTERNATIONAL JOURNAL

VOL. XI

SPECIAL ISSUE

JULY 2020

DISASTER MANAGEMENT IN GLOBAL CONTEXT



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PREFACE

Disasters come frequently and destroy the normal activities of human life whether these disasters are natural disasters or man-made. The whole world has been a continuous prey of not only natural disasters but also of man-made disasters. Nowadays the whole world is suffering from so-called man-made disaster that is COVID-19 which is supposed to be originated from Wuhan of China. COVID-19 is also being termed as a Biological attack of China as reports say that this virus was made in a lab of China Govt. in Wuhan. COVID-19 has made infected a population of more than 17.7 million people all over the world and resulted in the unfortunate demise of around 7 lakh people. The furiousness of pandemic is still on. Every economy of world has been helpless to this man-made disaster. But the story doesn't end here. The year 2020 has also been frightening by natural disasters like forest fire in Australia & India, floods in Indonesia & India, volcano eruption in Philippines, earthquakes in Turkey, China, India, Russia, Philippines & the Caribbean etc.; locust attack in Africa & various countries of Asia, cyclone Amphan in India & Bangladesh and melting of glaciers in Himalayan region & Antarctica region etc.

Disaster management is an effective mean to combat various man made & natural disasters. The role of Disaster management arises not only after the disaster but before occurrence of the disaster. Prevention, mitigation and Rehabilitation are the main features of disaster management policy. Every country of the world has various authorities, institutions, task forces at National, regional level & local level. These are funded consistently by the govt. and public contribution. Every country has its specific disaster management policy to combat disasters. With reference to India, there is National Disaster Management Act 2005, National Disaster Management Policy and specific forces & authorities like Disaster Management Authority at national, state & district level, National Disaster Response Force etc. for combating various types of disasters.

We have decided to invite articles & research papers on the disaster management in global context through this special edition of Journal Global Values. The purpose of selecting this theme is to analyse the various aspects of disaster management in Global context. Disaster management policy of a country is quite important for the smooth running of its various financial and non-financial activities. Pre-disaster activities of Disaster Management are comparatively important than the post-disaster activities as pre-disaster preparedness helps in soothing the furiousness of the disasters. Without a strong disaster management policy, frequent hurdles in form of disasters will disrupt the speed of the economic and social development of any country.

ACKNOWLEDGEMENT

It has been a herculean task to invite, collect and edit the various research papers and articles related to the main theme “**Disaster Management in Global Context**” for our research journal. As this edition is multi-disciplinary, various sub-themes were also decided to cover all the ocean of knowledge around us. These themes were legislations regarding handling & control of disasters in India and other countries, economic-non economic measures for damage control in case of disasters, role of media and scholars at the time of disasters, Govt. and non govt. efforts related to disaster management, role of ICT at the time of disaster, creativity in the field of literature and art in the society hit hard by disasters, contribution of the various branches of science in disaster management, disaster management methodology and strategies of the different economies of the world, expected post COVID scenario of the different economies of the world, effect of disasters on various sectors of the society and impact of COVID on the life style, attitude and behaviour of people in the society.

We have taken up this task to get published these research papers and articles, in a Refereed and Peer Reviewed Research Journal. We are highly thankful to Mr. Vishal Mithal, Anu Publications, Meerut (U.P.) who gave his consent to publish these papers as a special edition on “**Disaster Management in Global Context**” in his Reputed, Refereed & Peer-reviewed Research Journal ‘**Journal Global Values**’. We highly thank & appreciate the work of Anu Publications, Meerut.

I am also highly thankful to my team of expert professors working with me as editors. I am highly thankful to Dr. Sanjay Kumar Rastogi, Associate Professor in Commerce, Hindu College, Moradabad; Dr. Sanjay Kumar Bansal, Associate Professor in Commerce, N.R.E.C. College, Khurja and Dr. Manish Kumar Gupta, Associate Professor in Commerce, Sahu Jain College, Najibabad.

Also, I would also like to extend my special thanks to Dr. Manish Kumar Gupta for managing and coordinating this whole assignment. Besides it, I also extend a vote of thanks to various members of my Peer-Review Board for their timely advice and suggestions regarding the contents of this research journal.

And all of the above, I extend a vote of thanks to all the subject experts, professionals, academicians and scholars etc. for their contribution in form of their various research papers, articles and case studies etc.

During this course, despite all the possible efforts, some errors must have crept inside, please ignore.

Thanks everybody.

Dr. Abhai Kumar Mital

Chief Editor

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IMPACT OF COVID-19 ON INDIAN ECONOMY

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Abstract :

The whole world is attacked by Corona virus. This virus compelled the World Health Organisation (WHO) to declare it as pandemic. The virus has unprecedented implications on the global economy as well as on Indian Economy. The Indian Industries and all sectors are facing downfall. This research paper has been written to study the effect of COVID-19 on different sectors of Indian Economy and to highlight the reasons for which India can be benefitted in the post pandemic period and mainly to specify the business survival strategies.

Keywords: Covid-19, Industry, Financial Institutions, Coronavirus, Economy, India, Pandemic, Sectors, Strategy, Remedies.

Introduction:

At present world is facing the problem of coronavirus disease which is also named as Covid-19 given by WHO. This Covid-19 started from Wuhan city of China in December, 2019. From here it spreaded to whole of the World. World Health Organization has declared it as pandemic. And due to protocol of World Health Organization, many of economic activities are locked. Since till date no cure or medicine is available hence lockdown was called to stop spreading of disease. In India first time case was reported on January 30, 2020. Since then it has increased steadily and significantly in whole India. Now presently India has recorded the third highest Covid-19 cases after United States and Russia. Novel Coronavirus (COVID-19) has infected more than a million people in more than 200 countries impacting lifestyles, businesses, economies.

Objective of this Paper:

The objective of this paper is to analyse the Covid-19 and post Covid-19 economic situation. And how to recover the economy. Which parties are involved in the improvement of the economy and how they can play a role?

Present Scenario:

The Government of India announced a nationwide lockdown starting March 25, 2020 which continued till 31st May, 2020 and in this period all non-essential services and business activities are closed. All Retail Establishment, Educational Institutions, places of Religious worship across the country stayed closed. Travel activities were stopped. From 1st June, 2020, India started Unlock-1 and Lockdown was relaxed gradually in a phased manner but continued containment zones. This Covid-19 has given the tremendous hardship that the nationwide lockdown had begun imposing on overall economy.

The problem of Covid-19 has given impact in two ways. First Health Shock and Second Economic Shock. The nature of this disease is highly contagious, the ways to constrain the spread include policy action such as imposing social distancing, Mask wearing, self-isolation at home, movement restriction on movement in lockdown period created a lot of problem for the people one side employment loss and other side livelihood. It resulted potential loss of economic activity not only in India but also in world. It may produce global recession in most.

Almost all sectors were affected because of import and export of goods from China was restricted. The purpose of the Lockdown was to stop spread of disease but it failed to some extent.

In 2019 the Chief of International Monetary Fund, Kristalina Georgieva said that the year 2020 could see the worst global economic fallout since the great depression in 1930 with overall 170 countries will experience negative per capita GDP growth due to this pandemic.

From Indian Economy point of view, the crises comes 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. And this pandemic has hit the economic performance due to lockdown. Particularly financial sector which is the brain of the economy has not been functioning properly and the macro-economic policy space to respond to such a crisis is severely limited. Previously the economy was facing problem of demand and supply. To study we have the four channels through which the impact is getting transmitted to output growth.

Indian Scenario:

India’s GDP growth decelerated to its lowest in over six years in 2019-20’s third quarter and this pandemic created fresh challenges. Various steps are taken by the Government to overcome this pandemic. Indian businesses, barring a few sectors, can possibly insulate themselves from the global supply chain disruptions caused by the outbreak due to relatively lower reliance on intermediate imports, their exports to COVID-19 infected nations.

We can study on various parameters:

1. Private final consumption:

Expenditure by purpose	Share in Percentage
Food and non-alcoholic beverages	26.3
Alcoholic beverages, tobacco and narcotics	1.9
Clothing and footwear	5.8
Housing, water, electricity, gas and other fuels	13.7
Furnishings, household equipment	3.2
Health	4.5
Transport	17.6
Communication	2.7
Recreation and culture	0.8
Education	4.0
Restaurants and Hotels	2.2
Miscellaneous goods and services	17.2

Source: First revised estimates of national income, consumption expenditure, saving and capital formation, Ministry of Statistics and Programme Implementation (MoSPI), 31 January 2020, accessed on 24 March 2020.

Transactions are significantly reduced in urban area and subsequently consumption of non–essential items are fallen which is shown in above table. Since Lockdown was extended hence impact is more as predicted earlier. Due to low domestic consumption sentiments, investment is delayed. In post Covid-19 few countries and firms are shifting their manufacturing bases from china. It is the time of opportunity to grab this base. The extent to which tis opportunity can be leveraged is largely dependent on how quickly the economy recovers and the pace at which supply chain issues are addressed. First one is external supply and demand constraints due to global recession and second is disruptions of global supply chain, third is domestic supply disruptions and fourth is decline in domestic demand.

2. Informal Sector:

Five states have highest informal sector in India. These are Rajasthan, Punjab, Andhra Pradesh, Chhattisgarh, Gujarat. As per Periodic Labour Force Survey, 2017-18 (July 2017-June 2018), Ministry of Statistics and

Programme Implementation (MoSPI), Finance Minister announces Rs 1.70 Lakh Crore relief package under Pradhan Mantri Garib Kalyan Yojana for the poor to help them fight the battle. Around 37 per cent of regular wage/salaried employees in urban India are informal workers (non-agriculture). Shutdown of factories and the resultant delay in supply of goods in China, could result in a shortage of both raw materials and intermediate goods for Indian companies importing from there.

The economic shock is impacting on informal and formal sectors. It will take long time to recover the economy. All it depends upon complete lifting of lockdown, when economy will start moving gradually. This recovery will depend upon the policy on ground reality. The Government and Reserve Bank of India has given policy to overcome the crises. This initial action needs to minimize the impact on the economy.

In the whole world including India has similar impact on economy—Demand and supply disruptions and the consequent economic slowdown. Indian economy has deteriorated significantly after the years of performance. Gross domestic product growth rate has been on a downward trajectory since 2015-16. According to the official statistics, GDP growth slowed down to 4.2% in 2019-20, the lowest level since 2002-03. Industry, which accounts for 30% of GDP, shrank by 0.58% in quarter 4, 2019-20. Unemployment reached to 45 years high due to this pandemic. Private Corporate sector is playing role of driver to boost employment opportunities. But unlock down has not given boost to private players.

The total outstanding investment projects between 2015-16 and 2019-20 declined by 2.4%. New projects announced fell by 4% as per data from the Centre for Monitoring Indian Economy. Covid-19 has shown a new consumption pattern. Expenditure on consumption has also been falling, for the first time in several decades. Impact on various sectors can be analyzed. India has a vast informal sector, the largest in the world, employing close to 90% of its working population and contributing more than 45% to its overall GDP. This sector is hit by two consequence shocks in a short span of time, from 2016 -2019. In current crisis, the demand and supply is not there hence loss of revenue.

Indian economy is facing a lot of problems. In financial sector, Reserve Bank of India conducts monetary policy through open market operation. In addition, several industries are facing problem of supply chain from China. If this crisis lasts for longer period the more difficulty will be for the entrepreneurs to stay. It also will impact negative impact on production on domestic industries. It will affect investment, employment, income and consumption, pulling down the aggregate growth rate of the economy. Railway down by 35% in April, Travel is down by 25%. Due to continuance of expenditure many firms are defaulting the loans due to fall in revenue. The firms that were near insolvency will end up in the bankruptcy process and those undergoing insolvency resolution processes under IBC will most likely get pushed to liquidation.

As the world and the Indian economy attempt to balance mitigating the health risks of COVID-19 with the economic risks, immediate measures need to be taken to:

- o prevent collapse of liquidity
- o protect the vulnerable, while enabling social distancing
- o intensify health interventions on a war footing
- o unplug production and supply chains for this

Remedies Required:

To recover the economy it is necessary to shake hand between Government, Households, Business, Financial Institutions and Trading partners. To have a positive result it is necessary to have positive attitude irrespective of political promises. First of all, Government should minimise the Cash crunch for business and it can be done with the help of financial institutions. They can restore the services. Households should have a balance between demand and savings. Government should provide economic financial facility to promote the business. For this Government can issue various long-term financial instruments for 10 years for General public with tax benefit

facility. These funds can be used to survive businesses directly or through financial institutions. When business activities will start then wages and salaries are paid and employment will improve. The Government should reduce tax liability towards direct and indirect taxes. In GST where tax rate is 28% can be lowered to 18%. In addition social distancing and market opening time facilities should be enhanced. When production will start then people will create demand and it will recover economy.

In financial sectors following can be done:

1. Asset classification norms

- Regulatory support on asset classification and provisioning norms with forbearance period of upto nine months, for stressed sectors and end-user segments, post end of the moratorium, to defaulting borrowers.

2. Restructuring

- ‘One Time Restructuring’ window to be permitted across all businesses without reclassification of the accounts from the provisioning perspective. Existing Resolution framework will need to be made more practical and facilitative to ensure businesses are not pushed towards defaults and insolvencies.

3. Securitisation/loan assignment

- COVID-19 related credit guarantee schemes to be extended to banks supporting securitisation deals with NBFCs.

4. PCA norms

- Relaxation on implementation of PCA norms for a one-year period may be assessed for Banks, depending on how the portfolio stress unravels across the industry.

5. Digital payments

- Incentivising merchants, retailers and consumers through lower taxation, special incentive schemes to shift to digital payment transactions.

6. Liquidity support

- NBFCs to be provided three months forbearance to service bonds and debentures given the EMI deferral option given to customers
- Moratorium for tax payments of at least six months (upto 30 September 2020) to enable enterprises overcome liquidity crunch

Conclusion:

It will take time for the economy to return to a normal state and even when social distancing, masking like measures continuing during unlock period, hence we can say demand is unlikely to get restored in the next several months, especially demand for non-essential items. Actually, there are three major components of aggregate demand-consumption, Investment and exports. It will require more time due to widespread chain of goods and services.

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Dr. Manish Kumar Gupta*Associate Professor, Faculty of Commerce**Sahu Jain College, Najibabad***Abstract**

India having multiple demographic characteristics and geographical characteristics has always been a continuous sufferer of various type of disasters but here we would like to add that there is a strong mechanism of disaster management in India. National Disaster Management Act 2005 is a milestone in this regard. Various type of authorities established under this act and its various provisions are quite helpful in the management of every type of disasters whether natural disasters or man-made disasters. But more emphasis is required on the Pre-disaster stage i.e. Capacity Building Stage. Besides it, more funding should be there to the various authorities, institutions, forces and Govt.; who are in the active role of combatting various types of disasters.

Key Words—Disaster, Disaster Management, NDMA, NDRF.

The year 2020 has been full of man-made and natural disasters like floods, forest fire, earthquakes, cyclones and top of all corona virus disease. COVID-19 can also be called a man-made disaster because China has been blamed for creating this type of dangerous virus. In this type of situation and to combat various types of disasters, there is an important role of disaster management mechanism in every country. India having multiple demographic characteristics and geographical characteristics has always been a continuous sufferer of various type of disasters but here we would like to add that there is a strong mechanism of disaster management in India. National Disaster Management Act 2005 is a milestone in this regard. Various type of authorities established under this act and its various provisions are quite helpful in the management of every type of disasters whether natural disasters or man-made disasters. In this paper we are covering many aspects of disaster management in India like disaster management in India theoretical aspect, mechanism for combating disasters in India, punishments mentioned under the act, funding of disasters, handling of disasters in India etc.

Meaning of Disaster

The disaster management act 2005 defines the disaster as follows—

“Disaster means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area.”¹

Meaning of Disaster Management

The disaster management act 2005 defines the disaster management as follows—

“Disaster management means a continuous and integrated process of planning, organising, coordinating and implementing measures which are necessary or expedient for—

(i) prevention of danger or threat of any disaster;

- (ii) mitigation or reduction of risk of any disaster or its severity or consequences;
- (iii) capacity-building;
- (iv) preparedness to deal with any disaster;
- (v) prompt response to any threatening disaster situation or disaster;
- (vi) assessing the severity or magnitude of effects of any disaster;
- (vii) evacuation, rescue and relief;
- (viii) rehabilitation and reconstruction;”²

Types of Disasters in India³

Following is the list of disasters in India as depicted in ‘INDIA’ a report published by National Institute of Disaster Management. The list follows—

- **“Water and Climate Related Disasters**— Floods and drainage management, Cyclones, Tornadoes and Hurricanes, Hailstorms, Cloud burst, Heat wave and Cold wave, Snow avalanches, Droughts, Sea erosion, Thunder & Lighting, Tsunami
- **Geological Related Disasters**— Landslides and mudflows, Earthquakes, Dam failure/Dam bursts, Mine disasters
- Chemical and Industrial Disasters
- Nuclear disasters
- **Accident Related Disasters**—Forest fires, urban fires, mine flooding, oil spills, major building collapse, serious bomb blast, festival related disasters, electric disasters and fires, air, road & rail accidents, boat capsizing, village fire
- **Biological Related Disasters**— Biological disasters and epidemics, pest attacks, cattle epidemic, food poisoning.”³

The above classification of disaster can be further depicted as—

- **Natural Disasters**—drought, flood, cyclones, heat waves, cold wave and fog, earthquake, landslides, Tsunami etc.
- **Man made Disasters**—Industrial and chemical disasters, stampede, road-rail-air accidents, mine disasters, epidemics, terrorist attack etc.

Further, some disasters are predictable upto a desirable level like rain, cyclones, floods, droughts etc. due to the latest advancements in science and technology. But some disasters are non-predictable like man made disasters and natural disasters like landslides, earthquakes, forest fire etc.

Vulnerability Profile of India

“India is vulnerable, in varying degrees, to a large number of disasters. More than 58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12%) of its land is prone to floods and river erosion; close to 5,700 kms, out of the 7,516 kms long coastline is prone to cyclones and tsunamis; 68% of its cultivable area is vulnerable to droughts; and, its hilly areas are at risk from landslides and avalanches. Moreover, India is also vulnerable to Chemical, Biological, Radiological and Nuclear (CBRN) emergencies and other man-made disasters.....**Of the 7,516 km long coastline, close to 5,700 km is prone to cyclones and tsunamis. 58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity. Over 40 million hectares (12 per cent of land) is prone to floods and river erosion.**”⁴

Institutional Mechanism for combating Disasters in India

Mechanism at Central level— There will be a National Disaster Management Authority at central level. The Prime Minister of India will be the ex-officio chairperson of this authority and he will nominate a maximum of

9 members to this authority. Out of these 9 members, the chairperson will also nominate as Vice-chairperson of this authority. National Disaster Management Authority will make an Advisory Committee having experts of different fields related to disaster management and having practical experiences of these types of situations; taken from the national, state or district level. The Central Government will also establish a National Executive Committee for the smooth functioning of the activities of National Disaster Management Authority. National Executive Committee has the right to constitute sub-committees for smooth functioning.

Also at central level, a national plan for disaster management for whole India will be prepared by the national executive committee in line with the national disaster management policy and in consultation with various expert bodies, organisations and state governments. This plan will be approved by the national authority. This plan will be reviewed bi- annually.

Mechanism at State level— At state level, State Govt. will establish a State Disaster Management Authority. The Chief Minister of the state will be the ex-officio chairperson of this authority and will nominate other members to the authority not exceeding 8. The chairperson of the state executive committee will be the CEO of this authority. State Disaster Management Authority will also establish Advisory Committee consisting of various types of experts in the fields concerning disaster management and having practical experience of working during disasters. State Government will also constitute a State Executive Committee to help the State Authority in functioning smoothly. Executive Committee also has a right to constitute sub-committees for smooth functioning of its duties.

A state disaster management plan will be made by State executive committee keeping the guidelines of the national authorities and with consultation of local bodies district authorities and people representing the various local persons and experts related to specific disaster area.

Mechanism at District level— State Government will establish for every district of the state, a District Disaster Management Authority. The collector or district magistrate or the deputy commissioner will be the chairperson of this authority. The elected representative of the local authority will be its co-chairperson. Ex-officio members to this authority will be the CEO of the district authority, the Superintendent of Police (SP), the CMO of the district and two district level officers to be appointed by State Government. There will also be Advisory Committee and other committees for the smooth functioning of the responsibilities of District Disaster Management Authority.

There will also be a district disaster management plan made by the district authorities with coordination with local bodies and in line with national and state plan for disasters.

Mechanism of various department/ministries of Central Govt. And State Govt.— Besides the above mentioned authorities the various department and ministries of the central government and state government are also working with their specific disaster plans and with their staff aligned and co-ordinated with the specialised disaster management authorities.

National Institute of Disaster Management— In 1995, Central Government has also formed National Institute of Disaster Management (NIDM) having head office in Delhi. The main function of this institute is capacity building for combatting disasters.

The mission of NIDM is—

- “To work as a think tank for the Government by providing assistance in policy formulation and;
- To facilitate in reducing the impact of disasters through:
 1. Planning and promoting training and capacity building services including strategic learning.
 2. Research, documentation and development of national level information base.
 3. System development and expertise promotion for effective disaster preparedness and mitigation.
 4. Promoting awareness and enhancing knowledge and skills of all stakeholders.
 5. Strengthening institutional mechanisms for training and capacity building of all stakeholders.
 6. Networking and facilitating exchange of information, experience and expertise.”⁴

National Disaster Response Force—There will also be a National Disaster Response Force (NDRF) for prompt and specialized response to disasters. It will work under the direction and control of National Disaster Management Authority & Ministry of Home Affairs. Central Government will appoint a Director General of this force for command and supervision.

NDRF was constituted in the year 2006 with 8 Battalions. At present NDRF is functioning with 12 Battalions each of 1149 persons. At start NDRF was also deputed for law and order maintaining normal duties, but as per NDRF rules on 14th Feb 2008, NDRF was made a specialised force to be used only in case of disaster related duties.

Offences and penalties under the act

Section 51 to 60 of the act describes the rules regarding various offences and penalties and imprisonment provisions for them. The main provisions are—

* if any person obstructs any officer of the Govt. or authorities mention in the act to properly carry on functions or refuse compliance with the directions of the government, officers and of various executive bodies under this act; then he is punishable with imprisonment of one year or fine or with both. If this obstruction or non-compliance result into loss or danger to life, then imprisonment may be extended up to two years.

* If a person makes intentionally a false claim for acquiring any relief, help, repair, reconstruction and other benefit from any officer of the govt. & authorities under this act; he/she shall be punishable up to 2 years imprisonment and also with fine.

* Any person who is found guilty of misappropriation of money and materials under this act which he holds for providing relief in case of disaster or disastrous situation, will be liable to be imprisoned upto a term of 2 years with fine.

* If a person makes false alarm or warning regarding a disaster or its intensity leading to a panic situation will be punishable with one year imprisonment or with fine.

Stages of Disaster Management Cycle



(A) **Capacity Building Stage**—Following are the different sub-stages of Capacity building stage—

- Prevention
- Mitigation
- Preparedness

(B) Post Disaster Stage— Post Disaster stage is also called the response stage. Following are the sub-stages of the post Disaster Stage—

- Immediate Relief
- Evaluation of loss of life & money
- Reconstruction and rehabilitation

Funding of Disasters

A. State Disaster Response Fund—The main funding of the disasters is through the State Disaster Response Fund established under NDMA 2005. This fund is meant only for the immediate relief to the sufferers of disasters. This is the main fund used for combating disasters. The Central Government provides 75% of SDRF allocation in case of States/UTs under general category and 90% for States/UTs under special category. Special category states are North eastern states, Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir. Disasters covered under SDRF are droughts, Cyclones, earthquakes, floods, hailstorms, fire, landslides, avalanches, frosts, tsunamis, cloudbursts, pest attacks and cold waves.

A state govt. is also eligible to consume 10% of the amounts of SDRF for immediate relief to the sufferers of disasters considered 'Local'. 'Local' disasters are the disasters which are not mentioned in list of Ministry of Home Affairs. State Govt. has to give proper notification of these local disasters with the approval of State Executive Authority.

B. The National Disaster Response Fund—The National Disaster Response Fund (NDRF), constituted under NDMA 2005 acts as a supplement to SDRF of a State, in case SDRF has insufficient funds for combating disasters. Central Govt. makes budgetary allocation for this fund.

Budget Allocation to NDMA and Actual Expenditure by NDMA on Disasters (Rs. Crore)

	NCRMP		ODMP		Establishment Charges	
	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure
2017-18	630.39	630.33	19.56	15.60	27.77	26.88
2018-19	303.03	302.68	31.08	26.49	30.90	28.69
2019-20	296.19	98.29*	46.29	17.92*	38.16	12.86*

Source—<https://ndma.gov.in/en/budget.html>⁵

***Expenditures of 2019-20 are upto 30th Sep.2019.**

NCRMP—National Cyclone Risk Mitigation Project

ODMP—Other Disaster Management Projects

Suggestions for a better Disaster Management in India

- More funds are needed for combating the disasters. For this cess should be levied on all income tax payers.
- Prevention, mitigation and preparedness stages should be focussed upon.
- Various provisions of the NDMA should be strictly followed especially the provisions related to penalty and imprisonment.
- Plans for disasters management at central, state and local level should be more practical rather than a paper work. Their practical feasibility should be focussed upon.
- There should be no discrimination in immediate relief, reconstruction and rehabilitation.

- Personnel Power of NDRF need an increase.
- Education & Training regarding Primary prevention against disasters should also be a part of educational curriculum in India.

Conclusion

Every country of the world whether small or big, developed or developing or undeveloped; has been sufferer of any or more of natural or man-made disasters. Now a days man made disasters are more harmful than the natural disasters as in case of COVID 19. Man through its old tendency of indulging with natural resources and disturbing their natural balance has always been inviting the natural disasters in the varied forms. Excess industrialization, urbanization and advancements in science and technologies have also forced various types of man made disasters as well as natural disasters; to occur. Some disasters are predictable but some are not. In case of Predictable Disasters, Capacity Building stage of Disaster Management is comparatively important. While in case of Unpredictable Disasters, immediate relief, reconstruction and rehabilitation are comparatively important. But both Pre-disaster & Post-disaster aspects of Disaster management are supplement to each other. In case of India & its disaster management methodology, there is a strong mechanism to combat disasters and strong law, legislation & policies. But more emphasis is required on the Pre-disaster stage i.e. Capacity Building Stage. Besides it, more funding should be there to the various authorities, institutions, forces and Govt.; who are in the active role of combatting various types of disasters.

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EPIDEMICS AND HEALTH DISASTERS IN INDIA POST 1900s AND THEIR HANDLING: AN ASSESSMENT

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Abstract

The recent outbreak of COVID-19 has questioned the resilience of health infrastructure and medical facilities around the world. It has questioned our preparedness to such pandemics and also handling of such global health emergencies. Our response to the problems of today is contingent on how we had analysed the previous problems, what was our learning of past incidents? The better understanding of our past gives us power to control our present and also tackle our future. Therefore this paper provides the details of our previous health emergencies (epidemics and pandemics) and how they were tackled. It is also an assessment of the leanings for future challenges as these.

Keywords: - COVID-19, Resilience, Pandemics, Epidemics, Global Health emergency, Learning.

Introduction:

As it is said health is wealth, healthy body leads to a healthy mind which in turn leads to the holistic development of human being which results in turning human in to human resource who becomes asset for any nation by turning in to human capital. Health is most important part of governance of any country. In India health is a state subject. But when it comes to pandemics like COVID-19, central government needs to intervene and supervise management of such global health disasters. *In order to understand how health emergencies were handled it's imperative to get a basic understanding of epidemics and pandemics.* India's distinctive demographic profile and geographic position presents a unique challenge to infectious disease management. The country is one of the world's most populated nations, with a substantial proportion of the population living in impoverished areas where infectious diseases can spread exponentially.

Geographically, the country lies within the distribution zone of important disease vectors such as the '*Aedes aegypti*' mosquito (which spreads dengue and 'Zika virus'), and the country is subject to annual monsoon seasons which perpetuate mosquito borne diseases such as Dengue, Japanese Encephalitis and Chikungunya. In the backdrop of all these the crisis of COVID-19 exposed real face of health infrastructure and management. This paper tries to explore how the epidemics in the past were managed by the government and its institution.

Basics of Epidemic and Pandemic:

Epidemic is often used broadly to describe any problem that has grown out of control. During an epidemic, the disease is actively spreading. Examples of past epidemics are the 1918 Spanish flu, the measles outbreak from 1981 to 1991, and a 2014 case of whooping cough. Whereas a *pandemic* is a type of epidemic that relates to geographic spread and describes a disease that affects an entire country or the whole world. *An epidemic becomes*

a pandemic when it spreads over significant geographical areas and affects a large percent of the population. (Nita Madhav)¹. In short, a pandemic is an epidemic on a national or global level. Examples of past pandemics are the flu pandemic of 1968, the HIV/AIDS pandemic, and the bubonic plague.

List of major outbreaks post 1900s:-

Any occurrence in a community or region where the cases of illness, or specific health-related behavior, or other health-related events clearly in excess of normal expectancy, the community or region and the period in which the cases occur are specified precisely. *The number of cases indicating the presence of an epidemic varies according to the agent, size, and type of population exposed, previous experience or lack of exposure to the disease, and time and place of occurrence.*²

These are some of the previous epidemics³ in India:-

- **1915 - 1926: Encephalitis Lethargica**

It is also known as lethargic encephalitis. It was an epidemic and spread around the world between 1915 - 1926. Encephalitis Lethargica was an acute contagious disease where the virus attacked the central nervous system of human beings. Encephalitis Lethargica was in its epidemic form in Europe but it was still sporadic in India.

- **1918 - 1920: Spanish Flu**

While the world was still fighting with Encephalitis Lethargica, a new virus spread out and was known as Spanish Flu. Spanish flu was caused by the deadly strain of avian influenza and was spread due to World War I. In India, the Indian soldiers who were a part of the World War I became the carriers of this disease.

- **1961 - 1975: Cholera pandemic**

Since 1817, *Vibrio Cholerae* (a type of bacteria), which caused seven cholera pandemic globally. Within a time period of 5 years, this virus spread in parts of Asia from where it reached Bangladesh and India. The poor water sanitization practices in Kolkata made the city epicentre of the Cholera pandemic in India.

- **1968 - 1969: Flu Pandemic**

In 1968, the Flu spread in Hong Kong and was caused due to the H3N2 strain of influenza a virus and within two months it reached India. American soldiers returning from Vietnam after the Vietnam War became the carrier of this virus to the US.

- **1974: Smallpox Epidemic**

Smallpox was caused by either of the two virus variants: *Variola major* or *Variola minor*. According to the reports, 60% of the smallpox cases globally were reported in India and was more virulent as compared to other parts of the world. To get rid of this alarming situation, India launched the National Smallpox Eradication Program (NSEP) but failed to get the desired results. To help India with this alarming situation, WHO along with the Soviet Union sent some medical assistance to India and in March 1977 India was free from smallpox.

- **1994: Plague in Surat**

In September 1994, the pneumonic plague hit Surat and people fled from the city in large numbers. Rumours along with the misinformation worsen the situation and people hoarded the essential supplies. The mass migration from Surat to other parts of the country spread the disease across India. The main cause of the Plague was unhygienic conditions in the city such as open drains, poor sewage system etc. However, the local government of Surat cleared the garbage and clogged drains, thus, managing the Plague.

- **2002 - 2004: SARS**

After the 21st century, SARS was the first severe disease which was transmissible from one person to another. It was a severe acute respiratory syndrome and the cause of SARS was similar to COVID-19, named SARS CoV. This virus was known for frequent mutations and was transmissible from one person to another and through coughing and sneezing.

- **2006: Dengue and Chikungunya Outbreak**

Dengue and Chikungunya Outbreak both were mosquito-borne typical diseases and stagnation of water in different parts of the country provided breeding grounds for these mosquitoes. It affected people across India. Several parts of the country were impacted due to these outbreaks and the highest number of patients were reported in the national capital i.e., Delhi.

- **2009: Gujarat Hepatitis Outbreak**

Many people in February 2009 in Gujarat were infected with Hepatitis B which was caused by the transmission of the infected blood and other body fluids. Local doctors of Gujarat were suspected of causing this outbreak with contaminated and used syringes.

- **2014 - 2015: Odisha Jaundice Outbreak**

Odisha witnessed the outbreak of Jaundice in September 2014 and the main cause was suspected to be the contaminated water. As per the reports, the drain water seeped through pipelines of drinking water making it unhealthy for drinking.

- **2014-2015: Swine flu outbreak**

During the end months of 2014, several reports of the H1V1 virus started to rise. Swine flu is a type of influenza virus and in 2014, Gujarat, Rajasthan, Delhi, Maharashtra and Telangana were among the worst affected states due to the virus. Even after several public awareness drives, by March 2015, about 33,000 cases were reported across the country and about 2000 people lost their lives.

- **2017: Encephalitis outbreak**

Due to mosquito bites, in the year 2017, the city of Gorakhpur in Uttar Pradesh witnessed an increase in the number of deaths of children. These children died of Japanese encephalitis and acute encephalitis syndrome. Both of these viral infections cause inflammation of the brain which results in physical disabilities and even deaths in some cases.

- **2018: Nipah Virus outbreak**

In May 2018, an infection caused by fruit bats was reported in Kerala. Within a few days of its widespread of the virus, the state government implemented several protectionary measures in order to minimise the spread of the virus. Due to the preventive measures, by the month of June, the outbreak was curbed within Kerala.

- **2019: Coronavirus**

Coronavirus disease (COVID-19) is a new strain that was discovered in 2019 and has not been previously identified in humans. It is zoonotic, thus can be transmitted between animals and people. Common signs of infection include respiratory symptoms, fever, and cough, shortness of breath and breathing difficulties. In more severe cases, the infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death.

There were the major outbreaks that India has witnessed since the 1990s. These outbreaks have been eliminated from India with the help of proper hygiene and sanitization practices but COVID-19 still prevails in India as well as in other parts of the world.

Challenges and Prospects for handling such Health Emergencies:-

Significant advances in medicine in the last century mean that many people, including world leaders, assume that the 1918 pandemic should be confined to the history books, along with the Black Death and bubonic plague. That is a deadly assumption because outbreak of COVID-19 as pandemic questioned our preparedness and

management of health emergencies. There was already a warning about catastrophic epidemics by expert considering the fact the world is significantly more interconnected, with denser cities and no nation-wide seasonal flu immunisation policy in India.

Challenges:-

- **Importance of basic hygiene:** - Basic hygiene and precautions are first line of defence against spread of the disease. Therefore basic hygiene related practices must be part of our life-style.
- **Mass immunisation:** - Ensuring Immunisation among the masses would be the goal of government once the vaccine comes in market. Till then boosting of innate immunity is key to stay healthy.
- **Research and Development:** - Boost to research and development is required to create a robust and resilient environment for the growth of Pharmaceutical sector as well as health sector innovation and development.

Management:-

- **Epidemics Disease Act, 1897** – This act provides provisions for prevention of the spread of ‘dangerous epidemic disease’, used in context of COVID-19 case to ensure power to local level administration to tackle with the further spread of disease without fear of any legal infringement or proceedings against them .
- **National Centre for Disease Control (NCDC)** - comes under Directorate General of Health Services, ministry of health and family welfare, ensures guidelines and information regarding corona virus spread and control in India.
- **SOP- Standard Operating Procedures-** These are certain sets of guidelines issues to citizens by various ministries such as ministry of Home Affairs and Health Ministry to ensure containing spread of this epidemic.

Suggestions:-

- Coordination and coherent planning
- Prevention , Testing , Treatment
- Work in coordination of private sector in ensure better health facilities , Research and Development
- Building a global health system
- Viable measurements for unorganized sector of economy
- Empowerment of PDS (Public Distribution System) in India
- Empowering basic unit of administration i.e. Villages to function as self sufficient units of development and growth

Conclusion:-

Therefore the Challenge put up by COVID-19 crisis has shaken every aspect of country be it health, economy, education or any other. Stopping further spread of this pandemic is priority before the country. There are many vaccines are under trial around the world as well as in India. Till the vaccine comes in our rescue it is our responsibility as citizen of India to do our bit for the containment of the disease as well help those who are worst hit by its impact such as daily wage earners and migrant labourers. Ensuring our mental health in this scenario is also imperative. As history teaches us we have come across many health emergencies before too, this shall too pass when we do our bit for our country through leaning from past experiences.

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AN INTRODUCTION TO POPULAR PLANTS DURING COVID-19 PERIOD IN INDIA

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Abstract

This Paper provides information regarding medicinal properties and botanical introduction of some plants which remain popular during Covid-19 period in India. There are several traditional systems of medicine treat in India. There are so many herbs which are known in every part of country for their medicinal values. There is a list of spices used in Indian kitchens. Almost all the spices have medicinal values. Indian people are using herbs and spices for improving body immunity during Covid-19 pandemic. This paper focus on information regarding the plants which have capacity to improve immunity of body to fight against the diseases.

Introduction of Plants & Their Medicinal Uses

At present world is suffering from COVID-19 pandemic. Researchers are working hard to find some solution for this pandemic. Researchers are very curious about how to provide the best protection to the people before the availability of a vaccine.¹ Indian herbs have several medicinal properties and they are used in treatment of various illnesses.² Traditional Indian medicinal practices include Ayurveda, Siddha, Unani and Yoga, Naturopathy and Homeopathy, which are successfully practiced for treating various diseases.

Plants are good source of medicines. According to a survey (1993) of World Health Organization (WHO), the practitioners of traditional system of medicine treat about 80% of patients in India, 85% in Burma and 90% in Bangladesh.^{3,4} In traditional systems of medicine the Indian medicinal plants are successfully used in management of various disease like bronchial asthma, chronic fever, cold, cough, malaria, dysentery, convulsions, diabetes, diarrhea, arthritis, emetic syndrome, skin diseases, insect bite etc. and also in treatment of gastric, hepatic, cardio vascular & immunological disorders.^{3,5-9}

Ashwagandha

Botanical Name: *Withaniasomnifera*

Family – Solanaceae.

Stems : The stems of *Withania* are brownish dark colour and erect, sometimes leaves are absent or less on lower part of stem.

Leaves: Leaves simple, 2–6cm wide, 3–8cm long, alternate, petiole 1–2cm long. Leaves are ovate, glabrous, simple more than 10cm long.

Roots: The roots of *Ashwagandha* are fleshy when dry, they are straight, cylindrical, tapering down, gradually unbranched of about 10-17.5cm long and 6-12mm diameter in thick. The main roots are brownish outer and creamy interior and bear fiber similar secondary roots having acrid taste and bitter.¹⁰

Flower: Flowers are generally small, greenish, axillary, monoecious or bisexual and solitary or in few-flowered cymes. Small, yellow or green coloured occur in clusters.

Fruit: *Withaniasomnifera* can be identified by the red fruit (berry) enclosed by the brownish, papery, turgid calyx.

Withaniasomnifera



Ashwagandha in Sanskrit means “horse’s smell,” probably originating from the odor of its root which resembles that of a sweaty horse. Ashwagandha is called as Indian Ginseng, since it is used in Ayurvedic medicine in a way similar to that ginseng is used in traditional Chinese medicine.

In Ayurveda ashwagandha is considered a rasayana herb. This herb is also considered an adaptogen which is an herb that works to normalize physiological function.

In Ayurveda, this plant is claimed to have potent aphrodisiac rejuvenative and life prolonging properties. Ashwagandha is also used for the treatment of nervous exhaustion, memory related conditions, insomnia, tiredness, potency issues, skin problems and coughing. It improves learning ability and memory.

The traditional use of ‘Ashwagandha’ was to increase energy, youthfulness, endurance, strength, health, nurture the time elements of the body, increase vital fluids, muscle fat, blood, lymph, semen and cell production. It helps counteract chronic fatigue, weakness, dehydration, bone weakness, loose teeth, thirst, impotency, premature aging, emaciation, debility, convalescence and muscle tension. It helps invigorate the body by rejuvenating the reproductive organs, just as a tree is invigorated by feeding the roots.¹¹⁻¹⁵

Giloy

Botanical Name: *Tinospora Cordifolia*

Family: Menispermaceae

Tinospora cordifolia commonly named as “Guduchi” in Sanskrit. Giloy (*Tinospora cordifolia*) is a large, glabrous deciduous climbing shrub. This herb is found at higher altitude.^{16,17}

Stems- Fleshy

Roots - long thread like, aerial, arise from branches.

Bark - Thin, greyish or creamy white in colour, when peeled fleshy stem is exposed.

Leaves - Cordate (heart shaped), membranous, juicy.

Flowers - The flowering season expands over summers and winters.¹⁸

Maleflower - Small, yellow or green coloured occur in clusters.

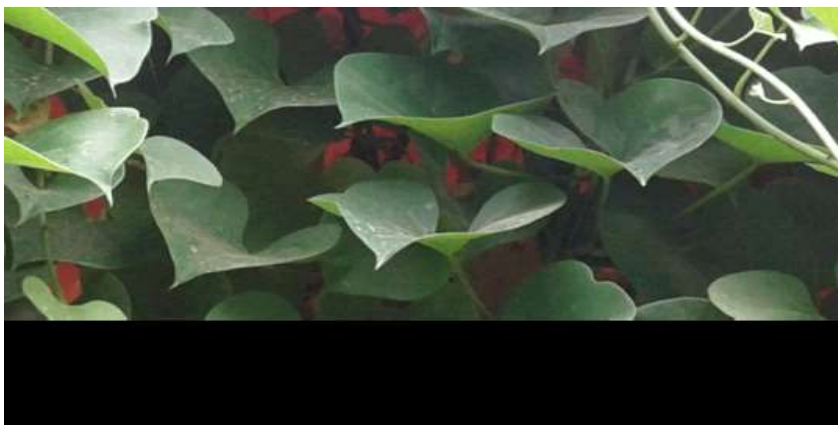
Femaleflower - Occur singly.

Fruits - Pea shaped, fleshy, shiny turn red when boiled. Occur in winter

Seeds - curved, pea sized.

T. cordifolia is widely used in the Indian Ayurvedic system of medicine as an immunostimulant.¹⁹ Syringin, cordiol, cordioside, and cordifoliosides A and B are the active principles responsible for anticomplement and immunomodulatory activities,^{20,21} well as an arabinogalactan polysaccharide isolated from the dried stems and an alpha-D-glucan.^{17,19,22,23} A variety of active components derived from the plant like alkaloids, steroids, diterpenoid lactones, aliphatics, and glycosides¹⁸ have been isolated from the different parts of the plant body, including root, stem, and whole plant. Recently, the plant is of great interest to researchers across the globe because of its reported medicinal properties like anti-diabetic, anti-periodic, anti-spasmodic, anti-inflammatory, anti-arthritic, anti-oxidant, anti-allergic, anti-stress, anti-leprotic, anti-malarial, hepatoprotective, immunomodulatory and anti-neoplastic activities.

Tinospora Cordifolia



AYUSH Ministry of Health, India also recommended Giloy to strengthened the immune power of body:

Indian medicinal Plant – *Tinospora cordifolia* (Giloy)

Form of Extract- Aqueous

Trade name – Samshamanivati

Indian traditional Medical practice- Ayurveda.

Preparation- Samshamani Vati 500 g with warm water.

Recommended usage - Twice a day for 15 days.

Effective against - Chronic fever.

(Ref: AYUSH Ministry of Health Corona Advisory – D.O. No. S. 16030/18/2019 – NAM; dated: 06th March, 2020).

Other Medicinal Plants

The following plants also have the medicinal properties—

Turmeric

Botanical name: *Curcuma domestica*.

Family: Zingiberace

It is a herbaceous perennial rhizome or underground stem with tough brown skin and bright yellow-orange flesh.

Turmeric contains the active ingredient curcumin. It is strong in anti-oxidant and anti-inflammatory properties. It is a rich source of manganese. Turmeric aids digestion, boosts immune system. Studies have shown cancer preventing effect of curcumin, protection of liver from toxic compound, improved circulation and protection against atherosclerosis, dementia, cold and flu, reduces risk of heart attack and flu. It improves glucose control and insulin

activity. Curcumin stimulates the gallbladder and produces bile. The bile helps digest fat, experts which improves digestion and may help control weight and bloating. Helpful in skin related problems. Used in cooking. Play important role in healing wounds & cuts. Also helpful in managing diabetes.²⁴

Clove (laung)

Botanical name- *Syzygium aromaticum*

Family: Myrtaceae

Clove is the aromatic flower buds of the family Myrtaceae. They are brownish, rough, and irregularly wrinkle texture. contains calcium, iron, vitamin A and vitamin C.

Use - Cloves are used as a carminative, to increase hydrochloric acid in the stomach and to improve peristalsis. Cloves are also said to be a natural anthelmintic. Laung oil is helpful for coping with tooth ache & sore gums. It also help in relieving chest pain, digestive problems, fever, cold & cough.²⁵ Also used for flavoring dishes.

Ginger (Adrak)

Botanical name: *Zingiber officinale*

Family: Zingiberaceae

It is a herbaceous perennial rhizome or underground with corky outer layer and pale yellow centre.

It protects against colon and ovarian cancers, Alzheimer's disease.

Food use: flavoring foods and beverages, as tea, ginger drinks.

Garlic

Botanical name: *Allium sativum*

Family: Liliaceae

Cumin

Botanical name: *Cuminum cyminum*

Family: Apiaceae

Conclusion

During this corona hit environment as no vaccine is available for this disease, the only way to remain safe is use of masks, regular & proper use of sanitizers, social distancing and above all to build & maintain a strong immunity within the body itself. To build and maintain strong immunity, direct and indirect intake of various medicinal plants like Ashwagandha, Giloy, Turmeric, Ginger, Garlic, Clove & Cumin etc.; is necessary to keep ourselves safe from Corona Virus.

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ASSETS LIABILITIES MANAGEMENT IN THE INDIAN BANKING SYSTEM

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Abstract

The paper is a broad descriptive view of the journey of asset liability management in the Indian banking system. It takes into account the various phases of implementation of asset liability management guidelines, its objectives, its techniques and how it is beneficial in the management of assets and liabilities of the Indian banks. The paper is broadly descriptive in nature to provide an overall view of how ALM operates in the banking scenario.

Keywords: Asset Liability Management, Pillars of ALM, Banking System, ALM Objectives, ALM Techniques

Concept of Assets Liabilities Management (ALM):

Asset Liability Management directs to the management actions taken by the managers to maintain the firm's portfolio of assets and liabilities with the view to maximize the profit generating capacity of the firm and stockholders' earnings over a long term period with the consideration of its safety and liquidity. Asset Liability Management refers to the accountability of managing the purchases together with the allocation of funds to make sure that there exists adequate liquid-ity, maximum profitability and minimum risks.

It acts as an indicator to take up future activities by including the reviews of the recent and past performances. Liquidity and return becomes a major player in assessing and determining the funding strategies. This results in monitoring the distribution of the volume, rates and mix of the assets and liabilities of the firm. Review of budgets and earnings is usually the tool for it.

Review of literature

Thomas Gerstner, Michael Griebel, Markus Holtz, Ralf Goschnick, Marcus Haep⁽¹⁾ in their paper concluded that "any kind of static regulation like prescription of maximum portion of stocks or the minimal participation rates for policy holders are insufficient to control the company's default risk or to ensure an appropriate policyholder participation. Instead, regulation as well as internal risk management guidelines should lay more emphasis on prescribing stress tests and stochastic simulations as these methods are much better suited to take into account the complex interaction of the assets and liabilities of a life insurance company."

Mei Choi Chiu, DuanLi⁽²⁾ in their paper stated the use of "stochastic LQ framework and embedding technique to the asset-liability mean-variance optimization under a continuous-time setting. An analytical optimal policy, the

efficient frontier and the optimal funding ratio have been derived. We have examined the impact of liabilities to the portfolio selection problem by comparing our results to those of the existing literature.”

Jerome Detemple, Marcel Rindisbacher⁽³⁾ developed a “dynamic asset-liability management model for pension plans. The main novelty in the model is the preference structure which allows for a funding shortfall at the terminal time. This feature enables us, in particular, to deal with the allocation problem of underfunded plans. The optimal asset allocation rule was shown to include hedging terms motivated by fluctuations in the value of liabilities. The sensitivity of the portfolio shares to the asset value and to the parameter controlling the tolerance for a funding shortfall was examined. The analysis presented focused on the case where utility functions satisfy the Inada condition at zero. The extension to the situation where the marginal utility functions are finite at zero is straightforward.”

Asset Liabilities Management in the Indian Banking:

Asset Liabilities Management (ALM) pertains to managing and levelling out the risks from the bank’s assets i.e. loans and liabilities i.e. deposits. The kind of risks that need careful attention in the banks are credit risks, market risks which are inclusive of the interest rates and liquidity risk management. In India, the Reserve Bank of India prescribes a set of guidelines which the banks follow for Asset Liability Management; those are in turn based on the global norms prescribed by the Bank for International Settlements, a body formed inclusive of the central banks from across the world.

Accordingly, there are three pillars of ALM as follows:

- o Information systems
- o Organization
- o Processes
- **ALM Information System:** ALM Information System is utilized to gather information in a precise and accurate way. ALM Process rests on the information being collected. A well designed information system provides for a better picture of the balance sheet of the bank.
- **ALM Organisation:** The Asset-Liability Committee (ALCO) consists of the bank senior management which also includes the CEO. The committee overall guides to adhere to the limits that the board sets and the business strategy that it decides keeping factors like bank’s budget and risk management objectives in mind. As a decision making body, it plans the balance sheet of the bank keeping the risk-return perspective in mind.
- **ALM Process:** Identification, measurement and management of risk parameters is the basic ALM process. Gap Analysis as a traditional technique for regular monitoring of the interest rate risk and liquidity risk is guided by the RBI. Nevertheless, RBI is advising the Indian banks to shift in the direction of more sophisticated techniques like Duration, Simulation, VaR.

The responsibility for the management of risks, a specific risk policy which the bank follows and its limits for various criteria like liquidity, rate of interest, foreign exchange, equity price risks need to be taken care of mandatorily by the board of the commercial bank as directed by the Reserve Bank of India. To accomplish this task, commercial banks are now required to create a decision-making unit which takes the responsibility for planning the balance sheet with a risk-return perspective, along with the management of interest rate risks and liquidity risks. A committee such formed is called the asset liability committee or ALCO, having the chief executive of the bank. ALCO considers the pricing of the products i.e. the deposits and the advances along with the aspired maturity profile of the incremental assets and liabilities. ALCO mandatorily articulate the current rate of interest with the point of view of the bank and proposes the strategies on the bases of this decision for the business’s future.

Evolution of ALM in Indian Banking System:

Taking into account the controlled condition in India in 1970s to mid 1990s, there was no interest rate risk as the financing cost were managed and endorsed by RBI. Spreads among deposit rates and loaning rates were exceptionally wide.

Around then banks Balance Sheets were not being overseen by banks themselves as they were being overseen through solutions of the regulatory authority and the government. With the deregulation of the rate of interest, banks were given a lot of opportunity to deal with their Balance sheets.

Hence, it got the importance to present ALM rules with the goal that banks can be kept away from incurring huge losses by virtue of wide ALM mismatch.

Reserve Bank of India gave its first ALM Guidelines in February 1999, which was made successful from 1st April 1999. These rules secured, among other things, rate of interest risk and liquidity risk estimation/reporting system and prudential cutoff points. Gap articulations were required to be set up by planning all assets and liabilities as indicated by the expressed or foreseen re-valuing date or maturity date.

The Assets and Liabilities at this stage were required to be separated into 8 categories on the basis of maturity (1-14 days; 15-28 days; 29-90 days; 91-180 days; 181-365 days, 1-3 years and 3-5 years or more 5 years), in view of the rest of the period to their maturity (called remaining maturity). All liabilities were to be taken as outflows while assets were taken as inflows.

According to liquidity management, banks needed to monitor their cumulative mismatches throughout all the categories in their statement of structural liquidity by keeping internal prudential cut offs with the approval of their boards/ management committees.

According to the rules, in the ordinary course, the inconsistency (negative gap) in the time categories of 1-14 days and 15-28 days were not to be in excess of 20 per cent of the cash outflows in the individual time categories.

In the latter decisions the Reserve Bank of India asked the banks to mandatorily form an ALCO (Asset Liability Committee) to keep a track, observe and report ALM issues.

It was in September, 2007, in light of the international practices and to address the issue for a sharper appraisal of the viability of managing the liquidity and with the goal of giving a boost to improvement of the term-money market.

RBI calibrated these rules and it was given that the banks may assume a more detailed way to deal with estimation of liquidity risk by separating the first time category(1-14 days at present) in the Statement of Structural Liquidity into three time categories viz., 1 day (called following day) , 2-7 days and 8-14 days. Consequently, banks were approached to bifurcate their maturing assets and liabilities in 10 time-categories.

Consequently according to October 2007 RBI rules, banks were directed that the net accumulating negative mismatch during the following day, 2-7 days, 8-14 days and 15-28 days ought not surpass 5%, 10%, 15% and 20% of the accumulated outflows, individually, so as to perceive the total effect on liquidity.

Banks were likewise encouraged to undertake effective liquidity management and to prepare on regular basis the statement of structural liquidity. Without a completely organized environment, banks were permitted to gather the statement on best accessible information inclusion at first however were encouraged to put forth cognizant attempts to accomplish 100 percent information inclusion in a convenient way.

Correspondingly, the statement of structural liquidity was to be accounted for to the Reserve Bank, monthly, as on the third Wednesday of every month. The recurrence of administrative reporting of the structural liquidity position was expanded to fortnightly, from April 1, 2008. Banks are presently needed to present the statement of structural liquidity as on the first and third Wednesday of every month to the Reserve Bank.

Leading body of the Banks were endowed with the obligation regarding the administration of risks and required to choose the policy for risk management and set cutoff points for liquidity, rate of interest, equity price risks and foreign exchange.

Asset Liability Committee (ALCO), is headed by the CMD/ED and is given top most priority to regulate the ALM framework in the firm. ALCO considers product pricing for deposits and advances, the desired maturity profile of the incremental assets and liabilities in addition to monitoring the risk levels of the bank. It will have to articulate current interest rates view of the bank and base its decisions for future business strategy on this view.

Progress in Adoption of Techniques of ALM by Indian Banks:

ALM process includes identification, estimation and the management of risk parameter. In its earliest rules RBI requested that the banks utilize customary procedures like Gap analysis for observing rate of interest and liquidity related risks. At that RBI wanted that Indian Banks gradually move towards refined procedures like Duration, Simulation and Value at risk in the future. Presently with the progression of time, an ever-increasing number of banks are moving towards these propelled procedures.

Objectives of Assets /Liabilities Management (ALM):

Based on the aforesaid premise, the broad objectives of ALM are:

1. Planning to Meet the Liquidity Needs:

The first task of ALM is to make sure that there is availability of sufficient funds at a competitive price as and when needed. The aim is achievement of a suitable mix of resources by keeping the non-interest funds to the minimum and maximizing the resource allocation to areas generating high profits while taking into account the availability of funds for any eventuality.

2. Arranging Maturity Pattern of Assets and Liabilities:

The ALM process takes care of the exposure of the pricing of the assets and liabilities to the interest rate risks and making sure that the assets and liabilities match over different time frames.

3. Controlling the rates received and paid to assets /liabilities to maximize the spread or net interest income is the final responsibility of ALM:

The aforesaid objectives are accomplished without exposing the bank to excessive risk of default.

4. Spread Management:

The difference between interest earned on deployment and interest paid on the acquisition of financial resources is called the spread or margin or net interest spread/margin or net interest income.

Spread maximization strategies help the firm in taking its advantage. The strategies involve:

1. Reduction of the bank's vulnerability to cyclical rate of interest and stabilizing its earnings in the long term.
2. Prediction of the change in rates and keeping a plan ready for any eventualities,
3. Making coordination in the rate structure,
4. Trying to keep a balance between the likely benefits and default risks on loans and investments.
5. To ensure a steadily controlled growth and a gradual improvement in profitability.

5. Gap Management:

A change in the rate of interest impacts the value of assets and liabilities leading to a gap. Assets and liabilities of this type are called as rate sensitive assets (RSA) and rate sensitive liabilities (RSL) respectively.

For the purpose of management of the gap, different time categories categorise the distribution of the assets and liabilities for:

1. Identifying and matching assets and liabilities over different time bands,
2. Optimizing the earnings over a complete economic cycle without moving to an extreme position during any one phase, and
3. Building a mechanism to expand and contract assets/liabilities in response to rate cycle phases.

6. Interest Sensitivity Analysis:

Interest sensitivity analysis is a generalization of the gap management strategy. It analyses the impact on the bank's spread or margin due to the changes in rate of interest and the overall earnings.

The strategy includes:

1. Separating fixed and variable interest rate components of balance sheet,
2. Listing assumptions regarding rate, volume and mix of the projected portfolio,

3. Making alternative assumptions on rise and fall in interest rates, and

4. Testing the impact of assumed changes in the volume and composition of the portfolio against both, rising and falling interest rate scenarios.

ALM should be proactive and be comparable with the cycle of business. Thought must be given to holding long term or short term assets/liabilities with fixed and variable financing costs. Referring to these issues ought to encourage better interest sensitivity analysis along with spread and gap management.

Asset- Liability Management Techniques:

ALM acts as control mechanism which is bank specific, where several banks may employ a similar ALM technique or each bank may make use of a separate system.

1. Gap Analysis:

Gap Analysis refers to technique used for Asset-Liability management. It is a technique used for the assessment of liquidity risk and interest rate risk. At a specific time it measures the spread between Rate Sensitive Liabilities (RSL) and Rate Sensitive Assets (RSA) (with the inclusion of off balance sheet position) by categorising them into time categories as per the residual maturity or next re-pricing period, whichever is earlier. In the following conditions, an asset or a liability is treated as rate sensitive if:

- i) Within time category under examination is a cash flow.
- ii) The interest rate resets/re-prices contractually during time categories.
- iii) Administered rates are changed and
- iv) It is contractually pre-payable or withdrawal allowed before contracted maturities.

Thus;

$$GAP=RSA-RSL$$

$$GAP\ Ratio=RSA/RSL$$

$$RSA=Rate\ Sensitive\ Assets$$

$$RSL= Rate\ Sensitive\ Liabilities$$

- Mismatches are either positive or negative.
- Positive Mismatch: Assets >Liabilities. Negative Mismatch: Assets <Liabilities.
- For a positive mismatch, the excess liquidity could be utilized in creating new assets, investing in money market instruments & investment swaps etc.
- In case of a negative mismatch,the deficit could be financed from market borrowings(Call/Term), Bills Re-discounting,Repos & in foreign currency converted into rupee.

During the late 1990s financial institutions made a wide usage of gap analysis which continued even during the early years of the current century in India. The under-listed table gives us an idea of how does a positive or negative gap will impact the Net Interest Income, in case there is either an upward or downward movement in the rate of interest:

Gap	Interest Rate Change	Impact on NII
Positive	Increases	Positive
Positive	Decreases	Negative
Negative	Increases	Negative
Negative	Decreases	Positive

2. Duration Gap Analysis:

This is an elective technique for estimating the risk related to rate of interest. This method inspects the sensitivity of the market estimation of the financial institution's net worth to the changes in the rate of interest. Duration Analysis depends on Macaulay's idea of duration, which quantifies the normal lifetime of a security's stream of payments.

We realize that Duration is a significant measure of the rate of interest sensitivity to assets and liabilities as it considers the arrival time of the flows of cash and the maturity time of both assets and liabilities. It is the weighted average time to maturity of all the present values of flows of cash. Duration essentially refers to the average existence of the assets or the liabilities.

There is more sensitivity in the price of the asset or liability to the change in the rate of interest if the duration value is large. Along these lines, according to this hypothesis, the bank will be immunized from risk of interest rate changes if the duration gap is zero between assets and liabilities.

This model has one significant advantage. It utilizes the market estimation of assets and liabilities. Duration analysis sums up with a solitary number exposure to simultaneous shifts in the term structure of rate of interest. It tends to be seen that both gap and duration approaches functioned admirably if assets and liabilities involved fixed flow of cash. Anyway choices, for example, mortgages or callable obligation present issues that gap analysis couldn't address. Duration analysis can refer to these in principle; however executing adequately modern duration measures was dangerous.

3. Scenario Analysis :

In scenario analysis of ALM a few rate of interest scenarios are made during next 5 to 10 years. Such scenarios may determine declining rate of interest, increasing rate of interest, a progressive reduction in rates followed by abrupt ascent and so on.

Various situations may indicate the pattern of the whole yield curve, so there could be situations with smoothing yield curve, modified yield curve and so forth. Ten to twenty situations may be indicated to have an all encompassing perspective on the scenario analysis.

Further presumptions would be made about the performance of assets and liabilities under every situation. Presumptions may incorporate pre-payment rates on home loans and surrender rates on insurance related products. Presumptions may likewise be made about the organization's performance. In view of these presumptions the presentation of the company's accounting report could be anticipated under every situation.

Whenever anticipated performance was poor in any specific situation the ALCO may modify assets or liabilities to refer to the indicated exposure. A weakness of scenario analysis is the way that it is profoundly reliant on the decision of which scenarios are to be taken. It likewise necessitates that numerous presumptions be made about how explicit assets or liabilities will perform under specific situation.

4. Value at Risk:

VaR or Value at Risk is the maximum exposure of risk or loss that a bank can afford over a specific period of time provided there is a certain level of confidence in it. The method enables a measurement of the market risk, that a portfolio is exposed to where no past data is given. The net worth of an organisation can be calculated at a particular point in time which provides accessibility of information to aim on the implications of long term risk decisions of the past and the future. There is an extensive use of this technique for measurement of market risk of an asset-liability portfolio.

Conclusion:

With this analysis we conclude that Asset Liability Management is an important tool to observe measure and manage the rate of interest risk, risk of liquidity and foreign currency risk with the bank. On deregulation of the rate of interest regime in the country, the banking industry got heavily exposed to interest rate risk / market risk. To

manage risks of such nature, Asset Liability Management need to be utilized to assess and manage the risks and take appropriate decisions to cover them.

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A SHORT STUDY ON THE CONSTRAINTS FOR FARMERS WHILE USING e-NAM PORTAL OF CHANDAULI DISTRICT OF U.P.

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Abstract

Modern business strategies & technology can enable Indian agriculture to face the serious challenges of poverty & food insecurity etc. Governments had encouraged the farmers to sell directly their produce to the ultimate consumers/buyers by eliminating the middlemen. e-NAM is an electronic trading portal, which is working across the nation, which aims to connect all APMCs to build single window system. A study was conducted related to eNAM in Chandauli District of U.P with the objective to know about the problems and constraints in using eNAM. The sample included 180 farmers and 41 traders of Chandauli Block of the Chandauli District. Major constraints was the lack of training to understand the e-NAM system and not so much awareness about e-NAM among farmers. The study has suggested that establishment of training camps and door-to-door general awareness activities related to e-NAM process and its benefits, would encourage and help the farmers to take part in it.

Key words – Electronic-National Agriculture Market (eNAM), APMCs, Process, Constraints.

1. Introduction

e-NAM is an electronic portal, which is working across the nation, which connects different networks of all the current APMC mandis to build single national market. By this sale and purchases of agricultural commodities could be done throughout the country. Aim of e-NAM in the country is to empower farmer to earn better value for consumer to disburse better value for Agri-produces. By creating healthy environment at the two ends of sales and purchases marketing of Agri related goods are done in states have different market area, which are controlled or directed by APMCs of related market area. Having responsibility for imposing its own different marketing regulation (including fees), e-NAM address above summons, fabricating market with the help of online platform for trading at

state as well as national level, simply efficient process is the basic aim of eNAM in the integrated market i.e. better quality and online payment producers. This can be done by removing gap between buyers and sellers in the sense of communication promotes actual price discovery on actual demand and supply. Making auction process transparent provide an overall market for the farmer and according to the quality of the produce price estimation helps the consumer to buy commodities at best price.

e-NAM Objectives:

- a) Clear sale agreement, proceedings and price.
- b) In the market ward removing requirement of physical presence.
- c) One license valid across all markets in the State for a trader.
- d) To authorize well informed biddings by buyers, approving quality standards & quality testing for Agri-produces.
- e) Impose market fees at single point i.e. first purchases from the farmer by wholesaler.

2. Review of Literature

1. Chand (2016) in this study agricultural markets are characterized by poor fragmentation, competitiveness, inefficiency, frequent price manipulations & presence of excessive middlemen. National agricultural market i.e. electronic trading portal is an attempt to use modern technology for transforming the system of agricultural marketing.

2. Mante and Almadi (2016) observed that no success on the market was attainable without appropriate communication. The authors suggested that if we aim to establish long term, sustainable growth in the sector preference should be given for home grown products and e-marketing of those could give higher profits than the conventional marketing system.

3. Aggarwal, Jain & Narayanan(2017) This paper examines Karnataka's pioneering agricultural output marketing reforms with the twin goals of assessing the state and challenges of implementation and to glean lessons from Karnataka's experience for India's e-National Agriculture Market. Through a field study of 10 mandis across the state, we find that while Karnataka has been consistently pushing through with reforms, in the context of deeply entrenched relationships between farmers, traders and commission agents, there remain significant challenges.

4. Yadav and Sharma (2017) found that it can be a game changer. The two important requirements include amendment of the state agricultural produce marketing committee act and physical logistic support to farmers, which would enable them to move their crops. The eNAM has the potential to transform Indian agriculture from traditional to an entrepreneurial and a profit making process.

5. Amarendr A. Reddy (2018) examines experience of e-markets in Karnataka since 2012, with the intention to suggest improvements to eNAM. Results show that e-markets help increase competition, eliminate collusion among traders resulting in increased farmers' price and market arrivals. They facilitate competitive bidding and same day payments to farmers. However, there was some resistance from traders and commission agents as they felt that there were no benefits in e-auction compared to physical transactions. In addition, there was fear of taxation of on-line transactions. Aligning interests of all stakeholders, including farmers, traders and commission agents is the biggest hurdle in the implementation of eNAM.

6. Bisen & Kumar (2018) this study captures various challenges in the implementation of e-NAM, Efficient markets offer efficient price discovery and level playing field for all the actors. This paper systematically reviews developments in Indian agricultural marketing and emphasizes on addressing the challenges in implementation of e-NAM to achieve the goal of doubling farmer's income.

7. Pavithra S, Gracy C P et al. (2018) analysed the effectiveness and challenges of e-tendering marketing system and indicated that e-tendering has been successful in reducing transaction time, bringing transparency in price discovery and increasing market revenue, besides enhancing market competition. The system, however, has

not been effectively implemented among all the markets because of traders' resistance. By identifying the factors behind the success of e-tendering in some markets and the lack thereof in others, we provide certain key insights into obstacles in successful implementation of innovative marketing reforms with specific reference to the e-National Agricultural Market (e-NAM).

8. Sally (2018) found that the agriculture ministry has added six new features in e-NAM, to make it more easy to use, the ministry included MIS dashboard for analysis, BHIM for payment and mobile payment by traders, new features on mobile app like gate entry and mobile payment, farmer's database integration and e-learning module on e-NAM website. Its main objective was to provide competitive and remunerative price to farmers for their produce through online competent bidding process. Facilitation of Unified Payment Interference (UPI) through BHIM is another milestone in easing out payment to farmers.

3. Research Methodology

District of Chandauli, Uttar-Pradesh was selected purposively for the study. Chandauli district is one of the leading areas in production and selling of commodities through eNAM. Chandauli APMCs was also selected purposively for the study. Chandauli district contains 9 blocks, out of these, Chandauli blocks which have maximum number of eNAM respondents was also selected purposively. Villages namely Sirasi, Bisauri, Shikari, Futia, MajhorKhas, Machiya Kalan, Baburi and Alahifrom the Chandauli block was selected randomly for choosing e-NAM respondents. 180 were selected as respondents for the study. Data were collected by survey method through personal interview using questionnaire from farmers and traders. The study was conducted in agriculture year 2019-2020.

3.1 Constraints faced by farmers in e-NAM system in selected APMCs

From the table it is observed that in selected APMCs, the major problems faced by the farmers were due to lengthier process of trading in e-NAM system followed Lack of awareness about e- NAM system, farmers do not understand the context displayed in the computer and projector screen and multiple visit to bank for payment .This may be due to the fact that the e-NAM was newly introduced to the selected APMCs and the farmers do not have much familiar about the system. However, to overcome these constraints, awareness campaigns and door-to-door training programs should be organized from village level to APMCs and the presented display should be made available in local languages also.

Table 3.1: Farmers constraints in e-NAM system in the selected APMC

S.N.	Particulars	Percentage	Rank
1.	Lack of awareness about e- NAM system	76.00	II
2.	Time consuming in e-NAM auction	47.00	IX
3.	Sometime e-NAM price was less compared to open auction	67.00	V
4.	Farmers do not understand the context displayed in the computer and projector screen	74.00	III
5.	Lack of training about e- NAM system	89.00	I
6.	Multiple visit to bank for payment	73.00	IV
7.	Grading inconsistent	62.00	VII
8.	Sometime whole quantity of produce was not able to sell through e-NAM platform	67.00	VI
9.	Shortage of labour in marketing activities	43.00	X
10.	Server problem	55.00	VIII

3.2 Constraints faced by traders in e-NAM system in the selected APMCs

From the traders point of view the major constraints faced by them were complexity of e-NAM trading compared to open auction followed by difficult to purchase without manual checking, not sufficient training about e-NAM system, not satisfied with grading, they prefer. The other constraints faced by them were last minute bidding & less time and time consuming in e-NAM auction.

Table 3.2: Traders constraints in e-NAM system of both the selected APMCs

S.N.	Particulars	Percentage	Rank
1.	Difficult to purchase produce without manual checking	84	II
2.	Not satisfied with grading	68	IV
3.	Less bidding time	58	VI
4.	Complexity of e-NAM trading compared to open auction	89	I
5.	Time consuming in e-NAM auction	48	VII
6.	Last minute bidding	67	V
7.	Not sufficient training about e-NAM system	79	III

However, by making available of proper and consistent grading facilities and also a training programme about the e-NAM the above constraints faced by the traders could be minimized system. Related to the bid time, since, most of the traders were waiting for the last minute bid so it is very important to increase the bidding minutes.

3.3 Constraints faced by the selected APMCs in e-NAM system

In e-NAM system lack of voluntary traders was the common constraints faced by selected APMCs participation due to the transparency in the e-NAM system, before finalizing price traders want to check the quality manually, payment realization from public sector banks was time consuming and only few farmers account has been linked with aadhar card. The available bidding rooms and computers was not sufficient with numbers of farmers and traders participating in e-NAM platform of the respective APMCs, which lead to time consuming trading in e-platform. Instead of open auction APMCs also faced a complaint from the sellers for selling their lots in e-NAM platform. Sometime after bidding cancellation held because farmers brought their commodity to the APMCs without proper cleaning.

4. Recommendation and Conclusion

Suggestions for the improvement of e-NAM system based on the finding of this study were given below:

1. About the e-NAM system educational Programmes should be organized for training within the APMC or at the village level for better understanding about e-NAM system so that they can take the best advantage of it.
2. For making people aware of e-NAM system, print media and social media advertisements should be done.
3. Context displayed in the projector screen should be in local language and also should be in friendly manner for farmers
4. To get instant payments and reduce the transaction cost Bank branches should be open on the premises of APMCs which in turn will help the farmers.
5. Payment through APMCs up to 20-60 per cent of sale should be in cash that will promote sale and purchase of commodities, since most of the farmers who are participating in e-NAM auction was marginal and small farmers which required immediate cash after sale for their urgent and regular needs.

6. By providing small loans, APMCs should start to encourage the farmers to participate in e-NAM and this will in turn also help them to get rid from the hand of moneylenders, who are responsible to exploit them.
7. In e-NAM system for taking participate, farmer should be incentivized by doing reduction in APMC fees on the gross value of produce sold respectively.
8. Different no. of commodities are also added for sale and purchase that are not included yet.
9. Sometime e-NAM sellers faced cancellation of their lots even after successful bidding due to poor quality of produce brought by them for sale. So, to reduce rejection of lots farmers need to bring good quality products for sale after cleaning in the e-NAM platform.
10. Facilities regarding grading, storage and assaying should be made prominent and improved from the present situation
11. Building proper server channel through better network connectivity should be done that will help farmers and traders in trading. Since most of the sellers use to bid their produce at the last minutes, for successful bid, bidding time should be increased to at least 20-30 minutes.
12. It is important to increase the bidding room and computers to reduce the time consuming of the e-NAM auction, it was observed that when large numbers of farmers trade their produce in the e-NAM auction, it leads to the time consuming as the farmers has to wait for their turn to bid individually in the bidding room.
13. To understand the problems faced by the farmers and traders Proper feedback system should be created which in turn will help to improve the e-NAM system.
14. It is very necessary for the APMCs to appoint additional staff members to help the farmers regarding the technical system during bidding time, because it was observed that most of the e-NAM sellers were illiterate and they were not able to understand the computerized system in e-NAM auction & establishment of an apex body is advocated to control and regulate the actives of e-NAM.
15. For successful implementation of e-NAM, political and administrative support should be provided.

5. Limitations of the Study

The researcher has the following limitations during investigation:

1. The study was confined to Chandauli district of Uttar Pradesh due to limitation of resources and time etc. which clearly allow the purposive selection of study area & confined sample size.
2. Data collection method in the investigation was mostly limited to personal interview and results, i.e. verbal expression and response provided by the respondents.
3. The method of data collection in the investigation was mostly confined to personal interview and results drawn were exclusively based on the verbal expressed opinion and responses provided by the respondent.
4. At a sametime responses of respondents are not always revealing or reliable all the time. It may also be that responses are instantly given without any serious thinking sometime some wrong information is given owing to cultural stigma, hesitancy of perception gap between the respondents and investigator.
5. Study was done at the limited geographic location, therefore the findings could not lead to a wide conclusion.

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ENVIRONMENTAL CHANGE AFTER COVID-19 IN INDIAN SCENARIO

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Abstract

The outbreak of COVID-19 has caused concerns globally. On 30 January, the World Health Organization (WHO) declared it as a global health emergency. The easy spread of this virus made route, use gloves and hand sanitizer on a daily basis that resulted in generation of a massive amount of medical wastes in the environment. Millions of people have been put on lockdown in order to reduce the transmission of the virus. This epidemic has also changed the people's lifestyle, caused extensive job losses and threatened the sustenance of millions of people as businesses have shut down to control the spread of the virus. All over the world, flights have been cancelled and transport systems have been closed. Overall, the economic activities have been stopped and stock markets dropped along with the falling carbon emission. However, the lockdown of the COVID-19 pandemic caused the air quality in many cities across the globe to improve and drop in water pollution in some part of the world.

Key words- COVID-19, Pandemic, Environment, Socio-economic, Regulations.

Introduction-

The environment as 'everything that is not me'. In other words we can say that "Final analysis of everything present outside an individual is called an environment." This outside world in which we all live, being a part of it is cosmos. This cosmos has air, water, soils, sun, moon, and other planets. It has plants, animals, rivers, mountains, deserts, and oceans. Collectively they make nature. This nature to which we belong is our environment.

Another way of understanding the environment is to classify it further as a physical, chemical and biological environment. Physical environment includes radiation (light) temperature (heat), humidity and rain. Chemical environment includes water, gases, acids, bases, inorganic elements and organic substances. Whereas, the biological environment covers all the living organisms found on the earth. These can be bacteria, viruses, microbes, algae, fungi, herbs, shrubs, crops, large trees, worms, insects, fish, snakes and mammals. This living world on the planet earth is supported by complex but interdependent physical, chemical and biological processes. These processes collectively resolve into evolution. Thus we found that in an environment that everything is related to one another.

Briefly, the environment has four realms i.e. atmosphere, biosphere, lithosphere and hydrosphere. Atmosphere is the gaseous envelope held by the gravitational force around the earth. Biosphere is concentrated mainly on the surface of earth. It includes all living species. Hydrosphere is the water domain. It includes all lakes, ponds, rivers, streams, estuaries, bays, oceans and seas. Earth's outer crust is lithosphere.

Man, biologically called as homo-sapiens evolved with other creators. For a long period he remained a part of the natural system. Then he started making tools, invented fire, grew agricultural crops and domesticated animals.

Later development changed agricultural men into industrial men. He started using nature and its resources according to his demands. That is the part of the environment that is directly affected by human's expression of thought and action now makes the fifth realm called a homosphere or noosphere.

Environmental Changes after COVID- 19 in Indian Scenario:

Pandemic- When the geographical area in which an epidemic communicable disease exists is very large, say a complete region, the disease is said to be prevalent in a pandemic form in that whole region. For example—the influenza pandemic of 1918. At this stage it is necessary to know something about the host parasite relationship as is commonly referred to in public health practice.

The microorganisms which cause communicable disease and/or disorders are, in fact, parasites. They live on the human host and in the process give rise to pathogenic conditions causing diseases or disorders. This is not applicable to all the parasite relationship in fact, is of 3 types.

- 1- Where the parasite feeds on the host without causing harm to the host, that is the relationship is uneventful.
- 2- When the parasite feeds on the host not only causing no harm but in fact achieving results beneficial to the host. Thus here both depend on each other resulting in mutual advantage. This relationship is expressed as symbiotic.
- 3- Where the parasite feeds on the host causing disruption of the host's metabolism or natural processes affecting them adversely to the detriment of the host. Thus under this relationship conditions of pathogenicity exist, which in fact we study under communicable diseases.

In the case of communicable diseases where there is a vector implanting the causal agent of the disease in man, that vector also becomes a host. Such a vector could only be a mechanical carrier like in the case of housefly which mechanically carries the causal agent to the susceptible host through food or drink. There are vectors which play a definite role in the transmission cycle. Such vectors then either become a definitive host or an intermediate host depending upon what role they play in the transmission cycle of the disease. Since they are essential for the transmission, they are hosts alright. They become the definitive host if, in the whole transmission cycle, the sexual cycle of the causal agent goes within the body of the vector. For example, in the case of malaria the anopheline mosquito becomes the definitive host because starting with male and female gametocytes the sexual cycle of the plasmodium is completed within the body of the female mosquito within insects, at the completion of sexual cycle, the end product thereof namely the sporozoites in the body of the man. The asexual cycle then starts in the body of man at the end of which the gametocytes are found in the body of the man. The man, in whose body the essential asexual cycle goes on becomes the intermediate host. On the other hand in the case of filaria the culex or the mansonoides mosquito becomes the intermediate host because sucking the micro-filariæ from the blood of a case the asexual cycle is completed in the body of the mosquito. Automatically man, in whose body the sexual cycle of the filaria goes on, becomes the definitive host in the case of filaria.

For communicability of diseases three very basic items need to exist and these are:

- 1- The soil
- 2- The seed
- 3- The sower

Soil is a healthy individual - the seed, the causal agent of the disease, which may be mostly the microorganisms responsible for causing disease in man, they are acting as parasites and the human being acting as a host and the sower may be either an inanimate thing depending upon the mode of transmission or an animate thing like an insect or a worm which plays the role of a definitive or an intermediate host like in the transmission of malaria or filaria respectively. Thus there is a susceptible host which is the soil, there is a reservoir of infection giving ample seed for transmission through the excretions like urine or faecal matter through which the case is discharging the causal agents responsible for the disease and there will be some portal of entry of the causal agents into the system of susceptible host which may be by ingestion in the case of diseases pertaining to the

gastro - intestinal tract which is through food, water or any other drinks , inhalation in the case of diseases pertaining to the pulmonary system or ingestion where a vector in the form of a definitive or an intermediate host plays a part.

Immunity -

In the context of soil,seed,sower relationship. I have mentioned the susceptible host and the host-parasite relationship. It, however, needs to be remembered that every individual, in whose body the infection gets transmitted through any of the three portals of entry viz inhalation, ingestion or inoculation may not necessarily get the infection and come down as a case to be called a susceptible host. In fact, the moment the organism enters the body of a person through any of the portals of entry, the defence mechanism of the body comes into play.

The types of immunity are;

- A) Active Immunity
- B) Passive Immunity
- C) Acquired Immunity
- D) Hereditary Immunity
- E) Herd Immunity

These terms are explained below in short;

Active Immunity-

The immunity which a man develops because of infection or by specific vaccination leading to formation of sufficient antibodies in his blood streams to combat that particular disease is known as Active immunity. As soon as infection enters the body, by virtue of a natural mechanism antibodies specific for combating that disease are created. These give the individual the active resistance to combat that specific disease.

Passive Immunity-

However, when a person has already come down as a case such an immunity has to be directly imparted by injecting such antibodies created in the laboratory into the body of the case. This is Passive Immunity. Recourse to such a measure has to be commonly taken in such events; example in a patient of Diphtheria, Anti-Diphtheria serum has to be given to combat the infection.

Acquired Immunity-

When a person suffers from a communicable disease, during the time he/she is a case more and more antibodies specific for combating that disease are created in the body. Eventually when the patient gets cured these specific antibodies continue to remain in his/her body for variable periods. These give him an immunity specific for that disease. This immunity is known as Acquired immunity, which in fact is a type of active immunity. In some cases such immunity lasts for years. In few others, it may be even life-long like, yellow-fever, smallpox, kala azar.

Hereditary Immunity-

A child is found to be resistant to quite a few communicable diseases within the first few months after its birth. This immunity which in fact, is acquired by the child from its mother's womb is known as hereditary immunity. This is why in the case of diseases like smallpox, there is no need to immunise the child immediately after its birth against those diseases as hereditary immunity, effective for some months, is imparted to the child through the mother's womb.

Herd Immunity-

Certain classes of people by themselves, by virtue of their modes and styles of living, immune to certain diseases. The disease which ultimately affects the large community are called communicable and not infectious or contagious as was done in earlier days on account of various modes of transmission given above.

Conclusion-

In the present article the effect of lockdown (Since the third week of march 2020) imposed in order to restrict the rapid spread of COVID-19 pandemic in India on the air quality of the national capital city Delhi has been assessed based on national air quality index and concentration of 7 major pollutants. Delhi is internationally recognized for its extreme pollution level. Among the selected pollutants PM 10 and PM 2.5 has witnessed maximum reduction followed by nitrogen oxide, carbon monoxide and ammonia. In comparison to the past 3 years average concentration of PM10 and PM 2.5 has decreased by about -57% and -33% respectively. On a contrary there is a slight increase in ozone concentration which is expected to be primarily due to the decrease in the concentration of Nox and particulate matter. Moreover, as anticipated, a considerable reduction in NAQI is observed during the window period of lockdown throughout the mega city. Just after 1 day of the commencement of lockdown (that is 25th of March) there is about 40% improvement in air quality. Only on the 4th day of lockdown (March 27) concentration of PM10 and PM2.5 have come within the permissible limit and there is about a 51% reduction in NAQI. During the three week lockdown period (from 24th march to 14th april) in comparison to the average NAQI during the first three week of march (from 3rd march to 21st march). About 54%, 49%, 43% ,37% and 31% reduction in NAQI are observed in central, eastern , southern, western and northern regions of the NCT Delhi respectively.

According to the study published in the Indian journal of medical research of the 28% asymptomatic patients 25.3% were direct and high risk contacts of the positive cases. The attack rate (per-million) by age was highest among those aged 50-69 years and was lowest among those under 10years. The attack rate was higher among men as 41.6% of them tested positive, while 24.3 of the women contracted the infection.

Among 12,810 cases with reported symptoms at the time of specimen collection, cough and fever were the most commonly reported, while around one-third reported sore throat and breathlessness.

More than 71% districts of the 736 total districts in the country reported cases infected with the virus. States with the highest proportion of districts reporting positive cases included Delhi, Maharashtra, Kerala, Punjab, Haryana, Tamil Nadu, Andhra Pradesh, Gujarat, Uttar Pradesh, Madhya Pradesh etc.

An ever changing Indian scenario of infectious diseases persists in rich and poor people COVID-19 in India. Emerging and re-emerging diseases are index of large scale environmental change for example the rise of COVID -19 throughout the world.

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PLIGHT OF SENIOR CITIZENS DUE TO COVID-19

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Abstract

This paper analysis the plight of senior citizens due to COVID-19. The population of senior citizens worldwide is higher than other age groups. This age group needs more attention than others, as they are the most vulnerable section of our society. The main purpose of this paper is to highlight the death ratio of senior citizens due to COVID-19 situation in India and oversees. This paper also discusses the laws related to senior citizens, the role of judiciary to protect them, steps taken by the government for their welfare, and impact of lockdown.

“When you get old, something kills you”. But COVID-19 is an extra something. An extra wolf in the pack.”—
-**Lyman Stone** (Economist and Demographer)

Introduction

COVID-19 - Coronavirus disease is an infectious disease caused by a newly discovered coronavirus. Most people who fall sick with COVID-19 will experience mild to severe symptoms. Older people, and those with pre-existing medical conditions (such as high blood pressure, heart problems or diabetes) appear to be more vulnerable

Senior Citizens – According to **Maintenance and Welfare of Parents and Senior Citizens (MWPS)** Act, 2007 defines senior citizens as any person who is a citizen of India and has attained the age of '60 years and above'.

According to population census 2011, there are approximately **104 million** senior citizens in India, among them **51 million** are males. As per the report published by UNPFHI (United Nations Population Fund and HelpAge India) the populations for them would reach up to **173 million** by 2026.¹

Due to this pandemic, senior citizens are facing a lot of problems than they ever expected. Even if they do not get affected, implications are so high on the segment especially in society, community and togetherness. But if affected it becomes worst of all situations for them as they deal with lot of problems already like pre-existing diseases, low immunity vulnerability, etc. They not only need help and support from their guardians but love and affection too.

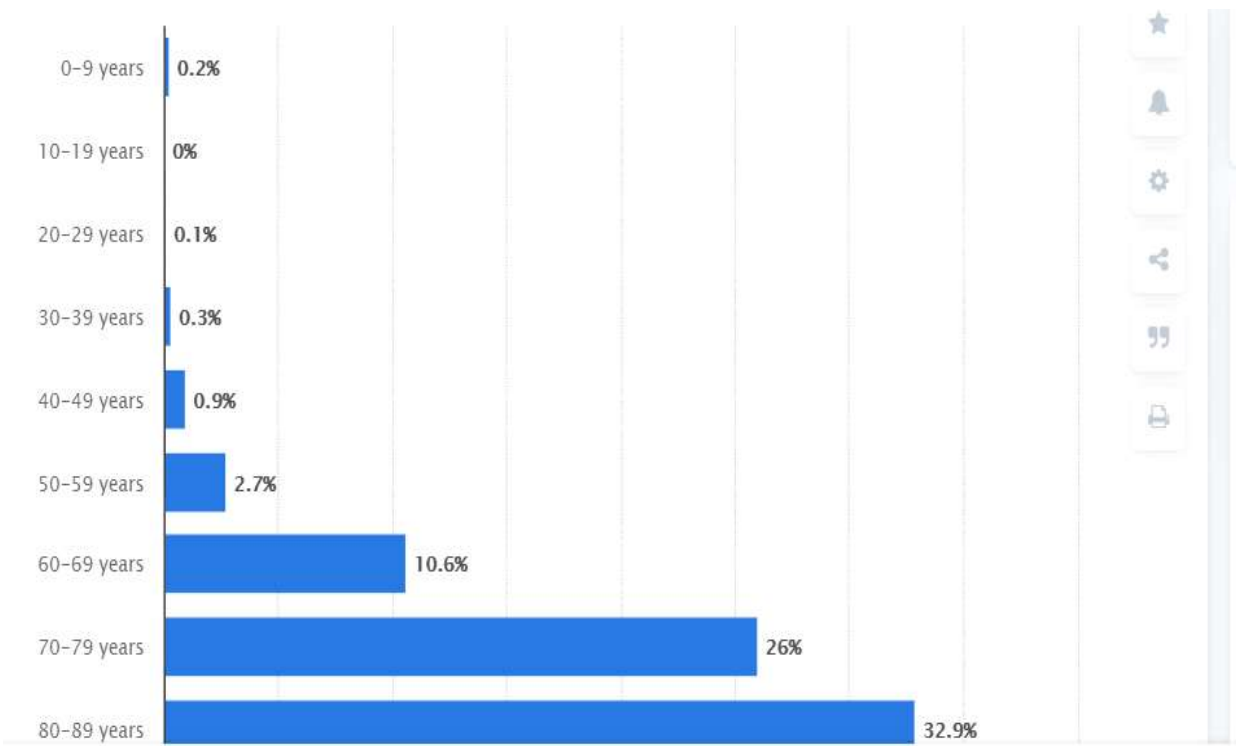
Global Impact of Covid-19

As per the report published by WHO Regional Office for Europe on 2nd April 2020, 95% people died due to COVID-19 were above 60 years of age, among them 50% died were above 80 years of age.

WHO had given three key messages to care and support older people namely:

1. Act in Solidarity
2. Special attention to nursing and social care services people
3. Supporting older people living alone²

Italy Death Ratio of Senior Citizens³



Most of the people affected in Italy were senior citizens over 60 years of age. Approximately 34 thousand people died till the first week of February 2020.

As it can be seen in the above chart people between 80 to 90 years of age are most affected by this virus.

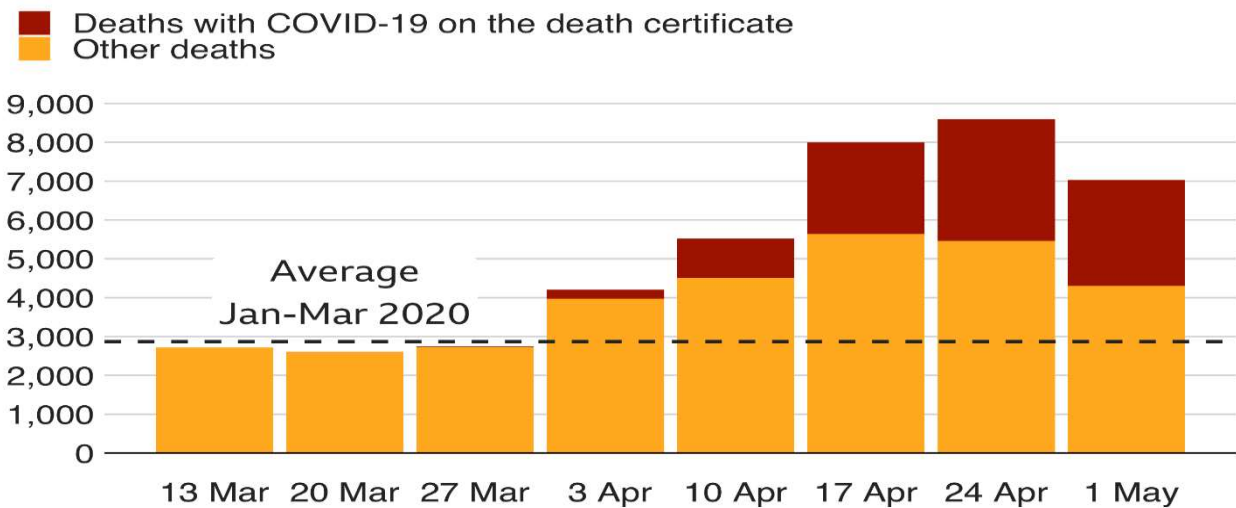
Deaths in Care Homes in European Countries

It is a matter of great concern that according to centralized figures the research done by **Long Term Care Policy Network** 54% people died on 11th April 2020 in Ireland were from care homes.

In Belgium, 42% of the people died were from care homes.

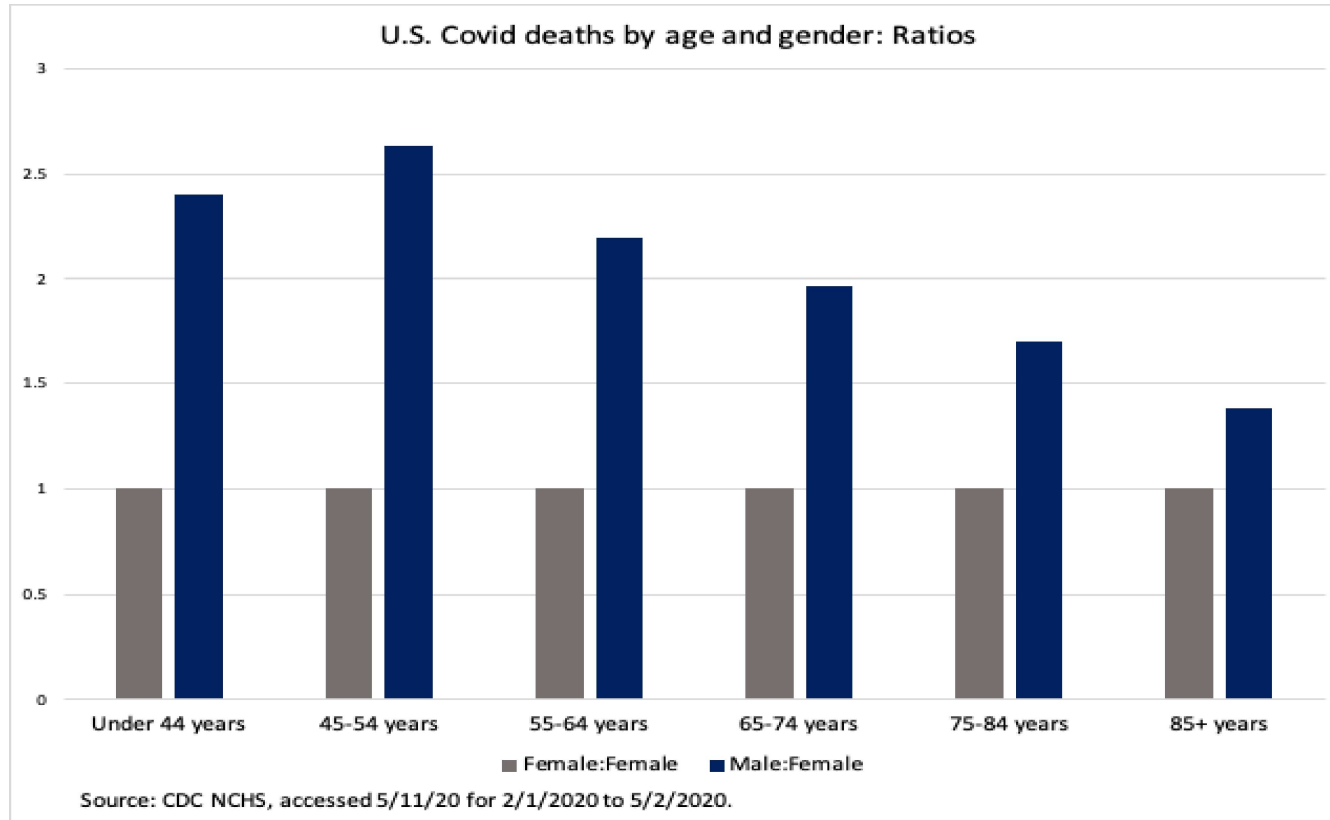
In Spain, 57% of the people died between 8th March to 8th April were from care homes.⁴

Weekly death registrations in care homes in Great Britain



Source: ONS, NRS

Death Ratio of Senior Citizens In America



The graph clearly shows that there is a big difference between the death ratio of male and female senior citizens in USA. Male elders are affected more and died due to COVID-19 than female senior citizens.⁶

Impact of COVID-19 on Senior Citizens of India

Senior citizens constitute 10% of the total population of India, out of which the age group of 60 to 74 years is 8% of the total population and the age group above 74 years is 2% of the total population, Joint Secretary in the Ministry of Health and Family Welfare of India. According to Love Aggarwal, India's death rate due to COVID-19 is 2.82% as of June 2, 2020. Out of which 38% have died in the age group of 60 to 74 years and 12% have died in the age group of 64, i.e. 50% of the total death percentage is from senior citizens.⁷

Data shows the failure of above-mentioned countries in health services. The growth and development of any country shows how prosperous and happy its citizens are. The medical facility in Italy is one of the best medical facilities in the world, but unfortunately the offer of death of senior citizens shows negligence and indifferent behavior towards their senior citizens. Queen of England herself is a senior citizen, despite health of elderly were compromised. The number of deaths of such senior citizens in care homes in this country surely shows the negligence. In many cases, it was been found that they are left alone and helpless to die due to lack of hope of living.

Protection of Senior Citizens Under Indian Laws

Right to life – Article 21 of Indian constitution provides protection of life and personal liberty – No person shall be deprived of his life or personal liberty except according to procedure establish by law.⁸

State of Punjab v. Mohinder Singh Chawla⁹- In this case, Supreme Court held that right to life includes right to health without a health right, right to life cannot be supposed. Health facilities should be provided by the government as their constitutional obligation.

State of Punjab v. Ram Lubhaya Bagga¹⁰- It was held government hospitals are bound to give timely treatment to patient if they failed to perform their duty it will be violation of patient's right to life.

Directive principles of state policy obliged to state to make beneficial provisions for weaker sections of society like senior citizens

Article 46 of Constitution of India says “**promotion of educational and economic interests of scheduled castes, scheduled tribes and other weaker sections**”¹¹

Section 20 in The Maintenance and Welfare of Parents and Senior Citizens Act, 2007¹²

Medical support for senior citizens —The State Government shall ensure that, —

1. The Government hospitals or hospitals funded fully or partially by the Government shall provide beds for all senior citizens as far as possible;
2. Separate queues be arranged for senior citizens;
3. Facility for treatment of chronic, terminal and degenerative diseases is expanded for senior citizens;
4. Research activities for chronic senior citizens diseases and ageing is expanded;
5. There are earmarked facilities for geriatric patients in every district hospital duly headed by a medical officer with experience in geriatric care.

Steps Taken by the Government

As per WHO report death ratio shows that virus is contagious and fatal for pre-existing beings especially senior citizens. They may fall prey to the virus after they cross 60 years of age, due to low immunity and physical weakness. To prevent the spread of the virus, the venerable Prime Minister announced a lockdown across India on March 24, ordering social distance and staying at home. But unfortunately, he missed out one segment of the society, though unintentionally, but later due to the same many suffered.

Impact of Lockdown on Senior Citizens

Health and Mental stress— According to an estimate, 6% of senior citizens live in isolation, as per HelpAge India survey. Loneliness among senior citizens is a big challenge for any civilized society. The restrictions imposed by the government due to the lockdown have further aggravated their problems, onto that, social distancing and lockdown has made this class lonelier. According to HelpAge India estimates that 10 to 20% of senior citizens suffer from loneliness. Those who live alone, used to spend time outside or in the park with their friends, neighbors, colleagues to get peace of mind. But now, they are stressed out which has adversely affected their health because of the lockdown. Another reason is, most of them do not know how to operate video call or spend time on social media.

In the country where Prime Minister, CJI and President of India are senior citizens themselves, people have started abandoning their own family members who have become old. According to statistics those who abandoned, or went abroad, have left over approximately 15 million senior citizens dependent entirely on their servants. These are those citizens who cannot do their daily routines work without a support.

Because of the lockdown, many of the servants have fled to their villages, leaving senior citizens in a helpless state. For example, if they need to travel for something, they would need some transportation service like auto rickshaws, cabs, etc. but due to COVID-19 lockdown everything stopped and shut down. In such a situation, they have become helpless. Though, in some states arrangements were made to provide door delivery service but it failed completely due to lack of resources.

National Social Assistance Program- In this program govt. provides a monthly pension to senior citizens. It was decided by central govt to pay three-month pension in advance to poor senior citizens due to COVID-19 crisis¹³.

Pradhan Mantri Garib Kalyan Yojna- In this yojana govt announced to provide free food grains and cash payments to poor senior citizens to help them in impact of Lockdown.¹⁴

Health Advisory for Senior Citizens Population of India During Covid-19 By Health Ministry Department Senior citizens are at higher risk to protect them from transmission of the virus, therefore, there are some measures advised by the Health Ministry of India (ICMR) by publishing list of DOs AND DON'Ts such as: -

- o In the list of DO they are advised to stay at home, wash hands, take proper nutrition etc.
- o In the list of DON'Ts, they are advised to don't shake hands, don't sneeze without covering face, don't touch eyes etc.¹⁵

Government Health insurance Schemes related to senior citizens

Indian government launched some health insurance schemes to make the life of senior citizens save, secure and happy schemes are as below-

1. VaristhaMediclaim policy
2. (HOPE) health of privileged elders
3. New India senior citizen Mediclaim policy
4. United India Senior Citizens Health Insurance
5. Ayushman Bharat

Judicial Response to Save Senior Citizens from Covid-19 Crisis

Madras High Court Judgment on 21 June 2020

In case of non-network hospital, Insurance company cannot make excuses to refuse medical Insurance for Senior citizens-In the suit the Madras High Court reprimanded the insurance company for non-reimbursement to the insured who got admitted to a non-network hospital. In any state, if senior citizens will be harassed in this way, it is very embarrassing for that state too. According to the court a claim cannot be rejected based on a condition that Hospital does not fall in the insurance companies network hospital list. Moreover, court held that it cannot be expected from a person or his family in an emergency to see and choose network listed hospital rather they would focus on saving the life of a person getting admitted.¹⁶

On 23 April 2020 Delhi High court sought Delhi government to make a helpline for senior citizens to assist on COVID-19 Situation

The direction came after a PIL was filed in Delhi High Court by senior advocate Ajitkumar seeking helpline for senior citizens. Thereafter, a bench consisting justice Himakohli and justice S. Prasad directed government to create the same.

After the direction of Delhi High Court, Delhi Government established helpline **1077** for senior citizens to assist on COVID-19 situation.¹⁷

On 24 June 2020 Delhi high court asked the stand of Delhi government to provide facilities for registration of Wills of senior citizens

In this case petitioner said that COVID-19 cases are increasing day by day, the life expectation has become more lighting than ever before. Therefore, the need arises to secure their property by giving it to the right legal heir. Hence, Delhi government must take this into consideration and assist senior citizens with registration of their wills.

Thereafter, a bench of chief justice D.N. Patel and Justice Prateek Jalan ordered to arrange the facilities for registration of wills of senior citizens. Registration cannot be stop due to scare of COVID-19¹⁸

Suggestions

1. Awareness to be increased, one nodal officer be appointed in a district exclusively to monitor effective implementation of law. In needy cases door to door service may be provided.
2. We should have a social police concept which will regularly monitors citizen health, psychological /other issues of senior citizens in his area by regularly visiting the house nearby places.
3. The problem of loneliness of senior citizens is arising due to lack of moral and cultural values in society.

4. There should be special provisions in pandemic act and disaster management act for senior citizens.
5. Accountability should be set for every administrative officer. In case of negligence strict penalty should be imposed.

Conclusion

At the end of this article, it can be concluded that steps taken by the government are not enough to save senior citizens from COVID-19. Although, government has made some attempts to control the situation by imposing lockdown and providing some beneficial policies like garibkalyanyojana, three-month pension in advance.

Despite the measures taken, death ratio shows that senior citizens are not secure and safe. Hence, this research raises few questions for every segment of the society and the government.

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THE IMPACT OF COVID-19 LOCKDOWN ON THE BUSINESS IN INDIA

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Abstract

The coronavirus outbreak is first and foremost a human tragedy, affecting hundreds of thousands of people. It is also having a growing impact on the global economy. This article is intended to provide business leaders with a perspective on the evolving situation and implications for their companies. The outbreak is moving quickly, and some of the perspectives in this article may fall rapidly out of date. This article reflects our perspective as of April 13, 2020. In this paper, we offer some of our latest insights on the COVID-19 pandemic, starting with a survey of the current epidemiology, the efficacy of the surge in critical care, the expansion of testing and other traditional approaches, the development of antibody testing, the unknown nature of immunity, and a wave of innovation that might produce treatments and vaccines.

Key words: Covid-19, migration, pandemic, WHO

COVID-19: Where we are, and where we might be heading

COVID-19 continues to spread rapidly around the world. Almost every country has reported cases, but the burden is asymmetrically distributed. In the past seven days (April 6–12), 46 percent of new confirmed cases have been reported in Europe and 39 percent in the United States. To an extent, that's because countries are at different stages of the pandemic. Some were effective at initial containment, such as Singapore and Hong Kong, have seen resurgence and are implementing additional measures to address it. Others, such as many countries in Western Europe, have seen the number of new cases plateau or begin to decline and are debating the right approach to reopening their economies. Some countries appear to be at the peak of infection and are urgently building surge capacity in their health systems. In other parts of the world, the number of cases is rising rapidly. Countries such as Russia and Turkey are seeing a recent acceleration. India too has experienced a significant increase in the number of cases since the beginning of April and has evolved its response strategy, including extending the nationwide lockdown.

The public-health tools and approaches to be deployed vary considerably based on this status. Measures including physical distancing, travel restrictions, effective use of personal protective equipment (PPE), testing and tracing, and healthcare surge capacity require more or less emphasis, depending on epidemic phase and local context. Local use of these measures varies considerably—physical distancing may be near-impossible in crowded urban settings, for example, and the apps and digital tools for contact tracing like those used in China may not be acceptable in other parts of the world. Another challenge is the dependencies among these measures: to take one example, the timeliness and stringency of physical distancing measures substantially influences how other tools should be deployed.

Although a consensus has emerged around the use of physical distancing to slow transmission in many high-prevalence settings, a few countries, such as Sweden, are pursuing an alternative “herd immunity” strategy focused on protecting the most vulnerable populations while using only limited distancing measures to flatten the curve for others. The goals are to maintain many aspects of economic and social life today and, over time, to develop a large enough pool of exposed people (about 70 to 80 percent) to “protect the herd.” Other countries are closely watching the outcome of this approach.

The months ahead will probably be quite volatile and dynamic. It now appears likely that some places will experience a local resurgence as restrictions are lifted and economies reopen. That will influence countries at the earliest stages. For example, Singapore has seen a resurgence mainly from imported cases, which have led to local transmission; this suggests that restrictions on international travel may continue. As China gradually reopens, the tactics it used (including group-based isolation models and setting a norm of wearing masks in the workplace) and their efficacy will inform approaches around the world. Western Europe’s experience in relaxing restrictions, and the most successful approaches there, will inform the approaches deployed in the United States.

Considering the variety of approaches in use, public understanding and consensus will evolve day by day. We will continue to find out more about the coronavirus—how it is mutating, the duration of immunity, its transmission dynamics, and so on. For example, it now appears that the virus probably won’t be highly seasonal, given the recent rapid growth in a number of hot spots in the Southern Hemisphere. But it is still possible that the arrival of summer in the Northern Hemisphere will slow transmission somewhat, as some studies in both labs and natural contexts suggest.

With all this in mind, we believe that leaders should closely watch five health-response dynamics in the coming weeks:

The efficacy of the health-system surge and how it is maintained over time— Countries with rapidly increasing numbers of cases are finding ways to expand their critical-care capacity massively. Their ability to do so, and to push mortality from COVID-19 to lower levels, will not only save lives but also engender confidence in their health systems’ ability to manage a resurgence. Over time, as cases plateau and then decline, there will be questions about how long to maintain surge capacity while also guarding against resurgence.

The scaling of traditional public-health approaches— In parallel with the surge in critical care, countries also need to think about building surge capacity in traditional public-health approaches—disease surveillance, contact tracing, and targeted quarantines. Such a surge must build on current efforts to scale viral testing rapidly, mostly through RT-PCR2. Moreover, to detect and control flare-ups quickly, widespread access to viral testing will become increasingly important as countries and cities prepare to relax distancing measures. In some countries, this testing capacity could be paired with at-scale contact tracing, with privacy-by-design embedded; and quarantine facilities to help localize hot spots and prevent a broader resurgence.

The development of antibody testing and understanding of sero-prevalence— One recent study in a hard-hit area of Germany showed that about 14 percent of the population has been—far from the levels of exposure required for herd immunity to emerge but higher than many had expected. A lot of other studies are underway to assess the portion of the population exposed to COVID-19. If individual or herd immunity is to play a meaningful role in reopening, antibody tests to measure exposure must be widely available. While many such tests are being developed, their accuracy and availability have been challenged.

The Nature of immunity—People exposed to other coronaviruses have exhibited durable immunity for several years after exposure. Everyone hopes the same holds true for the novel coronavirus, but we don’t know for sure. Emerging reports of recovered patients testing positive again on RT-PCR acute-infection tests raise questions about reactivation, as do studies in China showing very low levels of antibodies among some infected people. While it is unlikely that the duration of immunity is short, any new information about this issue would require a significant shift in strategy.

Innovation— There has been an unprecedented burst of global pharmaceutical R&D related to COVID-19. Today, more than 130 therapeutic candidates and 80 vaccine candidates are under consideration across a range of modalities and use cases, such as treatment of severe disease and pre-exposure prophylaxis. If drugs already approved for other indications prove effective in treating COVID-19, they could be deployed most quickly, but in coming months readouts on experimental new drugs will also arrive. The massive scale-up of clinical trials—especially randomized placebo-controlled studies—will provide evidence to guide clinical decisions. Similarly, the unprecedented consortium of plasma companies generates hope that hyperimmune immunoglobulin can be developed quickly. For all these innovations, a central challenge will be rapidly scaling up production to meet global needs.

Steps to be taken

Amid the chaos and all the incoming advice, it's hard to know exactly what leaders should do today. We suggest they focus their time on four areas:

- Supporting and protecting employees is the need of the hour. Companies have activated no-travel and work-from-home policies for some workers and physical-distancing-at-work measures for others. Making a mental separation from a sometimes-chaotic home life is tough. Workers are worried that staying remote could make them less valuable, especially in a recessionary environment.
- Companies need to increase communication, balancing the needs of the business with expectation setting and morale building, so employees know that their well-being is top of mind. They also need to change working norms, making remote work practical and simple whenever possible. And of course, they must protect people's health, with whatever measures are appropriate to the workplace: positive hygiene habits, personal protective equipment, amended sick-leave policies etc.
- Monitor leading indicators of how and where the pandemic is evolving and conduct scenario planning using both epidemiological and economic inputs. Think about the next horizons of COVID-19. In the urgency of the moment, it's easy to lose sight of the actions that might be needed tomorrow—and the day after that. The article “Beyond coronavirus: The path to the next normal,” explains the five horizons that every executive should use to ensure an organization's rapid response, adaptation to change, and re-emergence in a position of strength.
- Evolve the nerve center to plan for the next phase. To take one example, we might be in the midst of the largest drawdown in demand since the Second World War. The pendulum might not swing back fully once the outbreak has relented. Having experienced a new way of living, consumers are recalibrating their spending, increasing the likelihood that spending may permanently shift between categories and that online services could get adopted far faster. Decoding this new normal—and ensuring that the company has a strategy to navigate it—is an important part of the work of a nerve center.

Current perspectives on the coronavirus outbreak.

At the time of writing, there have been more than 7,00,000 confirmed cases of COVID-19. Older people, especially, are at risk. More than 140 countries and territories have reported cases; more than 80 have confirmed local transmission. Even as the number of new cases in China is falling (to less than 20, on some days), it is increasing exponentially in Italy doubling approximately every four days.

The coronavirus (SARS-CoV-2) will inevitably spread to all parts of the world, with the observation that governments, businesses, and individuals still have substantial ability to change the disease's trajectory. In this note, we describe emerging archetypes of epidemic progressions; outline two scenarios for the pandemic and its economic effects; and observe some of the ways that business can improve on its early responses.

Our perspective is based on our analysis of past emergencies and our industry expertise. It is only one view, however. Others could review the same facts and emerge with a different view. Our scenarios should be considered only as two among many possibilities. This perspective is current as of March 16, 2020. We will update it regularly as the outbreak evolves.

Archetypes for epidemic progression

Many countries now face the need to bring widespread community transmission of coronavirus under control. We present these archetypes while acknowledging that there is much still to be learned about local transmission dynamics and that other outcomes are possible:

Extraordinary measures to limit spread—After the devastating impact of COVID-19 became evident in the Hubei province, China imposed unprecedented measures—building hospitals in ten days, instituting a “lockdown” for almost 60 million people and significant restrictions for hundreds of millions of others, and using broad-based surveillance to ensure compliance—in an attempt to combat the spread. These measures have been successful in rapidly reducing transmission of the virus, even as the economy has been restarting.

Gradual control through effective use of public-health best practices— South Korea experienced rapid case-count growth in the first two weeks of its outbreak, from about 100 total cases on February 19 to more than 800 new cases on February 29. Since then, the number of new cases has dropped steadily, though not as steeply as in China. This was achieved through rigorous implementation of classic public-health tools, often integrating technology. Examples include rapid and widespread deployment of testing (including the drive-through model), rigorous contact tracing informed by technology, a focus on healthcare-provider safety, and real-time integrated tracking and analytics. Singapore and Taiwan appear to have applied a similar approach, also with broadly successful results.

Effect on Economy and Society

- Demand and production both have reduced to a very low level in this pandemic hit environment. All the three sectors of the economy i.e. primary, secondary and tertiary are facing towards recession.
- Tourism industry, aviation industry, hotel industry, real estate industry, entertainment, electronics, infrastructure, automobile industry, consumer & luxury goods and transportation industry etc. have suffered a lot.
- With factories and workplaces shut down, many migrant workers were left with no livelihood. They thus decided to walk hundreds of kilometres to go back to their native villages, accompanied by their families in many cases.
- The corona virus lockdown in India has left tens of millions of migrant workers unemployed. Companies have reduced their staff or reduced their remuneration.
- The lockdown disrupted food supplies and threatened to trigger a food crisis.
- Commodity prices have declined and producers are considering cutting output.
- Travel restrictions and quarantines affecting hundreds of millions of people have left factories short of labour and parts, disrupting just-in-time supply chains and triggering sales warnings across technology, automotive, consumer goods, pharmaceutical and other industries.

Conclusion

In this pandemic hit environment, a stringent policy response is necessary as business will inevitably be impacted, with both near-term effects and longer-run consequences. Economic relief packages for various sectors of society & economy are required. The plight of migrant workers should be taken care of. Some countries exhibit pre-existing economic fragilities, have weak health systems and thus lower resilience to pandemics. Many Asian and African countries lack surveillance, diagnostic, and hospital capacities to identify, isolate, and treat patients during an outbreak. Strong, developed and resourceful countries and the international organizations like WHO, now have the moral responsibilities to help these comparatively weak countries in combating this fatal virus. Innovation & Development of vaccine to prevent COVID disease should be focussed upon on a war level.

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BOYCOTT CHINA, ATMANIRBHAR BHARAT AND A WAY FORWARD

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Abstract:

In this article, I have discussed few pertinent issues concerning the 'Boycott China' movement. From the standpoint of economics and keeping peace with our neighbouring country, I have argued why this movement in its current form is futile, and possibly counter-productive. In the pursuit of making our nation self-reliant, it seems unwise to invite self-inflicted economic loss with no apparent benefits in the foresight. Moreover, such an appeal seems inconsistent with India's amicable efforts of developing positive bilateral relations, mutual investments and inclusive trade with China. Our overarching interests of prosperity and happiness can only be achieved through the proven ideals of capitalism. In my opinion, 'Atmanirbhar Bharat' scheme lays out a next generation of economic reforms, which would succour local industries and businesses to thrive. This shifts our focus towards the enablement of Indian businesses such that they could offer compelling services and superior products at competing prices, rendering the motivated rejection of imports irrelevant.

Keywords: Boycott China, Atmanirbhar Bharat, Self-Reliant India, Capitalism, Make in India

Amidst the Covid-19 crisis, we are witnessing a yet another spell of the Boycott China movement. Social media is flooded with an appeal to denounce Chinese products. Although 'No China' campaign is neither new nor exclusive to India. This time, remarkably, several prominent figures, public intellectuals and celebrities have ushered this campaign, which is intended to trounce Chinese dominance through waging 'wallet war - as famously coined by Sonam Wangchuk, founding-director of the Students' Educational and Cultural Movement of Ladakh'. Their proposal calls for a mass scale rejection of Chinese products and an instructed adoption of 'swadeshi (made in India)', which will strengthen our economy while weakening China's. However, neither the Government of India, nor any renowned body of economists has explicitly endorsed this movement. While most of the efforts from our Govt.'s end have centred on promoting self-reliance, we have also made efforts to strengthen the relationship with our neighbouring country. In the article, I will present a critical analysis of the aforementioned movement from two perspectives: economics and peace with neighbours. I will also present a way-forward for meeting the ultimate objective of this movement, i.e. economic growth and self-reliance.

What it means and takes to boycott Chinese products?

It is virtually impossible to find an absolutely indigenous product with no contribution of China. Almost every value chain invariably involves complex interconnectedness of nations at all levels. We depend on China for a range of raw materials and finished goods. At present, China constitutes 5.08% and 13.7% of our total export and import, respectively. In 2018-19, India's total import from china amounted to 70.31 bn \$, and the export to China

summed up to 16.7bn \$, making China our leading bilateral trade partner. As per Ministry of Commerce's data, electrical machinery constituted 34% of total imports, followed by nuclear reactor (18%), organic chemicals (10%), gems/jewellery (6%), iron & steel (4%), plastic goods (4%), fertilizers (2%), medical equipment (2%) and auto components (2%.) We import 20% of auto components, 70% of electronic components, 45% of consumer durables, 70% of pharmaceuticals ingredients, and 40% of leather goods from China.

Quoting Prof. Biswajit Dhar, Head of the Centre for WTO Studies at the Indian Institute of Foreign Trade, "If India decides to boycott Chinese products, it will not make any economic sense given the kind of dependency that we have." The reason is practical economics. It is in the interest of consumers (and thereby businesses) to import goods from China, simply because they are cheaper and best-in-quality for that cost. Boycotting Chinese goods would result in increased production costs and possibly some compromise in product quality, which will eventually be passed on to the consumers.

Is it practical and economically viable to reduce dependency on China?

NO. That's because we are not prepared for the alternative. If Chinese products disappear from the market today, there will be an acute shortage of goods which can only be addressed partly, that too by costlier and poor-quality goods. Also, the overall welfare gains from trade would be lost, rendering several products and essential services prohibitively expensive for the masses.

Are we prepared for import substitution with domestic production?

NO. It will require a substantial upgradation of our current infrastructure, including, the current capacity of local enterprises, availability of required technologies, labour laws, land acquisition policies, credit system, etc., to fill the productivity vacuum caused by the boycott.

Can our boycott mark an impact on China's economic strength?

Perhaps a little, but only at our own perils. India constitutes just 3.08% of China's massive 2499 Bn \$ overall import while accounting for 0.88% of its total exports. On the other hand, China is our third largest export market and the leading source of import goods, including life-saving drugs. Needless to highlight, our dependency on China for Lithium and solar cells, which are the corner stones of India's global commitment towards sustainability and e-mobility.

Can we extract revenge on China without hurting ourselves?

Definitely not. There is no maxim in moral philosophy that grants a disproportionate self-inflicted harm with no foreseeable benefits. As a customer, it is our choice whether to celebrate Dipawali festival with Chinese Lights, or to shell out few more rupees to buy a 'swadeshi' lamp. However, an appeal for a mass boycott remains unjustified. In the globalised world with complex interdependencies of nations, it is neither possible to progress in isolation from neighbours nor avoidable to protect against the adverse consequences of boycotting trade with China.

Do boycotts work?

To say the least, such a mass movement would be a direct assault on the spirit of capitalism. Capitalism thrives on free markets and fair competition among players. Sanctions, import-export restrictions and mass boycotts cripple the economies, and yield nothing in the long run. Adding to it, history is loaded with examples of failed mass boycotts and embargos. China boycotted Japanese products (1930), Ghanians boycotted European goods, Russians boycotted European agricultural products, US consumer forums boycotted French goods (2003); all of these movements were short-lived and turned into fiasco. Do not forget that independent India's remarkable GDP growth was made possible by 'economic liberalisation' that began in mid-1980s. In the first three decades of post-independence when our economy was closed, our GDP grew at a rate of 3-4% with a meagre 1% annualised increase in per-capita income. Then, opening economy opened the avenues of making fortunes, leading India to a 2.7tn \$ economy today.

What about Peace?

Not only the economic growth, but a peaceful relationship with our neighbouring country depends on bilateral trade. The idea of perpetual peace dates back to 18th century political theorists Immanuel Kant and Thomas Paine. Kant in his seminal essay titled “Perpetual Peace: A Philosophical Sketch,” proposed a peace program which marked the starting point of contemporary liberal thought and the subsequent theory of democratic peace. He argued that peace would emerge when states share three features: representative democracy, adherence to international law and organizations, and advanced commercial integration. It was in the mid-20th century, when this theory was empirically tested. Thanks to the classical work of John R. O Neal and Bruce Russett, that we now know what could reduce conflicts and instil peace. Their detailed statistical analysis confirms that the countries that engage in more trade are less likely to get into militarized disputes, and countries that are more integrated into the world economy are less likely to get into trouble with their neighbours. “That’s because capitalism makes buying things cheaper than stealing”, as summarised succinctly by Prof. Steven Pinker.

Copenhagen consensus (a project that seeks to establish priorities for solving global problems through welfare economics) report of 2008 ranked the Doha Development Agenda (DDA) as 2nd top priority for advancing global welfare. DDA is the trade-negotiation round of World Trade Organization, which commenced in 2001 to lower the trade barriers around the world, and thus facilitate increased global trade. In short, More Commerce results in more peace, lesser conflicts, healthier inter-state relationships and mutual growth. Take Europe for example. Today, it’s almost unimaginable that the kingdoms and countries in Europe were in constant war for centuries and witnessed two world wars less than a century ago. Essentially, we have moved into a world where trade-dependency fosters mutual growth and peace.

India’s recent efforts towards building good relationship with China

India has extended efforts to deepen economic cooperation with China. 2nd India-China informal summit, held in Mahabalipuram on 11th and 12th October 2019, outshines as an exemplar of developing positive bilateral relations, mutual investments and inclusive trade, wherein both the leaders agreed upon the common objective of working for a peaceful, secure and prosperous world. Both the nations reached a consensus that they will prudently manage their differences and will make joint efforts to ensure that international community strengthens the framework against training, financing, and supporting terrorist groups throughout the world and on a non-discriminatory basis.

Atmanirbhar Bharat

Amidst the Covid-19 crisis in the month of May 2020, hon’ble prime minister of India announced his vision of Atmanirbhar Bharat (aka self-reliant India). Aimed to enable the resurgence of economy, the vision rests upon five pillars, namely, economy, infrastructure, system, vibrant demography, and demand. A detailed plan has been laid out to realise it in five parts, starting from business including MSMEs in the first part, and the welfare of poor including migrants and farmers in the second part. In third part, the focus will be on agriculture, followed by the new horizons of growth. The government reforms and enablers are included in the fifth part, which in my opinion are critically desirable at the moment.

Government is working on a mission mode which encompasses, inter alia, the next phase of ease of doing business reforms, reforms in corporate laws, promoting technology driven systems (e.g. education), allocating an additional Rs. 40,000 crore under MGNREGS to provide employment boost, increased investment in public health, and extending additional supports to the state governments. The noteworthy growth of India’s personal protective equipment (PPE) sector, from zero before March, to 2 lac kits per day (which is steadily growing) is one such example that accentuates the positive aftereffect of this scheme.

It is worth noting that Armanirbhar Bharat, by no means, indicate cutting off from rest of the world. Quoting our hon’ble finance minister from a press conference held on 13th May 2020, “In his address, the Prime Minister didn’t mean isolated India, but a confident India.” Later in May, the hon’ble law and IT minister said, “When we talk about self-reliance, we do not mean isolating away from the world. Foreign direct investment is welcome, technology

is welcome.” He added that it is about self-reliant India, which translates to being a bigger and more important part of the global economy.

A way forward

I believe that our nation’s overarching interest lies in the prosperity and happiness of our people, for which, currently the Chinese products and services are indispensable. The spirit of ‘make in India’ is not (and ought not to be) predicated upon a motivated rejection of imports which jeopardises the ideals of free market capitalism. It rather lies in enabling local industries to produce superior quality products at competing prices that convince the consumers. The Atmanirbhar Bharat scheme provides necessary ingredients and a conducive environment for a thriving economy, which would create a fertile ground for Indian industries and businesses. While there may be some merit in boycott of Chinese products for geo-political or other reasons (which are beyond the ambit of this article), they do not justify an assault on the ideals of capitalism. Moreover, an outright mass rejection of Chinese products and services is antithetical to our government’s idea of self-reliant India.

Let’s celebrate the next generation of economic reforms. I hope that capitalists and entrepreneurs will leverage this opportunity to realise, in essence, the Atmanirbhar Bharat.

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DISASTER MANAGEMENT IN UTTARAKHAND- A CASE STUDY

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Abstract-

Uttarakhand is a Himalayan state which is prone to various manmade and natural disasters. Disaster has harmful impact on both society and humankind as it causes negative impact on physical as well as mental health of the people. Hilly areas are more vulnerable to disasters, lacks adequate facilities and infrastructure due to its remote location. The paper addresses types of disaster in the state along with the efforts of state Government to tackle the disasters. The paper also discussed existing infrastructure and technique used by state government for disaster management. This case study recommends several steps to be taken for disaster management, how to use technology as preventive methodology, how to spread awareness among the local people?

Keywords: Himalayan, Uttarakhand, Vulnerability, Disaster, Mitigation

Introduction-

Uttarakhand located in the northern part of the country and is primarily situated on the southern gradient of the Himalayas. Total area of state is around 53484 km² and Geographically, Uttarakhand has around 64 per cent area is covered by the forest and 93 per cent area is occupied by the mountain (**Chopra, R. 2014**). Glaciers in the state are situated in the highest level and dense forests at the lower elevations. The Western part of Himalayan region which is situated in the height 3000-3500 meters is covered with Alpine Shrub and Meadows (**farmech.gov.in**). Geologically, the Himalayan region of Uttarakhand is subdivided into Trans Himalayas, Higher Himalayas, Lower Himalayas, Shavlik Himalayas, *Bhavar&Tarai*(**Chopra, R. 2014**). Though the climatic situation of the Tarai areas is very similar to the other Tarai region of other part of country but the mountainous region has mild summers, colder winters, which is often accompanied with the snowfall for longer duration and monsoon has high rainfall. Pristine natural beauty along with favourable climatic conditions makes Uttarakhand as a most preferred tourist destination. Huge disparities in the geographical location and being an origin destination of several important rivers has impact on the climate, vegetation within the state and it has also made state vulnerable to several disasters.

Fragile geographical location, difficult terrain makes state prone to several disasters like earthquake, landslides, floods, epidemics, forest fire, hailstorm, lightening, road accidents. Along with this the state is highly susceptible to numerous hazards like flash -floods, avalanches, dam burst, drought but as the state is categorized in the highest seismic risk zones of the country i.e. Zone V and IV, thus it is state higher risk for reoccurrence of Earthquake(**Rautela, P. and et. al.,2015**).

State has formulated Uttarakhand State Disaster Management Authority (USDMA) and State Emergency Operations Centre (SEOC), through which the monitoring of work related to disaster is done. State Disaster Relief

force (SDRF) has constituted to tackle disaster more efficiently in the local terrain. Along with State has now focussed on early warning system and mitigation strategy. Uttarakhand is also promoting technology like Geographical Information System (GIS) and India Disaster Resource Network (IRDN) to strengthen its disaster management system. Vulnerability of disaster is high here, thus it is recommended to strengthen the inter Departmental coordination and promote mass awareness with participatory approach.

Types of Disasters

- **Vulnerability to Earthquakes**

According to report of Regional landscape study, done in particularly in Rishikesh area, stated that Uttarakhand is highly vulnerable to the earthquakes. The state is categorized in the zone IV and V, which indicates that it lies in the highest seismic risk zones of the country. The Main Central Thrust (MCT) & the Main Boundary Thrust (MBT) are the two regional tectonic features in Uttarakhand, which have earthquake potential (**Regional landscape study, 2016**).

- **Vulnerability to Landslides**

Unplanned construction and uncontrolled human activities in the fragile ecosystem, mainly in the hilly region of the state has resulted in increased landslides in the recent past. Along with this, state is situated in the southern slope of Himalayas, these mountains are snow covered, fragile, unstable and geologically very young which has made them much vulnerable to natural disaster like landslides. Landslides in Uttarakhand occurs very often in Uttarakhand and its probability is highest during the monsoon. Landslides has adverse impact on human life as it results in loss of life, destruction of houses, damaged roads, obstruction to the means of communication, loss in agricultural land.

- **Vulnerability to Floods**

Majority of the area in Uttarakhand is covered with the forest area, trees have positive role in binding the ground soil. Ambient climate and natural beauty of the mountainous state has attracted several outsiders for dwelling purpose. Huge demand of land in remote villages has resulted in deforestation. Thus, cutting of forest excessive amount has increased the of episode of floods, specially during the rainy season. Flood causes the soil erosion and accumulation of soil in the river, leading into reduce water carrying capacity of the rivers, it also results, into swallowing of riverbeds leading to floods in the plains. Since riverbeds in plains areas, are mostly occupied by the illegal inhabitants, thus floods have severe negative impact on them.

Deforestation has also resulted in low recharging of natural springs, which causes reduced steam flows and dried up springs during the dry seasons.

- **Cloudbursts and Flash Floods**

Cloudburst and flash floods mean, the cloudbursts leading to exceptionally heavy rainfall and sudden flash floods in the mountainous streams and rivers, leading to breaching of banks and overflowing of dams. This leads to floods in lower plain areas and create devastation in the life of the people residing below the hillock. Cloud burst events are mostly reported to occur around the southern rim of the Himalayas generally between elevation range of 1000 m and 2500 m within a small geographic area of 20-30 km, having rainfall greater than 100 mm / hour (**Dimri and et.al., 2017**). According to the various cases reported in newspaper, on analysing the situation of cloud burst in southern rim of Himalayas, from 1970 -2016, on an average around 30 cases of cloud bursts were reported and out of which Garhwal region was far ahead to Kumaun region with 17 cases (**SANDRP, 2019**).

- **Avalanches**

Uttarakhand is one of favourite choice of mountaineers due to snow laden Himalayas and several other mountain peaks. Human interference in Himalayas has increased the risk of snow storm, commonly known as avalanche. Snow avalanches are the sudden slide of large mass of snow down a mountain (**Haerberli, W. and Whiteman, C., 2015**). The temperature variation and wind speed are directly proportional to avalanches.

- **Drought**

Droughts are the result of natural and human activities both in Uttarakhand. Excessive human interference in natural dimensions has led to several types of weather changes. Excessive human interference in natural dimensions has led to several types of weather changes, which have also altered the normal rainfall pattern in an area and caused drought. Human activities like soil erosion, deforestation, excessive use of ground water, pollution etc. have also caused drought.

- **Hailstorms**

A hailstorm is an unusual weather phenomenon in which balls of ice, called hail, fall from the sky. The ice balls are nothing more than solid precipitation that will form under certain conditions (Kumar. M., 2009). Hailstorms cause heavy damage to crop and vegetation. It also causes secondary hazards like breaking of electric poles, disruption of connectivity etc.

The vulnerability of a disaster in regard to an area is assessed on the basis of its capability to sustain and respond according to its physical, social, economic and environmental structures. Marginalization, ignorance, illiteracy, rapid population growth and limited or no access to utilities are some of the predominant factors that directly affect the socio-economic behaviour of a population. In the urban areas of the state, the large number of populations is concentrated on one location, which limits the preventive measures to certain sections of the population, leaving behind huge groups to tackle the hazards of disaster on their own.

In the rural areas the disaster preparedness which is mostly done by the block or district administration, is just limited to marginal sections of the population, mostly people belonging to poorer sections of society (below poverty level) and socially challenged groups. Thus, making the state and its people more vulnerable to various types of disaster. Thus, the focus of the Government should be to train local people and make them aware regarding the preparedness and mitigation plan related to disaster, thus the ill effects can be reduced to certain levels.

State Level Institutional Mechanism to tackle the disaster:

Disaster management in the state is done with the involvement of several participating organizations. The major role in disaster management is basically played by the State Government, District administration and actual site of disaster. The role of the State is to formulate and implement the policy level decisions, allocation of resources, budget, and conduct activities according to the priority or need of an area. The State Government has also set up the Uttarakhand State Disaster Management Authority (USDMA) and State Emergency Operations Centre, through which the monitoring of work related to disaster is done.

The establishment of Uttarakhand State Disaster Management Authority (USDMA) was done under the Chairmanship of the Chief Minister, according to the S.14 of the DM Act, 2005. Foundation of USDMA was laid to plan the policies and plans for disaster management, ensure implementation of the State Disaster Management Plan (SDMP) and to recommend fund provisions for mitigation and preparedness measures and review the development of all plans of different departments so as to ensure integration of prevention, preparedness and mitigation measures in these. SDMA is looked after by the State Executive Committee (SEC) under the supervision of Chief Secretary, to execute, monitor and coordinate its action and performance in accordance with guidelines laid down by the State Authority. In all the 13 districts of the state, Disaster Management Authorities have been constituted under the provision of S.25 of Disaster Management Act, 2005. In the districts, the work related to disaster management is under the supervision of District Magistrate.

For ensuring the immediate and exclusive response to the disaster, National Disaster Response Force (NDRF) was formulated by the Government of India, under the clause S. 44 of Disaster Management Act, 2005. The state being vulnerable to disaster, the state of Uttarakhand has constituted four companies of State Disaster Response Force (SDRF), the concept was to involve the local people in the force who are accustomed with the local terrain of the state.

Preparedness Measures taken to tackle the disaster in the state

1. Early warning, Preparedness and Response:

Early warning regarding the disaster is done through the Early Warning and Dissemination systems. This system work in coordination with the technical agencies and technical committees. The purpose of the early warning system is to prepare for the disasters and proceed with the ways to tackle it. In Uttarakhand, State Emergency Operation Centre (SEOC) has been setup, which helps in dissemination of information and coordination among the responsible officers and disaster affected communities. During the monsoon season, the SEOC helps in gathering the rainfall report from Dehradun Meteorological Department and circulate to the districts, which help in preparing in advance, in case of emergency.

Other important parameter in disaster management is prevention, which specifies as measures designed to prevent natural phenomenon from causing or resulting in disaster or other related emergency situations. Prevention involves long term planning and preparation which can be helpful in reducing the vulnerability of disaster. Certain steps which must be taken in mind for the prevention of disaster involves identification of the probable hazards, analyse the risk level associated with it, taking action to mitigate potential loss or damage to life, property and the environment.

2. Mitigation Strategy:

Mitigation is one of the important strategies to tackle the disaster in the sustainable way, it involves all the steps which are required to overcome the ill effects of disaster among the community. The main motive of disaster mitigation is to identify the disaster and plan ways to tackle its effects in more efficient way. Thus, under this strategy, the first foremost step is taken to spread awareness among the community about the disaster and its risk management. Planning on the reducing the impact of hazard on the community.

a) Hazard Assessment

Hazard assessment analyse the probability of pattern of occurrence of a hazard and risk associated with it. GIS is an important tool for hazard analysis and its management.

b) Training & needs Assessment

To handle the disaster efficiently and effectively, all the officers associated with disaster management are trained, both at state and district level. Emphasis is also given to train people at local level, including NGOs and institutes affiliated to University and research centres.

3. Community Based Disaster Management

Community preparedness is utmost important parameter to tackle the disaster and it depends on the ability of community to sustain the disaster. Community must have the knowledge regarding the hazards associated with the disaster, basic terms related to disaster must be communicated among the community. People should be prepared to understand their role and duties at the time of disaster. Emphasis should be on participatory approach, coordination of local community with the authorities can result in effective management of a disaster. Along with this use of local knowledge of terrain and resources can be helpful in handling situation efficiently. Organization preparedness will also be an important parameter at the time of tackling the disaster. Ability of community to recover i.e. recovery ability from the disaster will also help in overcoming stress of a disaster. Community based disaster management can be attained through the following steps:

- To formulate a block and gram panchayat disaster management committee.
- Establishment of village disaster intervention team (VDIT) for managing the first respondents of the disaster.
- Facilitates community-based disaster programs through selection and training of volunteers .
- Train and organize mock drill for the village response groups for the preparedness regarding the disaster.
- To engage local regulatory bodies in developing mitigation strategy and assure their participation.
- To encourage participatory approach of community in disaster related planning and development process

- To involve women, local community and specially abled people in programs related to disaster.
- Regulatory authorities should ensure that the proper spread of disaster related information among the common masses and adequate.
- Involvement of Non-Government Organization (NGO) and local level groups to achieve maximum benefits of disaster management programs.
- To involve appropriate ICT enabled communication systems to ensure proper dissemination of disaster related information among the community.

4. Awareness Generation:

To reduce the impact of hazards of the disaster, community must be well prepared to tackle the disaster through proper awareness generation.

Objectives of the Community Awareness-

- Help people to train proper disaster related training to make people self-sufficient to tackle the disasters.
- To spread public awareness among the community regarding disasters and its mitigation strategy and also disseminate information regarding state's initiatives regarding the disaster management.
- Understanding of personal and community responsibilities and the capabilities of disaster management agencies.
- Arrange mock drill among school, colleges, and offices for preparedness regarding disaster.
- Follow back to basic approach i.e. make people aware regarding the use of local knowledge and resources to tackle the emergency.

5. Capacity Building Program for Disaster Management:

In order to develop the expertise in disaster management building capacity, thus it is necessary to train and setting up of emergency response mechanisms which can mobilize trained resources in a quick, efficient and systematic manner.

Capacity Building Measures followed in the state:

- To provide practical based first aid and rescue training to police, home guards, PRD's and health department personnel to assist people during disaster. Along with this training on evacuation and shelter management should also be imparted to manage the after effect of the disaster.
- Training to Technical Manpower: Efforts is made in the advance to train the technical expert like architects, engineers, and mason so that disaster resistant construction can be planned and prepared to tackle the disasters. They can also be trained in retrofitting methodologies to provide sustainable solution for all the hazards.
- Efforts is made to reinforce the existing training and impart awareness among the community.
- Advanced training courses should be inducted among the concerned authorities time to time.
- Involvement of various youth organization like national credit corps (NCC), Rover and Rangers, Scouts and Guide, National social service (NSS) and local organization.
- Involvement of local NGOs should be promoted as they have good hold on the community and can utilize local knowledge and resources to tackle any emergencies.
- Regular mock drills and simulation programs are be organize to educate the people.
- Efforts should be made to strengthen the state and district level disaster control rooms.

6. Communication systems:

At the time of disaster, communication needs to be updated and made more users friendly to handle the emergency. Although state has good communication network still efforts should be made to extend the communication services in the remote areas. To tackle the emergency disaster situation, coordination with

other department like forest, Garhwal MandalVikas Nigam and Kumaun Mandal Vikas Nigam is done to utilise their services and disseminate information through radio sets and wireless in the community.

7. Geographical Management Information System for Emergency Management:

GIS plays an important role in disaster management, it helps in gathering accurate and suitable data, also helps in analysis of gathered information to track the actual site of disaster and its appropriate management. The data generated from GIS is more accurate and reliable as compared to the conventional methods. GIS helps in effective coordination among the related authorities, also facilitates planning, monitoring and implementation of disaster management related issues at state, district and local level.

8. India Disaster Resource Network (IDRN) for Disaster management

The response system of Uttarakhand is strengthened through the launch of IDRN, a web-based information system. This system helps disaster management through managing the reservoir of apparatus and machinery, proficient manpower, critical adequacies for tackling the emergency situation. IDRN facilitates the policymakers to evaluate their disaster management system through the inventory of equipment and manpower to combat the disaster.

9. Medical preparedness in hospitals:

The major ill effect of disaster is human loss or mass casualty incidents, in order to cater this problem, hospital disaster management cell helps planning for treating the ill effects of hazards and prepare themselves to take immediate response to treat and help the needy people. Efforts of this cell is to not to hinder the regular workload and resources of the hospital but to prevent the chaos, confusion and inefficiency that occur at the time of emergency.

Recommendations:

To make task of relief, restoration, and reconstruction easy, the state should opt for standard operating procedure. Coordination between various department should be established to avoid the duplicity of work and role conflicts. New construction should be planned according to the building- byelaws, emphasis should be given to construct earthquake resistant houses. Rebuilding after disaster should be strong and according to byelaws. Identification of vulnerable site and building should be done on priority basis to avoid mass causality incidences, especially schools, hospitals, and other public utility areas. Focus should be on creating mass awareness and preparedness regarding the disaster among community, school, and local level. Being vulnerable to disaster, the State should give more emphasis and focus on framing adequate policies regarding the disaster and should try to reframe and update it according to need of an hour.

Conclusion

The focus of disaster management in the state in the past was inclined to relief and rehabilitation but now in the current scenario, there is major shift in line of action and now focus is laid to prevention and preparedness as well as on relief and recovery. More damage due to disaster was seen due to poor communication facilities and warning system, now due to introduction of technology like IDRN and GIS, information system has strengthened, this has helped in lowering the losses. Though the state is taking lots of initiative to tackle the disaster in effective manner yet substantial results are not seen due lack of proper implementation of programs, lack of coordination between higher authorities and at local level. Thus, efforts should be made to mobilize resources and prepare infrastructure ahead to facilitate timely evacuation at the time of disaster.

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DISEQUILIBRIUMISATION OF ECOSYSTEM: THE PLIGHT OF ECOLOGY

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Abstract

Preservation of ecological balance is very crucial for us; as plant and animal species are disappearing faster than ever in recorded natural history of the earth. Our earth is home to multiple species. But we have destroyed many and endangered others. Our treatment of the world's fabulous ecosystem is now creating a lonely planet. We are to blame ourselves, but solutions are possible. When we damage the earth we damage ourselves. The earth is home to multiple species designated to rings of specific biomes of the ecosystem. An ecosystem's balance of life - bacteria to plants, animals, birds etc – maintain the global equilibrium of temperature, water and air. Why ecosystem matters the most?

Keywords: Ecosystem, Specific biomes; and, Equilibrium.

Introduction and Explanational Aspect

Contemporary trends in the technological advancement has had enabled man to solve and diagnose many problems, but it has had harmful affects on a number of aspect of contemporary cycles of ecosystem. All over the world it contributed to the disequilibriumisation of ecosystem. The irreversible of ruptures are threatening to mankind. Within, equilibrium ecology; the state of disequilibriumisation of ecosystem is perceived as an aberration that interrupts the natural development of stable ecosystem.

Our planet has suffered five mass extinctions, the last of which occurred about 66 million years ago. When a giant asteroid believed to have landed near The Yucatan Peninsula set off a chain reaction that wiped out the giant dinosaurs and roughly three – quarters of the other species on earth.

A few year ago , in a book entitled:-The Sixth Extinction; authored by Elizabeth Colbert warned of a devastating sequel, with plant and animal species on land and sea already disappearing at a ferocious clip, their habitats destroyed specifically by anthropogenic activities. This time the asteroid is us - and we will pay heavily for our folly.

Biodiversity – a word encompassing all living flora and fauna is declining faster than at any time in annals of human history. As per the estimation around 01 million species already face extinction, and many within decades. Unless the world takes transformative action to save earth's natural systems. Theat-risk population includes a half millions land based species and one –third of marine mammals and corals.

The most obvious victim is the world's coral reefs, which have suffered grievously from ocean waters that have grown warmer and more acidic as a result of all the carbon dioxide they have been asked to absorb. Most of the causes of this carnage seems familiar: - logging, poaching, overfishing by large industrial fleets, pollution,

invasive species, the spread of roads and cities to accommodate an exploding global human population (now 08 billion) and still rising.

If there is one alpha culprit, it is the clearance of forests and wetlands for farms to feed all those people (and perversely to help them to get work). The destruction of Indonesia's valuable rain forests, and their replacement with palm oil plantation, has been driven in part by Europe's boundless appetite for biodiesel fuels.

Add to all this is a relatively new threat: Global Warming, driven largely by the burning of fossil fuels, is expected to compound the damage. Rising seas and increased extreme weather events propelled in part by climate change – fire, floods and droughts have already harmed many species on the earth.

Humanity's culpability in what many scientists believe to be a planetary emergency has been reaffirmed by a detailed and depressing {Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (I.P.B.E.S)} report compiled by hundreds of international experts, based on thousands of scientific studies. Its findings are grim.

The I.P.E.S report reaffirms that, the Biodiversity loss is an urgent issue for human well - being, providing billions and billions of dollars for the “*ecosystem services*”. Wetlands clean and purify water. Coral reefs nourish vast fish population that feed the world. Organic matter in the soil nourishes crops. Bees as well as other threatened insects pollinate fruits and vegetables. Mangroves protect us from floods made worse by rising sea.

Methodology and Data Base

The present study has been primarily conducted on the basis of secondary data and reports of Indian Daily Newspapers and News Channels. The approach which is adopted for the accomplishment of the present study is largely based on Inductive and Deductive approach. The whole study is purposive in nature; and, the entire analysis has been made on the basis of personal observation; trends of media reports; and, reports of various News Channels.

Definitional Section

“As applied and used in Ecology, the term ‘Disequilibriumisation’ is used to describe systems that do not tend towards a stable homeostatic balance”.

The natural condition of an ecosystem is imbalance; and, hence constant change. Furthermore, says the disequilibrium ecologist, while natural laws are (by definition) constant, the natural (and now, the artificial) context of ecosystem are imperpetual flux.

Thus, the Disequilibriumisation of ecosystem generally pertains to the impoverishment of various species of flora and fauna; especially in terms of extinction and population degradation, habitat fragmentation and destruction; and, pollution (including acid rain).

Why Ecosystem Matters?

Preservation and protection of ecosystem is utmost crucial for the very survival of mankind. Moreover, the disequilibriumisation of ecosystem in the post- modern world has made the ecosystem most vulnerable to anthropogenic oriented development. That's why ecosystem matters the most due to the followings:-

1. An ecosystem's balances life on earth, as it maintains global balance of temperature, water and air.
2. Ocean ecosystem contains one-celled phytoplankton plants which via photosynthesis produces half the oxygen of the world.
3. Marshlands ecosystem stores carbon within their plants and soil functioning as a carbon sink.
4. Mangroves and Marshlands collectively with their long grasses rooted in soils covered by very slow - draining water are a natural guard against soil erosion.
5. The Polar Regions maintains the balance of world water distribution. About 90% of the freshwater on earth surface is held in the polar ice sheet.

6. Covering about one-third of the Earth's dry and arid land, desert biome acts as a carbon sink. Ecologists, finds that bacteria located in desert aquifers capture and store carbon from the atmosphere.
7. The rich tropical rainforest ecosystem works as a carbon sink for about 50% of all atmospheric carbon released annually.
8. Tropical rainforests recycles water vapour and thus impact cloud formation and precipitation.
9. Ecologists and Scientists finds that, tropical rainforest ecosystems also powers about 28% of the world's oxygen turnover, transforming CO₂ into oxygen through the process of photosynthesis.

Thus, most of the nature's contribution are not fully replaceable. But humans can stop or at least limit the damage. One critical task is to protect (and, if possible, to enlarge) the world's natural forests, which are home to two-thirds of world's species. In fact; the intact forest absorbs and stores enormous amounts of carbon. So, preserving them assists not only the numerous species of flora and fauna; but also, helps in the struggle against climate change. Recently, Ecologists and Scientists suggests, that deforestation accounts for slightly over 10% of worldwide greenhouse gas emissions.

Specific Biomes of The World's Ecosystem

The Biospheric life support system of the biosphere is very crucial not even for mankind; but, also for flora and fauna of the specific biomes of zoogeographical world. However, ignoring the components of macro system will be foolish. For example, persuasive evidence indicates that key species of world specific biomes of our ecosystem acts as “**ecosystemengineers**” and provide an important ecosystem function to the intertidal zone.

Thus, the specific biomes of the world's ecosystem are broadly grouped into **06 Macro Biomes of the Ecosystem**. They are as followings:-

1. Oceans,
2. Marshlands,
3. Mangroves,
4. Deserts (Arid Zones),
5. Tropical Rainforests; and,
6. Polar Regions (Frozen/Cold).

- A. The Oceans:-** The oceans of the earth surface are the first macro biomes of the ecosystem. The Aquatic Ecosystem is located in the form of five oceans spread over the world namely: The Arctic, The Atlantic, The Pacific, The Indian; and, The Southern or Austral Ocean. These covers about 70% of the earth's surface.

The rich ocean ecosystem is home to the smallest living creatures, like plankton and bacteria, right up to the world's largest living structure, the Great Barrier Reefs, composed of corals, found in Australia. Ocean life which extends over three depths of waters, the top- most and sunlit Euphotic zone to the middle- level Disphotic zone and the dark and cold Alphotic zone at the bottom, includes fish, dolphins, walruses, crustaceans to tiny sea anemones and huge whales.

This magical world is under grave threat from fishing and whaling, plastic pollution, oil spills and pesticides; destroying the habitats of the hawksbill, turtle, the fin whale, the sea otter, the Whale Shark and the Monk Seal.

- B. Marshlands:-** The marshlands are freshwater marshes which are found at lakes and river mouths. Marshes are characterized by herbaceous flora like reeds, sedges, and long and dense grasses which prevent soil erosion. The marshlands covers about 06% of the Earth's surface. The Marshlands are distributed over Europe, Africa, Asia, Australia; and, North and South America as well.

The regions of marshland are very rich in biodiversity, from tiny insects to wading birds. However, with the climate change and altering water levels, alongside fishing, hunting and dam building marshlands species are now confronts extinction. Some endangered specie includes the whooping cranes, the whistling ducks, the western swamp tortoise, the pirate perch and the glorious kingfisher birds.

- C. Mangroves:-**A mangrove is a tidal swamp which forms along lagoons, islands and tropical deltas. It is marked by high salinity; and, its ecology is coupled with both freshwater and oceanic ecosystems. Over 60,000 square miles of mangroves are found across the tropics and sub-tropics, along coastal Central America, India, Brazil, Australia etc., forming a crucial buffer against storms.

Mangroves house fascinating varieties of fish,algae, crustacean, reptile, birds and mammal species.However, these stunning beings, form the whiskered smooth-coated otter to the red-fur Proboscis monkey and Bengal Tiger to the Dugong ‘sea cow’ faces threats from climate change raising sea levels around the world. Alongside, agrochemicals and oil-spill pollution are also destroying mangroves habitats.

- D. Deserts (Arid Zones):-** The dry desert ecosystem is largely based on scanty or low precipitation. Spread over 20% of the earth’s surface across Africa, The Middle–East, America and West and Southern Asia. The Deserts supports tough flora and fauna, like heat resistant xerophytes plants which stores water, including cacti and oleanders, and small, often nocturnal animals, birds and reptiles.

However, global warming now threatens desert species like the Rasta involucrate plant, bighorn sheep, fringe-toed lizards, and desert gazellers, facing drying water pools and growing wildfires, alongside hunting and human encroachments.

- E. Tropical Rainforests:-**The tropical rainforest, with very high rainfall and humidity is found in lowlands and uplands around Equator. Especially in South – East Asia, South and Central America (particularly in the Amazon Basins) and West and Central Africa.

With the astounding biodiversity, tropical rainforests houses vibrant species like the Gorilla and Orangutan, the poison Dart Frog, the Chimp, the Toucan and Macaw. These now faces the threat of extinction from the burning of rainforests for commerce as well as from pollution and poaching.

- F. Polar Regions (Frozen/ Cold):-** They are geographically located around the North and South Poles. The Polar ecosystem is characterized by floating ice–caps amidst frozen lands and oceans. They are often composed of Polar Barrens and Tundra. Polar vegetation features are generally tussock-forming grasses, lichens and mosses; and hardy animals and birds that can survive temperatures dipping to -50 degree Celsius in the Arctic and – 89degree Celsius in the Antarctic. These include the Polar Bears, Seals, Penguins, the Arctic Falcon, the White Whale, the Caribou, the Arctic Fox, the Musk Ox and Pacific Walrus.

However, these species faces severe extinction risks with climate change, atmospheric warming and the melting of ice caps. Also due to thawing Arctic permafrost and destroying habitats, shrinking food supplies and limiting access to hunting and breeding grounds.

Further threats are posed by unceasing oil and gas explorations, commercial hunting and dangerous chemical pollution.

The Way Forward

1. Ecological restoration is the need of the hour in an era of ecological disequilibriumisation. This requires reintroduction of appropriate biotic assemblages, not just a few species. Both ecosystem structure and function must resemble the original natural system for the process of true restoration.
2. National restoration goals and assessment strategies be developed for each ecoregion.
3. Drastically reduce the anthropogenic gases that affect both climate change and ocean acidification

4. Drastically reduce the rate of species impoverishment so that as many species as possible are available to recolonize damaged ecosystem.
5. It must be recognized that the destabilization of ecosystems and human society are closely interwoven with each other.
6. The Nations / States is now no longer the primary provider of security. The primary source of security is the integrity and health of biospheric life support system.
7. Finally, humans must live sustainably so that life on earth is not endangered. What humankind could do and what it will do will determine the future outcome.

Suggestions and Recommendations

In the context of above crisis there are two important parallel approaches to the interconnected climate and species crisis.

[A]. One is to transform agricultural practices, figuring out how to produce more food on fewer acres.

[B]. The other is to enlarge the world's supply of legally protected landscapes that cannot be touched for any commercial and business purpose.

[C]. Under the umbrella of 'Global Deal for Nature' we must nurture the nature.

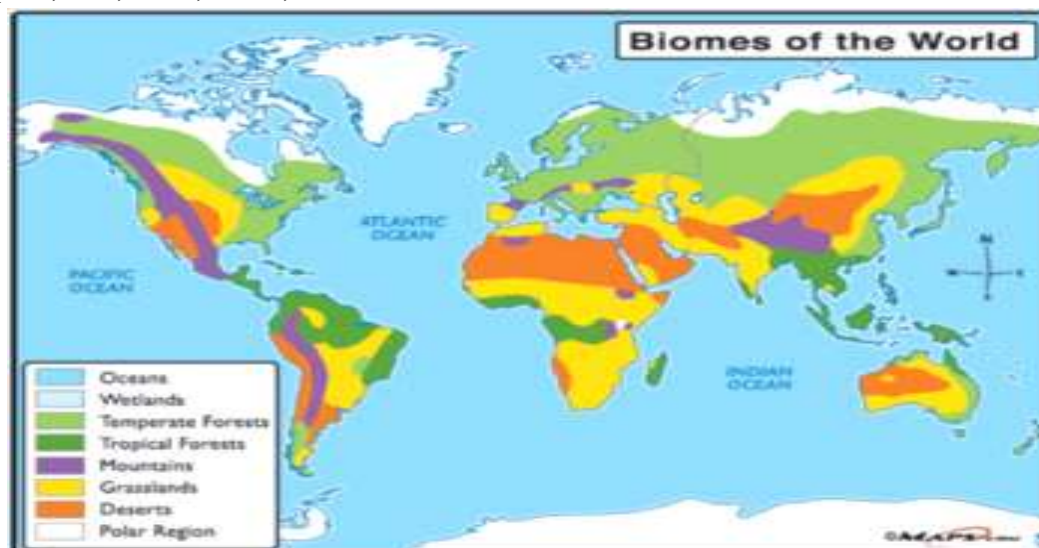
If rigorously policed and practiced, that would effectively quarantine about 30% of the world's land and oceans.

One major point is absolutely crystal clear— however much humans destabilize the world's ecosystems, they will not eliminate evolutionary processes. Species do come and go. Humans are presumptuous to expect *Homo sapiens* to be on the planet for the estimated 15 billion years earth might last, but it could happen. Still, the quality of life matters, not the duration. Humankind could and should live in harmony with the other species with which it shares the planet.

Humans must not produce an ecological overshoot by using resources faster than Earth can regenerate them.

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IMPACT OF COVID-19 ON INDIAN SOCIETY: SPECIAL FOCUS ON PSYCHO-SOCIAL BEHAVIOUR

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Abstract:

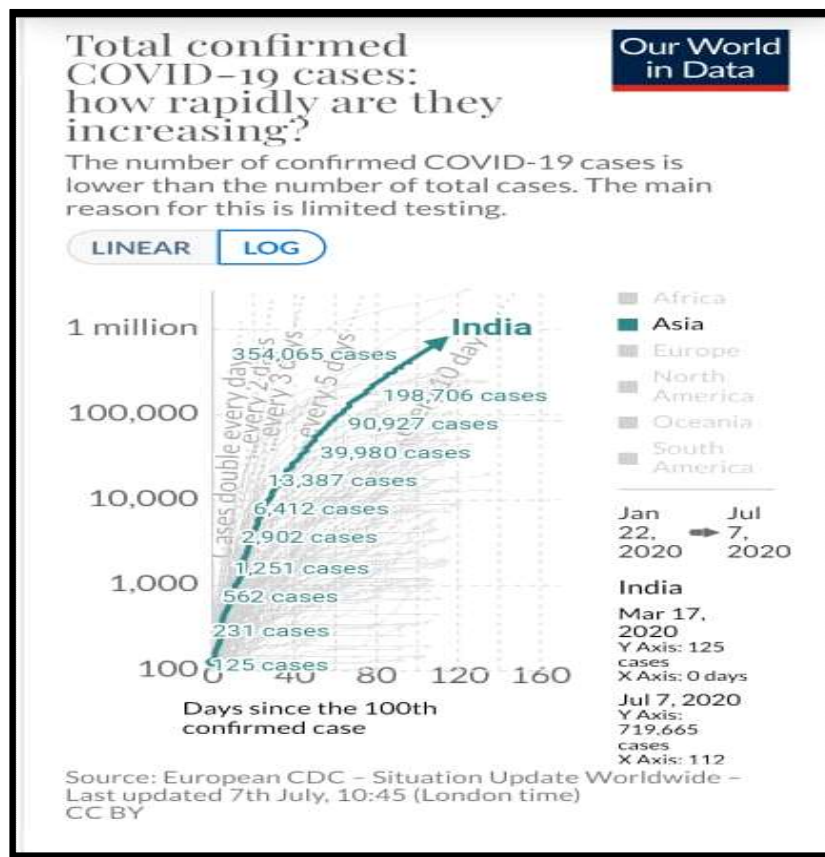
Covid-19 has affected the human life worldwide at most after the Second World War. It was originated in Wuhan city of China but was rapidly communicated in other countries within few weeks. Therefore, WHO has declared Covid-19 as Pandemic? Pandemics are not merely a health concern which affects the human physiology but it is much more than that. The first case of Covid-19 in India was reported in January, 2019 and posed psychological pressure in society. It is a disaster which triggers the social, psychological, emotional, physical and economical aspects of the infected nations. Almost all the nation is working hard to minimize the damage caused Covid-19 and guiding to avoid social contacts to slow down its transmission. Therefore, Government took the step of partial and complete lockdown which has affected the psycho-social behaviour of society. The present paper describes the impact of Covid-19 on Psycho-social behaviour of human with special reference to India its causes and the possible strategies to combat its impact on human life has also been discussed therein.

Key Words: Covid-19, Pandemic, Psycho-social, Behaviour, society.

Covid-19 has become a major threat for human civilization worldwide and evolved as a critical health disaster worldwide after Second World War (Chief of United Nation, April 2020). It is a challenging global issue which has put great impact on human existence and their survival which affected the human psycho-social behaviour and their attitude at great extent. The Covid-19 is originated in Wuhan city which is located in Hubei province of China. It was a novel and acute respiratory infectious disease noticed by World Health Organization and named it as COVID-19 (Corona-virus disease 2019). The Covid-19 was very rapidly spread over the other countries from China in few weeks. The Director General of WHO Dr. Tedors Adhanom Ghebreyesus said "WHO has been assessing this outbreak around the clock and we are deeply concerned both by the alarming levels of spread and severity and by the alarming level of infection". Thereafter, WHO has declared Covid-19 as Pandemic on 11th March 2020? According the report of The Hindu (January 30, 2020) the first case of Covid-19 in India was reported at Kerala, when a corona positive medical student returned back India from Wuhan. The other three cases were reported on 3rd February, 2020 and all were students returned from Wuhan. After this no other cases of Covid-19 were reported in month of February, but new 22 cases were reported in India on 4th March, which included 14 infected persons and all those were Italian tourist. In the month of March transmission raised and several people who had traveling history were getting infected. In India in March the first Covid-19 fatality was 76 year old man who had travel history from Saudi Arabia.

After seeing this vulnerable health situation and increasing cases of Covid-19 forced prime minister Narendra Modi Government instanced a 14-hour voluntary public curfew. This public curfew was a transitional period for human life. People were restricted to attend family function and large gathering, travel, perform sports activity etc. As Indians pay high values to maintain the harmony with society, meeting their relatives frequently and community in general but due to this lockdown and fear of getting infected affected not only the physiology of human being but also put its negative impact on psycho-social behaviour. Asmundson et al., (Feb, 2020) found in his research that the Corona-phobia has developed fear of acquiring the infection, intolerance of uncertainty, news of causality, rising cases of infection and excessive attention to media which generated adverse or negative psychological responses. Similar study conducted by Papageorgiou et al., (2020) on Mental health effects of CoViD-19 pandemic revealed that negative psycho-social responses includes feeling stressed, worries, losing interest, anger, feeling helplessness, feeling disconnected from relative and society, nervousness of going out even for necessary work or grocery purchase, mental trauma, anxiety, feeling of depression and emotionally sick, frustration and aggressiveness has critically affected the human behaviour.

India has reached at third position of most Covid-19 infected citizens, there are various reason behind but the main reason behind is limited testing of Covid-19. Till the end of 1st week of July, total confirmed cases of Covid-19 are 719,665 and death is 20,160. People watching rapidly increasing cases of Covid infection in e-newspapers and other electronic media is developing mental illness among people.



According to Comscore, an American media measurement and analytics company which provides data and analytics to media, marketing, advertising agencies, noticed that the online newspaper consumption, communication app and binge watching across the world has significant raised and has become the new stress and anxiety booster. The World Health Organization (WHO) has warned of a “massive increase in mental health conditions” which is arising due to the consequences of pandemic. Mental health experts in India practically found increasing cases of pupil suffering from the feeling of frustration, anger and helplessness. It was a tragic period for the students,

elderly who were living far away from their family and were sick of being sucked in their home from moths and had no one to talk to share their emotions, all these factors have affected the mental health and psycho-social behaviour of mass population.

In India, a survey conducted by India Psychiatry Society (IPS) revealed 20% cases of mental illness has increase in India and at least one in five were affected emotionally due to Covid-19. In this survey it is also found that since March 125 case of suicide is reported due to fear of getting infected, living in Isolation and inability to reaching home which affected their psycho-social behaviour. A study says in India during lockdown from 19th March to 2nd May, 2020 around 300 non-corona virus deaths cases were reported due to suicides. According to the data, 80 people committed suicide due to loneliness and fear of being tested positive for the virus. 51 cases are followed by migrants dying in accidents while returning back home during lockdown and 45 suicides are related to symptoms of withdrawal and 36 are related to financial distress. The Director of National Institute of Mental Health and Neuro-Sciences (NIMHANS) has received 3 lakhs distress calls since lockdown begun in India. Around 60-77% calls are related to helplessness and anxiety of being separated from the loved ones. To fight against the mental health issues due to Covi-19, NIMHANS started pan India helpline no. and providing psychological support from mental health professionals to different group of society such as children, adults, women and elderly soon after the lockdown was clamped from March 25.

Impact of Covid-19 on Psycho-Social Behaviour of Various Societal Group

The psycho-social impact of Covid-19 has touched every section of the society as mentioned below:

Children: Covid-19 outbreak on psycho-social impact of childhood is perhaps a critical but is actually ignored issue of this pandemic health crisis. Research on child development reported that covid-19 has disrupted the routine life of young children and toddler. They are forced to stay home as schools are closed; outside recreational and sports activities are banned that has pivotal role in developing the emotional, physical, cognitive and psycho-social lifetime behaviour of children. Single child at home are most affected because they become more demanding, impatient and annoyed and having no one to cope up with these situations. It has sprouted the physical suffering, mental violence because of the higher expectations and pressure of parents.

Adolescence: Adolescence is the most crucial stage of human development, in which various physical, emotional and psychological changes occurs. Therefore, this stage is called stage of “storm and stress” (G. Stanley Hall 1904). Hall used this term because he observed this period as most confusing and unavoidable and is a transition period from childhood to adulthood. In this crucial stage when adolescence fighting with psycho-physical changes occurring in their body have to suffer pressure of study, lacking enough personal space at home and family financial crises during lockdown has trigger their mental status.

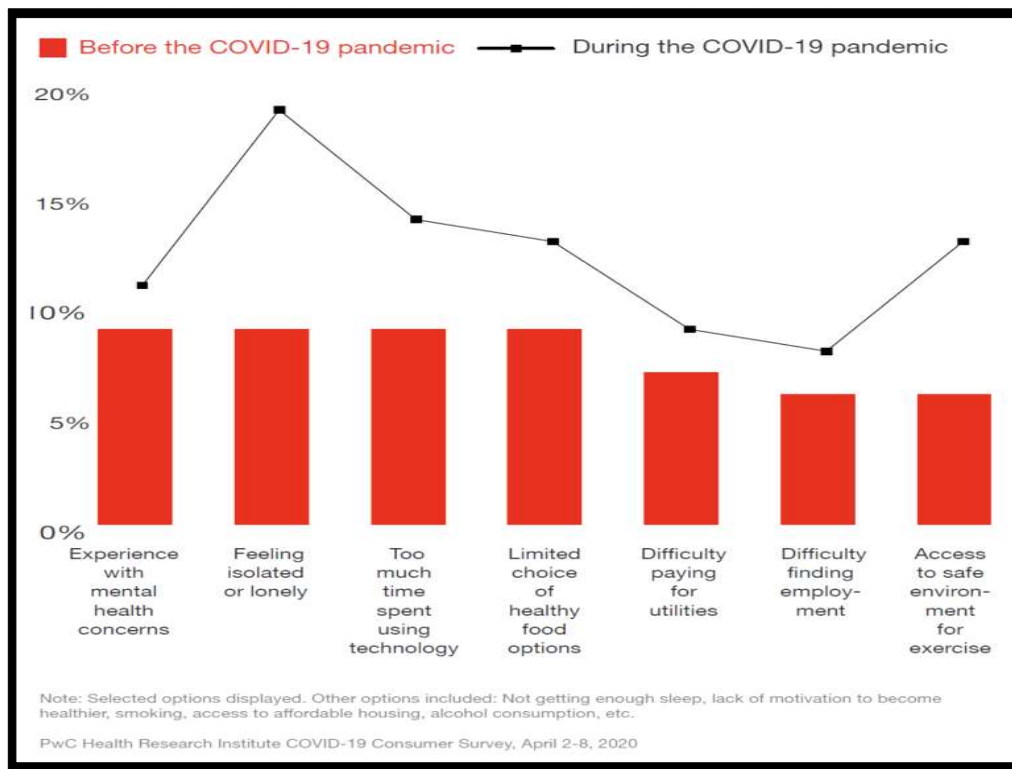
Domestic Care givers: In India majority of family earning comes from male working outside, during lockdown the male had suffer unemployment and had to stay at home entire day which has raised the domestic violence cases. The National Commission for Women (NCW) has reported 94% complaint cases of domestic violence where women have been abused at their homes during lockdown. In a survey it has found that during lockdown the cases of domestic violence has raised by frustration leading unemployed. Secondary, in India the telephone survey conducted by Population Council reveals that young women are reported more symptoms of anxiety and depression during lock down then before lockdown period. Excessive care for elderly and kids more suspected to infection disturbed the mental health of domestic caregiver cautioned by a survey conducted by Young Minds in a recent review in the *Lancet*.

Elderly: The conception that older adults and people suffering from prolonged sickness, or serious diseases are more suspected to get infected from the Covid-19 had created fear and terror among the elders. The older people disconnected left themselves from society and relatives and put a negative impact on their mental health. The elderly people whose cognitive capacity is declining feel more psycho-socially withdrawn and make them more aggressiveness, anger, anxious, nervous and nuisance.

Migrants: In India large population migrates from their hometown to other states or nation for getting employed and for opportunities and livelihoods. Therefore, Covid-19 has obligated the India to acknowledge the migrants. According to the report presented by United Nations Development Programme (2020) the global scope of this pandemic has ensured that no section of people is left unaffected and low-income groups of society are more vulnerable during COVID-19 crisis because they lack the ability to come up emergency funds. During lockdown the migrants have to face disproportionately vulnerable to exclusion, stigma and discrimination especially in the state or nation where the health structure was insufficient to cater the health needs of massive population. The labor class are highly affected by lockdown, reaching home was a challenge for migrants and walked hundreds of kilometers resulted many casualties leading to generate stress, poor quality of life, scarcity etc.

Education Sector: Covid-19 has not only affected the personal life of human but the professional life has also developed stress and frustration for many. Covid-19 has also given a huge lift to virtual teaching and learning; therefore students are attending online classes but teachers who are less techno-savvy and are older had to struggle a lot to teach students virtually which develop anxiety and stress among them and affected their mental health.

Causes of Psycho-Social Behavioural Changes During Covid-19



Source: Health Research Institute COVID-19 Consumer Survey, April, 2-8, 2020.

Isolation and Loneliness: Many students who were at a far distance from their family due to employment or education and were staying alone suffered depression during lockdown period. Which was so sudden and unexpected that they could not come back their home becomes the reason for disturbing their mental or emotional health. Living in isolation developed the fearfulness, feeling of frustration, social isolation, loneliness, confusion for their survival etc. Dr Rajesh Sagar, Psychiatry professor of AIIMS, said that “the most vulnerable are elderly people and those living alone. Loneliness is a mental state. It depends on the coping mechanism, and that’s what we have to build by taking care of each other while maintaining the social distance,”

Excessive use of Mass Media: During covid-19 outbreaks, expansive media attention has heightened the fears, frustrations, helplessness and anxiety among people of society. A poll conducted by Hammerkopf Consumer Survey found that 87% social media like whatsapp, facebook, and twitter etc. consumption were seen in first week

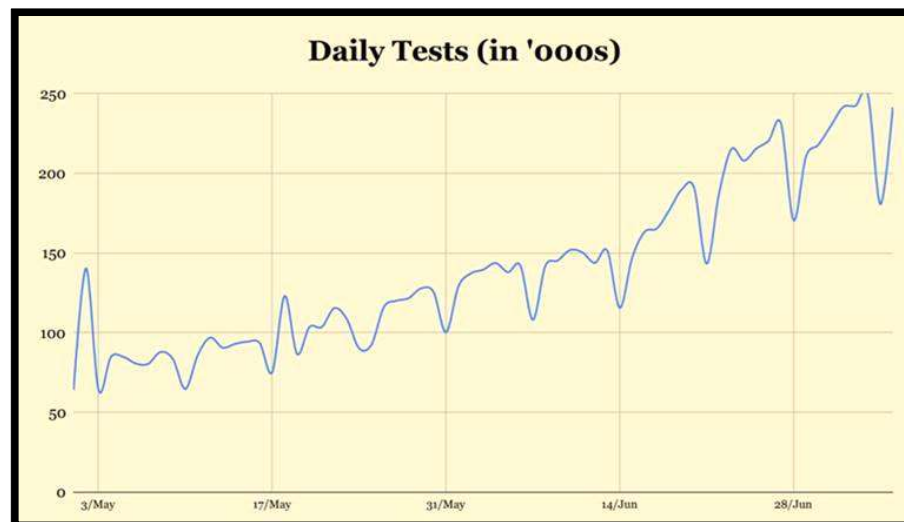
of lockdown in India. Similar survey conducted by American Media Measurement and Analytics Company which provides data and analytics to media, marketing, advertising agencies noticed that high rise in assessing online newspaper and communication generated mental pressure and nervousness. Excessive use of social media repels loved ones due to ignorance and busy on social networks.

Escape of suspected infected people: The nervousness, terror and frustration increased among people when many Covid-19 suspected cases around the country was reported escaped from the quarantine centers and hospitals. A 35 years old man of Chhattisgarh committed suicide. He was put under isolation by health department. In Gujarat, 93 people break self-isolation rules in 10 days.

Unemployment: The Covid-19 lockdown in India has highly affected the employment in both rural and urban population. Mahesh Vyas, Managing Director and CEO, Centre for Monitoring Indian Economy (CMIE), said in an article on CMIE website that "The employment rate has fallen from 40% in February to 26% now. This is steep fall of 14 percentage points. This implies that 14 per cent of the working age population has lost employment." The labour markets are at a great stress both in urban and rural location. The rate of unemployment in rural India stands higher at 26.7% as against urban 25.1%. All these conditions attacked the large population with frustration, anger and helplessness.

Virtual Work culture: The covid-19 has forced educational society to transform the traditional teaching methods. Internet consumption in India has jumped by 13% since the lockdown was declared. According to Telecom Ministry data on an average Indians has consumed 308 petabytes (PB) or 308,000 terabytes (TB) everyday during beginning March 22. It is believed that crises always bring some opportunity; virtual teaching learning is an example of it and making education system technologically advanced. Definitely teachers and students have to adjust with it. Firstly; working from home demands techno-pedagogical competency which has emerged as a biggest challenge for teachers especially for those who are at the stage of retirement and are techno-pedagogical incompetent developed anxiety and stress among teachers. Secondly, unavailability of smart phones developed inferiority and fear of lacking behind in their studies among economically backwards learners. Survey conducted by Akshara Foundation's in rural Karnataka found that smart phone penetration in rural Karnataka was as low as 11%. The Smartphone ownership among female were 21% and male were 79%.

Limited testing: India is world's second most populated nation, but the testing capacity of Covid-19 is very limited. According to data on the Worldometer website it is found that India crossed one crore sample testing of novel Covid-19 and increasing by passing days but still it is very low as compare to China, Russia, America and UK etc. The reason behind is unavailability of testing labs to test the large population. In Uttarakhand as on 7th July 6000 samples of Covid-19 test is awaited and 8,235 samples in Telangana state. This results confusion and uncertainty of getting infected that cause tremendous *anxiety*.



Source: Worldometer coronavirus update

Strategies to Combat the Impact of Covid-19 on Psycho-Social Behaviour

- Keep yourself informed by Listen the advice and recommendations of your national and local authorities.
- Follow healthy routine. Keep up with healthy daily routines as far as possible. Do regular exercises, Yoga and meditation by following healthy diet.
- Reduce newsfeeds. Try to reduce your time read or listen news that makes you feel anxious or distressed.
- Stay connected to your loved ones: In restricted outside movement try to get in touch with your friends, family and relatives by making audio or video calls of other social networking site.
- Avoid alcohol and drug use. Avoid using alcohol and drugis a way of dealing with fear, anxiety, boredom and social isolation.
- Do recreational activities: Retrospect yourself and understand your strengths for doing recreational activity.
- Help others. If you are capable to, offer elderly citizen of your community to bug grocery and medicines needed them will develop sense of goodness within you.
- Learn how to protect yourself and others from COVID-19. Follow self-isolation, social distancingand washing hands frequently etc.
- Meditation exercises for Mindfulness can help us stay grounded in the midst of an emotional storm.
- Keep learning and try to maintaining your study habits by Staring virtual book or movie club.
- Read positive books and listen music for peaceful mind.
- Explore new skill or hobby (e.g., cook a new recipe, play an instrument, learn a language, learn how to sew, gardening).
- Remember that physical distancing does not need to mean social disconnection.
- Some stress releasing Mobiles app like Smiling mind, Headspace should be explored to look after mental health by managing the daily challenges and stress.

Conclusion

The entire community was disheartened with unexpected and sudden lockdown in India. People were forced to cancel their trip, educational institutions were closed, home confinement and the fear related to uncertainty of ongoing pandemic developed the anxiety and stress among all age group and affected their psycho-social behaviour. Government and NGO are upfront working hard to council the people suffering from the mental stress by giving expert advice on helpline no. The society should be more educated for utilizing this period to do recreational activities and stay connected to their loved ones through video calls and other social networking apps. As mortality rate of Covid-19 infection is very low in India, so people should be motivated to stay calm and follow healthy routine to fight this pandemic.

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CONTRIBUTION AND ROLE OF CHEMICAL SCIENCE IN DISASTER MANAGEMENT

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Abstract

Disaster means no boundaries man made or natural, technological, chemical, Biological, zoological and others can strike at any moment anywhere effecting people of various regions or nations. In the globe human activities has become one of the main reasons of changing nature at times from its routine life. There is a danger that these disasters may one or the other day destroy the globe or all the life in the globe. Every government in such circumstances has its native responsibility to plan of issues of disasters and making different strategy for ensuring the wellbeing of its citizen.

In this paper the author will discuss some pandemic disease occurred is past along with the very latest pandemic COVID-19 disease. This disease was originated from Wuhan (China) and spread as major global disaster worldwide. Coronavirus is zoonotic meaning they are transmitted between animal and people. Coronavirus are large family of virus that cause illness ranging from common cold, fever, respiratory syndrome, shortness of breathing. In more severe case infection will cause pneumonia, kidney failure and even cause death.

In this paper the author will also explain the vital contribution of chemical science in the global pandemic disaster, chemical science play key role in understanding the chemical nature of virus, how to go pathogenically for identification of virus and different medicines used for curing the pandemic disease. Composition and manufacturing of medicines is done under the field of chemistry, which makes chemistry the most important field in sciences.

Introduction

These viruses probably originated from Bats and then moving to others mammalian host. This new virus seems to be very contagious and has quickly spread globally. In a meeting held on January 30, 2020 per the international health regulation, the outbreak was declared by world health organization a public health emergency of international council as this virus spread over 100 countries with human to human transmission. In the beginning the new virus is called as 2019 – n COV. Later by expert of International council of taxonomy of virus termed it as SARV – COV2 virus as it is very similar to the one that caused the SARS outbreak (SARS – COVS). The covid 19 have become the major pathogens of emerging respiratory disease outbreak. They are large families of single stranded RNA Virus (+ss RNA) that can be isolated in different animal species [1] for reason yet to be explained. By that time virus spread over 114 countries with thousands of deaths all over. On 12th March 2020 world health organization

declared the COVID – 19 a pandemic. The potential growth, transmission, and rapidly multiplication of virus has become pandemic worldwide which seems to be a very serious public health risk.

All the government of different countries started working on the counter measures to establish possible devastating effects, simultaneously health organization coordinating information and preparing guidelines to best mitigate the impact of the threat. At the same time scientist worldwide started working and gathering information about the transmission of virus mechanism, the clinical spectrum of the disease. Preparation of new diagnosis kits for testing COVID-19 patients. Different preventions were also taken into consideration to minimize the transmission of virus and medicines for curing patients, to overcome from this pandemic threat.

Evolution

According to the U.S. CDS most patients with confirmed COVID – 19 have developed fever and / or system of acute respiratory illness, difficulty in breathing. If a person is observed under such investigation, he or She is recommended by the practitioner immediately to test all the source of respiratory tract. People coming in close contact with such patients also are suggested by health ministry to undergo testing process as this virus has a nature of jumping into new host immediately.

Coronavirus Disease 2019 (COVID – 19) is transmitted in most cases instance through respiratory droplets, direct contact with cases and through the contaminated surface/object. Though the virus survives on environmental surface for varied period of time, it gets easily inactivated by chemical disinfectants. The world health organization and ministry of health and family welfare have insisted that the use of face covers can protect you from droplets transmission of COVID – 19 infections.

On 24th March 2020 the government of India under Prime Minister Narendra Modi ordered a nationwide lockdown for 21 days, limiting movement of the entire 1.3 billion population of India. [2] It was ordered after a 14 hour voluntary public curfew on 22 March followed by enforcement of a series of regulations in the country's COVID – 19 affected region [3,4] The lockdown was placed when the number of confirmed positive coronavirus cases in India was approximately 500 [7]

Some Pandemic Diseases in Past

With 11.38 million confirmed cases and 533473 death worldwide as of this writing, the coronavirus pandemic has become a global tragedy unlike any in our lifetime. But as historians remind us this is neither our first nor our most deadly war with an infectious disease. Some of them discussed below.

1. A century ago, the flu epidemic of 1918 swept the globe, killing as many as 100 million people. Social distancing helped curb its spread.
2. In the early 1780 smallpox ravaged from America West, ripping through indigenous communities with case fatality rate of 38% or higher and leading to the development of the world's first vaccine less than two decade later.
3. Other outbreak-from cholera in 1830 to HIV-AIDS in 1980 brought xenophobia along with disease and revealed that fear and blame can distant from effort to find a cure. [5]

Chart of Some Past Pandemic Diseases

S.NO	DISEASE	NAME	YEAR OF OCCURANCE	Total effect worldwide
1	Plague	(Black death)	1347-1351	75-200 million
2.	Spanish Flu	Flue	1918-1920	100 million people
3.	Smallpox		1780	4,00,000 people
4.	Asia Flu		1957	4 million
5.	Swine Flu		2009	491382 (confirmed) 700 million (suspected)
6.	ARE (SARS) MERS		2001 to 2003	774 thousand
7.	Cholera		1830	50 milions
8.	HIV-AIDS		1980	

Why Covid – 19 Declared Pandemic Disaster Globally

Coronavirus are a family of virus that can cause illness such as the common cold, severe acute respiratory syndrome (SARS) and Middle East respiratory Syndrome (MERS). This is a “novel” virus because it started with an animal population, was transmitted to a human and now can go from human to human. Our immune system has never seen this particular strain of virus before, so we haven’t developed immunity. We don’t have vaccine for it at this point. And similar to many of the other novel virus, it has potential for worldwide distribution. SARS-COVID-19 is likely more contagious than the virus that cause influenza and common cold because it is new to human. Humans have no way to prepare for it, and their immune system are not ready to fight it. This result in the virus causing more cellular damage and producing more inflammatory cells. For people with decreased immunity, due to medications, a specific condition, or from aging, the resulting COVID– 19 disease is more serious for them. [6]

Planning and Execution of Different Strategies to Manage the Nation from this Global Disaster

With the information available to the world since early January, both in public domain and from authoritative international sources, India has taken several proactive measures. This has ensured that India stayed ahead of the curves as the crises evolved. The government of India organized a meeting of the health crises management group on Jan 8th and constituted a group of ministers to plan, monitor and renew the situation regularly and to ensure inter-ministered coordination.

Focus areas of the strategy and major action taken are as follows:

1. Surveillance at the country’s points of entry.

The first travel advisory was issued on 17 Jan (before the first case was detected in India) along with the initiation of screening on flights arriving from china and Hong Kong at 3 major airports. Screening and graded travel restrictions were increased step by step from mid-January until March 11, when the WHO finally declared COVID a pandemic.

2. Community surveillance of all passengers through the Integrated Disease Surveillance Program (IDSP) network.

Passengers are monitored in the community through IDPS network on daily basis. By this not a single positive case has been able to mix with general population.

3. Laboratory testing

A network of labs across the country has been set up to facilitate early and timely sample testing. Total no of 223 laboratory were referred by WHO. India is also developing indigenous testing kits to meet higher demand for more extensive testing.

4. Ramping up production and procurement of medical supplies.

The Indian private sector is being fully involved in the quest to make affordable local alternatives. More than 30 Indians companies started working to produce personal protective equipment. Presently 727,499 beds, 171,317 isolation beds and 74,450 confirmed COVID beds have been identified up to 40,000 extra isolation beds have been prepared by converting 2,500 railway carriages.

Public Communication

One of the biggest ways to prevent community spread of the infection is through communication. Regular press conferences with the Health minister have been carried out. On March 24 due to substantial global spread of disease in India, Prime Minister Modi announced a total lockdown for 21 days until April 15. This lockdown was truly unprecedented. It has enclosed stoppage of 13,000 railway passenger service a day for the first time in India’s history as a Republic stoppage of all flight services and most public transport. And yet continuity of essential services the power supply, water, energy, food product, banking and delivery of essential goods was ensured.

- After the lockdown, a lot of migrant laborers from NCR Delhi started migrating towards their home states. Many even started walking on foot and many were struck at different interstate borders. The government of India swung into action and the around 500,000 migrants were safely transported to their home state.
- Nearly 28,000 relief camp and shelters have been set up, with relief being provided by state government to 1.25 million people. Nationwide, 20,000 food camps are being run, with up to 7.5 million people being fed every day. During the lockdown, the government accelerated its efforts for effective management strategies and future planning. The Prime Minister's Garib Kalyan (welfare of the poor) package sets out US\$ 22 billion to alleviate the situation of the poor and vulnerable, including farmers and labourers. This includes insurance of 220,000 health care workers.
- Food relief measures are being implemented to provide free grain and lentils for 3 months to 800 million people. L.P.G. cylinders are been provided to 80 million poor households. Funds are being transferred through direct cash, transfer schemes to poor senior citizen, differently – abled people and to indigent widows.

Contribution of Chemistry to Overcome from Global Disaster Covid – 19.

Sanitizers:-The novel coronavirus (called SARS-COV 2) is mainly spread when virus-laden droplets from person's mouth or nose are transferred to other people. Some recent studies also suggested that it can spread through faces. According to WHO guidelines regular wash of hands by warm water and by using sanitizers will reduce the risk of catching certain infections. In light of the rapidly evolving COVID-19 pandemic, there is an expected storage of alcohol-based hand sanitizers. Different scientist suggested that 60% of ethanol C_2H_5OH and 70% of isopropyl alcohol CH_3CH_2OH inactivate virus that are genetically related to and with similar physical properties of the COVID-19 virus. 14 March 2020, FDA released an immediately in effect guidance titled "Policy for temporary compounding of certain alcohol-based hand sanitizers products during the public health emergency.

1. Formulation

1:Ethanol Antiseptic 80% Topical Solution.

C_2H_5OH Ethanol 96%	8333 ML
H_2O_2 Hydrogen peroxide 3%	417 ML
Glycerol 98%	145 ML
Water a sufficient quantity to make	1000ml

Lab Work

Measure the quantity of Ethanol, Hydrogen peroxide and Glycerol in suitable container, transfer the C_2H_5OH and H_2O_2 into a suitable calibrated and min gently. Transfer the glycerol stepwise and quantitatively into the addition. Rinse the container several times with water and add the contents to the calibrated containers. Add sufficient water to bring final volume. Mix well. Transfer the solution into another container.

Formulation 2. Isopropyl alcohol Antiseptic 75% topical solution.

Isopropyl Alcohol 99%	7576 ml
Hydrogen peroxide 3%	417 ml
Glycerol 98%	75 ml
Water sufficient quantity to make	1000 ml copy/paste

Lab Work

Measure the quantity of Ethanol, Hydrogen peroxide and Glycerol in suitable container, transfer the C_2H_5OH and H_2O_2 into a suitable calibrated and min gently. Transfer the glycerol stepwise and quantitatively into the

addition. Rinse the container several times with water and add the contents to the calibrated containers. Add sufficient water to bring final volume. Mix well. Transfer the solution into another container.

These two formulations for compounding alcohol-based hand sanitizers were developed according to WHO recommendation.

2. Disinfectants

The spread of COVID-19 has spurred a surge in demand for disinfectants to keep our surface clean. COVID-19 is an enveloped virus, which means the protein capsid containing the viral genome is surrounded by lipid membrane, and that offers a fairly flimsy defense against disinfectants. As disinfectants are strong oxidizing agents they kill the microorganism. The U.S. centre for Disease control recommends frequently disinfecting in public areas. Such as hospitals, care homes and food service facilities. One can also use surface disinfectant to avoid the virus spreading on frequently high touch surfaces, like table, doorknobs, light switches, phone remotes control, keyboards and desks. Health minister issued guidelines for disinfectant to spray in public places with 1% sodium hypochlorite. **NaOCl or NaClO comprising a Na⁺ and a hypochlorite anion OCl⁻ or ClO⁻**

Lab work guidelines for preparing of 1% sodium hypochlorite solution

Product	Available cl	1 percent
Sodium hypochlorite liq bleach	3.5 %	1 part bleach 2.5 H ₂ O
Sodium hypochlorite liq	5 %	1 part bleach 4 part H ₂ O
Sodium dichloroisocyanurate	60%	17 gm to 1 liter water
NaDcc (tablet form)	60%	11 tablets to 1 liter water

3. Designing cheap diagnostic kit.

A COVID-19 infected person is recommended by WHO for testing upper respiratory specimen.

- i) A nasopharyngeal (N.P.) specimen
- ii) An oropharyngeal (O.P.) specimen
- iii) A Nasal mid turbinate swab of throat.

Swab should be placed immediately into sterile transport tube containing 2.3 ml of either viral transport medium or sterile saline. C.S.I.R. (Council of science and international research) chemical laboratory has therefore developed indigenous N.P swab to collect samples. The N.P. Swab is a molecular device designed with specific parameters of quality, polymer grade, dimensions and sterilization. The components of an NP swab are cylindrical plastic strikes with a brush like tip of synthetic fibre/flocks. The flocking process helps in alignments of fine bristles in parallel orientation. It has round geometry and the brushes are of micron diameters. This is an excellent example of optimizing the polymers specification and validating the chemical analysis of urgently needed medical swab product. [7]

4. Presently using tablet Hydroxychloroquine and Azithomycin as a treatment of COVID-19

Hydroxychloroquine (an analogue of Chloroquine) has been demonstrated to have an anti-SARS-COV activity in vitro [8]. Therefore, Chinese scientist started to conduct clinical trial aiming at assessing the effect of hydroxychloroquine on SARS COV-2 infected patients after the approval by French Ministry of Health.

Hydroxychloroquine:

Hydroxychloroquine is an old anti-malarial drug that has shown also efficiency in Q-fever (coxiella Burnetti), Hydroxychloroquine has also been effectively administered in patients with systemic lupus erythematosus (SLE) rheumatoid arthritis and sarcoidosis with skin manifestation and respiratory hypercalciuria. Hydroxychloroquine acts through increase of lysosomal pH in antigen-presenting cells and as an inhibitor of autophagy (process of selecting degradation / removal of damaged organelles from the cell through the autophagosome) antiviral properties were also attributed to a mechanism involving interference with glycosylation of angiotensin – converting enzyme (ACE)-2 the cellular receptor of SARS-COV (9,10)

In Vitro Experiment

The infected humans are reported that an initial – loading dose of Hydroxychloroquine 400 mg twice a day followed by 200 mg twice a day for 4 days could be effective in human. Authors reported that Hydroxychloroquine was more effective than Chloroquine [9] clinical trial.

Clinical trial of hydroxychloroquine in human was recently published by French group of Didier Raoult and reported that the optional dose is 600 mg administered as 200 mg thrice per day for 6 days [11]. Author enrolled 42 patients – 26 were given hydroxychloroquine 200 mg and 16 were control group. Six patients from the drug arm were lost in follow up, thus the analysis included an overall of 36 patients.

Patients were predominately male of middle age (around 45) with a mean incubation time of 4 days. PCR negative which was achieved in 70% of patients compared to 12% in the control group. Interestingly, its effects were enhanced by azithromycin which was co-administered in 6 patients to prevent bacterial co-infection. All these patients (100%) exhibited virological clearance compared to 57% of the patients in the single-drug group. The study was underpowered and included non-severe case of COVID-19, meaning non ventilated patients. From the above finding results are encouraging but should be treated with cautions. Perhaps drug Hydroxychloroquine could be effective in combination with azithromycin useful for the treatment of COVID-19 patients. COVID-19 spread in 213 countries and territories with millions of infected patients, the mode of treatment presently is somewhat similar as suggested by different scientist worldwide.

Conclusion:-

Worldwide scientist is working day and night to cure COVID-19 completely. There are several drugs identified against SARS-COV, MES-COV, testing in animal and infected viral cell in laboratory are conducted. Till then, each individual is responsible for themselves to care physically, mentally and financially with the support of government of each country. These investigations are in progress but still require months to develop appropriate vaccine for COVID-19. Presently the entire world is suffering from this pandemic disaster.

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A CRITICAL ANALYSIS OF INSTITUTIONAL FRAMEWORK OF DISASTER MANAGEMENT IN INDIA

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Abstract:

Disaster is the act of god-unpredicted, inevitable, but its effect can be mitigated with the efficient disaster management. As far as we concern about India, a country which is known for its diverse geo-climatic nature makes it more disaster prone. On one-side country is admire due to its varied natural environment but on other side its varied nature exposed it to many destructions. It is a need of the hour to discuss the total disaster management system in India to lessen the scars of tragedies on the country. Proactive approach rather than reactive activities made the system more successful in dealing with the entire natural, man-made and non-natural disasters. So, this article is focused on bringing out the existing mechanisms of institutional set-up for disaster management in India and highlights the controlling authorities which makes the country prepared for and after the disaster happened.

Keywords: Disaster, mitigate, geo-climatic, destruction, lessen, proactive, mechanism, institutional set-up, controlling authorities.

1. Introduction

Disaster comes without information and killed millions of people every year in the world. Disasters are not new to mankind, it is as old as earth's existence. Disasters, both natural and man-made showing rising trend in past decade due to increasing population, urbanization and degradation of environment. Humans are busy in fulfilling their needs ignoring the fact "what you give is what you get".

1.1 Etymology

The word "Disaster" derives from middle French 'desastre'. The root of the word 'disaster' (bad star in Greek and Latin) comes from an astrological theme in which the ancients used to refer to the destruction or deconstruction of a star as a disaster.

1.2 Definition

Disaster is an event or series of events, which gives rise to casualties and damage or loss of properties, infrastructure, environment, essential services or means of livelihood on such a scale which is beyond the normal capacity of the affected community to cope with.

1.3 List of various Disasters

1. Water and climate related disasters	<ul style="list-style-type: none"> a) Floods and drainage management b) Cyclones c) Tornadoes and hurricanes d) Hailstorm e) Cloud burst f) Heat wave and cold wave g) Snow avalanches h) Droughts
2. Geological related disasters	<ul style="list-style-type: none"> a) Landslides and mudflows b) Earthquakes c) Dam failures
3. Chemical , Industrial and nuclear disasters	<ul style="list-style-type: none"> a) Chemical and industrial disasters b) Nuclear disasters
4. Accident related disasters	<ul style="list-style-type: none"> a) Forest fires b) Oil spills c) Major building collapse d) Serial bomb blasts e) Festival related disasters f) electrical disasters and fires g) Air, road and rail accidents h) Village fire
4. Biological related disasters	<ul style="list-style-type: none"> a) Biological disasters and epidemics b) Pest attacks c) cattle epidemics d) Food poisoning

2. Disaster Management-Definition

Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emerging in particular, preparedness, response and recovery in order to lessen the impact of disasters (*IFRC Organization, Geneva*)

2.1 Evolution of Disaster Management in India

Disaster Management in India has evolved two-fold from reactive setup to a proactive institutional framework. The traces of disaster management in India found during British period from 1900, 1905, 1907 & 1943, and the Bihar-Nepal earthquake of 1937.

2.2 Disaster Management Post Independence

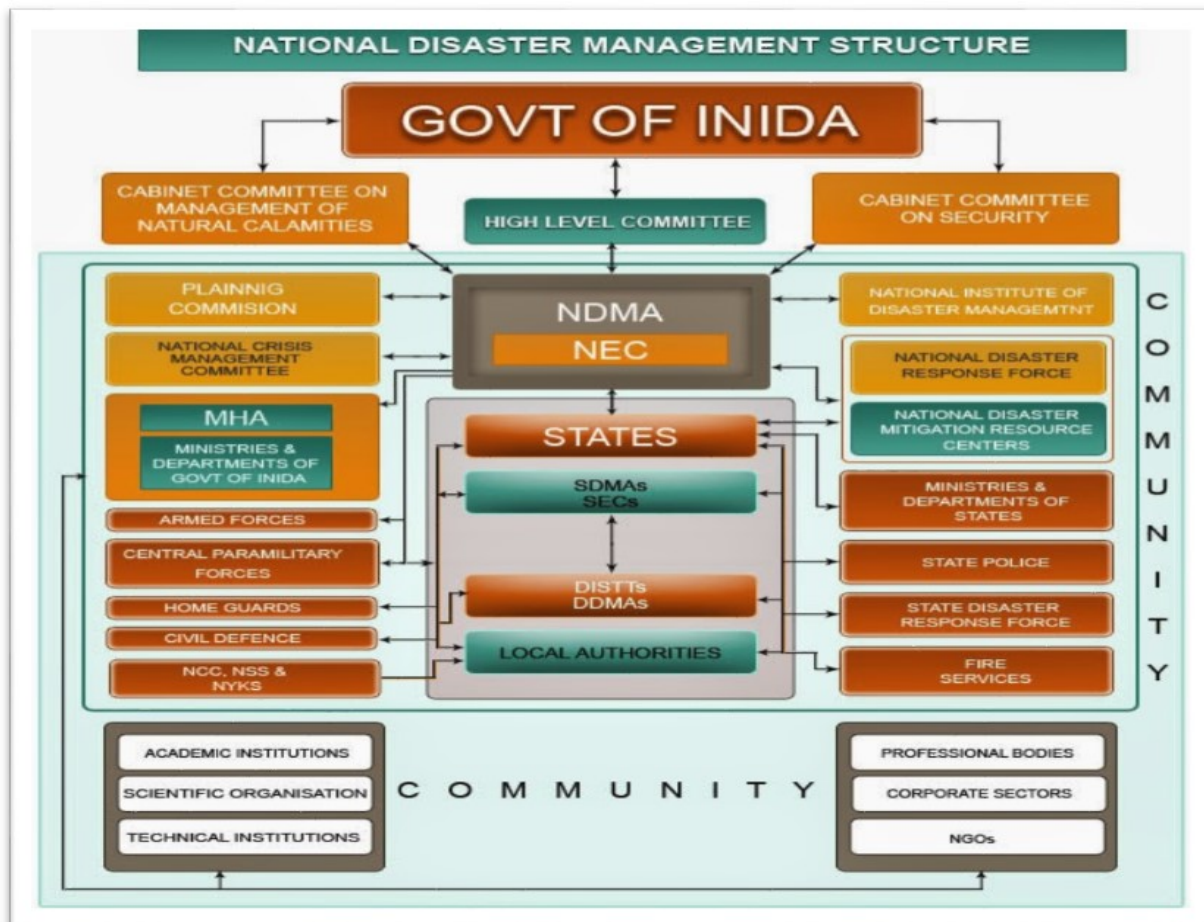
After Independence disasters managed by Relief Commissioners in each state under the Supervision of the Central Relief Commissioners, who were delegated limited to distribute relief material and money in the affected areas. Until this stage, the disaster management structure was activity-based, functioning under the Relief Departments.

2.3 Emergence of Institutional Set-up in India

A well said or permanent institutional setup of disaster management began in the decade of 1990s under the Ministry of Agriculture and a hierarchical structure for disaster management evolved in India.

2.4 Present Disaster Management Structure in India

The present institutional structure in India exist at three levels-National Disaster Management Authority (NDMA) established at Centre, State Disaster Management Authority(SDMA) at state and district authorities at district level, in addition to National Crisis Management Committee functions at the Centre.



3. Disaster Management Act, 2005

The Act established to provide effective disaster management in India and connected therewith the matters related thereto. National Disaster Management authority (NDMA) under the chairmanship of the Prime Minister, State disaster Management authority (SDMA) under the chairmanship of Chief Minister, District Disaster Management Authority (DDMA) under the chairmanship of District Magistrate. Under this act, the National Institute of disaster Management (NIDM) for capacity building and National Disaster Response Fund (NDRF) for response purpose is also setup.

3.1 Legal Institutional Framework

A legal institutional framework developed on the basis of the provision of the disaster management act, 2005.

National Level Institutions

3.1.1 National disaster management Authority-

National disaster management Authority (NDMA), as the apex body for disaster management constituted on May 30, 2005 under the chairmanship of Prime Minister of India.

Aim: It established to laying down policies on disaster management and provide guidelines which should be followed by different ministries and departments involved in it. NDMA is also responsible for providing funds for the mitigation of disasters in India.

3.1.2 National Executive Committee (NEC)

NEC is constituted under the section 8 of disaster management act, 2005. It is headed Home secretary as Chairperson and other Secretaries of Government of India in the Ministries of Agriculture, Atomic Energy, Defense, Drinking Water Supply, Environment and Forests, Finance(expenditure), health, power, rural development science and technology, space, telecommunication, urban development, water resources.

Aim: It is responsible for coordinating and monitoring of disaster management in the country, as well as, to prepare a National Plan, and monitor the implementation of national Policy of the act.

State level institutions

3.1.3 State Disaster Management Authority (SDMA)

State Disaster Management Authority constituted in all the states and Union Territories under the Disaster management act, 2005, except Gujarat and Daman & Diu which constituted their SDMA prior to this act.

Aim: It lay down policies and plans for disaster management in the State under the guidelines laid down by the NDMA.

3.3.4 State Executive Committee (SEC)

It is established under the section 20 of the Act, headed by the Chief Secretary of the State government with other four Secretaries.

Aim: It works for the implementation of the National Policy, National plan as well as State Plan provided under the act.

District level institutions

3.3.5 District Disaster Management Authority (DDMA)

DDMAs constituted in every district of a state under the supervision of District Magistrate/Deputy Commissioner/ District Collector in addition to an elected representative of the local authority as a Co-Chairperson.

Aim: At district level authorities responsible for planning, coordination and implementation of measures of disaster management in various areas. It also have the power to examine any construction site and check the safety standards and to arrange relief measures and respond accordingly.

3.3.6 National Institute of Disaster Management (NIDM)

NIDM is constituted on 23 February, 2007 comprise of forty two members of various ministries, departments and the Union Government and heads of National level scientific, research and technical organizations in its general body. The Union Home Minister is the President of the Institute headed by an Executive Director with the faculty and staff.

Aim: The Institute responsible to develop training modules, organize training programmes, undertake study courses, lectures, conferences and seminars on disaster management.

3.3.7 National Disaster Response Force (NDRF)

NDRF is also constituted under the section 44 of the Disaster Management act, 2005 .It is headed by the Director General comprises eight battalions trained in handling various natural, man-made disasters as well as non-natural disasters. Each battalion consist of thousand person located different areas of the country.

Aim: Its purpose is to give special response to threatening disaster situation under the act. When calamities occur of severe nature, NDRF provide assistance to the affected areas.

3.3.8 State Disaster Response Force (SDRF)

It is constituted after the letter issued under Ministry of Home Affairs on dated June 26, 2007 and March 8, 2011. The State and Union Territories has been advised to set up their own Specialist Response Force responding to disasters. It is assisted by Central Government in giving training to trainers at State level. It has been advised to all State and UTs to utilize 10 percent of State disaster Response Fund in it.

Aim: To procure and search rescue equipment for disasters and tragedies and SDRF is also deputed to provide training to the Response Force.

4. Policies, Plans and Guidelines

The national Authority, under the Disaster Management Act, 2005 responsible for formulating policies and laid down guidelines for managing disasters in India. Below discuss all of them:-

4.1 National Policy on Disaster Management (NPDM)

NPDM is approved by the central government on October 22, 2009. The Policy provide the roadmap to deal the disasters in India in a holistic manner. It was built on the vision of safeguarding the country by developing proactive approach. It covers all the aspects of disasters management such as legal, institutional and financial arrangements, prevention, mitigation and preparedness. The policy focusses on the affected areas and provide help accordingly. The NPDM concern about all the sections of society including women, children underprivileged groups, as well as for differently abled persons.

4.2 National Plan on Disaster Management

An institutional mechanism for the preparation of the National Plan in three parts are as follows:-

- i. National Response Plan,
- ii. National Mitigation Plan and
- iii. National Capacity Building Plan.

4.3 Guidelines on Disaster Management

National Disaster management Act (NDMA) is responsible for formulation of guidelines through consultative process, involving the government, non-government and multiple stakeholders. Following are the guidelines issued:-

- i. Management of Landslides and Snow avalanches
- ii. Management of Cyclones
- iii. Management of Earthquakes
- iv. Management of Floods
- v. Chemical Disaster Management (Industrial)
- vi. Management of Chemical Disasters (Terrorism)
- vii. Preparation of State Disaster management Plan
- viii. Psych-Social Support and Mental Health Services in Disasters
- ix. Medical Preparedness and Mass Casualty Management
- x. Management of Nuclear and Radiological Emergencies
- xi. Incident Response System
- xii. Management of Biological Disaster

And some other guidelines for framing a preparedness plan.

5. India's Disaster Management System-Critical Analysis

Here, Critical analysis done on the basis of the Performance Audit Report of Comptroller and Auditor General (CAG) on the two past disasters happened in India: **Uttarakhand Cloudburst (2013)** and **Kerala Floods (2018)**. A performance audit carried out on a national level for disaster preparedness in India. The Comptroller and Auditor General (CAG) of India had undertaken this comprehensive auditing exercise.

5.1 Highlights of CAG Report 2015 on Uttarakhand Cloudburst (2013)

- i. As per the performance audit report of the disaster management mechanism in the country by the Comptroller and Auditor General (CAG) of India, submitted to the Parliament in April this year, NDMA

has neither had information and control over the progress of disaster management work in the states, nor could it successfully implement various projects it had initiated for disaster preparedness and mitigation.

- ii. It said none of the major projects taken up by NDMA was complete even after seven years of its functioning. The projects were either abandoned midway or were being redesigned because of initial poor planning.
- iii. The State government incapable of submission of proposal to the GOI which made it incapable to availed approved outlay of ¹ 246 crore under the Medium and Long-Term Reconstruction (MLTR). As a result, Environment Research and training center could not be set up.

5.2 Highlights of CAG Report 2018 on Kerala Floods (2018)

- i. Auditors found out that the National Disaster Management Agency (NDMA) had constituted an expert committee for the identification of flood-affected districts in India in January 2009. This expert committee was tasked with establishing the parameters for proper categorization of flood-prone districts and preparing an updated list of flood-affected districts.
- ii. Up to July 2012, the flood hazard map of only one state (Assam) was completed, while for Bihar, auditors were told that work was nearing completion. Audit scrutiny revealed that for the states of Odisha and West Bengal, work had not been taken up yet, as on July 2012.
- iii. CAG auditors also made a shocking revelation that CWC has not established any flood forecasting station in 15 States/UTs i.e. Andaman and Nicobar Islands, Chandigarh, Daman and Diu, Goa, Himachal Pradesh, Kerala, Lakshadweep, Manipur, Meghalaya, Mizoram, Nagaland, Pondicherry, Punjab, Rajasthan and Sikkim”.

6. Conclusion

Every year India faced many disasters in the form of floods, earthquakes, landslides, cyclones on a recurring basis. Over 12 per cent of land is prone to floods and river erosion, 68 per cent confronted drought, and 55 per cent of India’s land comes under seismic zone.

The basic responsibility for relief and rescue in natural calamities is with State Government with assistance of Central government for arranging funds and providing logistics. The Central Government made several policies, plans and provide guidelines to deal with the disasters in the country but it showed the erratic functioning and needs more strengthening. The overall trend in the country indicates that disaster management system in India is more on papers less on action. Though the country constituted authorities at three levels National, State and District, but the preparedness needs more concern. The Disaster Response plans, National Disaster Response Force (NDRF), State Disaster Response Force (SDRF) prepared, trained the specialized force and contributed in saving lives and property in the affected areas. The problem lie in the reluctance of State Government in tackling with the calamities due to the lack of adequate competencies and capabilities among disasters managers. So, the Indian Disaster Institutional System needs more focus on actions rather than mere formulation and constitution of policies and plan. The Central Government well played its role but at the State Level it should be more ready to confront with the disasters in the efficient manner.

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IMPACT OF COVID-19 ON BANKING AND INCREASING NPAs

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Abstract

To defeat the COVID-19 epidemic, the Government of India announced complete lockout in the country from 24 March 2020 and was extended to May 3, 2020 in the second phase. Although lockdown was necessary and unavoidable to prevent the rapid spread of Novel Corona virus (COVID-19) and save the lives of the people of the country, it is going to severely affect various sectors of our economy. Banking and Non-Banking Finance Companies (NBFCs) which are the backbone of India's economy. This article is an attempt to assess the impact of this epidemic on banks and NBFCs due to lockdowns, resulting in the closure of all commercial organizations, educational institutions, public and private offices, suspension of modes of transport, etc. The explosion of the COVID-19 epidemic is an unprecedented blow to the Indian economy.

This paper is based on the effects of COVID-19 on the Indian banking system and the increase in NPAs leading to lockdown. It focused on the four impact areas of COVID-19 on the digitization of banks in India. The Indian financial sector is facing major issues of increasing non-performing assets (NPAs). The conclusion in this regard is based on the views expressed by several groups, including financial institutions such as economists, RBI, IMF, World Bank and consulting firms. Secondary sources of information are used to collect the necessary information. The article indicated the very serious impact of lockdown on banks and NBFCs leading to increased NPAs.

Keywords: COVID-19, NBFCs, NPAs, RBI.

Introduction

As community spread of the coronavirus (COVID-19) proliferates, alternatives to in-person banking and physical exchanges are looking more and more attractive.

For example, the World Health Organization (WHO) has advised people to use contactless payment and avoid handling banknotes as much as possible. That's because the coronavirus may continue to live on banknotes for days, accelerating spread of the disease.

The Bank of Korea has started to quarantine bills originating from local banks, keeping them isolated for up to two weeks. Likewise, the Chinese government requested lenders to disinfect physical notes and place them in quarantine. The U.S. Federal Reserve has instituted a practice to isolate banknotes from Asia for seven to ten days.

Of course, it's not just paper money that's increasingly being viewed and treated as a potential coronavirus carrier. Banks, consumers, and governments are weighing the risks of in-person banking, and opting for digital channels when they have the choice.

Current official recommendations from the Centers for Disease Control and Prevention advise individuals to stay six feet away from visibly sick people. This may be all but impossible at physical branches, where long lines and close interactions with bankers are expected. All it takes is one infected person to sneeze or cough to put everyone else around them at risk.

Moreover, some people may be capable of spreading the disease even before they show symptoms of illness, making avoidance of disease nearly impossible. Elderly consumers and consumers with preexisting conditions will likely be the first to avoid physical branches, as the coronavirus poses a direct threat to their life. Consumers under quarantine will literally have no choice but to forgo the branch visit. As more cases inevitably appear across the U.S. and the world at large, physical banking will look less appealing for everyone, not just the most vulnerable populations.

Objectives of the study

- To understand the impact of lockdown due to COVID 19 on Indian Banking System.
- To analyze challenges and changes in Banking Sector.
- To analyze the increasing NPAs due to COVID-19.

Research Methodology

The research methodology is descriptive in nature.

Data Collection Method

This present study is entirely based on secondary data source which has been collected from government official websites, journals, newspapers and related studies.

Coronavirus is fueling the society towards digital banking

Government agencies and banks are anticipating this change in the direction of digital banking and taking relevant measures. Last week, the Federal Financial Institutions Examination Council ordered American banks to test the ability of their online systems to handle the influx of digital banking demands. The agency called for "increased dependence on online banking, telephone banking, and call center services" in addition to working remotely.

Goldman Sachs merchants are reported to be working from home. HSBC has implemented split-site working arrangements in its Asia offices after an employee with the virus arrived.

DBS Bank of Singapore can provide a blueprint for branchless banking like the reality of our corona virus. When the bank was forced to lay off its employees after an employee detected the virus, DBS honked down to provide customers with a robust digital banking system.

It has digitized 11 financing processes to reduce the need for in-person exchanges, and is offering immediate interbank fund transfers to trading accounts. The bank is also running webinars to train its employees to use digital tools.

In addition, SMEs can apply online for short-term loans of up to S \$ 50,000 to soften the blow to lower sales and cash flow. While the corona virus is making the need for banking services more urgent, consumers' increasing preference for digitization is nothing new. They are neither frustrated nor confronted with the broken digital journey while trying to complete the online process. According to a recent Lytico survey, 56% of banking consumers report that they have been redirected from online banking interactions to physical locations. And 48% say they have been asked for print, signature and email papers while banking online.

The rise of digital giants like Amazon and Netflix has led consumers to expect satisfactory and complete online interactions in all areas of their lives, including banking. Coronavirus has served to intensify people's desire for digital services, turning it into urgency.

Alleviate banking customers' fears with digital-only transactions

Banks that are committed to preserving their profit margins, continuing business as usual, and reassuring anxious customers would benefit significantly from using a digital front-end platform.

Lightico's solution for banking enables bank agents to easily send clients a text message link, allowing them to complete forms, submit documents, upload ID, and sign via eSignature entirely through their mobile device. Meanwhile, bank agents provide real-time guidance by phone, helping customers accurately complete the entire process (and providing much-needed information and reassurance during these uncertain times). Customers no longer have to pay a potentially stress-inducing visit to a physical branch to complete any number of transactions, from opening an account to applying for a loan.

Even after the passing of the corona virus, digital solutions will have lasting relevance for banks.

The growing popularity of neobanks and fintechs are a testament to that. Traditional banks that choose to learn and take lessons from digital financial institutions will find themselves more prepared to compete with challenger banks both during the coronavirus pandemic and long after it's over.

Four impact areas of COVID-19 on digitization of banks in India

Banking services in India are classified under the essential services list. Banking and financial institutions were under immense pressure to ensure business-as-usual amidst the lockdown and health crisis. Banking operations such as cash deposits, withdrawals, clearing of cheques and other traditional teller services had to be executed by maintaining a safe distance of at-least a meter. Social media was abuzz with a bank employee's effort to handle cheques with tongs and sanitize them with a steam iron.

The operational and technical challenges for both the customers and employees highlighted a lacuna and the general lack of agility in our banking systems when faced with an emergency situation. The immediate learning's from the current COVID-19 situation will add the much-needed rigor towards digitizing and optimizing the bank's backend operations. This will eliminate the dependency on manual entries, person led reviews i.e. paper and employee intervention within banks. When the COVID-19 situation is before us, it is expected that Indian banks will shift gears to move away from traditional forms of banking. The traditional banks will stand the opportunity to leapfrog adopting cutting edge banking technologies and blaze the digital transformation trail. Currently, 27 of Indian public sector (PSU) banks are on a path of consolidation to 10 large banks. It is an opportune time for the PSU's to explore better technology integration and customer adoption.

Other Indian banks (both public and private) which are already online with some core banking functions will focus on a complete transition by digitization of all their functions, processes and systems. Legacy Indian banks and financial institutions will also look at collaboration with the new entrants and fin techs. Such necessity-driven partnerships will drive innovation and jointly reap the benefits of the large customer base of the banks and the new technologies of the fin techs.

The COVID-19 situation will not only speed up the adoption of technology, but will renew focus on the following four key areas of banking:

Embracing neo technologies – In the aftermath of the pandemic and economic uncertainties, emerging technologies will play a key role in speeding up transactions and reducing costs for banks. Indian banking sector has already realized the role of technology in achieving the reach and scale. I foresee higher rates of adoption of microservice architecture by dropping vertically integrated stacks, APIs, containerization, cloud computing, AI and block chain. These technologies will play critical roles in digital transformation of Banks and Financial Institutions and re-imagine digital delivery of services.

Channels of digitization – As per the 2017 Global Findex Report by the World Bank, India is home to the world's second largest unbanked population at 190 million adults without access to a bank account. With increased penetration of mobile and Internet, the primary focus would to accelerate technology enabled digital financial inclusion. The business focus would also be to create a gradual shift in customer preference from visiting bank

branches to using digital channels. Banks will enable its customers to interact over multiple automated and digital channels to offer the optimal channel mix. Banks will consider important factors such as demographics, access to internet, last mile connectivity, customer banking behavior patterns etc. to enable effective adoption by the Indian banking consumers.

Security, privacy and customer trust – According to RBI, for the financial year 2017-18, India's banking sector witnessed a spike in cyber frauds and pegged the losses at \$ 13.7 million. With increased use of cashless and digital economy, it will be imperative for the banks to implement secure frameworks and systems. Some of the obvious cyber risks include financial frauds, money laundering, data loss, identity thefts and privacy breaches. Banks need to take stringent steps to identify both internal and external system vulnerabilities. They should be technically strengthened by rigorous KYC, strong customer authentication (SCA), financial grade APIs, firewalls, smart networks, etc., for secure and seamless transactions. Robust banking solutions and cyber security initiatives help safeguard against malicious attacks.

Policy and compliance – The focus should be on increased digital payment infrastructure, especially in rural India, with an intention to create a financial ecosystem for the unbanked and underbanked population of our country. From a security and privacy standpoint, India is already on its path to introduce the Personal Data Protection bill (PDP) on the lines of GDPR in the EU. This bill protects personal information of consumers including sensitive financial information. It would be in the best interest to implement stringent penalties on erring entities found in violation of the bill.

India's banking revolution can be further catalyzed by the introduction of the open banking directive on the lines of the UK and the EU. The COVID-19 impact on the global and Indian financial systems will be phenomenal and multifold. It is important to take the long view and prioritize accordingly. For Indian banks particularly, resilience, driven by digital agility, is a way to achieve relevance and success on the other side of COVID-19.

RBI is pumping in liquidity into the system to support the economy against the virus pandemic. The challenge is to understand the repercussions. Subhas Chandra Garg, Former Economic Affairs Secretary in a tweet stated that NPAs would rise and might double up. "Survival and revival of businesses need additional credit," he tweeted on April 23. He also wrote that the moratorium of three months to be provided by the banks would push down new NPAs under the carpet. RBI has infused liquidity of about 3.2 per cent of GDP in the system, and Garg believes that "liquidity injected to push banks to lend has been returned to RBI."

He backs this up through his blog where he wrote, "Banks' extra deposits (other than required under CRR) with RBI grew to Rs. 7.46 lakh crore on April 10, 2020 compared to Rs. 1.7 lakh crore on March 22, 2019. Banks discretionary deposits with RBI grew by additional Rs. 5.76 lakh crore. In effect, the banks returned more than two and a half times of liquidity provided to RBI." In an interview with ETCFO Religare Group CFO, Nitin Aggarwal said, "RBI done its part and now banks have to pass on the liquidity where required. As the credit cycle has to kick start again and the banks are still not passing the benefits of the liquidity mechanism to the NBFCs and industry which is a big challenge." On the contrary, "There is a lot of liquidity being infused by the RBI in the system, lenders will be encouraged to further lend," said Charanjit Attra, Partner, Financial Services and Financial Accounting Advisory Services (FAAS), EY India. Over a period of time, the rising level of NPAs, major banking frauds, has increased the risk averseness of banks. "It is not unnatural to anticipate that the banks will be excessively averse to lend to even mature and established businesses. I don't expect the banks to ramp up lending to businesses in the face of extra demands for loans to survive, repair and re-construct their COVID-19 battered businesses," wrote Garg.

However, Charanjit Attra is of the view that due to lower borrowing rates banks would have more spread - would be lending more and not take exposure in higher-risk assets as compared to pre-COVID-19 era — where banks needed to go for higher risk assets with higher lending rates for better spreads. "Banks may go for risk in lending but not at a large scale," he shared. While certain industries, like entertainment, aviation, have been severely

impacted by COVID-19 pandemic, Attra said that NPAs would rise, but to what extent is uncertain. “As of today, no one has the hint when the vaccine for COVID-19 going to get prepared. Economic activity will start but not completely, things will ease once the vaccine or an antidote is ready. We might be able to contain the spread but have not eliminated it yet. So it is difficult to say how much the NPA will increase,” said Attra.

He suggested the one-step-at-a-time approach is required to avoid fatalities. Right now SMEs, MSME, traders people are anticipating of shutting operations. “Perceptibly there will be defaults, and if this lockdown will extend further, it is bound to happen,” he explained. In a move to provide cushion for the rising NPA issue, the banking regulator, Shaktikanta Das in his April 17 press conference said the 90-day NPA norm will exclude moratorium period for all accounts where the lenders decide to give the three-month loan relief. “...there would an asset categorization standstill for all such the books from March 1, 2020 to May 31, 2020,” Das said. The RBI had March 27 announced the moratorium decision for mitigating the debt servicing burden faced by companies due to COVID-19 downturn.

Conclusion:

NBFCs have also been given flexibility under the Indian accounting standards (Ind-As) to consider relief in recognition of impairments to their borrowers. RBI has allowed the banks to grant moratorium to all, including to the mortally wounded businesses. This will keep the show to go on for some time. The reality is, however, grim. The RBI is aware of it. However, RBI is expected to do more. RBI should provide credit to investment grade businesses directly. Surely, many finance heads scratching their heads for credits would agree.

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Abstract

India is one of the hazard prone countries in South Asia. Floods, droughts, landslides, snowstorms, hurricanes and cyclones occur regularly. Among these earthquakes, floods and drought risk are extremely high. These hazards threaten millions of lives and cause large scale financial, infrastructure, agriculture and productivity losses that seriously hinder India's overall development. In India, as in the United States, the primary responsibility for responding to disaster lies at the state and the central level. The GOI have a national emergency plan for disaster management, some of the state also has a disaster management plan. It can be, and is called upon to assist when necessary, but there is a lack of awareness in the public. Many Indian States have limited resources and lack their own disaster management plans. Considering these problems, this paper attempts to throw light on a more integrated and responsive disaster management system in India. Whereas

ICT plays a very important role in various aspect of disaster risk management. At present there is a growing awareness of the importance of ICT for disaster risk management. Disaster risk management through ICT aims to reduce the damage caused by natural and manmade hazards like earthquakes, floods, droughts and cyclones epidemics, wars and ethno-religious and political conflicts. The use of ICT can facilitate the management of disasters by providing information on disaster prevention, early disaster prediction, communicating and disseminating disaster information to residents, and ensuring a speedy communication system before, during and after the disaster to both government and non-government agencies for relief materials.

A disaster is a natural or man-made hazard resulting in an event of hard loss of extent causing significant physical damage or destruction, loss of life, or sudden change to the environment. A disaster can be defined as any tragic event occur from events such as earthquakes, floods, catastrophic accidents, fires, or explosions. It is a phenomenon that disasters can cause damage to life, property and destroy the economic, social and cultural life of people.

Disasters are also seen as the consequence of inappropriately managed risk. These risks are the product of a combination of both hazards and vulnerability. Hazards that strike in areas with low vulnerability will never become disasters, as is the case in uninhabited regions.

The word disaster is derived from Middle French *desastre* and that from Old Italian *disastro*, which in turn comes from the Greek word as (dus-) "bad" + (aster) "star". The root of the word disaster ("bad star" in Greek) comes from an astrological theme in which the ancients used to refer to the destruction or deconstruction of a star as a disaster.

Disaster refers to an emergency caused by natural hazards or human-induced actions that results in a significant change in circumstances over a relatively short time period. Typical examples are death, displacement, disease,

and loss of crops. Others may include damage to physical infrastructure, depletion of natural and social capitals, institutional weakening and a general disruption of economic and social activity.

Disaster are of two types -

Natural Disaster-

A natural disaster can cause loss of life or damage property and typically leaves some economic damage, the severity of which depends on the affected population's resilience (ability to recover) and also on the infrastructure available.

Following are the examples of Natural Disaster:

- Geophysical (e.g. Earthquakes, Landslides, Tsunamis and Volcanic Activity)
- Hydrological (e.g. Avalanches and Floods)
- Climatological (e.g. Extreme Temperatures, Drought and Wildfires)
- Meteorological (e.g. Cyclones and Storms/Wave Surges)
- Biological (e.g. Disease Epidemics and Insect/Animal Plagues)

Artificial disaster-

It is also known as Man-made disasters can include hazardous material spills, fires, groundwater contamination, transportation accidents, structure failures, mining accidents, explosions and acts of terrorism. There are actions that we can take to prepare to react appropriately to these events. The key to acting appropriately to these man-made threats is to find out what you need to do and what you need to have in advance of a man-made emergency and to prepare to respond appropriately.

An example of a recent natural disaster is the flood in 2013 at Kedarnath in Uttarakhand is also an event that is rarely forgotten. There were signs of flood in the mid-night of 16-17 June and by the morning...the entire Kedarghati was destroyed. The number of people who died in the disaster is recorded in government documents at around 4000, but the actual number is believed to be more than 10 thousand.

And in the same way, from December 2019 onwards, the threat of global pandemic coronavirus is ongoing and which is still going on. Government of India is taking all necessary steps to ensure that we are prepared well to face the challenge and threat posed by the growing pandemic of COVID-19 the Corona Virus. Corona cases in India are 220114 out of which 347978 have also been treated successfully and 17400 have been deadly died.

This is also an example of disaster in a way, but the fact is not clear whether it is natural disaster or man-made.

Role of ICT at the time of disaster

The term ICT means Information and Communication Technology. It is used to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system. There are large economic incentives to merge the telephone network with the computer system using a single unified system of cabling, signal distribution and management. ICT is an umbrella term that includes any communication device encompassing radio, television, cell phones, computer and network hardware, satellite systems and so on, as well as the various services and appliance with them video-conferencing and tele-conferencing.

Application of Information Technology in Disaster Management

Though it is not possible to completely avoid the natural disasters, but the sufferings can be minimized by creating proper awareness of the likely disasters and its impact by developing a suitable warning system, disaster preparedness and management of disasters through application of information technology tools. The changing trends have opened up a large number of scientific and technological resources and skills to reduce disaster risk.

There are mainly applications we can use to manage disasters:

- 1) GIS and Remote Sensing
- 2) Internet

GIS and Remote Sensing

GIS provides a tool for effective and efficient storage and manipulation of remotely sensed data and other spatial and non-spatial data types for both scientific management and policy oriented information. This can be used to facilitate measurement, mapping, monitoring and modelling of variety of data types related to natural phenomenon. The specific GIS application in the field of Risk Assessment are:- Hazard Mapping to show earthquake, landslides, floods or fire hazards. These map could be created for cities, districts or even for the entire country and tropical cyclone Threat Maps are used by meteorological departments to improve the quality of the tropical storm warning services and quickly communicate the risk to the people likely to get affected by the cyclone. Remote sensing makes observation of any object from a distance and without coming into actual contact. Remote sensing can gather data much faster than ground based observation, can cover large area at one time to give a synoptic view. Remote sensing comprises Aerial Remote Sensing which is the process of recording information, such as photographs and images from sensor on aircrafts and Satellite Remote Sensing which consists of several satellite remote sensing system which can be used to integrate natural hazard assessments into development planning studies. These are: Land sat, SPOT Satellite, Satellite Radar System, Advanced Very High Resolution Radio.

Some applications of GIS and Remote Sensing in various disasters are as follows:-

a- Drought

GIS and Remote Sensing can be used in drought relief management such as early warnings of drought conditions will help to plan out the strategies to organize relief work. Satellite data may be used to target potential ground water sites for taking up well-digging programmers. Satellite data provides valuable tools for evaluating areas subject to desertification. Film transparencies, photographs and digital data can be used for the purpose of locating, assessing and monitoring deterioration of natural conditions in a given area.

b- Earthquake

GIS and Remote Sensing can be used for preparing seismic hazards maps in order to assess the exact nature of risks.

c- Floods

Satellite data can be effectively used for mapping and monitoring the flood inundated areas, flood damage assessment, flood hazard zoning and post-flood survey of rivers configuration and protection works.

d- Landslides

Landslide zonation map comprise a map demarcating the stretches or area of varying degree of anticipated slope stability or instability. The map has an inbuilt element of forecasting and is hence of probabilistic nature. Depending upon the methodology adopted and the comprehensiveness of the input data used, a landslide hazard zonation map able to provide help concerning location,-extent of the slop area likely to be affected, and rate of mass movement of the slope mass.

e- Search and Rescue

GIS can be used in carrying out search and rescue operations in a more effective manner by identifying areas that are disasters prone and zoning them accordingly to risk magnitudes.

Internet

In the present era of electronic communication, the internet provides a useful platform for disaster mitigation communications. Launching of a well defined web site is a very cost-effective means of making an intra-national and international presence felt. It provides a new and potentially revolutionary option for the rapid, automatic, and global dissemination of disaster information. A number of individuals and groups, including several national meteorological services, are experimenting with the Internet for real-time dissemination of weather observation,

forecasts, satellite and other data. In the most critical phase of natural disasters electronic communication have provided the most effective and in some instances perhaps the only means of communication with the outside world.

a- Warning and Forecasting System

An advance system of forecasting, monitoring and issuing early warnings plays the most significant role in determining whether a natural hazard will assume disastrous proportions or not.

b- Indian Meteorological Department (IMD)

IMD provides cyclone warnings from the Area Cyclone Warning Centers (ACWCs) It has developed the necessary infrastructure to originate and disseminate the cyclone warnings at appropriate levels. It has made operational a satellite based communication system called Cyclone Warning Dissemination System for direct dissemination of cyclone warnings to the cyclone prone coastal areas. IMD runs operationally a Limited-area Analysis and Forecast System (LAFS), based on an Optimal Interpretation (OI) analysis and a limited area Primitive Equation (PE) model, to provide numerical guidance.

c- National Remote Sensing Agency (NRSA)

Long term drought proofing programmes on the natural resources of the district have been greatly helped by the use of satellite data obtained by NRSA. Satellite data can be used very effectively for mapping and monitoring the flood inundated areas, flood damage assessment, flood hazard zoning and past flood survey of river configuration and protection works.

d- Flood Forecasting

Flood forecasts and warnings are issued by the Central Water Commission (CWC) , Ministry of Water Resources. These are used for alerting the public and for taking appropriate measures by concerned administrative and state engineering agencies in the flood hazard mitigation. Information is gathered from the CWC's vast network of Forecasting Stations on various rivers in the country.

e- Cyclone Tracking

Information on cyclone warnings is furnished on a real-time basis to the control room set up in the Ministry of Agriculture, Government of India. High-power Cyclone Detection Radars (CDRs) that are installed along the coastal belt of India have proved to be a very useful tool to the cyclone warning work. These radars can locate and track approaching Tropical Cyclones within a range of 400 km. Satellite imagery received from weather satellite is extensively used in detecting the development and movement of Tropical Cyclones over oceanic regions, particularly when they are beyond the range of the coastal radars. The existing mode of dissemination of cyclone warnings to various government officials is through high priority telegrams, telephones, telex and fax.

Natural Disasters as well as artificial disasters are huge economic burdens on developing economies such as India. Every year huge amount of resources are mobilised for rescue, relief and rehabilitation works following natural disaster occurrences. The Central Government plays a major role as far as mobilisation of financial resources are concerned. A scheme called Calamity Relief Fund (CRF) has been constituted for each state with contribution from the Central and State Government to undertake relief and rehabilitation measures . This enable the states to manage and provide for calamity relief on their own by drawing upon the resources available with a fund constituted for that purpose separately for each state. In addition to CRF, a National Fund for Calamity Relief (NFCR) has been created to deal with hazards of rare severity managed by a National Calamity Relief Committee (NCRC). The State Governments are required to submit memoranda for this purpose giving details of damage and destruction and the cost of relief and rehabilitation. On receipt of these memoranda, the Government of India decides on an individual basis whether a Central Team is required to be deputed to assess the situation.

Conclusion

It may be observed that advancement in Information Technology in the form of Internet, GIS, Remote Sensing, Satellite communication, etc. can help a great deal in planning and implementation of hazards reduction. For maximum benefit, new technologies for public communication should be made use and natural disaster mitigation messages should be conveyed through these measures. GIS can improve the quality and power of analysis of natural hazards assessments, guide development activities and assist planners in the selection of mitigation measures and in the implementation of emergency preparedness and response action. Remote Sensing, on the other hand, as a tool can very effectively contribute towards identification of hazardous areas, monitor the planet for its changes on a real time basis and give early warning to many impending disasters. Communication satellites have become vital for providing emergency communication and timely relief measures. The disasters usually occur in the well-defined areas, even though the community does not know the coping mechanism for the disaster. The disaster mitigation programmes must be extensively taken up covering various aspects at national level to minimise the disaster damages.

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PERCEPTION OF COMMERCE STUDENTS IN HIGHER EDUCATION IN RURAL AND SEMI RURAL AREAS IN MAHARASHTRA DURING COVID 19

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Abstract:

Covid-19, which started from China in the end of 2019, was declared by WHO as Public Health Emergency of International Concern (PHEIC) on 30 January 2020 and a pandemic on 11 March 2020. To avoid the spread of this pandemic, many governments all over the world started taking many measures, one of which was social distancing. For social distancing they closed down the places of gatherings like cinema houses, malls, schools and colleges, etc. Government of India too began to realize that pandemic has spread to India and started closing down the places of gatherings. Around mid of March schools and colleges were also closed. This was the time when portion of syllabus of Commerce undergraduates and postgraduates were nearly complete or complete and exams were to start. Such closure at such a crucial time created a lot of emotions among the students. The paper is to find out the perceptions of Commerce students regarding Covid-19 and its effect on teaching and examinations.

Introduction:

COVID-19, the full form of which is Coronavirus disease 2019, is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus is primarily spread between people during close contact, most often via small droplets produced by coughing, sneezing, and talking. Recommended measures to Maintaining physical distance from one another and isolation especially for those with symptoms, repeated hand washing, covering coughs, use of face masks and keeping unwashed hands away from the face prevent infection were.

The viral outbreak was first identified in December 2019 in Wuhan, China, and has since spread globally infecting thousands of people, resulting in an ongoing pandemic. Since mid March India started closing down places of social gatherings, schools and colleges. The Government of India ordered a 14-hour voluntary public curfew on 22 March, followed by nationwide lockdown on 24th March 2020 for 21 days, till 14th April which was further extended until 3rd May. But with more cases coming up till was extended up to 17th May and finally it is extended up to 31st May 2020. But for containment zones it got extended till June 30th, 2020 in a phased manner, services were resumed.

This lockdown situation is nothing new. In the past, outbursts of infectious diseases have been controlled by closing down of educational institutions and banning public gatherings. In 1918-1919 when influenza pandemic hit United States, school closures and public gathering bans were resorted to for preventing its spread. Similar measures

were taken to reduce sickness from the Asian flu during the 1957–58 outbreak, and also in controlling influenza in the US, 2004–2008. During 2009 H1N1 Flu pandemic several countries successfully used closures of schools and colleges to slow the spread of infection through school closure.

It has been agreed that lockdown has led to disruption of education at a crucial time of academic year. The paper shall study the perception of students whose studies and exams are interrupted due to lockdown.

Objectives of the Study:

1. To study the perception of students relating to studies and exams during Covid-19
2. To understand the preference of students towards of various online learning tools
3. To find out the views of students about online learning after Covid-19

Research Design:

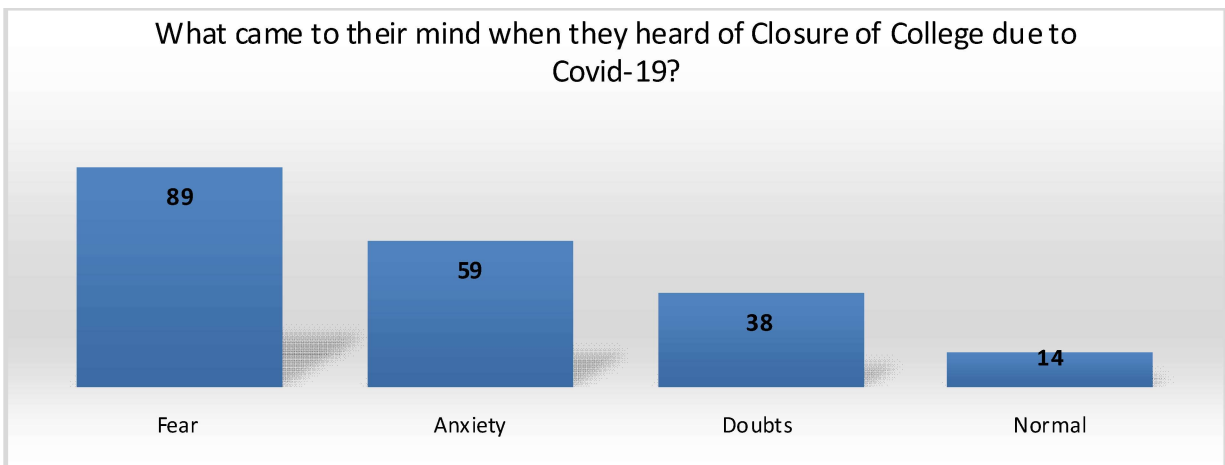
The study is mainly through Primary Data. Questionnaire were sent across students of B.Com. and M.Com. of colleges in Bhusawal and 200 responses on first cum first basis were taken. Fifteen questions were asked. Secondary data was mainly from the internet.

Data Analysis:

The analysis of responses of students gave the following results:

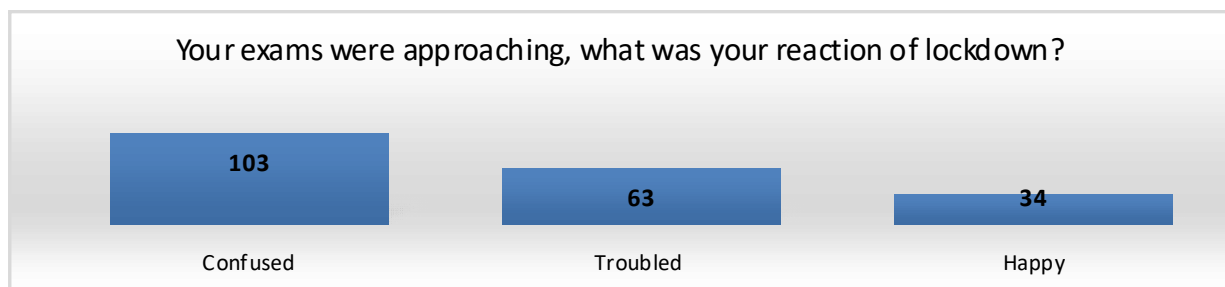
The questions with multiple options and their responses are explained as under:

Figure 1



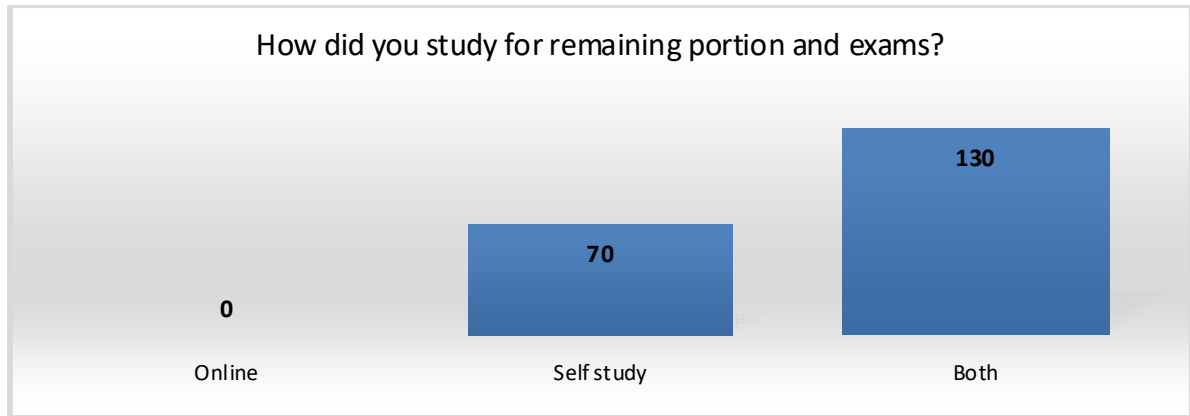
A thought of fear came to the mind of 44% (89 out of 200) of the students, anxiety to around 30% (59 students), doubts as to what may or may not happen to 19% and for remaining others, i.e., 7% (14 students) nothing came to their mind. In all 74%, nearly 3/4th, students had fear and anxiety.

Figure 2



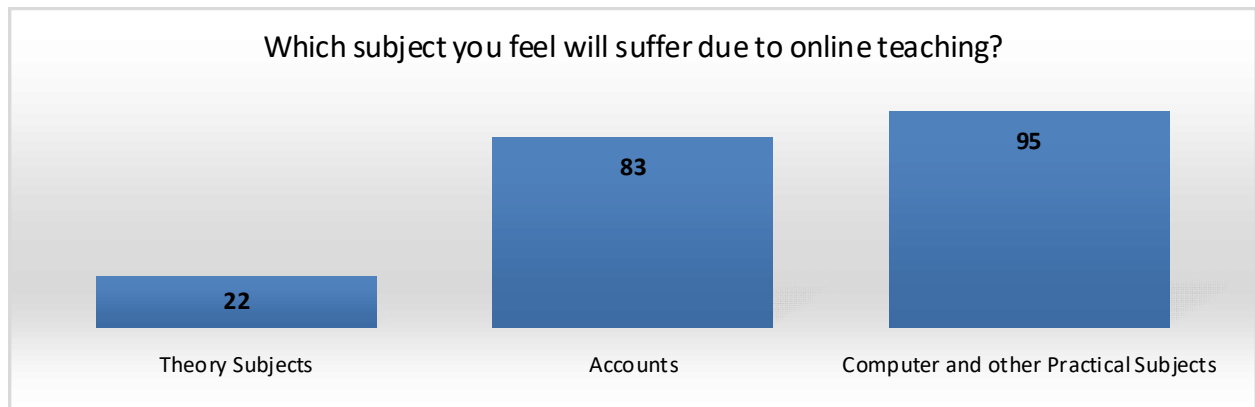
51.5% were confused as to what will happen to exams, 31.5% were troubled and 17% were happy with the hope that there will be no exams.

Figure 3



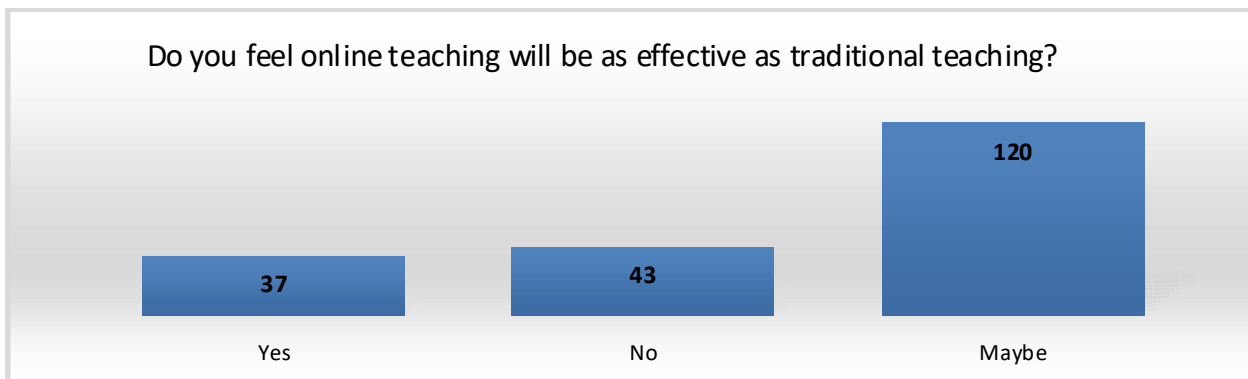
35% (70 students out of 200) were dependent on self-study and majority 65% were doing self study and online study. This online study was mainly taking down notes from internet. The reason was that majority of the portion was over, only a unit of the syllabus remaining.

Figure 4

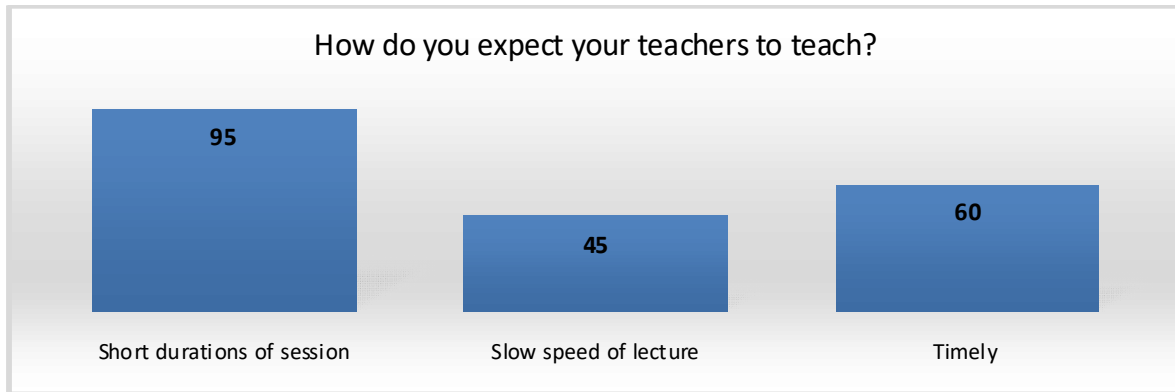


Out of 200 students 95 students, i.e., 47.5% felt that Computer and other practical subjects would suffer due to online teaching. 83 students (41.5) also felt that Accountancy subjects will suffer. Only 11% (22 students) felt that theory subjects will be affected due to online teaching.

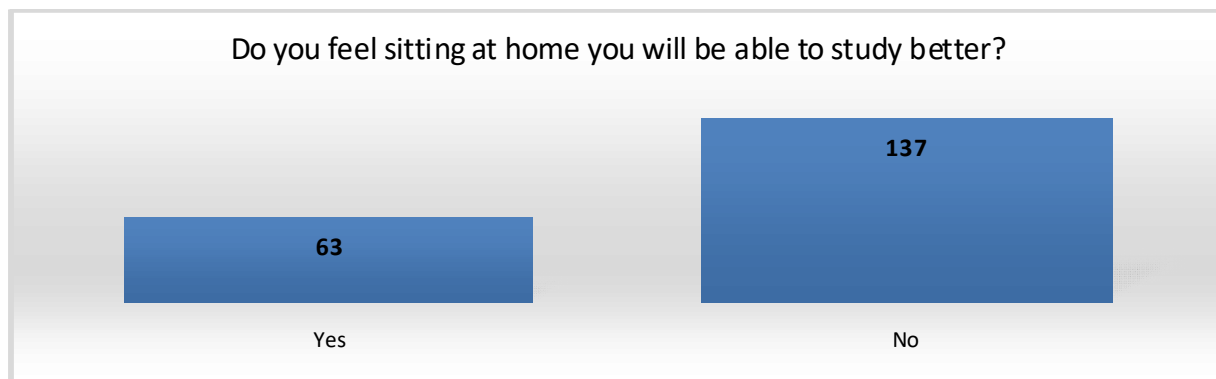
Figure 5



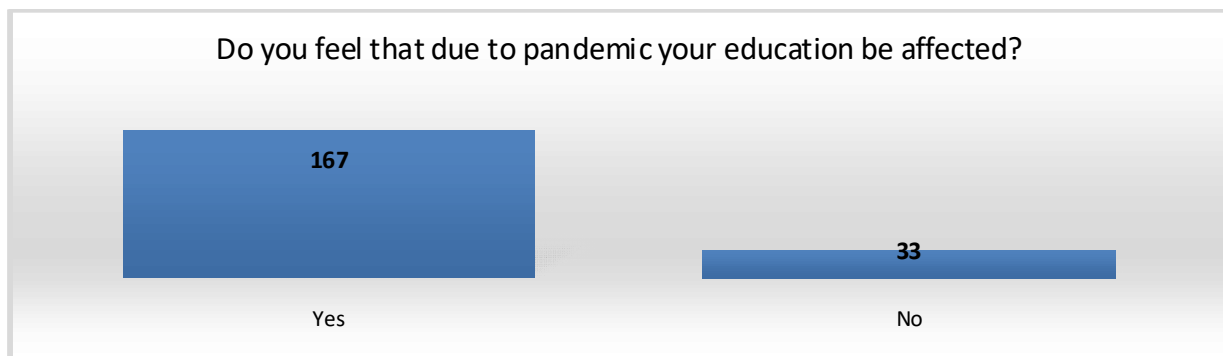
60% of the students were unsure of effectiveness of online teaching over traditional teaching. In the remaining 40% nearly 50% said yes and 50% said no.

Figure 6

Maximum number of students, 95 out of 200 (47.5%) recommended short duration of lectures, 45 students (22.5%) were for slow speed of lecture and 30% (60 students) went for timely lectures. Long duration of lectures diverts to attention of student especially in online lectures and at times puts a strain on their eyes.

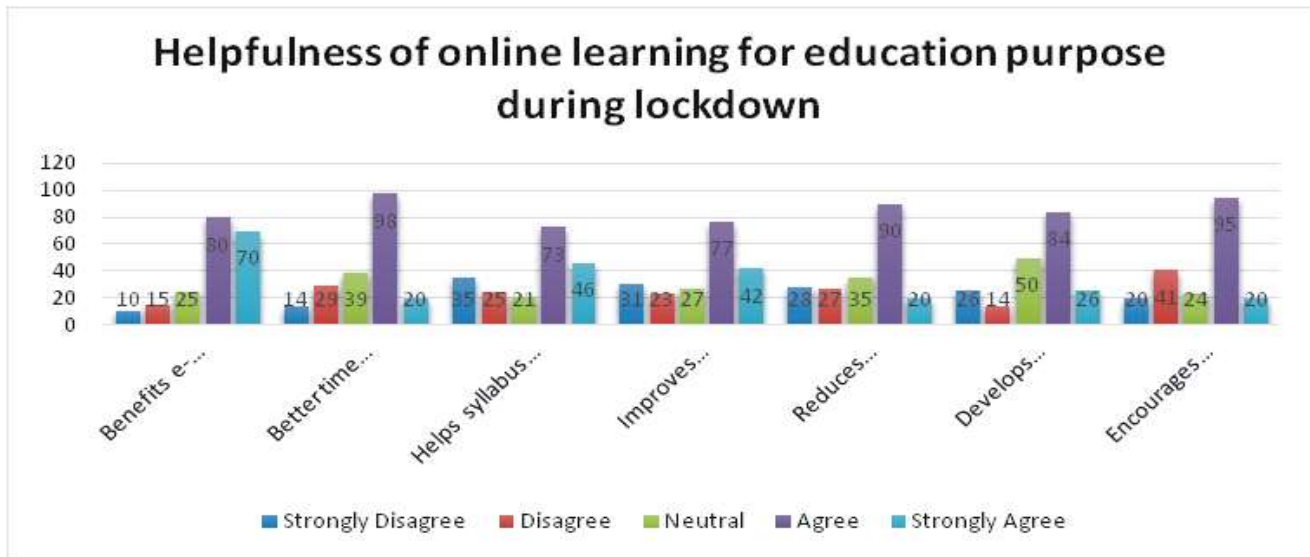
Figure 7

Nearly 70% felt that they will not be able to study better sitting at home and the remaining around 30% felt that they could study better at home. The reason for students not in favour of study from home could be the distractions at home like phone calls, parents interruptions, TV being on at home, door bell ringing, etc.

Figure 8

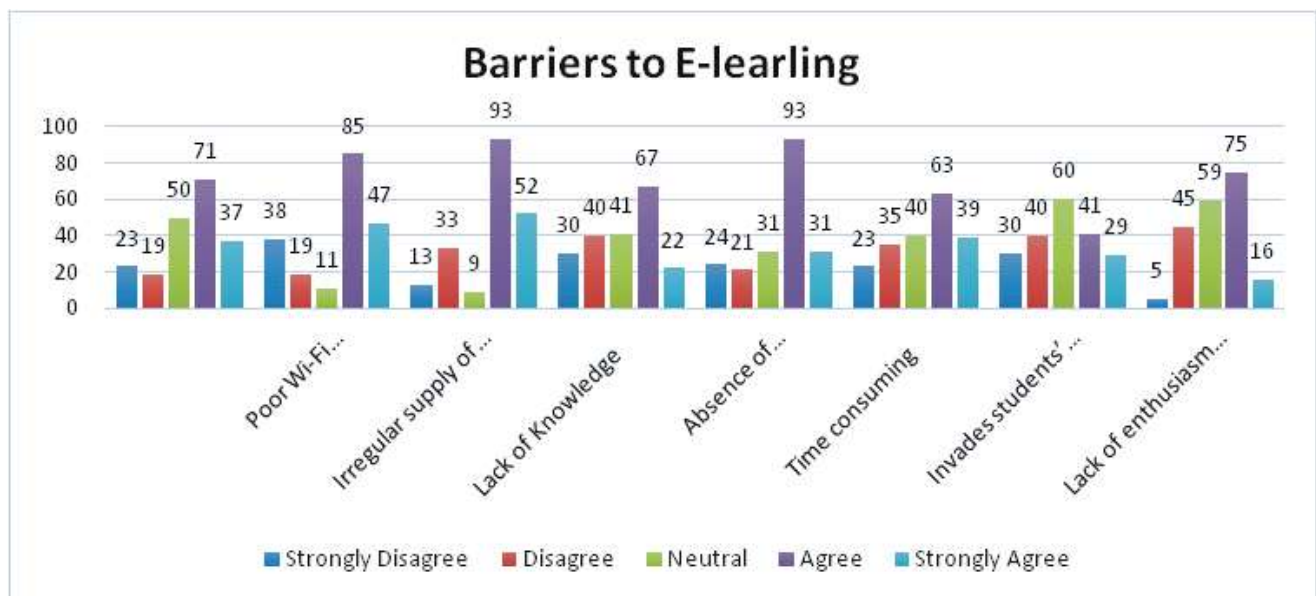
A whopping 83.5% of students felt that their education would be affected due to pandemic. On Likert Scale three questions were asked.

Figure 9



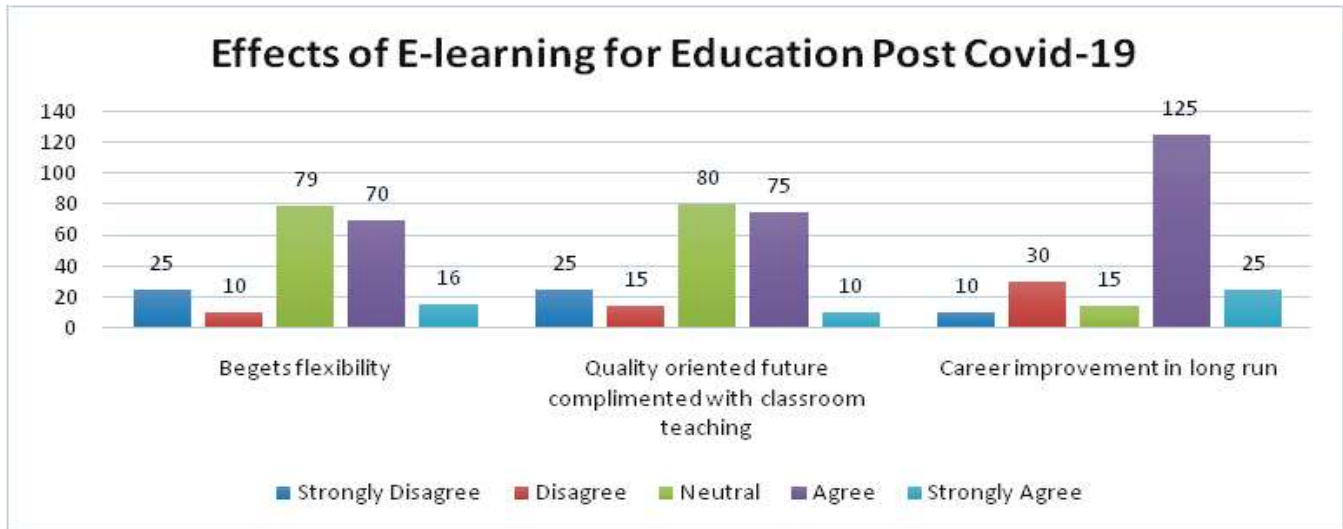
The analysis of above parameters shows that majority of students agreed or strongly agreed that online learning as a tool for helping students learn and adapt to e-learning skills, better utilization of time, completing syllabus, improved content’s quality, reduces communication gap with students, developing problem solving skills of students and encouraging students to take active part in learning.

Figure 10



For question relating to barriers to e-learning most of the students agreed or strongly agreed that there is lack of proper facility – PC, Tab, Laptop or Smart Phone, wi-fi connectivity is poor, irregular electricity supply, students lack knowledge and skills required for e-learning, online is time consuming and lack of enthusiasm among students. For barrier relating to invading student’s privacy there were nearly equal responses in all levels of scale. This may be due to students not being aware of privacy. Most of the students did not have PC or laptops, though may be having smart phones. But online learning with use of mobile is not appropriate.

Figure 11



Many students were of the opinion that flexibility would be brought in by e-learning in the sense one could use different online teaching tools to suit the needs of the students. Majority also believed that it must be done along with classroom teaching for quality education and e-learning will help career improvement in the long run.

Three open ended questions were asked, the analysis of which are as follows:

Will you miss regular college? And why? – To this question almost all students stated that they would miss regular college and along with that regular lectures, guidance by teachers and interacting with teachers, college campus, meeting friends, extra-curricular, practical. Many felt that it was difficult to study without the physical presents of teachers. A few, 6 students, living in far off areas said that to be safe they would prefer not going to college and they also complained about the lack of transport -railway and buses which makes it inconvenient for them to attend lectures.

Which technological tool would you recommend for online lectures? – More than 3/4th of the students were for Google classroom and remaining for Video conferencing like Zoom. The reason may be that in google classroom media sharing can be undertaken, scheduled tests could be conducted, students need not be present when assignments are given as they could see it later. For video conferencing connectivity issue was there and students had to log on at the time given to them. It was surprising that MOOC was not recommended by any student. This could be because they are not aware of it.

To question regarding any issue they want to mention regarding online education (e-learning), students coming from rural areas and disadvantaged families put their concern about having computer system or android mobile, tab, laptop, etc., provision for free Wi-Fi connectivity, and many students wrote about creating awareness among the students of e-learning technology, providing of study material, having students corner to discuss their problem. It cannot be denied that there is unequal access to technology among students. Students also talked about availability of fast and reliable internet access. Absence of good internet connectivity is an obstacle to continued learning. Few said that they were emotionally drained due to lockdown and were not in a mood to study.

Recommendations:

Here are the steps being taken by colleges to keep education going during Covid-19 lockdown as well as after it as students should be prepared for such situations in future too:

1. Conducting online classes, giving online assignment submissions and taking efforts for teacher-student interactions is required. But while planning for online learning many options which are suitable and feasible should be assessed taking into account the wi-fi connectivity, supply of electricity, hardware available – PC, or mobile or laptop or tab and technical skills of teachers and students to handle online teaching.

2. Access to technology by teachers.
3. Running courses for teachers to make themselves abreast with ICT tools to teach online effectively. A module may be developed to convert face-to-face lessons into online lessons and how to train teachers to do so.
4. Special website to provide webinars, tips for online teaching and resources for teachers.
5. Determination of teaching staff in imparting online teaching effectively, timely and without any interruption in the academics is the key.
6. Keep duration of lectures short to keep the attention of student and will avoid a straining their eyes.
7. Subsidy to college to provide to children from rural areas and disadvantaged tab or laptop.
8. Free Wi-Fi for study. Along with it encourage appropriate adult supervision while children are using distance learning approaches.
9. Access to technology by students – using webinars for sharing information on programs, video calls for one-to-one interactions.
10. Take initiatives to ensure that students and teachers have access to open educational resources.
11. Create awareness of MOOC.
12. Security and privacy of data or educational resources uploaded and shared with students has to be considered while going in for online learning. It must be made sure that platforms and applications in use do not violate student's privacy.
13. Technical issues if faced with limited IT support and staff should be sorted out.
14. Counselling should be done of students and faculty on adoption of technology. Address their psychosocial challenges before teaching which they may face when they are isolated. Tools available to connect colleges, parents, teachers, and students with each other should be assembled to ensure regular human interactions, enable social caring measures, and address possible psychosocial challenges to tackle feeling of loneliness, and having open discussion on strategies to cope up with learning difficulties. Lack of enthusiasm among students to use online resources for studies have to be dealt with.
15. In case pandemic lessens, then following safety measure could be taken:
 - i) Face masks will become a necessity.
 - ii) Space between students in classrooms, for instance — they might be seen as a good option for a year while the situation with the virus becomes more definite.
 - iii) Make admission process online.
16. Solutions must be found to bring about a holistic development of students.

“Plans can build on everyday practices that include strategies for before, during, and after a possible outbreak.”¹

Conclusion:

Closing down of educational institutes – colleges and universities has affected students, teachers, administrative staff as well as the institutes. But what needs to be appreciated that in spite of the lockdown teaching staff of colleges have not abandoned their prime responsibility of teaching and are making plans to handle the situation in the future if the situation continues. They understand that a gap in education cannot be afforded at this time. Suddenly the educators and students have woken up to change the way education and exams are conducted and adapt the new ways of teaching. New skills have to be developed. Problems do crop up, challenges in education are already manifold. With this pandemic, problems and challenges have increased but with proper strategic planning it is not that it cannot be overcome.

Recovery from this pandemic will be a long haul, and only those who brace for change will thrive – *Amit Shrivastava, CTO & Co-founder, KopyKitab¹¹*

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Ritu Rani*M.Phil. (Edu.) Student, Mahalaxmi College for Girls**C.C.S. University, Meerut***Abstract**

Education is an important aspect for the overall development of an individual and it also contribute in the immense development of a nation. In recent times, there takes place revolutionary changes in the field of education which are because of the advancement of digital education resources. The basic feature of typical Indian classroom was that the students needed to listen their teacher for long sessions in their class room without any help of visual presentation. But these days, the use of technology give a boosts to the classroom teaching method specially for the child learning. Digital education resources provide an easy access to material available around the Globe. It makes the distance shorter between a learner and educator and because of which modern classroom become more inclusive. The INFO-TAINMENT combination used in digital education make it more practical and reliable data to our life. With the evolution of digital technologies, the education system gets hike at different level of learning both in schools and colleges. Now, Virtual classes become more popular in the field of education. This paper tries to give an overview of digital education, resources of digital education, scope of digital education in future and possible challenges in digital education.

I. Introduction

Digital education resources mean the learning material which is available online. These digital resources are too much effective in the education system. A learner and educator can easily make access to the developed technologies in field of education across the globe with the help of these resources. With the progressive invention in the field of education, the way of learning system becomes more easy. The learning material become more cognitive, also the classroom teaching find new ways for the execution of instructions. For the proper use of these digital resources a teacher which can be of school or college supposed to have trained in their respective field, with it they find convenient to prepare their teaching plans aided by digital technology. Teaching and learning become more impressive as it includes animations, audio-visual aids, graphic images, simulations and prepared or programmed learning modules. Learner develop the higher order of thinking and skill that how to apply learned things practically. These resources are providing a base to the important trends in the education landscape like for blended learning, standards for learning, testing/ assessment, personalized learning, project based learning and mastery based learning etc.

In the last few years, digital education is evolving at a very fast pace. It changes the environment of traditional classroom and made them more inclusive. It also changes the method of learning the different concepts. School and Colleges have been slowly updated themselves with interactive teaching methods and adopting digital solutions. In digital learning, more participation of student guarantee as the students of the current generation are well versed with gadgets like : I-pads, smartphones and laptops. In the field of digital education, there are many players like

Tata Class Edge, Educomp, Tech-next and Pearson which are continuously developing different interactive software to help the teachers in teaching.

II. Objectives of the Study

The objectives of the research paper are to study:

- Elements of Digital Education Resources.
- Advantages of digital education resources.
- Scope of digital education in India.
- Challenges of digital education in India.

III. Literature Review

For this study related literature review is given below:

- **According to Himakshi Goswami (2016):** “Digital India stands for transforming India into a digitally empowered knowledge economy. It is Associate in nursing initiative of state of Asian nation to integrate the Government Departments and the people of India. It aims at ensuring that the Government services are made available to citizens electronically by reducing paper work.”
- **Mehek Gulati (2016):** In her paper “Digital India” is an initiative of the Central Government of India “concluded that it is designed to transform India into a global digitized hub” by renewing a summation digital sector of Asian nation with the assistance of up digital property and talent sweetening and varied different incentives to create the country digitally scattered within the field of technology. Further the paper conjointly highlights the opportunities that may pave the means for achieving the program’s aim of creating Asian nation the popular alternative for digital activities by each international and domestic investors Associate in Nursing conjointly however way the “Digital India” model will persuade be an attraction for the investors to take a position within the sectors that square measure nevertheless to realize their full potential in India.
- **Rahul Midha (2016)** in the twenty-first century, one of the most important technologies is the power of the digitization. Digital Republic of Asian country may be a program to remodel India into a digitally authorized society and data economy. It consists of three core components as follows- The creation of digital infrastructure, delivering services digitally and Digital literacy in India.
- **Jani Jinal, Tere Girish (2015):** Digital delineate to electronic technology that generates, stores and processes data, so that it is stored in a virtual central repository and is easy to access anytime, anywhere, through established protocols which creates a Mobile Applications transpire as catalysts for shaping our world. The Digital India transparent environment. Digital Technologies which include Cloud Computing an economy. The purpose of this research is to find out how the government services can drive is a dream project of the Indian Government to remodel India into a knowledgeable work for reducing paperwork with upcoming practical solutions and innovative ideas to accomplish the vision of a digital India in reality.
- **Jyoti Siwach & Dr. Amit Kumar (2015):** in their paper concluded that Digital India, the dream project of the government and a blessing for the citizens, could help in connecting the dots of various comes, past and present, to bring India to a global platform. The Digital India vision aims to transform our country into a digital economy with participation from citizens and businesses. This initiative can make sure that all government services and knowledge square measure obtainable anyplace, anytime, on any device that’s easy-to-use, seamless, highly available and secured. The Digital Republic of India program is simply the start of a digital revolution, once enforced properly it’ll open varied new opportunities for the voters.
- **According to Rahul Midha (2016)** in the twenty-first century, one of the most important technologies is the power of the digitization. Digital Republic of Asian country may be a program to remodel India into a digitally authorized society and data economy. It consists of three core components as follows- The creation of digital infrastructure, delivering services digitally and Digital literacy.

IV. Research Methodology

The main purpose of qualitative research methods are providing a clear and complete picture of the recent digital education resources with the aim of understanding of behaviour and interrelations. The research is primarily based on the secondary data. This study was conducted through literature review, without any empirical work being conducted. A large resource of written material was used, which included online articles, academic journals, as well as the websites.

V. Elements of Digital Education Resources

Primarily digital education has three basic elements:

- The content
- The technology platforms
- The delivery infrastructure

The modular of digital learning carry a variety of elements that an educator and learner can use as needed. Some of these will be easily available and others need authorization. In India there are many companies which are providing the digital education resources. Here list of some companies given : BYJU'S, DEXLER education, EDUCOMP solutions, IGNOU, NIIT, EDUCART, MERITNATION etc. These companies in India trying to replace the traditional education system with the modern education system by developing latest educational technologies. To understand the working procedure of above companies let's take an example of BYJU's, one of the top e-learning company in India offering various online learning programs for schools ,colleges and competitive exam . this company creates a smartphone learning app that provide highly effective and engaged learning programs.

VI. Advantages of Digital Education Resources

(i) Advantages to Academic Institution:

Academic institutions can easily manage their activities with the help of digital education programs.

Some of the important benefits are :

- Time and money of the academic institutions will be saved.
- With the help of this they can easily plan to conduct online exam and declare the result quickly.
- It helps transfer of knowledge equally to all the learners from the teacher in a highly effective and developed technology based teaching tools.
- These resources help in creating interest among learners with which they can learn many concepts through interactive audio-visual, animated teaching contents.
- It helps the educators to make their experience effective in the class with the wellplanned e-content.
- It provides the facilities of good interface to parents and teachers.
- It helps the countries to easily access the advanced educational technologies from other countries across the globe.

(ii) Advantages to Learners :

As all the study in the classroom will be taught through multimedia slides, it creates interest in learners and they grasp the knowledge from the content easily.

- Learner can make easy access to the online content for their projects and presentations.
- It helps them surfing for advanced contents for their study material.
- With it they can collect missed lectures online.
- It helps them to access online library.
- It helps them to find the same problems solution from different online teachers in their ways.

(iii) Advantages to Parents:

In recent times, it is difficult for the parents to visit the school or college because of their busy schedule.

It helps them to view their results online. Some of its benefits are:

- It helps them to make control on their wards online activities.
- Make easy access to all the schedule of activities.
- It helps them to pay fee online.
- They can get each and every information for their ward regarding school or college activities.
- The web facility helps them to view attendance and progress of their ward.

(iv) Advantages to the Teachers:

With the advanced technologies a teacher can make their teaching effective and interactive. they can teach the content with the help of graphs and slide shares. Some of the benefits are:

- They can easily manage their lecture content through web.
- It helps them to deliver their lectures online also.
- In the pandemic situation of COVID -19 , they can make easy access to the students online.
- It helps them to make online quiz and objective type of paper for their students.
- They can also access the online library for preparation of their lectures.

(v) Advantages to the Management:

The digital education resources help the institutions to provide better management of their resources. The management can take view of whole activity which are done in the institute through these resources. They can manage their institute or university effectively with the help of these resources. Some of benefits as follow:

- Make easy to organize webinars and workshops online.
- They can easily make access to all the faculty members and the other staff of the institutes.
- It helps them to organize different type of online activities for the different department of institution at the same time
- With it they can provide the advanced learning contents and infrastructure to the institutions.

VII. Scope of The Digital Education Resources In India

In last few years India holds an important place in the field of education. Online education market in India was worth \$ 247 million in 2016, which is expected to grow about \$ 1.96 billion by 2021. That is a compound annual growth rate of 52%. The number of users enrolled for various online learning courses is estimated to be 1.6 Million in 2016, Which is expected to grow about 9.6 Million by the end of 2021. Nearly 48% population in India between 15–40 age group with high aspirations but lower income is a good target market for online education. And, the acceptability of online channel is high in the younger demographic. These factors clearly show the involvement and future potential of online education in India. Here discussing some initiative taken by Indian government:

- **Encouraging public private partnership (PPP):** In August 2019, the Maharashtra International Education Board (MIEB) signed a collaboration agreement with Google to advance EdTech vision in India. This includes utilizing Google tools and technologies like Google Classroom and G Suite for Education to facilitate online learning for students and teachers.
- **Allowing 100 percent FDI under automatic route:** From April 2000 to December 2019, India's education sector received FDI worth US\$3 billion. In July 2019, the EdTech company BYJU's raised US\$150 million in funding led by the Qatar Investment Authority (QIA).

- **New education policy:** Drafted in 2019, it aims to increase the focus on early childhood care, reforming examination system, improving teacher training, and restructuring the education regulatory framework.
- **e-PATHSALA:** has been developed by the NCERT (National Council for Educational Research and Training) to promote and disseminate educational e-resources. Till December 2018, 3,444 audios and videos, 698 e-books (e-pubs) and 504 flip books were made available on the online portal and mobile app.
- **National Repository of Open Educational Resources (NROER):** initiative to collate comprehensive resources across all stages of teacher and student education. Till December 2018, 13,635 files – including 401 collections, 2,722 documents, 565 interactive, 1,664 audios, 2,581 images and 6,105 videos were made available on the portal.
- **The ‘Study Webs of Active Learning for Young Aspiring Minds’ (SWAYAM):** is a portal for online courses with classes ranging from high school (grades 9 to 12), to undergraduate and post-graduate levels. The National Institute of Open Schooling (NIOS) is providing 44 online courses at the SWAYAM portal to promote education through e-learning methods.
- **National Digital Library of India (NDL):** is an online repository of learning resources with more than 15.3 million digital books available online.

Some initiatives which are taken by private sectors in the field of online education are discussed here:

- **Tata Trust**—Tata Trusts, the principal shareholder of the \$109-billion Tata Group, is seeking to break out of the traditional approach to education by joining hands with Khan Academy, an American online teaching provider that already reaches 2.6 crore students worldwide.
- **Intel Corporation**—AU.S. based multinational technology company makes collaboration with the PHD chamber of commerce and industry. As part of this collaboration, Intel has made available its “Intel Pentium Processor A1020” to leading device manufacturer partners. It starts work in providing learning solutions in the field of digital education.

VIII. Challenges of Digital Education

Some of the major challenges for digital education resources in India are try to discuss in this section:

- **Resource and internet connectivity related challenges:**
In the use of digital online resources, main obstacle is poor internet in rural areas and some parts of urban areas. Majority of the population across India has still no access to internet and a large population is illiterate in the field of technology and has no smartphones or other needed devices.
There is a need of more innovation in the field of digital education.
- **Lack of trained teachers:**
One of the main challenges for the digital education in the rural area is lack of knowledge and skills in educators. There is a shortage of teachers, formally trained on the digital technology. In some of the schools and colleges in rural area professors are not interested in using digital education tools for conducting classes.
- **Language and content related challenges:**
In India there are different languages are spoken in different states, which become barrier in the development of digital education. It is little bit difficult to pushing the digital content in the regional languages for the agencies.
- **Insufficient digital infrastructure:**
Although Government of India is taking initiative to develop digital infrastructure but a lot need to be done in this direction. High speed internet and stable power supply are the biggest problem. only 15 percent of

the households have access to the Internet, and mobile broadband remains accessible to very few i.e. only 5.5 subscriptions for every 100 people. 5G networks technology is the requirement of today's which will increase the speed of downloading the data.

IX. Conclusion of The Research

In last few years, in India education sector has seen a rapid expansion which helped to transform the country into a knowledge heaven. This study clearly points out that development of digital infrastructure is required for the development of digital education in India. For the advancement of infrastructure there is a need of investment in this sector. Democratic governance, English speaking and technology trained faculty, a strong legal and intellectual property protection framework is required for the development of online education in Indian society. Indian government has taken initiatives for the development of digital education in India like opening of IIT's and IIM's as well as allocating educational grants for the research scholar in different government universities and institutions. During the previous Budget (2019), the Finance Minister said that the government will also ensure industry-level training for 10 million youth in India. This would enable building skills in technologies such as artificial intelligence, big data, virtual reality, 3D printing, and robotics. During the previous Budget (2019), the Finance Minister Sitharaman announce Rs 99300 crore has been allocated for the education sector and RS 3000 crore for skill development for next fiscal. Government need to take sufficient steps for the transformation of education system in India with a developed infrastructure.

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EFFECT OF COVID 19 ON COMMODITY DERIVATIVES MARKET IN INDIA

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Abstract

In this study, we explored the effect of COVID 19 on agricultural commodity. Under this we studied about the 3 months effect on commodity derivatives market because covid 19 effect on commodity market more at that time. Trading in commodity derivatives on exchange platforms is an instrument to achieve price discovery, better price risk management, besides helping macro-economy with better resource allocation. Since the inception (2003) of national online trading on multicommodity exchange platforms, the trade volumes have grown exponentially. Under this we studied about agricultural commodities and effect on the price of these commodities. So we collect data from journals, websites, times of India news paper, the economics times etc.

Introduction

The **COVID-19 pandemic in India** is part of the worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first case of COVID-19 in India, which originated from China, was reported on 30 January 2020. As of 1 July 2020, the Ministry of Health and Family Welfare (MoHFW) has confirmed a total of 585,493 cases, 347,978 recoveries (including 1 migration) and 17,400 deaths in the country. India currently has the largest number of confirmed cases in Asia, and has the fourth highest number of confirmed cases in the world with the number of total confirmed cases breaching the 100,000 mark on 19 May and 200,000 on 3 June. India's case fatality rate is relatively lower at 2.80%, against the global 6.13%, as of 3 June. Six cities account for around half of all reported cases in the country – Mumbai, Delhi, Ahmedabad, Chennai, Pune and Kolkata. As of 24 May 2020, Lakshadweep is the only region which has not reported a case. On 10 June, India's recoveries exceeded active cases for the first time reducing 49% of total infections.

Definitions of Covid 19

- Corona virus disease 2019 (COVID-19) is defined as illness caused by a novel corona virus now called severe acute respiratory syndrome corona-virus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. It

was initially reported to the WHO on December 31, 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. On March 11, 2020, the WHO declared COVID-19 a global pandemic, its first such designation since declaring H1N1 influenza a pandemic in 2009.

(David J Cennimo, MD, FAAP, FACP, AAHIVS; Chief Editor: Michael Stuart Bronze)

“An infectious and deadly coronavirus that has killed thousands in China has spread to at least 44 countries, stirring fears that *COVID-19* may soon become a pandemic”.— Darryl Coote

“The goal of the vaccine is to trick cells to produce antibodies against *COVID-19*’s surface protein, thereby eliminating the virus with the body’s own immune system.”— Miriam Fauzia

“Germs exist on surfaces in our everyday living spaces, including viruses like *Covid-19*, says Professor Wendy Graham, who works at the department of infectious disease epidemiology at the London School of Hygiene and Tropical Medicine”.— Aine Fox and Catherine Wylie

Definitions of Commodity Derivatives:

Article 2(1)(30) MiFIRB

“commodity derivatives’ mean “those financial instruments defined in point(44)(c) of Article 4(1) of Directive 2014/65/EU; which relate to a commodity or an underlying referred to in Section C(10) of Annex I to Directive 2014/65/EU; or in points (5), (6), (7) and (10) of Section C of Annex I thereto”

Article 39

(Article 4(1)(2) of Directive 2004/39/EC)

Derivatives within Section C(10) of Annex I to Directive 2004/39/EC

In addition to derivative contracts of a kind referred to in Section C(10) of Annex I to Directive 2004/39/EC, a derivative contract relating to any of the following shall fall within that Section if it meets the criteria set out in that Section and in Article 38(3):

- (a) Tele communications bandwidth;
- (b) Commodity storage capacity;
- (c) Transmission or transportation capacity relating to commodities, whether cable, pipeline or other means
- (d) An allowance, credit, permit, right or similar asset which is directly linked to the supply, distribution or consumption of energy derived from renewable resources;
- (e) A geological, environmental or other physical variable;
- (f) Any other asset or right of a fungible nature, other than a right to receive a service, that is capable of being transferred;
- (g) An index or measure related to the price or value of, or volume of transactions in any asset, right, service or obligation.

Collection of Data

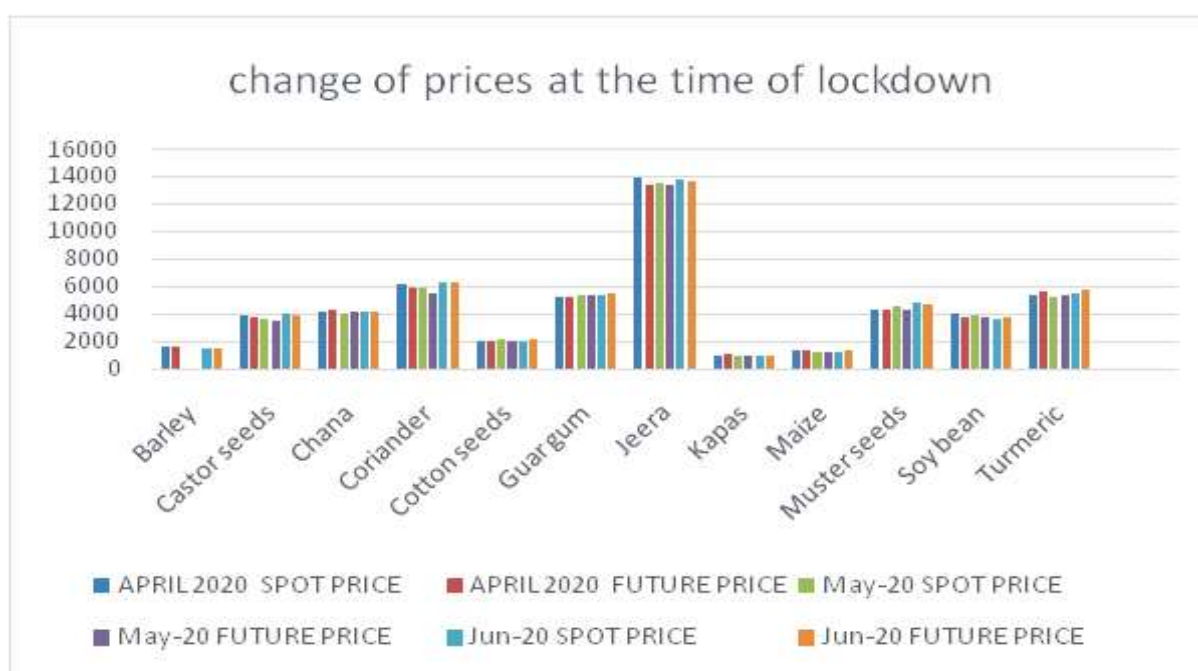
The data is used for the analysis is obtained from the NCDX for the period April 2020 to June 2020. Under this data we analyse the spot and future price of agriculture commodities, cotton ,barley,castor seeds etc.and find the effect of covid 19 on agriculture commodities.

Table 1

COMMODITY	APRIL 2020		MAY 2020		JUNE 2020	
	SPOT PRICE	FUTURE PRICE	SPOT PRICE	FUTURE PRICE	SPOT PRICE	FUTURE PRICE
Barley	1604.4	1570	-	-	1441.8	1459
Castor seeds	3890	3788	3646.05	3562	3976	3930
Chana	4200	4280	4100	4114	4173	4204
Coriander	6230	5873	5975	5555	6337	6280
Cotton seeds	2000	1972	2090.8	2008	2081.55	2129
Guar gum	5275	5177	5400	5315	5412.5	5520
Jeera	14050	13475	13616.65	13425	13840	13715
Kapas	908.3	1025	915	982	892.8	988
Maize	1357.2	1367	1253.35	1250	1261.1	1302
Muster seeds	4326.65	4240	4550	4315	4837.9	4665
Soy bean	3983	3810	3916	3750	3680	3720
Turmeric	5368.75	5592	5229.15	5440	5551.15	5750

Source: NCDEX website.

Figure 1



Agri-commodities: Cash crunch hits volumes

Prices of agri-commodities crashed to multi-year lows, as record produce and a plunge in demand due to lockdown gave the bears enough ammunition to come out with all gun blazing. Turmeric price hit a three-year low

on NCDEX while cardamom hit a one-year low. Jeera made a three-year low, as prices crashed due to a halt to exports.

“For last one year, agri-commodity prices have come down on account of record production for the third consecutive year. The coronavirus-led disruptions have put further pressure. Had Covid not occurred, we could have seen a price rise in April, as arrivals were slow and domestic demand would have picked up along with export demand for new crop,” said Ajitesh Mulick, VP-Retail Research, Religare Broking

Other analysts said closure of mandis hit price discovery for these commodities. All domestic mandis were closed to contain the spread of coronavirus. Traders also faced logistics problems in transporting their produce.

“Exporters take cues from spot markets. In the absence of physical business activities at mandis, they refrained from buying fresh,” said Subhranil Dey, Senior Research Analyst at SMC Com-trade.

All this negativity hit the sentiments of traders and speculators. MCX and NCDEX, India’s two biggest commodity exchanges, were forced to cut down trade timings due to the lockdown. This resulted in a sharp drop in daily volumes in derivative market.

“With trading time cut, volumes in agri commodities came down, though not much as those in metals and energy. Speculators also became less active due to increased risks. Hedging contributes 1-2 per cent of total daily volume on the exchange,” said Sunilkumar Katke, Head-Commodities & Currency, Axis Securities.

Crunching of daily volume data on NCDEX showed a gradual drop in average daily volumes in 2020 from Rs 1,639.10 crore in January to Rs 692.82 crore in April. In the first two weeks of May, when normal trading time was reinstated, average daily volume was still down to Rs 618.99 crore.

Katke said dearth of free cash was another reason for the drop in volume. “Traders and companies which used to trade with their surplus money are not doing so today because they no longer have that much free cash,” he said.

Analysts are by and large unanimous in their views that agri-commodity prices would bounce back as soon as mandis open and export routes become operational.

“The current levels are very low, and any further drop level will not be sustainable. Things can only look up from here on. Right now, we are seeing a partial reopening of mandis. Once the government allows exports, agri prices will definitely go up sharply,” said Mulick.

He said importers of Indian agri products are seeing a depletion in stocks as they have not been able to get normal shipments. When imports normalise, the demand will be huge, and that will support commodities like spices, chana, guar and other items we like spices, chana, guar and other items we export, he said.

Katke said edible oils, cotton and chana have been performing well lately, and with China coming back on track, demand has been rising. “Edible oil can outperform, and so could cotton, as they are available at cheap prices,” he said.

Measures taken by the Government to control the Effect of CORONA on Commodity Derivative Market

- **SEBI may cut commodity derivatives timings till 5 PM over virus lockdown : The securities and Exchange board of India (SEBI) is considering a proposal to cut down trading hours for commodities derivatives from 11.30 PM to 5 PM till the time lockdown over coronavirus is in place.**
- **Permitting banks to trade on commodity exchanges :** The government needs to work on several steps such as permitting banks to trade on commodity exchanges and weather derivative indices to boost growth of commodities market. India remains one of the largest producers in the world for most of the agricultural commodities and there is an urgent need to safeguard the interests of various stakeholders, including farmers.
- **MHA take steps regarding hoarding and black marketing of commodities :** “There have been reports of loss of production due to various factors, especially reduction in labour supply. In this situation, there is a

possibility of inventory building/hoarding and black marketing, profiteering, and speculative trading, resulting in price rise of essential goods. The States have been asked to take urgent steps to ensure availability of these commodities at fair prices for public at large,” the MHA said.

- **Allow the entry of financial institutions in the Indian commodity derivatives market :** The purported objectives behind these measures are to deepen the Indian commodity derivatives market by allowing the entry of financial institutions (such as mutual funds, banks, insurance companies, alternative investment funds and other financial investors) and to widen it by allowing options with commodity futures contracts as underlying. At present, only futures contracts are allowed on the commodity derivatives exchanges.
- **Government providing packages to the farmers :** government provide package to the farmers for their food grains and agri products. Govt. Helps to the farmers to provide insurance and also provide financial help to smaller section of farmers.
- **Demand and supply effect :** another measure was taken by government is to control demand and supply effect through different policies these can control supply of different products by transporting goods from one market to another market.

Conclusion :

From the above data we see the effect of corona on agricultural commodities because spot price of most of the commodity was higher than the future prices. so under the corona period most of the effect was negative for the farmers they cannot sell their commodities on good prices. This effect is not so high but some other agriculture commodities like rice and wheat prices also effected by this no body can get good prices for their products. Perishable goods are also an other part of agricultural commodities because this part was mostly affected in this period because farmer cannot transfer their commodities at market place so that they cannot get good prices for their commodities and cannot bear cost of their commodities this can affect the standard of living of farmers. So from the above data we can conclude that under covid19 or lockdown period most of the agricultural commodities are affected mostly and this loss was bearded by the farmers.

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A STUDY ON LEGISLATIVE REFORMS INITIATED BY THE GOVERNMENT OF INDIA TO COMBAT THE COVID-19 PANDEMIC

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Abstract:

COVID-19 pandemic has brought a worldwide public health crisis as well as economic recession. Considering economic implications of COVID-19 on Indian economy, Mr. Shaktikanta Das (RBI Governor) said, “the risks of growth have become far more severe than in our assessment at the end of March 2020.” In this context, the GoI has adopted some steps involving amendments in FDI rules, GST rules and the Insolvency and Bankruptcy Code (IBC) 2016, force majeure & protecting interests of migrant workers and micro small & medium enterprises (MSMEs). U.P. CM Yogi Adityanath quoted regarding migrant workers that “They are our biggest resource & will given them employment in Uttar Pradesh.”

In this research paper, evaluation of steps taken by Government of India (mostly by central government) regarding amendments in existing legal framework to protect economic health of the country will be done. Along with, this paper also remarks need of some new legislatures & legal reforms in present Acts for the sake of ensuring long term interests & well being of India.

Keywords:- COVID-19, Public Health, Economic Health, Government of India, Legal Framework.

Coronaviruses (COV) are a large family of single strand, positive sense RNA viruses that cause respiratory infection ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS-COV). Coronaviruses are zoonotic i.e. they are transmitted between animals and people. Common symptoms of infection include breathing related problems, fever, cough and cold, etc. In severe case, it may cause kidney failure and even death. A zoonosis (plural zoonoses or zoonotic diseases) is an infectious disease caused by bacteria, viruses and parasites that spread between animals (usually vertebrates) and humans. Human coronaviruses, most commonly spread from an infected person to others via:

- The air by coughing and sneezing.
- Close personal contact such as touching & shaking hands.

- Touching an object or surface with the virus on it then touching your mouth, nose or eyes before washing your hands, and
- Rarely, by fecal contamination.

The COVID-19 disease that emerged in Wuhan (Hubei province), China in December 2019, is now spanning every continent except Antarctica. Its virus named as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-COV2). WHO declared the outbreak of COVID-19 as a pandemic on March 11, 2020. An outbreak can be defined as a sudden rise in the cases of a disease in a particular place while a pandemic is an epidemic occurring on a vast scale crosses international boundaries, usually affecting a large number of people e.g. throughout history, there have been a number of pandemics such as smallpox and tuberculosis, spanish flu (1918) etc. The US Centers for Disease Control and Prevention (CDC) says the COVID-19 virus should meet criteria for a pandemic-

- It spreads between people.
- It kills, and
- It has to spread worldwide.

India reported its first case of COVID-19 in the state of Kerala on January 30. With the time of growing seriousness, the central government made it a notifiable disease to prevent its spread through imposition of section 188, 269 and 270 of the IPC.

Literature Review:

In the process of reviewing the research work done on COVID-19, we found that, a lot of analysis is conducted regarding initiatives of GoI to ensure public health. The Centre has decided to invoke Epidemic Act, 1897 to prevent the spread of “dangerous epidemic diseases”. Sec 1 provides if the State Government thinks that the ordinary provisions of the law for the time being in force are insufficient for the purpose, may take, or empower any person to take such measures, and by public notice, prescribe such temporary regulations to be observed by the public and may determine in what manner and by whom any expenses incurred (including compensation) if any, shall be defrayed. Sec 2 states regulations regarding the inspection of persons travelling by railway or otherwise and the segregation in hospitals, temporary accommodation. Recently, this section was used in 2009 to tackle the swine flu outbreak in Pune. Section 3 provides penalties for disobeying any regulation or order made under the Act by using Section 188 of the Indian Penal Code (i.e. disobedience to order duly promulgated by public servant). Section 4 gives legal protection to the implementing officers acting under the Act. Under Disaster Management (DM) Act 2005, the district administration exercises power of Section 33 and 34 to opt for requisition powers for any officer or any department at the district level or any local authority to take measures for prevention or mitigation of disaster or to effectively respond to it and such officer or department is bound to carry out such order. This step will help to create awareness among the public regarding COVID-19 and will also help to regulate the medical supply of masks, injections and medicines etc. Section 269 and 270 of IPC lay down punishments on negligent act and malignant act respectively likely to spread infection of disease dangerous to life. Section 271 is related with disobedience to quarantine rule promulgated by government with punishment of either description for a term which may extend to six months or with fine or with both. Firstly, This section was imposed in 1897 during the outbreak of plague in India. In a case of 1886, at the Madras High Court, a person was held guilty along with the person, who brought the train ticket under section 269 for travelling by train despite suffering from Cholera.

The COVID-19 is being proved deadly as till June 20, 2020 (at 6:50 GMT), there were 87,66,741 COVID-19 cases, 4,62,700 deaths & total 46,28,502 infected people recovered from this disease. In India, total cases were 4,11,773 alongwith 1,70,135 active cases, 2,28,307 recovered numbers and deceased number of 13,281 people.

Research Gap:

The decisions of nationwide lockdown & cancellation of international flights have been pertinent regarding the Government's strategy to tackle the COVID-19 emergence in India. With business closed, supply chains disrupted, timelines extended and contracts terminated, this exercise has led to unprecedented economic losses for organized sector. In the unorganized sector, there has been a complete breakdown with little or no legal recourse for those who are affected. Therefore, this research paper is intended to put impetus on protecting financial interests of the nation along with considering public health during this pandemic through legal means. In this parlance, gaps in legal framework will be identified in order to be filled to ensure long term safeguard of public interests & economic interests of the country.

Research Questions:

- What are the existing legal framework available in order to deal with an epidemic or other disasters?
- How the implementation of concerned legislation could be made effective on ground during 'public health emergency'?
- What are the amendments brought out by the Government of India in existing legislations to restrict the impact of COVID-19 on financial and public health of the country?
- What are the steps, still required to be taken up by the Government to fill the gap in containment efforts regarding COVID-19 pandemic?

Objectives of the Study:

- To study the relevant legal framework to tackle COVID-19 pandemic in India.
- To find strategies that could be implemented to bring more effectiveness of such legislations during 'public health emergency'.
- To evaluate the steps taken by Government of India by amending the existing Legislative in order to protect financial interests of the country.
- To identify the growing need of enactment of some new legislatures and reforms in present legal framework to ensure protection of nation from COVID-19 stressing upon coordinated efforts of Central government & State governments.

Need of the Study:

Legislation can play a pivotal role in coordination of initiatives of Central government & State governments in order to prevent the uncontrollable spread of contagious disease and guard the financial interests of the nation. On the one hand, existing legal structure is useful to minimize the impact of COVID-19 on public health & economic health of the nation but on the other hand, there is still need of some new laws and legal reforms regarding this. Since, a lot of work has been done related with moves of the Indian Government to protect public health but there is need of quoting steps taken by the Government to prepare a legal ground for ensuring soundness of our economy during this health and economic crisis. Further, new laws and amendments in existing laws could be proved crucial for shielding public health and economic health of the country.

Significance of the Study:

This research work has a core aspect, which focuses on protecting of economic health of country along with embedded review of available legal framework to ensure public health in order to remark any need of new legislative reforms. Hence, on the one side, it is beneficial for people as it has motive to shield their health during pandemic of COVID-19 and on the other side, it is beneficial for the Government because it suggests legal reforms by identifying

riffs in legal structure. Overall, this paper is important for economy as it evaluate the Government's move to protect country's financial soundness in order to strike a balance between valuing the life of our human resources and pace of economic progress.

Steps of GoI to Protect Economic Health of the Nation:

This research work is descriptive and deductive in nature & some secondary data have been used to derive a conclusion. The GoI rectified FDI rules i.e. a non-resident entity can invest in India, subject to the FDI policy except in those sectors/activities, which are prohibited (i.e. defense, atomic energy, space, etc.). However, an entity of a country, which shares land border with India or the beneficial owner of investments into India, is situated in or is a citizen of any such country can invest only under the Government route. This amendment may negatively affect the FDI inflows (i.e. \$49 in 2019 with 16% increase from previous year) but it is crucial to protect Indian companies from Chinese influence during this pandemic as China's Central Bank buys more than 1% stake in HDFC Ltd. at the lowered price rate due to crashing of Indian Stock Market. Finance Ministry in February clarified that disruptions in supply chain due to spread of coronavirus qualifies as a force majeure and companies and businesses can invoke this clause (if having an expressed condition of contract) under the Indian Contract Act, 1872. Force majeure literally means "greater force" or it is "an act of God", an event for which no party can be held accountable, such as cyclones, flood etc. (but doesn't cover an endemic). It is important to note that Indian Contract Act is silent about force majeure though allows usage of similar terms i.e. impossible act. In 40th GST Council meeting, some changes are approved to provide relief to taxpayers in this COVID-19 pandemic. It includes, for GSTR 3B, late fee waiver and a capping of late fee at Rs.500 per return for taxpayers having nil tax liability & some tax liability respectively from July 2017 to June 2020 provided that return must be filed between 1st July 2020 to 30th September 2020 but no reduction in interest rate is allowed i.e. 18% on due amount.

Small taxpayers are divided into two parts:

- Aggregate turnover is between Rs. 1.5 crores to Rs. 5 crores.
- Aggregate turnover is below Rs.1.5 crores.

In case of small tax payers, for first category regarding GSTR-3B of February and March, they can file by 29th June and for April, by 30th June to get waiver from interest and late fee. In this context, for second category, they are supposed to file their GSTR-3B by 30th June with respect to February, for March till 3rd July and for April till 6th July. Further it is provided that filing after 6th July to 30th September, the rate of interest will be reduced to 9% from 18% on due amount.

IBC ordinance 2020 came into effect from 5th June 2020. In its reforms, Sections 7, 9 and 10 of IBC have been suspended for at least 6 months (or longer but not exceeding 1 year). These sections are related with initiation of bankruptcy proceedings by financial creditors, operational creditors and corporate debtors respectively considering defaults arising on or after 25th March till notified date (a new section 10A is inserted in the Act) on account of the COVID-19 situations by excluding concerned months from IBC. To regulate the employment and working conditions of inter-state migrants employed in those establishments which have five or more migrant workmen from other states, a law was enacted in 1979, making compulsory registration of such enterprises creates a system of accountability and helps the government to keep track of number of workers employed & provides a legal basis for regulating the work environment& quality of work life. In this direction, UP Chief Minister has decided that any State Government which wants to employ workers from his state will have to seek permission first. Central Government implemented 'One Nation, One Ration Card' Scheme & 40% to 50% more workers enrolled compared to may last year along with hike in average wage rate to Rs. 202 from Rs. 182 (may 2019). Changing of MSMEs definition and announcing Rs. 3 lakh crores special package for these enterprises are some strong steps towards protection of 'lifeline of our economy'.

Existing and Revised Definition of MSMEs



Existing MSME Classification			
Criteria : Investment in Plant & Machinery or Equipment			
Classification	Micro	Small	Medium
Mfg. Enterprises	Investment < Rs. 25 lac	Investment < Rs. 5 cr.	Investment < Rs. 10 cr.
Services Enterprise	Investment < Rs. 10 lac	Investment < Rs. 2 cr.	Investment < Rs. 5 cr.

Revised MSME Classification			
Composite Criteria : Investment And Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing & Services	Investment < Rs. 1 cr. and Turnover < Rs.5 cr.	Investment < Rs. 10 cr. and Turnover < Rs.50 cr.	Investment < Rs. 20 cr. and Turnover < Rs.100 cr.

Source: Ministry of Finance

Conclusion:

Today, the world is under threat of three biggest problems i.e. climate change, nuclear war & a deadly pandemic. The WHO estimates that globally, about a billion cases of illness & millions of deaths occur every year from zoonoses. Some 60% of emerging infectious diseases are zoonotic and over 30 new pathogens detected in the last three decades are transmitted between people & vertebrate animals. The reasons of such occurrences can be traced in shrinking of natural habitat of wild animals due to conversion of forests in agricultural land or for any industrial purpose, mixing of humans & domesticated animals (or wet) markets etc. As far as COVID-19 is concerned the GoI took several measures to restrict its community spread e.g. imposing strict lockdowns (from 24th March to 31st May) in phased manner, issuing rules & guidelines regarding social distancing, quarantine and other protection measures, customized policy for different zones (i.e. red, orange & green zones), amending existing laws etc. Yet, there is need of transferring 'public health & sanitation' from state list to concurrent list & a new enactment of 'National COVID-19 Act' to bring coordination & effectiveness in efforts of Central and State Governments in targeted manner.

In economic reference, GoI has done a lot but unprecedented demand for public financial resources has been felt due to COVID-19, therefore, there is need to use resources prudently as per changing and emerging priorities.

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NATURAL DISASTER: CAUSES, CONSEQUENCES AND MANAGEMENT

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Abstract

The occurrence of disasters and natural calamities are common and these happen all around the globe. In this research paper, information has been provided regarding the kinds of disasters and natural calamities, the causes of their happening, the preventive measures and the steps formulated in order to curb the devastation that takes place as a consequence of disasters and natural hazards; the effects and aftermaths that happen are a crucial aspect to be taken under consideration and finally the main components of disaster management have been emphasized. The distribution of facts, capacity building, institutional development and information allocation are the crucial ways or expertise that individuals have to possess sufficient knowledge of who choose disaster management to be their area of interest.

Keywords: Disasters, Hazards, Prevention, Mitigation, and Preparedness.

Introduction

Disasters and natural hazards are common and occur not only in India but all over the world. The disasters can be sudden such as earthquakes, floods or hurricanes or they can be slow such as drought or famines. India has been prone to natural disasters on account of geo-climatic conditions; disasters such as floods, earthquakes, droughts, cyclones and landslides have been major within the country. About 60% of the landmass is prone to earthquakes of various intensities; over 40 million hectares of land is prone to floods; about 8% of the total area is prone to cyclones and 68% of the area is at risk to drought. Natural calamities and disasters lead to immense destruction, loss of lives, private, public and community positive features and assets. The super cyclone in Orissa in October, 1999, the Bhuj earthquake in Gujarat in January, 2001, the natural calamity in Uttarakhand in 2013 and in Kashmir in 2014 have drawn attention towards the need to adopt a multi-dimensional undertaking involving various scientific, engineering, financial and community procedures and practices the need to adopt multi-disciplinary and multi sect oral approaches and integration of risk diminution in the developmental plans and strategies. The poor and the underprivileged sections of the society are the people who are the major sufferers of natural calamities and disasters. What are Disasters and Hazards? Disaster can be defined as the severe disorder in the implementation of the community or a society causing extensive substance, economic, social, financial or environmental losses which go beyond the ability of the affected society to manage using its own resources. A disaster occurs as a consequence of the hazards, defenselessness or insufficient capacities or measures to cause a reduction in the risk factors. A hazard may be defined as the perilous conditions or events that are threatening or have the potential for

causing injury to life, property or the environment. Hazards are of two kinds, natural and manmade; natural hazards are the ones that take place as a result of natural phenomena, these can be meteorological, biological and geological. Examples of natural hazards are cyclones, Tsunamis, earthquakes, landslides, floods, drought and volcanic eruptions. On the other hand, manmade hazards are the ones that occur due to human negligence; these are associated with industries or energy generation power plants and include explosions, leakage of toxic wastes, pollution, dam failure, wars or civil strife or occurrence of fires.

Causes of Disasters and Hazards

The causes of disasters and hazards have been extensive and various reasons have been stated as follows:

1. Causes of Earthquakes – The earth crust is a rocky layer of variable thickness crust comprises of portions called plates which vary in size from a few hundred to thousands of kilometers. When these plates contact each other, stress occurs within the crust.

2. Causes of Tsunamis – Firstly, the fault movements upon the sea floor, associated by an earthquake release a huge amount of energy and have the capacity to cross through the oceans; secondly, landslide may cause Tsunami that is occurring under the water or above the sea and then plunging into water and thirdly, volcano eruptions may lead to Tsunamis.

3. Causes of Floods – There are different causes of floods and they differ from one area to another; they may vary from rural area or urban. The causes may be due to heavy rainfall, heavy siltation of the river beds, blockage within the drains also leads to flooding of the region, landslides block the flow of the streams, construction of dams and reservoirs may lead to floods and the areas which are prone to cyclones, winds that are associated with heavy down pour cause floods.

4. Causes of Drought – Though drought is mainly caused by deficit rainfall, which is a meteorological phenomenon, it is apparent into different spheres because of various vulnerability factors associated with them. Some of these factors are human stimulated. Though drought is a natural disaster, its effects are made worst in developing countries which are over populated; the countries that are over populated in them factors such as over grazing, deforestation, soil erosion, excessive use of ground and surface water for growing crops, loss of biodiversity takes place which causes drought.

5. Causes of Landslides – The major causes of landslides are weaknesses in the structure of land components such as rock or soil, erosion of slope due to decrease in vegetation, intense rainfall, volcanic eruptions and earthquakes are natural factors. Human excavation of slopes, factors such as mining, deforestation, irrigation, draw down in the reservoir, explosions/blasts and water leakage from services are some of the human made factors that cause landslides. The effects of disasters and natural hazards are destructive which lead to dire

Consequences

1. Environmental Effects – The environmental effects can be destruction of lands, homes, buildings, and surroundings; there are huge losses caused in water supplies, food availability, as there is destruction of crops, immense loss of life is caused by natural calamities and there is presence of human bodies and animal carcasses which remain unburied. The environmental effects vary from disaster to disaster such as earthquakes may destroy buildings but not crops, on the other hand, a cyclone may cause destruction in both.

2. Effects on Health – Sudden natural disasters may cause not only widespread death but also massive social disruption such as famines, epidemic diseases; injuries are also caused by the natural disasters; when people get affected by disasters they tend to move to another place and this movement may lead to transmission of diseases, and there is prevalence of malnutrition, as the food and water supplies get destructed, there is scarcity of food and water quality and quantity.

3. Economic, Social and Political Effects – Disasters lead to destruction of economies, individuals have to leave their jobs and get involved in disaster related activities or they become jobless if their place of work gets

affected by the disasters. There is loss of machinery and equipment as well; farmers, shopkeepers and fishermen are the individuals who are affected by the disasters in most cases. Huge monetary and financial losses are caused by disasters and economic, political and social conditions of the region get severely affected.

4. Administrative and Managerial Effects –Administrative problems become more complicated and tedious due to emergence of disasters. Loss of community leadership, when there is loss of leaders due to death or when they get injured then the leadership functions get affected; formal organizations are the ones that get most disordered by the occurrence of disasters, even though small community organizations can function without leaders but formal organizations cannot exist if there is no skilled personnel available, there is severe damage to critical facilities and lifelines such as electrical generating and transmission facilities, water storage, purification and pumping facilities, sewage treatment facilities, transportation facilities, police stations, hospitals and other private buildings. Prevention, mitigation and preparedness planning may be defined as the process of preparing a set of decisions for action in the future directed at achieving goals by most advantageous means.

Main Components of Disaster Management and Prevention

1. Early Warning – The main activities that are involved in early warning regarding the occurrence of the disaster are continuous observation, examination of surroundings, estimation of inconsistent situations and an effective and timely dissemination of information. Meteorological data, hydrological data from within the country as well as neighboring regions have to be obtained and analyzed.

2. Emergency Operations –Planning, management and communication are the main activities that come under the emergency; information available should be relevant, concise and accurate; the dissemination of information should also be of significance and quality standards. On the basis of the assessment procedures that have been implemented, operational plans have been framed to organize existing resources and create applications for additional support (Zeil, n.d.).

3. Rehabilitation–Once the disastrous conditions have passed, next step comes rehabilitation, what is required is analysis of damages, direct development planning, and examining and estimation of the measures and procedures. For example, if one has to look at food production, then first step is the analysis of damaged agricultural production areas, measures have to be implemented to anticipate food scarcity and undertake procedures and help of agricultural scientists to restore food production and distribution.

4. Prevention–Knowledge, awareness, dissemination of timely information, precautions and measures have to be established in all cases in order to prevent massive destruction. Hazard mapping and allocation of safe areas are the ones that have to be implemented in order to prevent disasters. For example, it is recommended that in order to prevent drought more and more trees should be planted so that there is sufficient rainfall hence severe drought can be avoided.

5. Disaster Classification –It is important to classify all kinds of disasters and natural hazards in accordance with their nature, time scale, influence, intensity, causes and the aftermaths. The disasters can be earthquakes, cyclones, drought, landslides, floods and so forth. All kinds of indicators have to be formed by which they are measurable.

Conclusion:

Disasters and hazards can be manmade or natural, they can be prevented from taking place, steps and measures can be formulated in order to prevent them from taking place but at times they cannot be avoided. Natural disasters are earthquakes, cyclones, floods, droughts, landslides, volcanic eruptions and Tsunamis, on the other hand, manmade disasters are the ones that take place due to human negligence such as explosions, leakage of toxins, gases or fires. Disasters may take place accidentally disasters and natural calamities, when they occur always lead to dire consequences such as loss of life, property, financial, economic and political resources, inventory, machinery and equipment and so forth. One of the most crucial aspects that has to be possessed is capacity capacity means the resources, strengths and capital which exists in households, associations, organizations and communities which

enable the individuals to mitigate, withstand, prevent, and recuperate from disasters at a fast pace. Data from satellite sensors play an imperative role in disaster management and crisis prevention. Their effective application depends not exclusively on technical specifications, but is influenced by factors such as data distribution, capacity building, institutional development and information sharing. These are some of the skills that need to be possessed by the individuals who are involved in disaster management. While efforts are being implemented to develop new technologies in data collection and processing, the flow of data from providers to users has to be improved.

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IMPACT OF SOCIAL MEDIA ON INDIAN BANKING SECTOR

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Abstract

In current era, social media is seeing a good impact on Indian banking sector. This study presents the current status of use of social media by the public and private sector banks in India. The government of India has been inquisitively finding a way to bring to mechanical progressions in the financial division in India. This paper records internet banking patterns, practices and desires for Indian shoppers and banks. There is little question within the incontrovertible fact that subsequent generation Banking has been derived by the usage of mobiles, technology, digitalization, social media, etc. Toward this end, every bank in India is using internet to increase customer engagement and satisfaction. This study aims at sorting out the impact of social on banking sector and pointing to the role that helps to understand the relationship between E- banking and the process of long-term and beneficial bank- customer relationships. The use of social media leads to engagement of most customers with bank's activities. At present, almost all the internet users are using social media tools to be in connected with each others. This study helps to analyze how social media make an impact of Indian banking sector.

Keywords: Social Media, E-Banking, Digitalization, Private Banks, Public Banks and Internet.

1. Introduction

The government of India has been curiously taking numerous steps to awaken technological advancements within the banking sector in India. In other words, banks are using Internet to speak with clients, build credibility, launch new products and offerings, show their company's history and it becomes visible that all they are doing as it relates to social responsibility. Introduction of debit cards, credit cards, NEFT, RTGS, mobile banking, web banking and plenty of different major initiatives to reinforce banking in India have its nice responses from the

consumer's end. Banks now understand that Internet's true power is found in its ability to attach brands directly with their clients. Financial services organizations center huge numbers of their promotions on their prizes and advantages programs. Internet Banking has gradually found its way into various aspects of our lifestyle, replacing traditional media.

In simple manner we are able to say the term social media is made up of two phrases Social and media for understanding proper meaning Social Media we must have to understand both the terms i.e., Social Media. Social means relating to society or to the way society is organized, Media means act of making contact with others to exchange information and develop professional or to access and share information between computers to allow them to operate interactively and social Media means is a series of websites and applications designed for people to build social networks or social courting with other people who proportion similar private or profession interests, activities, backgrounds. Social networking web sites are a bane and a boon. It depends on us how we use to. In business, social media is hired to promote product, sell brands, connect to current clients and foster new business.

2. Social Media and Banking Sector

In this converting environment, the banks focus on trying to connect with their customers on a personal level and the important thing to sustainable increase is dependent on a bank's capacity to efficaciously transition into a digitally savvy institution. We cannot ignore the fact that social media is one of the biggest element that is present in our lives today with this growth of social media, banking sector is now hired these platforms to promote product, sell brands, connect to current clients and foster new business. According to a report drafted by Facebook and The Boston Consulting Group (BCG), titled "ENCASHING ON DIGITAL: Financial Services in 2020, with the ongoing virtual force in India, the wide variety of users opting for on-line banking is anticipated to double to reach a 150 million mark by way of 2020, from the modern 45 million active urban online banking customers in India.

In this era how many youngsters do we see visiting a bank branch today? Hardly a few because everyone wants to save time and ignore those long queues. Banking sectors increasing coming up with new innovations with the help of social media in order to serve their customers more efficiently. Banks aren't only that make use of these platforms for promoting their new products or schemes, however also the usage of this to promote their events and supporting their customers to recognize the cutting-edge developments. The role of social media can be understood that as it supports the banking sector innovations.

2.1 Impact of social media on E-banking

If a question ascends why this media is becoming so widespread in India, it is because of interaction, live chat, status appraises, image as well as video sharing are few examples for popularity of social media. More over multiple roles played by social media beyond its care role of mere communicating information are another aspect of its popularity. Banks can take help of social networks to tell their customers about their products and upgrade them according to customers' feedback. Users of these administrations or different pursuers may leave a comment or Like. There is the talk about turnover in social networks. Social networks can act like wallet. It means that the purchases can be made through social networks. At the same time, turnover could happen on social networks or a combination of these, which is lending, the circulation of money and the flow of data.

2.2 Social media users in India

In India the users of social media are increasing day by day as per the report published by SEMursh India is the second largest country in which people are using social media after China. In India people are fond of social media. Indian internet users are spending average 17 hours on social media platform each week, which is far above than China and United States.

Table-1 List of Social Media Visitors

Social Networking Sites	Monthly visits(In Billions)
Facebook	1.6
YouTube	1.2
Quora	215.8
Instagram	191.1
Twitter	125.2
Linkedin	29.9

Source: SEMursh

From the data given it is clearly stated that the internet users are spending much more time on social media. With the help of social media tools, banks keep in touch with their customers. Earlier only private banks interact with customers on the social networking sites but now public banks are also using social media tools for interaction with their customers.

Table-2. Follower of Banks on Social Media

Banks	Twitter	Facebook	Instagram
SBI	4M	1.82 Cr.	1.5M
PNB	126.2K	7.11L	17.5K
Bank of Baroda	89K	14.64L	114K
Canara Bank	44.7K	15K	5.6K
Union Bank of India	113.5K	14.25L	55.5K
ICICI Bank	533.6K	54.42L	114K
HDFC Bank	356.6K	28.06L	135K
Axis Bank	304.2K	36.78L	509K
Kotak Mahindra Bank	239.1K	15.34L	35K

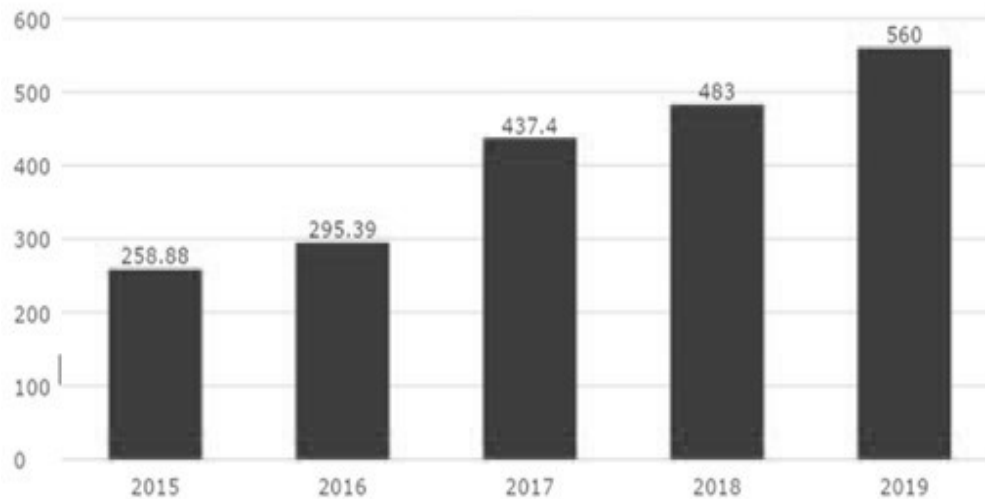
Source: Data compiled by Researcher

The above data shows a large number of followers of public and private sector banks. State Bank of India is on the top of list in the followers, who has more than 4 Million followers on twitter more than 1.82crore on Facebook and more than 1.5 Million on Instagram. Most of the public banks are active on social media which helps to make them customer orientation. Banks use social media networking tools to update the users with latest announcements and news related to banks.

3. E-banking in India

In India Internet banking was arrived in the late 1990s ICICI was the first bank to launch this service and introduced internet banking to its customers in 1996. SBI launched internet banking in 2001 and experienced good response including HDFC, Citibank. The Indian banking sector has accepted computerization since 1993. In 1987 HSBC bank was the first bank which introduced the ATM but now each and every bank have issued ATM card to its customers so that customers can easily transact without visiting the bank's branch. Indian banking sector has not stopped their E-Banking services to ATM card, Credit Card, NEFT and RTGS etc., but they have also launched their mobile application to provide flexible services to their customers. Almost every bank has now launched their mobile banking.

According to Statista reports 2019 India has 560 million active Internet users as of 2019. India is the second-largest online market, behind China. It is estimated that by 2021 there'll be around 636 million active internet users in India. The number of internet users had increased over the years in rural as well as urban areas.

Figure-1. Internet Users in India

Source: Statista Reports 2019

With reference to Statista reports 2019 and Kantar IMRB ICUBE Report with the ease of internet access, the number of active social media users in India stood at 310 million in January 2019 and by 2023 it is expected to reach 448 million.

The Internet users in India are increasing year by year. The increase in internet users leads to increase in the using internet banking. The banking sector is also influenced by the mass users of internet. As far as the internet users are increased the people want to save time so they need connectivity with their bank. So the banks have started Monbile banking facility to provide convenience to its customers. Few of the mobile banking applications launched by banks are-

State Bank Buddy, a service of State Bank of India is the first Indian Mobile Wallet Application available in 13 languages. Users (non SBI account holders too) can send money via Facebook, or to other bank accounts, book hotels, air tickets, railway tickets movie tickets, and much more.

LIME- M. wallet from Axis Bank The lime app is launched by Axis Bank providing your payments, according to the bank Axis Bank LIME is the country's first mobile app that offers Wallet, Shopping, Payments and Banking. Lime is a digital wallet.

HDFC Lite App using this mobile payment app, one can transfer money to anyone in their phone book, thereby ablation on the hassles of adding a beneficiary.

4. Importance of Social Media in Banking Sector

Today Social media is universal and pervasive, so banks can rely on it, understanding the capabilities and opportunities of various social media platforms with a unique ability to establish and maintain relationships, banks need to embrace resource and advocate for social media as an integral ingredient in their overall marketing strategy. The Banking industry is aware of the power of social networking, it gives the customers a voice and enables the banks to connect and reach out to far more customers as compare to traditional channels. The future of banking is digital and social media will play an important role in shaping the banks of the future. Directly the most recent incorporations, for example, Internet banking and Core banking have made financial activities more clients well disposed and simple.

4.1 It helps in increasing touch points

Banking establishments have historically struggled with creating shopper connections, mostly as a result of the move with customers only if required. Social media will increase connections, building on touch points in order that

shoppers will see and move with their bank or potential bank multiple times a month, week, or maybe day. In addition, the non-public nature of social media provides banks the chance to figure to make real relationships through stigmatization, client satisfaction, and added content.

4.2 Continues eye on customer feedback

The most important part of every activity banking sector doing for public is worthless without knowing the feedback, knowledge of what your clients think of your services and products is essential for surviving in the market and that is one of the reasons why so many companies are so actively engaged in customer's surveys. Web based life is where clients post endless surveys, assessments, and inputs about your items and administrations, without being approached to do as such. This information can be used by businesses to design new products and/or improve existing offerings.

4.3 Greater Personalization

A partnership between banks and massive social media giants can open up new potentialities in terms of personalizing the client expertise as information is shared between the 2 parties. Bank can have larger insight into their customers' persona, disbursal patterns, preferences and necessary life events

4.4 Younger Customers

Younger customers (18-30) do not forward to going to a branch to speak to a rep about their finances or discuss investments options, they prefer being able to manage their money from any location. This means their banks should be gift at each communication bit purpose, whether it is telephone, social media, web or mobile apps. This generation of consumers can get drawn to the convenience of winding up banking activities via their social media accounts. With the help of social media is now able to leverage on this by providing all the facilities through social media.

4.5 Improved Customer support

Social media is already getting used for customer support by most banks, but a great partnership with social media platforms will empower the banks to supply better support services. This will help in building stronger relationships with customer further improve reaction time.

5. Recommendations

This study sheds light on the impact Social media on banking sectors. Banking is an errand centered movement and furthermore manages individuals' cash. It explicitly needs a reasonable assignment stream, lucidity of language and phrasing and bolster accessible consistently. An example of customer focused online banking would be specialized banking for the Hindu community. It is vast business opportunity, to capitalize on that opportunity; banks must understand the user behavior, expectations and critical aspects of the Hindu culture.

There is a wide variety and large numbers of novice users among Indian E- banking customers today. They expect their experience to be similar to what they get at a service counter but this can be possible only if Banks are able to guide them properly regarding the use of their services, Banks need to view and reflect this through thoughtful designs of their offerings basic functions made obvious to average users and support available at all times. Besides short-term solutions, the long-term goals needed is to not just create but also measure user performance with the planning to make sure it's self-evident and transactions are truly self-controlled.

This study be a contribution to filling present gaps and to future research on banks' reasons for utilizing social media, therefore creating new paths toward future viability and developments, perhaps a comparative analysis of these and in other sectors of activity. The study also contributes to highlight the literature on study of the reasons for utilizing social media in banking sector and also their relationship with banks' financial and non-financial performance

6. Conclusions

Welcoming the communication networks has attracted the attention of varied businesses. Among the businesses, and groups who are using social Medias, banks consider this field as a good chance because their life relies upon customers. Social media changes the face and overall development of Banking sector and banks can work with their marketing team or experienced organization to develop content calendars in advance and existing social media polices can also help guide their efforts .In India, banking, like many other transactions, continues to be relation-based and in need of human assurance and intervention, true benefits are going to be seen when banks use this technology to minimize customer service costs and increase sales by maximizing self-service. Social media can be more useful in exchanging ideas or Marketing tool for companies, entrepreneurs, nonprofit organizations, including advocacy groups and political parties and government.

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PSYCHOLOGICAL EFFECTS OF COVID-19 ON INDIAN CULTURE

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Abstract

COVID-19 (Corona Virus Disease 2019) has significantly resulted in a large number of psychological consequences. The aim of this study is to explore the impacts of COVID-19 on people's mental health, to assist policy makers to develop actionable policies, and help clinical practitioners (e.g., social workers, psychiatrists, and psychologists) provide timely services to affected populations. We sample and analyze the Weibo posts from 17,865 active Weibo users using the approach of Online Ecological Recognition (OER) based on several machine-learning predictive models. We calculated word frequency, scores of emotional indicators (e.g., anxiety, depression, indignation, and Oxford happiness) and cognitive indicators (e.g., social risk judgment and life satisfaction) from the collected data. The sentiment analysis and the paired sample t-test were performed to examine the differences in the same group before and after the declaration of COVID-19 on 20 January, 2020.

Going by the current physical reach of the COVID-19 pandemic in the population there are bound to be long-term socio-economic and psychological implications. The swift rise of fear and anxiety among people due to uncertainty of the disease are coupled with essential yet socially disruptive measures like lockdowns and quarantines. These can lead to significant psychological and psychiatric disturbances such as post-traumatic stress disorder, depression, anxiety, panic disorders, and behavioural disorders. Predisposing factors include staying away from family, loneliness, misinformation on social media, financial insecurity and stigmatization. Healthcare workers, too, have a high risk of developing post-traumatic stress disorder and burnout; therefore, it is paramount to understand and research the psychological impact and key determinants to prevent, identify, and manage such problems.

Keyword: COVID-19, Anxiety, Depression, Stress, Public health emergencies, word frequency, analysis and quartier.

1- Introduction

Corona is a single stranded RNA virus that had its roots into the world from almost 60 years since its discovery in late 1960s. Corona viruses belong to the Corona viridae family in the Nidovirales order. The nomenclature of the Corona virus is named after the crown-like spikes on the outer surface of the virus structure. The virus has been infecting animals like chickens and pigs but there was no major human contraction to humans. Earlier, the allied viruses of the same family like the Severe acute respiratory syndrome coronavirus SARS-CoV in 2003, Human corona virus HCoV NL63 in 2004, HKU1 in 2005 [4], Middle east respiratory (MERS) in 2012, have shown their outbreaks and now the novel version of this virus has presented a threat of unmatched severity. According to the classification of International Taxonomy of Viruses (ICTV) has referred this novel pathogen as SARS-CoV-2

(formerly known as 2019-nCoV) in 2019. The first case was identified in the city of Wuhan, a Chinese seafood market and since then it has been exponentially increasing with an evident human to human contact via respiratory droplets while sneezing and coughing. The mode and transmission and other related details about the virus continue to be updated in every few weeks, leading to enhanced uncertainty. During this period most of the research has been focused on understanding and preventing transmission; exploring treatment options and issues with global governance. However we think that the psychological impact of this pandemic like stress and anxiety among the general population is also a grave concern. A study from China suggesting that more than half of the participants had a significant psychological impact of the COVID-19 pandemic. Another recent study from Denmark reported psychological well-being as negatively affected. In the United States nearly half were found to be anxious as per the survey conducted by the American Psychiatric Association. The same has not been studied in Indian population systematically; except anecdotal discussions and case reports.

In Indian subcontinent, as of 30 March 2020, according to the Ministry of Health & Family Welfare (MoHFW), a total of 1071 COVID-19 positive cases (including 49 foreign nationals) were reported in 27 states/union territories. These include 99 cases that were cured / discharged, one person who has migrated and 29 deaths.

Int. J. Environ. Res. Public Health 2020, the uncertainty and low predictability of COVID-19 not only threaten people's physical health, but also affect people's mental health, especially in terms of emotions and cognition, as many theories indicate. According to Behavioral Immune System (BIS) theory people are likely to develop negative emotions (e.g., aversion, anxiety, etc.) and negative cognitive assessment for self-protection. Faced with potential disease threat, people tend to develop avoidant behaviors (e.g., avoid contact with people who have pneumonia-like symptoms) and obey social norms strictly (e.g., conformity). According to stress theory and perceived risk theory, public health emergencies trigger more negative emotions and affect cognitive assessment as well. These negative emotions keep people away from potential pathogens when it refers to the disease. However, long-term negative emotions may reduce the immune function of people and destroy the balance of their normal physiological mechanisms. Meanwhile, individuals may overreact to any disease in case of less appropriate guidance from authorities, which may result in excessively avoidant behaviors and blind conformity. Therefore, it is essential to understand the potential psychological changes caused by COVID-19 in a timely manner. Since psychological changes caused by public health emergencies can be reflected directly in emotions and cognition, we can monitor psychological changes in time through emotional (e.g., negative emotions and positive emotions) and cognitive indicators (e.g., social risk judgment and life satisfaction). The emotions and cognition are usually measured by retrospective questionnaires, such as Oxford Happiness Inventory (OHI) Symptom Checklist 90 (SCL-90) Satisfaction with Life Scale (SWLS) [14], and Likert Type Attitude Scale. However, at the time of the COVID-19 outbreak in China, it was very difficult to conduct a traditional paper survey in the affected areas; online surveys rely on the cooperation of participants, and it is difficult to meet the requirements in time, and even brings extra burdens for participants. Since we did not know the time of COVID-19 declaration, it was impossible to measure people's emotions and cognition by a traditional survey in advance. There may be a certain deviation when requiring people to recall their mental state a week or more ago. Weibo data is emerging as a key online medium and data source for researchers to understand this social problem in a non-invasive way. Sina Weibo is a leading Chinese Online Social Networks (OSN) with more than 462 million active daily users in 2019. These users use Weibo functions (e.g. reply, @function) to interact with each other, forming rich user behavior data. The aim of this study is to explore the impacts of public health emergency COVID-19 on people's mental health, to assist policy makers to develop actionable policies, and help clinical practitioners (e.g., social workers, psychiatrists

2- Methodology

The current article is a narrative review of the existing literature on mental health symptoms and interventions relevant to the COVID-19 pandemic. A search of the PubMed electronic database was undertaken using the search terms "novel coronavirus", "COVID-19", "nCoV", "mental health", "psychiatry", "psychology", "anxiety", "depression" and "stress" in various permutations and combinations. A total of 47 citations were retrieved using

this method. On reviewing the above citations, 19 articles were excluded: 3 because they were available only in the Chinese language, and 16 because they dealt with other aspects of the COVID-19 outbreak, such as drug therapy, animal models, public health and preventive measures, and organization of health care systems. A careful review of these 16 articles revealed no material relevant to mental health.

The study has been approved by the Institutional Ethics Committee at Institute of Liver and Biliary Sciences, New Delhi (letter no: IEC/2020/73/MA04). A cross sectional survey design was decided to assess the initial psychological impact of COVID-19, (fears worries and impairment in sleep). We collected data using an online (anonymous) survey platform (Survey Monkey) as per Indian Government's recommendations to minimise face-to-face or physical interaction as citizens continue to isolate themselves at home. Potential respondents were invited through a text message, which lead them to a survey monkey page (designed by IT team at ILBS, New Delhi). All people who have registered at ILBS (2009 to present) since the inception were sent the SMS for participation in the FEEL-COVID survey.

The majority of published articles (18/28 of all articles; 64.3%) and all the observational studies (4/4; 100%) were from Chinese centres. There were two publications each from Iran and Canada; one each from Brazil, Singapore, India and Japan; and two publications with no specified country of origin.

3- The Psychological Effects on People from Different strata In India

There are following psychological effects due to COVID-19 Lockdown

A-Effect on Farmers:

The impact of COVID-19 on farmers has been very well explained by Dr Mahesh Chander in AESA Blog no. 107 and by Maji et al. (2020). In his interview to News 18 published on April 12, eminent scientist Dr MS Swaminathan stated that the rural economy is not prepared for the pandemic, but he closed on a positive note by saying that the mobilization of institutional organizations such as Panchayats in partnership with technology and extension service providers like KVKs, NGOs, FPOs and line departments can bring relief. One remedial solution in the current situation comes from Kerala State where Panchayat-level interventions are feeding the poor – through community kitchens with help from volunteers (Kudumbashree members, Anganwadi members etc.) – along with provision of essential commodities like food grains, pulses and sugar. Readers can refer to AESA Blog 109 for more details on how the State machinery of Kerala is working to solve the agrarian crisis. Farmers are left without adequate labour to harvest their standing rabi crops in many parts of the country and at the same time do not have enough financial resources for purchasing critical inputs like seeds, fertilizers, pesticides, feed and fodder, etc. With disruption in the supply chain and market linkages, farmers who are already burdened with debts are hit hard. The rise in farmer suicides every year is further intensified by COVID-19 now. Farmers, already stressed by numerous factors have been facing an unprecedented crisis which may last for a long time. Reports have indicated that farmer suicides occur due to poverty, alcoholism, depression and family disputes, etc. Rather than simply blaming the victim, this requires understanding the root cause of the problem in the first place. Though social research has been carried out on this there is a policy-practice gap. Punjab Agricultural University (PAU) has submitted a survey report to ICAR on 'Addressing farmers' distress through capacity building of farming families', based on findings after interacting with farmers on their mental health. The report is based on findings from 16 of the worst farmer suicide affected districts of Punjab, Maharashtra and Telangana. "Only a vibrant farmer can do vibrant farming, which is the need of the hour," says Dr Sarajbeet Singh, principal investigator of the project (The Times of India, 25 Feb, 2020). ICAR, with the help of SAUs, should plan and implement a technical and culturally sound suicide prevention programme, both at the national and the State level on a priority basis considering the repercussions this pandemic would have on the mental health. With strict lockdown enforced and lack of movement, landless labourers are left in the lurch without any work for their livelihood. Without COVID-19 the present season would have been an ideal situation for landless labourers, especially those actively engaged in harvesting, grading and packaging operations of wheat, rice, pulses, onion, along with sowing of summer

rice, pulses and cotton. This also happens to be peak season for many fruits such as mango, watermelon, muskmelon, apricots, plums, etc. But in the present scenario, landless labourers are solely dependent on State and Central assistance to battle the crisis. Though the Central Government and governments of different States have initiated various schemes for the welfare of rural poor including cash transfer, PDS, food supply, etc., pinpointing and gauging their effectiveness so early would be naive. The government under the Pradhan Mantri Garib Kalyan Yojana (PMGKY) has decided to deposit Rs 500/- into women's Jandhan accounts which is a welcome move. But this cash transfer promised to certain section of the poor is both small and narrowly targeted. Under PM-KISAN scheme, every farmer is entitled to Rs 6,000 annually in three installments, but landless agricultural workers, who are among the poorest of the poor, are not covered under this scheme. On one side we have witnessed farmers facing difficulty in harvesting their standing crop and on the other there are agricultural labourers unable to provide this service – and both sides suffering. This conundrum has left the agricultural sector reeling under severe problems which needs to be addressed at the earliest so that people do not fall into the debt traps of moneylenders to meet their basic needs. With strict lockdown enforced and lack of movement, landless labourers are left in the lurch without any work for their livelihood. Without COVID-19 the present season would have been an ideal situation for landless labourers, especially those actively engaged in harvesting, grading and packaging operations of wheat, rice, pulses, onion, along with sowing of summer rice, pulses and cotton. This also happens to be peak season for many fruits such as mango, watermelon, muskmelon, apricots, plums, etc. But in the present scenario, landless labourers are solely dependent on State and Central assistance to battle the crisis. Though the Central Government and governments of different States have initiated various schemes for the welfare of rural poor including cash transfer, PDS, food supply, etc., pinpointing and gauging their effectiveness so early would be naive. The government under the Pradhan Mantri Garib Kalyan Yojana (PMGKY) has decided to deposit Rs 500/- into women's Jandhan accounts which is a welcome move. But this cash transfer promised to certain section of the poor is both small and narrowly targeted. Under PM-KISAN scheme, every farmer is entitled to Rs 6,000 annually in three installments, but landless agricultural workers, who are among the poorest of the poor, are not covered under this scheme. On one side we have witnessed farmers facing difficulty in harvesting their standing crop and on the other there are agricultural labourers unable to provide this service – and both sides suffering. This conundrum has left the agricultural sector reeling under severe problems which needs to be addressed at the earliest so that people do not fall into the debt traps of moneylenders to meet their basic needs.

B-Effects In Students

The COVID-19 crisis brought a unique dilemma to the student fraternity. With the colleges and universities closed, the students were left with no option but to move to their homes hastily. In most cases it was mandatory to leave the hostel while in some other cases the students were allowed to stay with requisite permissions. These sudden changes have brought immense agony to the students who are already burdened with their semester and competitive exams, research and academic activities. With the ever increasing unemployment rates every year, this pandemic brings a double whammy to the students. Moreover the economy being at the lowest point the IMF is echoing concerns of a global recession in the making. India is no different in the current scenario with constantly decreasing growth rates – presently projected at 1.9% by the IMF. Thus it is a no brainer to The COVID-19 crisis brought a unique dilemma to the student fraternity. With the colleges and universities closed, the students were left with no option but to move to their homes hastily. In most cases it was mandatory to leave the hostel while in some other cases the students were allowed to stay with requisite permissions. These sudden changes have brought immense agony to the students who are already burdened with their semester and competitive exams, research and academic activities. With the ever increasing unemployment rates every year, this pandemic brings a double whammy to the students. Moreover the economy being at the lowest point the IMF is echoing concerns of a global recession in the making. India is no different in the current scenario with constantly decreasing growth rates – presently projected at 1.9% by the IMF.

4- Psycho-Social Effect of the Covid -19 Lockdown:

Social distancing seems to be hitting people even more than the scare of the deadly virus. People are getting highly restive and agitated in spite of social media connectivity. Cases of domestic violence have more than doubled in the country during the lockdown period. We need to contain the psychological damage by diverting maximum resources towards strengthening our healthcare system.

OVER two weeks of the lockdown brought on by the Covid pandemic have struck people as a painfully long period of isolation. Social distancing seems to be hitting people even more than the scare of the deadly virus. People are getting highly restive and agitated in spite of social media connectivity. Cases of domestic violence have more than doubled in the country during this period. The government is currently all caught up in dealing with the immediate threat of the pandemic, which has disrupted daily life and toppled the markets. It will soon be imperative to consider and take proactive measures about the more long-term effects of the pandemic and a long-drawn lockdown.

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Humans have evolved to be social creatures and are wired to live in interactive groups. Being isolated from family, friends and colleagues can be unbalancing and traumatic for most people and can result in short or even long-term psychological and physical health problems. An increase in levels of anxiety, aggression, depression, forgetfulness and hallucinations are possible psychological effects of isolation. Mental conditions may be precipitated for those with underlying pre-existing susceptibilities and also show up in many others without any pre-condition. Personal relationships help us cope with stress, and if we lose this outlet for letting off steam, it results in a huge emotional void which, for an average person, is difficult to deal with. Just a few days of isolation can cause increased levels of anxiety and depression. Add to it the looming threat of a dreadful disease being repeatedly hammered in through the media and you have a recipe for many shades of mental and physical distress.

5- The Psychological Effect of Locked down on Mental Health

The effects of locked-down on mental health may be explained as below-

I-Topsy-turvy times:

“These are strange times,” says Pratima Murthy, head of department, psychiatry, at the National Institute of Mental Health and Neurosciences (NIMHANS) in Bengaluru. “What we generally prescribe for the elderly is social interaction for their emotional wellbeing. And now they’ve been told the opposite: to physically distance even from their grandchildren ‘.——A review published recently in *Lancet*, which studied literature on the psychological impact of quarantine — the separation and curtailed movement of people potentially exposed to a contagious disease — during previous epidemics such as SARS, found proof of a range of psychological conditions, from post-traumatic stress symptoms to confusion, anger, depression, stress, insomnia and emotional exhaustion. “Activating your social network, albeit remotely, is not just a key priority, but an inability to do so is associated not just with immediate anxiety, but longer-term distress,” says the paper. Communicating, even remotely, with family and friends, is “essential,” it adds.

II-Invisible enemy:

That’s what Bonoshree (name changed on request), 25, is trying to do. Diagnosed with depression two years ago, Bonoshree works in a publishing house and lives alone in Delhi. She used to walk or step out for coffee to keep her spirits up; now all that’s stopped.

Her worried parents video-call her three times a day. “I have to create a facade to keep them from worrying. But the truth is, I am extremely lonely. I am hardly ever hungry and I can’t sleep well.” Work keeps her busy in the mornings and a friend checks up on her, “but nothing replaces human connect, you know,” she says. She has reached out to her counsellor to see her through.

For those with anxiety disorder, it might be worse. Bengaluru-based psychotherapist Natasha Vijay talks of one of her clients who is struggling to cope with the distress of facing this ‘invisible enemy’. The pandemic has been very hard on this woman, the psychotherapist explains, because all she hears constantly are health warnings and alerts.

6- Discussion:

The current study investigated the initial psychological impact of COVID-19 outbreak in Indian population. As the disease progressed, concerns regarding health, economy, and livelihood increased day-to-day. The findings of the pandemic’s impact on mental health could help inform health officials and the public to provide mental health interventions to those who are in need. This can guide researchers to plan prospective longitudinal studies for assessing treatment need.

There are mental health concerns like anxiety, worries and insomnia especially after the declaration of lockdown in India on 24th March, 2020. Government of India has launched helpline numbers to provide guidance and counselling, in collaboration with different Institutes of national importance. World Health Organization has urged to take the necessary precautions to tackle the negative impact of the spread of Coronavirus on psychological health and well-being.

Overall, among the 653 respondents 33.2% had significant (mild / moderate /severe) psychological impact regarding COVID-19. This finding was different from the study conducted in china by Wang et al which reported 53.8% of respondents suffered a psychological impact from the outbreak, ranging from moderate to severe among 1210 respondents. Since these findings were during the early phase of COVID-19 outbreak in the country, chances are they could have changed over time and hence, should be interpreted accordingly. In the past, during outbreaks such as ‘Ebola Virus’, individual and community at national and international had a major and wide spectrum of psychosocial impacts due to the sudden outbreak of the disease. It is likely that people are relating contracting the virus with a fear of falling sick, helplessness, hopelessness, stigma and even death.

Though there are few large-scale observational studies available in this field to date, it is clear that the COVID-19 pandemic has led to a vigorous and multifaceted response from psychiatrists and allied professionals, and that mental health is clearly being taken into consideration at multiple levels – in the general population, among healthcare workers, and in vulnerable populations. Though the quality of evidence in the available literature is relatively low, it still contains numerous valuable observations and suggestions for all professionals working in this field, whether they are associated with psychiatric or general hospitals or working in the community. As the number of patients affected by this pandemic continues to increase, the psychiatric profession – particularly in Asian countries – faces both a challenge and an opportunity; the challenge of addressing the numerous barriers and limitations identified in the above literature, but also the opportunity to implement those suggestions or recommendations which are feasible at a local or regional level. The long-term mental health impact of COVID-19 may take weeks or months to become fully apparent, and managing this impact requires concerted effort not just from psychiatrists but from the health care system at large (Maunder, 2009). There is a need for further research, even in the form of preliminary or pilot studies, to assess the scope of this pandemic in other countries, particularly in those where mental health infrastructure is less developed and the impact is likely to be more severe (Duan and Zhu, 2020). Researchers should also attempt to assess the impact of COVID-19 on other vulnerable populations, such as children and adolescents, those in remote or rural areas who face barriers in accessing health care, and those belonging to lower socio-economic state. Further, there is a need to develop mental health interventions which are time-limited, culturally sensitive, and can be taught to healthcare workers and volunteers. Once developed, such interventions should be

tested, so that information regarding effective therapeutic strategies can be widely disseminated among those working in this field.

Conclusion

COVID-19 pandemic has caused a lot of uncertainty in the lives of Indian public, just like their global counterparts. Our survey is one of the first mental health related data from India, during the initial phase of COVID-19 pandemic and indicated that a significant proportion of them have had a psychological impact during the crisis. The factors that predicted higher impact were younger age, being female and having a known physical comorbidity. There is a need for considering mental health issues by the policy makers; while planning interventions to fight the pandemic.

Though there are few large-scale observational studies available in this field to date, it is clear that the COVID-19 pandemic has led to a vigorous and multifaceted response from psychiatrists and allied professionals, and that mental health is clearly being taken into consideration at multiple levels – in the general population, among healthcare workers, and in vulnerable populations. Though the quality of evidence in the available literature is relatively low, it still contains numerous valuable observations and suggestions for all professionals working in this field, whether they are associated with psychiatric or general hospitals or working in the community. As the number of patients affected by this pandemic continues to increase, the psychiatric profession – particularly in Asian countries – faces both a challenge and an opportunity; the challenge of addressing the numerous barriers and limitations identified in the above literature, but also the opportunity to implement those suggestions or recommendations which are feasible at a local or regional level. The long-term mental health impact of COVID-19 may take weeks or months to become fully apparent, and managing this impact requires concerted effort not just from psychiatrists but from the health care system at large (Maunder, 2009). There is a need for further research, even in the form of preliminary or pilot studies, to assess the scope of this pandemic in other countries, particularly in those where mental health infrastructure is less developed and the impact is likely to be more severe (Duan and Zhu, 2020). Researchers should also attempt to assess the impact of COVID-19 on other vulnerable populations, such as children and adolescents, those in remote or rural areas who face barriers in accessing health care, and those belonging to lower socio-economic state. Further, there is a need to develop mental health.

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IMPACT OF COVID- 19 ON ANNUAL COMPENSATION AT AXTRUM SOLUTIONS PRIVATE LIMITED

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Abstract

Crafting solutions to business problems including technology is smarter and efficient way of doing things in the present era. The present paper focuses on multinational organization Axtrum Solutions Private Limited which provides technology enabled business solutions. The important indicator of organizational performance is its human resources. To be competitive in a global marketplace an organization should manage human resources as strategically as any other department. Axtrum Solutions Private Limited is an example of strong human resources strategy coupled with efficient and effective management. It serves as a strong example for contributing to the efforts of its employees based on the review of the performance by increasing the annual compensation to approximately 80% in the scenario of pandemic COVID- 19.

Key-Words: Pandemic, Annual Compensation

The company was founded in 2009 as Blue Thread Solutions, Axtrum operates from its offices in London and Noida (India) and serves customers in the UK, USA, Continental Europe and India. It is a solutions driven organization and finds solutions to complex business problems. Innovation is the focus and it keeps finding new and better ways of doing things. It hires the best talent that shares the passion and values of the organization. Focused on delivering value for the business, they aim at being the partner of choice for the customers. Axtrum's management team has many years of delivering business solutions and helping customers globally.

It is specialized in digital transformation solutions, sensible business intelligence, business support services, enterprise solutions- applications, integrations and support.

A pandemic is defined as an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people.

COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic affecting many countries globally.

Review of Literature

- Rewards and compensation controls are a significant predictor of organizational performance, and researchers must focus this to measure organizational capabilities and organizational performance (Hameed et al. 2014; Rehman et al. 2018).
- In 2009 a novel influenza A (H1N1) virus emerged. This was detected first in the United States and spread quickly across the world. This H1N1 virus contained a unique combination of influenza genes not previously identified in animals or people. The virus was designated as influenza A (H1N1)pdm09 virus. Though pandemic primarily affected children and young and middle-aged adults, the impact of the (H1N1)pdm09 virus on the global population during the first year was less severe than that of previous pandemics. Estimates depicts that 0.001 percent to 0.007 percent of the world's population died of respiratory complications associated with (H1N1)pdm09 virus infection during the first 12 months the virus circulated.
- Employees work hard when they know that they will receive the reward of their efforts, and employees comparatively make less efforts in that situation when they see the organization will not pay according to their efforts (Bonner and Sprinkle, 2002).

Research Gap

The present paper addresses the gap for contributing to the effort made by employees in 2019-20 in an organization on annual compensation in a positive manner even in the scenario of COVID-19 at Axtrum Solutions Private Limited.

Need For The Study

This work will be a step to consider efforts of employees of the organization as a key indicator which will ultimately enhance the performance of the organization. The policy and programmes of the organization should be such so as to contribute for the efforts made by employees even in the scenario of pandemic.

Significance of the Study

The research work will be for academic purpose as well as it will be helpful for government planners, research scholars and common public.

Analysis

The present study has been made on the basis of primary data collected from one of the employees of Axtrum Solutions Private Limited.

The annual increment of salary is usually done from April of every year after reviewing performance of each and every employee done in previous year. The decision of increment also depends on the discussion and meeting of each employee with the specified panel members of management who review the performance of the employee in an organization.

To bring valuable and sustained contribution to bring distinction and high repute to Axtrum Solutions Private Limited revised annual compensation of the employee to approximately 80% with effect from April 01, 2020 in the scenario of COVID-19.

Though the incremented salary was paid to the employees on June 01, 2020 with retrospective effect from April 01.2020.

Conclusion

Employers ask employees to work hard, to be pleasant, and show the results. The investment of time and money into human resources can, and will, pay off in positive organization outcomes if a strategic management system is in place and well-used. The contribution to the efforts of employees is a key factor in motivating employees and seeking the best talent in an organization for a lifetime. Axtrum Solutions Private Limited has been an example of success through strategic human resource management through good times and bad.

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IMPACT OF COVID-19 ON UTTARAKHAND'S ECONOMY

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Abstract:

Coronavirus disease (COVID-19) has taken the entire world by surprise and disrupted not only the lives of people but also economies of all affected nations. This global pandemic has exposed vulnerabilities of the system across multiple sectors. The two main concerns remain, saving the lives of citizens which is normally achieved by extended periods of lockdown to prevent the spread of pandemic and saving the economy which is still a work in progress. Governments are having hard time in facing the repercussions of this 'shutting down' of economy due to lockdowns. This is especially tough for developing nations like India. While a lot of discussions have been done on the national level, this paper explores the effect of the pandemic at a more granular level of state. The main objective of the study is to analyse the impact of COVID-19 on economy in the state of Uttarakhand. Since Uttarakhand, being 'dev-bhoomi', has been engaged in heavy tourism with a significant portion of its revenue tied to these activities, it is natural to scope the impact of the pandemic which has affected the tourism sector the worst. This paper also attempts to examine the policy paradigm changes warranted and the level of expected revival package in Uttarakhand.

I. Introduction to Covid-19

Coronavirus (COVID-19) pandemic has negatively impacted even the strongest economies around the globe. The Indian economy is no different and has been hit severely by this global crisis. There has been an unprecedented rise in number of COVID-19 patients across the world as well as in India. As on 1 July 2020, 585493 people in India have been affected by COVID-19. This rise of pandemic has cornered everyone into an area of uncertainty.

Primarily there are two major challenges that every economy is facing due to COVID-19 pandemic. First, to restrict the spread of coronavirus so as to save the country's population from being affected by the disease by following lockdowns and other distancing measures. It has been known that COVID spreads exponentially and once it rises it overburdens the medical system so much that treatment becomes no longer an option for many. Second, to save the country's economy from the unfolding economic crisis due to industries being negatively impacted by the pandemic and the aftermaths of global and national lockdown.

To bring the situation regarding the pandemic in control the governments across the globe have implemented the guidelines presented by the World Health Organization in their countries. These guidelines put into act the practice of social distancing and self-quarantine. Lockdown has been put into action and the public has been requested to stay in their houses during the lockdown period. With the exception of essential services, every other economic or social activity has been brought to a stop. All educational and government institutions have been

closed along with all factories, market areas, restaurants and other places frequented for entertainment. Social ceremonies related to that of weddings and funerals have taken place after certain preventive measures have been ensured. Nations have closed their borders and have been locked down internally. Transport via inter-state has been discouraged and at someplace sealed, in India. This has resulted in the economy being brought to a halt. As of yet no systematic estimates are available about the total economic loss during the lockdown/ curfew period in any country including India. World Bank, IMF and many other international organizations have been projecting zero growth of various nations. Although these projections do vary, they all indicate a substantial negative impact on various economies.

The exact impact will differ in accordance to the period of lockdown, which varies from country to country. The main objective of the study is to analyse the impact of the pandemic on the economy of the state of Uttarakhand. This paper also attempts to examine the policy paradigm changes warranted and the level of expected revival package of Uttarakhand.

Uttarakhand's Economic Features

Uttarakhand was carved out from Uttar Pradesh on 9th Nov 2000 with a motive of rapid and sustainable growth of this region. In the year 2001, The Uttarakhand region, when part of Uttar Pradesh, comprised of 8 hilly districts which were among the most under-developed regions of Uttar Pradesh. To overcome the problems of this area, need for special efforts over and above those aimed at the development of the state in general was recognized. The Centre and State provided separate funds with the specific objectives of promoting development program in the region and this assistance continue to increase from one plan to the next. However, despite these efforts, neither the stated goal of development nor a sustainable pattern of development could be achieved. As a result, the demand for a separate state gained ground. Though the new state was formed, it inherited its fragile economy. The specific economic features of the region can be listed as:

1. The over dependence on agriculture, despite constraints on agricultural development as a result of topographical conditions has been observed in the absence of a developed industrial sector.
2. Due to lack of sufficient infrastructure facilities to promote all round development of the region, wide disparities have been observed specially in hill districts.
3. Lack of gainful employment opportunities thus leading to widespread poverty and largescale migration of competent youth from hill region to other areas.
4. Female population is over-burdened with work as a result of this migration of their male counterparts.
5. Policies formulated and implemented without considering local condition and constraints are having damaging effect on socio-economic state of the region.
6. Excessive exploration of the forest wealth is resulting in environmental degradation.
7. In the remote hilly regions of Uttarakhand, people are surviving because of the remittances coming yearly from migrant workers all over India and abroad.

Apart from above list, a major sector to think about is Uttarakhand's tourism and the dependency of state's economy on this sector. Tourism sector contributes to 25-30% of state's GDP and thus can rightly be considered one of the most important industry to protect from any external/internal disrupting factors.

II. General Impact of the Pandemic

The management of the pandemic has largely been a union and state government affair. The state of Uttarakhand has managed quite well in the prevention and containing of the virus by enforcing several adversaries in place. But this hasn't helped in preventing the backlash on the economy of the state. The virus has thrown all daily activities in a state of disarray. This has impacted the tourism and trade sector severely.

Right now, the commerce sector has become pretty vulnerable in the palpable condition of the deteriorating economy. Certain factors that have been brought into play as preventive measures which have uprooted the normal

lifestyle of the public. Social distancing, sealing of state borders, issues of passes, identification of infected patients, keeping suspected infected persons in quarantine, admission of patients in hospitals has been the task of the civil and medical administration. All private clinic, hotels and places of public entertainment have closed their door in response to the fear of the spread of the aforementioned virus. Employers have refused to pay their workers during the covid period. Even after the appeal of the Prime Minister to not remove people from their employment, many companies have terminated or suspended services of many of their employees. These include airlines, media, both electronic and print, to mention a few. Government employees have received their assured income. Though the employees of the corporate and informal sector have faced unemployment and loss of income. Therefore, income of the citizens has declined. This has resulted in the rate of unemployment to increase quite steadily and goods, like refrigerators, televisions, vehicles, etc. due to the fear that the virus has instilled in the general masses. The ordinary economic activities have been brought to a halt. This includes transport via airlines, railways, public vehicles, etc. This has resulted in the loss of income in many households due to inactivity in the tertiary sector. Producers and sellers of perishable items are also facing a great loss in their businesses. People are not approaching banks for investment purposes. Evidently the impact on the economy is widespread towards reduction in income of people. The fall in economy has been quite hard for daily wage earners, since their source of income has come to a stop. This has resulted in poor living conditions and the unfulfilling of basic needs for many people. Most of them have faced hunger for many days. Some of them were fed by the civil society organizations and government agencies, but many remained away from their coverage due to fear of the virus. Similarly, the employees working in the private sector, who either did not get wages/pays during lockdown or were laid off or retrenched have been facing hardship. Many companies fear even bankruptcy due to loss of business.

COVID-19 has halted the operation of all major industries of the economy from aviation, to tourism and entertainment. As all of them are entangled in a cruel mesh, many of them are at the brink of a full-blown bankruptcy, and others are working out ways to cut costs by freezing salary hikes, introducing a cut in pay and a lay-off at large scale. This would only add to state's unemployment ripple and such drastic measures would only dip consumption hindering a quick recovery from the ongoing slump. The pandemic has tremendously increased their liabilities. The deteriorating economic situation has badly affected union and state government finances due to fall in tax collection. It is duty of the government to lead the state out of the crisis by taking appropriate measure and one of them certainly needs to be an action plan for reviving tourism sector.

III. Impact of COVID-19 on Uttarakhand Tourism

Uttarakhand is popularly called 'dev-bhoomi' because it's home to the most regarded Hindu Chardhaam, and innumerable temples. This naturally attracts a multitude of visitors from all over India and from across the globe. Tourism sector supports the livelihood of a vast number of locals in Uttarakhand and is affected the worst by COVID-19 pandemic. Approximately 35 crore tourists come to Uttarakhand annually which support a lot of local businesses. Any natural/man-made calamity which affects this sector results in loss of revenue for all of these businesses. The 2013 floods in Kedarnath region resulted in loss of 12,000 crores approximately.

COVID-19 pandemic has crippled the tourism industry. Travelling is no longer an option with lockdowns and is one of the most dangerous things to do after lockdown. Due to this, businesses in tourism sector are being forced to shut down and some may never be able to re-establish themselves again. Hotels, restaurants and other businesses who survive will have to follow strict sanitization guidelines which will increase their operational expenses. An estimated loss of 500 crores was recorded by Uttarakhand Tourism by the end of April due to the pandemic. Mussoorie, which is one of the most popular hill stations and attracts a lot of tourists, itself recorded a loss of 150 crores due to COVID by May 15th, 2020.

Even with all this there is still some light at the end of tunnel. The industry would be able to rebuild itself because of the general inclination of people to travel. Though lockdowns have restricted people they have also made them

eager to travel again whenever it appears safe to do so. An example is that 422 e- passes to travel were issued on a single day when chardham yatra was opened only for Uttarakhand's residents on July 1st, 2020. However, now is an even more crucial time for the government to support the industry and businesses as much as it can through concrete measures.

IV. Recovery with Revival Package

A financial revival package appears to be the need of the hour to reinvigorate economic growth or at least prevent further damage. The revival package has to cover the loss of private consumption as well as private investment. This should also include the financial support to the people who suffered loss of their livelihood and provision for saving the companies from impending bankruptcy. The important question is where this public expenditure is to be made. Priority area has to be revival of jobs in the state. Most of the job loss has been in the unorganized sector of the economy. The victims of job loss in this sector need food and shelter immediately and jobs on normalization. The programs like MGNREGA would have to be doubled and opened in urban colonies of the poor along with the rural areas. MSMEs have to be revived with financial support. The state government can play a vital role in both the areas.

A cut in intermediate tax in this time would surely help the economy. Also, it is essential that the union government transfers the state's share of GST amount due immediately. A relaxation in respect of GST tax has already been given. However, the union government should be proactive in releasing the GST due amount of firms immediately. The money at the hand of firms is essential now. The global demand will be low in the coming 2 to 3 quarters. Barring government, households are the principal source that can trigger the economy by demanding goods. The money at the hand of the poor people by cash transfer would be effective because they will probably spend the entire amount in fuelling demands as their saving propensity is negligible. Lowering tax rates for the lower middle income class also make sense for the same reason. Giving money only to the industry would not help as they may just restructure their debt and may not increase production due to lack of demand.

V. Conclusion

This encounter with the current pandemic has brought home a great lesson. In case of pandemic like covid-19, it is the State which has to bear the brunt. Since as of now, it is not certain how long the present situation shall continue and also the words may face more such challenges in the future, the nation state must be properly strengthened and put in the centre stage. The role of nation state has been greatly weakened, due to the adoption of the policies of liberalisation, privatisation and globalisation. The country saw the market forces receiving a large role in areas reserved for public sector. The shift from socialism to capitalism, resulted in the flourishing of the private sector at the cost of the state sector. The latter now has reduced capacity to act in the hour of crisis. The present crisis has exposed the state to be unable to protect health, employment and livelihood of its citizens.

In the light of present experience, the terms of discourse needs to be changed in favour of state government administration. The government now faces substantial challenges and concerns, but the state should not prefer hasty remedies that do not resolve underlying concerns and avoid permanent solutions. Substantial and structural reforms are need of the hour to focus on the strengthening of the Indian Economy. Only then meaningful contributions towards a more robust and resilient nation can be assured.

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IMPACT OF COVID-19 ON CHILD TRAFFICKING IN INDIA

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Abstract

The Problem of child trafficking is prevailing all over India and increasing day by day. Presently Covid-19 is acting as a catalyst to boom this problem at a drastic level. National crime records bureau reported total 8132 cases of human trafficking in India 2016. This report also show that in every eight minutes, one child got disappeared. This situation will become worst due to this Covid-19 as explained by Amnesty International Agencies-

“Millions more children in the world over risk being pushed into labour as a result of crisis caused by Covid-19, which could lead to the first increase in child labour in 20 years”.

Job losses and rising poverty because of lockdown and sickness is likely to force more children to seek exploitation and hazardous job as family use every available means to earn money for their survival. This financial crisis and stress increase the risk of child trafficking. This will create opportunities for traffickers to recruit children into commercial and sexual exploitation, child labour etc.

Children may not be the face of covid 19 Pandemic but they are one of its greatest victims.

—Antony Guterres, Secretary General (UN)

Introduction:

During this Covid -19 Pandemic whole world is facing problem related to Health, and Economy. India which was on second position in world population and have weak health infrastructure are dealing with this pandemic in well organised manner. By implementation of Disaster Management Act. Indian government announce national lockdown on 24 March, on recommendation of health expert. All over India provision of Disaster Management Act 2005 and Epidemic Act applied by central authority to cure this problem of Covid- 19 by making Action Plan. But during this problem another miserable situation of migrant labourer was arise, which affect the Indian social and economical aspect very badly.

Migrant Labours, which include adolescent labour too, now a days in a very worst situation. They had neither work nor any social security. Relaxation in labour law ,during unlock 1 by state government of Maharastra, Gujrat, Uttar Pradesh etc, create complication in existing situation of workers. Suspension of Trade Union by some states authority create a big problem, as now, there is no one who advocate for their rights as worker. This will be converted gradually in to bondage and wage less labour.

Factory owner will look to cover their financial losses by employing cheap labour. Child worker are not in position to negotiate wages or their rights. A large number of children will be forced to out of school, bearing the

burden of their families. Thousands of children may be Trafficked to production factories across the country, where they will be paid meagre to no wages and will most likely face extreme physical mental and sexual violence. Present financial distress caused by Covid-19 increase the risk of child trafficking.

Child Trafficking:

Children, which are one third of the Indian population, are the true soul of India. Indian Jurisprudence always protects the rights of children and every keen effort has been done by the convenor of Indian legal system to give children a protected environment, safe life, and peaceful upbringing. Children are not only the relevant assets of a nation but they are the nation in themselves. How a nation represents itself on world's stage highly depends on its treatment towards upcoming generation. National and International organisations are always in a process to protect the rights and interest of children.

Now the relevant question is that whom we should consider as a child. A child means a person who has not completed eighteen years of his age; under Juvenile Justice Act The convention on the right of child 1989, define child as "any one under the age of 18 years will be considered as a child.

In India, there are majority of children, who suffers from many types of maladjustment. Absence of healthcare, poor education system and lack of basic needs which are necessary for the growth of a child became the cause to convert a child into a juvenile delinquent or victim of crimes. In trafficking children was tricked, forced or persuaded to leave their homes and are moved or transported and then exploited, forced to work or sold. Child trafficking and child labour are two sides of the one coin. Children are trafficked first and then placed in labour either forced or for earning a sub minimal wage. Young boys and girls are forced into sexual exploitation. Usurious money lending and debt bondage will also become a force multiplier for sourcing child labour from the countryside. The objective of child trafficking is forced child labour. Children are cheap labour and are able to complete jobs that adults cannot due to their size. So the demand of child labour always remains a present consequence of child trafficking. During Covid 19 migration of workers create a big problem for industries, this situation increase the problem of child trafficking.

Trafficking of Children due to Covid-19:

Over 42.7 million children are out of school in India. This may force many children into labour market for survival. Census 2011 already puts the number of working children between the ages of 5 to 11 at 10.1 million. Various policies and relief funds of government in response to Covid-19 Pandemic do not heed to the protection of the children who have either migrated or whose parents have migrated in search of work.¹

Same as Ebola crisis in West Africa witnessed spikes in child labour, sexual abuse etc. Present crisis may lead to increase in incidents of child trafficking and child labour as parents lose their jobs and with the increase in cases of domestic violence, children may tend themselves in tensed environment at home affecting their mental and emotional well being. This situation will provide a chance to the traffickers to induce children to go to new places and cities to fulfil their dreams. Children and more specifically girls are more likely to be burdened with the household responsibilities. So there may be increase in exploitation or domestic violence by families, due to which children may think off to leave their house and can be trapped in the trap of traffickers.

Most of the migrant workers are Dalits and Adivasis, who left their house to escape the inequalities, atrocities and violence. Child trafficking can have both short and long term effect on child right but impact last a lifetime of child. The poor working condition, no access to education, physical injury, inability of opportunity for social and emotional development have a serious impact on child's mental and physical health.

Anti Child Trafficking Law in India:

India is a party to the convention on Right of children and International covenant on economic, social and cultural right, also a state party to the optional protocol on sale of children, child Prostitution and child pornography.

The 1949 Convention against Trafficking gave rise to the first Indian Law against trafficking:-

1. The submission of immoral traffic women and girls Act, 1956.
2. Children (pledging of Labour) Act, 1933.
3. Immoral Traffic (Prevention) Act, 1956.
4. IPC-Section 366, 360 B, 372, 373, 370.
5. Bounded Labour system(Abolition) Act, 1976.
6. Child Labour Act 1986.
7. Juvenile Justice Act 2015

Proposed Bill:

The trafficking of Persons (Preventing, Protection and Rehabilitation) Bill 2018.

This Bill had a provision of aggravated forms of trafficking. These include trafficking for forced labour, bearing children begging or for inducing early sexual maturity, it attracts a higher punishment. It provides prevention, rescue and rehabilitation of trafficking person.

In July 2018, this bill was introduced in Lok Sabha by Menaka Gandhi, but this bill was not passed and got lapsed.

International Response:

Trafficking of children has been internationally recognized as a serious crime that exists in every region of world. So every effort to prevent this crime done by international community as:

- UN Convention on The Right of Child 1989
- ILO Worst Forms of Child Labour Convention 1999
- UN Protocol To Prevent, Suppress and Punish Trafficking in Persons Especially Women And Children.

According to International Labour Organisation 1.2 Million children are trafficked each year over the world. There are some international frameworks which deals with the matters of child trafficking which often involves both labourer and migrant child as:

- ILO Minimum Age Convention 1973
- ILO Forced Labour Convention 1930

Causes of Child Trafficking:

Children due to their immature mental state are more prone to get affected by trafficking, specially for the child labour and sexual abuse. Now young children of migrant workers, who depend upon their parents is at risk of dropping out schools due to loss of livelihood of their parents during Covid-19. The factor responsible for child trafficking can be summarised as:-

1. Economic Crisis during Covid-19.
2. Demand of cheap or free labour.
3. Poverty/Financial distress.
4. Demand of workforce who can easily be controlled.
5. Lack of Education.
6. Effect of Pandemic or disaster.
7. Dropping out school by children for family survival.
8. Absence of proper law for prevention of child Trafficking.
9. Improper mechanism of child care.

10. Unemployment of Parents.
11. Decline in Living standards.
12. Insufficient Social Protection System.
13. Unemployment of adolescent worker.
14. Usurious money lending and debt bondage.

Judicial response:

Supreme Court on June 8 2020 issued notice to National Disaster Management Authority and Central government to take necessary step to prevent Child Trafficking. Chief Justice of India S.A Bobde , on hearing a **PIL by BachpanBachaoAndolan** said policing is not enough ,a joint mechanism should be prepare by NDMA and Center. A register of contractor and their workers should be maintain to prevent increasing matter of child trafficking.²

Supreme Court also on Feb 10, 2020 issued notice to Jharkhand State Government about state's lenient approach in protection of children from child right's abuse. For this a petition was filed by **National Child Right Protection Commission** under Article 32 of Indian Constitution. NCPCR demanding to constitute of a special investigation team to look this matter (selling of children by Charity Homes of Missionaries, situated in Jharkhand) and requested for set up an SIT not only in Jharkhand but in every state³

Besides these, there are many cases which deals with protection of child from trafficking as:

Bachpan Bachao Andolan vs Union of India,⁴ In this case, National commission for protection of child rights (NCPR) were made the nodal agency for implementation of the Juvenile Justice act, 2000. Recovery of wages of child labour, chief secretary of each state were asked to submit a circular for implementation of actions to combat human trafficking. **Budhadev Karmakar vs State of West Bengal**⁵ In this case, Supreme court appointed a penal to monitor and suggest rehabilitation scheme for trafficked sex workers and trafficked victims. Judiciary is taking many suo moto action or through giving direction to government for protecting children and their rights but this problem need that kingpins too are arrested, government should implement the law effectively.

Suggestions

Assam, Bihar, Chhattisgarh, Jharkhand, Maharashtra, Rajasthan, West Bengal, Delhi, Telangana in top of in transfer of migrant workers . This migration leads the situation of child trafficking as the owner of industry, by cheap and controlled labour try to cover their big economic loss through the small hand of children. To curb this problem there are some suggestions as:

1. Children, due to their tender age and mental situation are more subject to trafficking specially for Child Labour and sexual abuse. So there is a need to pass The Trafficking of Child (Prevention, Protection and Rehabilitation) Act.
2. All workers of unorganised sector should be registered immediately so that they can get government assistance.
3. After Lockdown is opened, special inspection drive should be carried out on manufacturing units for the next two years and child labour laws should be strictly enforced.
4. All children up to the age of 18 years should get free education by amending the Right to Education.
5. This is also a point of concern that when workers will take loans from private money lenders, child labour will increase in order to repay that loan, hence one suggestion is that the upper limit of interest rate given by the private lenders to the poor should be fixed by the government. The government of Andhra Pradesh has passed one such act, all other states should also do the same to prevent child labour.
6. In order to avoid trafficking, there should be a migration register in the villages, so that children going out of the village can be monitored.

7. Migration of workers should be prevented in future so that the trafficking does not occur again and safety of workers can be ensured by implantation of effective laws.
Social protection, easier access to credit, job creation, frequent labour inspections, strong law enforcement with measures to get children back to the schools, including the elimination of school fees should be implemented.
8. To keep children safe in homes, in shelters, in camps, in the real world during Covid-19 lockdown and after that, and beyond will require intention, public finance, collaboration and all hands on the deck.
9. The state-civil society collaboration will be necessary.
10. Strengthen implementation of the progressive inter-state migrant worker legislation especially in 1979, i.e. the inter-state migrant workman act.

Conclusion:

Case of Child Trafficking will increase once the lockdown is relaxed. Two million children of India are on street and living in abject deprivation of the most basic rights and in poverty. Over 80 % children living in street have no legal identity document which creates an obstacle for them to access to social entitlements. Long period of school shutdown will adversely affect the children's access to education, nutrition (mid-day meal) under the integrated child development scheme. Children would experience trauma, frustration of parents due to job loss, displacement of their family and the long walk to home along with the brutality of Police which they witnessed and suffered during their journey to home

Due to lockdown many children who are living in care homes send back to their homes on direction of NCPCR and child of migrant workers, adolescent child are now is out of umbrella of social security. These children are now subject of child trafficking, sexual exploitation. So there is need that central and State Governments should frame policies of social security, rescue and rehabilitation of child, forprotraction of children and proper implementation of existing law like Juvenile Justice Act and Child Labour Act. The enforcement agencies in the child protection mechanism should work proactively with Child Welfare Committees.

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COVID-19 AND ITS IMPACT ON TOURISM

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Abstract

India is ranked third in the World Travel and Tourism Council's (WTTC) Travel and Tourism Power Ranking, behind only China and the United States (US). Tourism Sector includes many small and big services ranging from aviation to auto services and from food to hospitality. Corona pandemic impacted all the services and not a single service is such that can claim zero impact of the pandemic. Hence, there are many grievances related to this pandemic in the tourism sector alone. India too has capabilities and behaviour to address its grievances effectively. For this there will be need of government support with fiscal and promotional assistance. There should be a comprehensive economic package to give support to MSMEs in tourism sector.

Key-words: Tourism, Aviation, B2B, MICE, CSSS, MOT

Outbreak of the corona virus hampered all sort of political, economical, and social sphere of life and affected the backbone of the society i.e. labours, farmers and daily wage earners, these people have a very little or no savings to sustain themselves in times of epidemic or pandemic. Economies worldwide are at standstill and the major challenge in front of all is sufficient acquisition of essential commodities such as medical equipments like sanitizer, soaps, face masks, PPE Kits, Ventilators, and food items, etc.*¹

In this scenario all spheres of economy such as agriculture, manufacturing, and tertiary sector are affected, millions of people got unemployed across the world. Within the economy, tourism is the worst affected sector with complete shutdown and it is true that it will not be back on track as steadily as other sectors will come.*²

Tourism is a major source of employment because of its labour-intensive nature and the significant multiplier effect on employment in related sectors. It is estimated that **one** job in the core tourism sector creates about **one-and-a-half** additional or indirect jobs in the tourism-related economy.

India is ranked third in the World Travel and Tourism Council's (WTTC) Travel and Tourism Power Ranking, behind only China and the United States (US). The World Economic Forum conducts a biennial study across 14 vital parameters. India's improved rank is encouraging and makes the sector an essential part of the New India growth story. Tourism not only provides countless jobs but also enhances investments in India which increases developmental process and showcases India's unique culture and heritage. This shows how tourism and hospitality has a multiplier effect on economy and talking of factual numbers, tourism created 42 million jobs, contributed 9.3% to GDP and 5.6% of total investment in India.

Tourism Sector includes many small and big services ranging from aviation to auto services and from food to hospitality. Corona pandemic impacted all the services and not a single service is such that can claim zero impact of the pandemic. Hence, there are many grievances related to this pandemic in the tourism sector alone.*³

If we speak about the impacts lets divide it sector wise:-

1. **Aviation sector:**At the beginning of 2020 there was a worldwide shutdown thus hampering the swift movement of the airlines across the boundaries which eventually led to halting of airlines profits and resulted into \$314 billion loss to worldwide aviation sector.*⁴
There is concern about the recovery of business travel, mainly due to the cancellation of meetings, incentives, conferencing and exhibitions (MICE) events, and the uneven lift of travel bans.*⁵
2. **Hospitality Sector:**In India there is 12 months tourism weather because of varied range of places and rich culture we offer, so according to the tourism trend people in India book hotels and stays months before the planned trip and many Indian hospitality ventures received their bookings at the end of February and received cancellations request of 90 percent bookings till March end. Therefore, we can conclude that impact upon hospitality is a major concern for employment of a huge chunk of people and the revenue losses to companies as well. Thus the industry will see cash flows only beginning to improve in November, 2020 and perhaps get to normal levels by end of 2020.*⁶
3. **Last Mile connectivity vehicles** i.e. taxis, autos, buses, rickshaws, etc. are among the worst hit employment sectors by the corona pandemic. According to BOCI, around 2 million people become jobless due to the outbreak of corona virus. Due to the nationwide lockdown in India there was a decline in movement of vehicles and so in the movement of commercial vehicles including taxis and autos. Moreover, in the time of phase wise unlock many companies gave option to employs of work from home and this practice may continue for a longer period of time and hence there will be a very little or no demand of cabs, taxis, metros, local trains, autos and rickshaws in the year 2020.*⁷
4. **Restaurant Sector:** According to National Restaurant Association of India. With the fear of human to human transmission of corona virus, people are afraid to look upon ordering food from restaurants and dining out is a dream away.In the unlock phases also dine in is not offered by the majority of food outlets, functioning is dependent upon mere online ordering and take ways. There is need to carry out strict safety measures to ensure safety of the people.*⁸
5. **Street Vendors:**Street Vendors in Africa, Asia and South America accounts for around 2 million people working in the informal sector. Majority of them are the food vendors who all offers food to labours, migrant workers and home servants and rest are the sellers of day to day lifestyle products of antiques, cosmetics, etc. With the outbreak of corona virus there is a hard hit upon the people related to informal economy because of no give and take and no exchange of services among themselves and reduced demand of such products from the household.

Particularly in India most of the street vendors were migrant labours working in the urban and metropolitan cities as food vendors, vegetable sellers, and the house workers as well, are the worst affected because of deprivation from food and shelter caused by complete shutdown resulting into zero income source for them.*⁹

Tourism in India:

Approximately, Tourism contributes 5.06 percent to GDP of India and its share was continuously growing till March 2020 when nationwide lockdown was imposed keeping in view the outbreak of corona virus. With around millions of employs working in the tourism sector some as hotel owners, hotel workers, street vendors, travel related jobs and many others, tourism sector is the most vibrant and aggressively growing sector specially in India which provides ample of opportunity to the people to indulge in this sector but because of corona virus outbreak all hopes are at stake and people are in distress and this distress increases when there comes to mind the uncertainty of reviving of the sector.

Let's see impact of pandemic state wise-

1. **Rajasthan:**Rajasthan offers a variety of cultural heritage. After the outbreak of corona virus tourism in Rajasthan just like every other part of India declined to zero. This caused distress among the variety of

people belonging to informal economy ranging from antique sellers, dancers and musicians, elephant tourism workers, camel hawkers, ethnic cuisine small restaurants and a lot more. About 8000 families related to elephant tourism are in complete distress due to the outbreak of corona virus. ^{*10}

2. **Goa:** This year due to outbreak of virus the Goa tourism faced a setback. Almost 40 percent of the state revenue comes from tourism sector and 40 percent population of Goa is dependent upon Tourism sector and condition made by corona virus is a threat to survival of the people related to Goa tourism. Goa Tourism Association has raised the matter to state for seeking relief packages and a reply from state's concerned ministry is satisfying to the association. ^{*11}
3. **UT's:** Starting with Puducherry, famous for its colonial legacy and beaches is facing a shutdown due to the outbreak of corona virus. Treasurer of Hotels Association of Puducherry expressed that about 90 percent loss has been occurred since March due to complete shutdown and cancellations of pre bookings from the domestic as well as foreign travellers.

In case of Andaman and Nicobar Islands which is home to several tribes who depends upon tourism and hunting for their survival. With the complete cancellation of tourism to Andaman there is a distress of living in this territory of India.

Delhi is the capital of India and offers a variety of legacy of many kingdoms who rule upon Delhi, famous for historical places and street food Delhi attracts migrants as well as tourists every year in a large number, has also suffered a lot.

Newly formed UTs of Ladakh and Kashmir were set to offer tourism in a different environment but due to the pandemic, Switzerland of India has to wait to offer its magnificent cuisines and beautiful Himalayan views to the people. ^{*12}

4. **Uttarakhand:** With the complete lockdown, people living in hamlets and high lying areas are most affected as in summer season they all get indulged at tourist places but in 2020 they faced a huge employment and financial crisis. Moreover the Kanwar Yatra during the onset of monsoon offers a huge economic boom in the state's economy. In Haridwar only there is a business of around 3 crore rupees during the Kanwar Yatra but this time Kanwar Yatra is also cancelled in lieu of safety from corona virus. ^{*13}
5. **Himachal Pradesh:** With almost 70 percent of its population indulged in tourism sector and more than 8000 hotels and homestays, economic nerve of Himachal is completely hampered. Himachal attracts tourists from all over India because of its breath taking valley views and highest motor able passes of the world. Moreover, Himachal offers a gateway to Ladakh a favourite destination for adventurers and road trip lovers but due to the safety measures just like other states Himachal is also undergoing lockdown and placed a full stop on tourism until new directions. ^{*14}
6. Talking of tourism in general, every part of India has faced a crisis due to outbreak of corona pandemic. Uttar Pradesh, Bihar, Madhya Pradesh, Punjab, Maharashtra and every other state has faced a breakdown in their small activities of tourism but the major concern is because of migrant labours who are indulged in other states' tourism activities are returning home empty handed to their home towns.

Global Guidelines to restart Tourism-

The World Tourism Organization (UNWTO) has released a set of recommendations calling for urgent and strong support to help the global tourism sector not only recover from the unprecedented challenge of COVID-19 but to 'grow back better'. Within this set of guidelines there are several guidelines for everyone including nations, tourists, hosts, etc.

1. Guidelines to tourists-

- a. UNWTO prescribes use of hand sanitizer and recommend thorough washing of hands.
- b. Secondly, there is a need of maintaining at least 1 metre distance from another person.

- c. Thirdly, going to crowded places should be avoided and frequent touching of mouth, nose and eyes should be prevented by the use of masks and face shields.
- d. Fourthly, make sure that people around you are with good hygiene and if there is any problem with the respiratory system person should quarantine himself/herself with immediate effect.

2. Guidelines to hospitality sector-

- a. Proper thermal screening of all the employs on daily basis and providing PPE kits to them.
 - b. Limited tourists capacity to half or one-third of total occupancy ensuring social distancing.
 - c. At the time of check-in there should be corona virus test report presented to hotel authorities.
- ### **3. Guidelines to governments and national authorities-**
- a. There should be a economic relief package for business houses related to tourism
 - b. Aviation houses should be clarified with the notice to follow proper guidelines of social distancing.
 - c. Street vendors, small scale transport houses, small restaurant owners should be supported economically.*¹⁵

Operational Guidelines from Ministry of Tourism, India-

1. For Tourism Service Provider-

- a. Office premises must be sanitized regularly, deep cleaning twice a week is recommended along with ensuring the proper ventilation and hygiene.
- b. Ensuring there must be sufficient presence of medical sanitizers, protective masks, thermal guns, etc. in the office. Moreover there must be an association with medical agency for quick response.
- c. Ensuring proper record of visitors, CCTV cameras in proper working conditions, displays regarding the awareness of outbreak of corona virus and how to tackle it.
- d. Service provider has to ensure that the customer has not suffered from COVID-19 and the medical reports of the patient are to be kept as records, there should be cashless transaction and service provider has to give exact itinerary to the customer of stays, travelling, etc.
- e. In case of transport providers, they must ensure that all the vehicles must be sanitized before the start and end of every trip, use of disposable seat covers and headrest is recommended, there should be sufficient quantity of masks and sanitizers in the vehicle, emergency numbers should be displayed in the vehicle and driver along with co-driver must keep their compartments fabricated from the passengers with fibre glass.
- f. In case of tourism service providers who receive tourists, they must ensure greetings should not be done with physical touch rather with Namaste, ensuring use of gloves for the shifting of luggage, they must ensure that every tourist must have AROGYA SETU APP downloaded in their mobile phones and if there are symptoms in any tourist he/she must be transferred to nearest test centres.
- g. Tourist Facilitators & Guides providing offline guide facilities involving interaction with tourists must ensure that the greetings should be done without physical touch, guide must make groups of 10-15 and accompany them by managing restaurants, etc. for them so that there can be maintained discipline in social distancing. There must be ensuring adventure activities with full proof medical safeties in a limited number with pre and post sanitization.*¹⁶

2. For Hotels, B&B Service, Home stays, etc.-

- a. Hotels in containment zones shall remain closed. Only those outside containment zones will be allowed to open that too with proper medical equipments, with proper availability of sanitizers and masks to tourists.
- b. It is recommended to have Gowns/ Aprons & Personal Protective Gears available 24/7.
- c. All touch points in public areas like door handles, elevator buttons, counter tops, tabletops, railings, etc. are cleaned continuously using a sanitizer/disinfectant.

- d. Posters/standees should be displayed at various locations for information and awareness telling how to remain safe and keep others safe. Emergency helpline numbers should be displayed at the reception.
 - e. Adequate isolation facilities should be kept ready and made available in case of any requirement for the suspected COVID guest or staff.*¹⁷
- 3. Ministry of Tourism** has given guidelines to promote MICE TOURISM which stands for Meetings, Incentives, Conferences and Exhibitions. This tourism attracts a lot of tourists every year from foreign and this generates a lot of employment in the country. MICE sector benefits local entrepreneurs, creates jobs, gives boost to cultural tourism, facilitates people to people exchange and helps in image building of the destination. India has immense potential to emerge as a strong MICE destination with new infrastructure being developed in the country. In order to give a boost to the MICE tourism and attract more MICE events to the country the Govt. of India has decided to extend the benefits to the MICE Organisers under CHAMPION SECTOR IN SERVICES SCHEME (CSSS), administered by the Ministry of Tourism (MOT). For this purpose, a MICE fund has been set up under the CSSS.*¹⁸

Way Forward-

Tourism promises its future reliability and promises that even after the complete shutdown of tourism sector it has capability to revive and grow at faster pace than Pre-Covid time. For this there will be need of government support with fiscal and promotional assistance. There should be a comprehensive economic package to give support to MSMEs in tourism sector so that they can offer better services to a variety of tourists that will flock in India after the pandemic is over. There are expectations that tourists from western world will change their destination location from China to India, so there must be promotional tag lines which may attract a wholesome of tourists. In India we have certain taglines such as “Incredible India” and “God’s Own Country” so these catchy taglines must be enhanced and increased in number. Also, India must collaborate with European Union and African countries to increase exchange of tourisms and there should be ease in visa approvals and hospitality expenses to boost tourism.

India is continuously working towards the connectivity of potential tourist hotspots. Prior to pandemic work on transportation to allow access to many hidden treasures of India was paying off and we expect it to continue after the pandemic with greater efficiency. Apart from this, UDAN Scheme has been a huge success and government can also focus on 100 tourist trains, one such example is MAHAKAL EXPRESS and VANDE BHARAT EXPRESS. Also there are highway connecting projects such as SAGARMALA PORTS and BHARATMALA HIGHWAY. Last but not the least, Holistic Island Development Plan is an ambitious policy directive focusing on the development of Andaman & Nicobar Islands and Lakshadweep Islands.

Conclusion

So we can conclude that, although the corona pandemic impacted the tourism sector must however these effects are not long lasting. UNWTO has recommended a better action plan for tourism and many nations are moving in accordance with the nodal agency. India too has capabilities and behaviour to address its grievances effectively. Once the pandemic is under control then we can again welcome all the tourists from abroad with a cheerful NAMASTEY! And a tagline “Welcome to Your Own Dream, India”.*¹⁹

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MICRO FINANCE OPPORTUNITIES PROVIDED BY RASHTRIYA MAHILA KOSH

Tasneem un nisa

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Abstract

Micro finance is an effective element in poverty reduction target especially for weaker section of woman population in a developing nation like India. The services provided by microfinance institutions is targeted to enable the poor women to smoothen their consumption level, manage their risks better, develop their micro enterprises and businesses, enhance their income earning capacity, and enjoy an improved quality of life. This paper discusses the role of microfinance industry in country's economic development keeping in view of woman's micro finance opportunities that is providing by a central institution namely Rashtriya Mahila Kosh situated in Delhi. It also discusses the objectives, functions and various schemes provided by Rashtriya Mahila Kosh along with its introduction. So that, reader have a clear idea about its functions and can avail benefit from its schemes and poor women could be able to make herself as an entrepreneur by starting their own work.

Key Words: Micro-Finance Industry, Gross Loan Portfolios, Total Borrowings, RMK, Economic Development, Self Help Groups.

Introduction

Micro-finance means small savings, credit and insurance services provided to socially and economically backward segments of our society. In the Indian context terms like 'small and marginal farmers', 'rural artisans' and 'economically weaker sections' have been used to define micro-finance customers. Micro Finance refer to various types of loans and other services provided by microfinance institutions.

The recent task Force on Micro Finance has defined it as—

“Provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi urban or urban areas, for enabling them to raise their income levels and improve living standards”.

The contribution of Microfinance is studied based on income, saving, expenditure for household budget expenditure for children school, asset acquiring, decision making power, business management skills along with the strength and weakness of the developing economy among other developing nation. The study revealed that the aim of MFIs and especially of institution namely Rashtriya Mahila Kosh is to reach out the poorest section of the woman population that has not been achieved due to targeting problems. It was, again, uncovered that, microfinance try as much as possible to reduce the risk involved in giving out unsecured loans. Micro finance institutions are the major contributor in the global economy. At present there is huge demands of many home made and hand made products in which the face shields, masks, handloom and unique accessories item products are main. Woman can

do this skilled work very well. So, if finance could be available at easy rates to these women, they can do their work more efficiently. In this paper we are discussing micro finance provided by Rashtriya Mahila Kosh (RMK).

Research Methodology

The present study is purely based on the secondary data which is collected from the various reports & articles published by the government and other non-govt. institutions, website of Rashtriya Mahila Kosh and various national journals & international journals.

Objectives of this paper

- To have an idea about objectives of RMK.
- To have an idea about functions of RMK.
- To have an idea about various schemes of RMK.

About Rashtriya Mahila Kosh

“Rashtriya Mahila Kosh, a national level organization was established in 1993 by the Ministry of Women and Child Development. It is an autonomous body framed for social & economic empowerment of women. RMK provides loans to various Intermediary Organizations like NGOs/MFIs which further lend to Self Help Groups of women. It was registered under the Societies Registration Act 1860. RMK also has established nodal agencies and franchisees for reaching out to the women beneficiaries.

Mission of Rashtriya Mahila Kosh

“To be a single window facilitator for provision of financial services with backward and forward linkages for women in the unorganized sector through Intermediary Micro Finance Organizations (IMOs) and Women Self Help Groups (SHGs) and to augment their capacities through multi-pronged efforts.”— as mentioned by RMK at the time of establishment

Objectives of RMK

The aims or objectives of Rashtriya Mahila Kosh are as under:-

1. Socio-economic development of women.
2. Providing micro finance facilities to poor women.
3. Capacity building of micro finance institutions.
4. To support schemes for women for sustenance of their existing employment & for generation of further employment, for wealth creation, for redeeming assets, leadership building, skill development, training, social and cultural development etc.

Functions of RMK

The RMK performs the underline functions to fulfill its objectives—

1. The RMK will make women independent to achieve economic development.
2. Credit services provided will be linked to production and economic activity.
3. Its main target is to facilitate and support innovation and experimentation for benefit to poor women.
4. RMK sorts out the various constraints in the formal system of micro finance to women.
5. Literacy and skill training for women, leadership training among groups for self-management etc. will be promoted by RMK.
6. RMK provides regular flexible credit as per demands of the poor women on basis of seasons and occupations.
7. RMK promotes grassroot level societies and organisations for micro finance to women.
8. RMK has developed effective channels of communication between women and the IMOs.

Role of Microfinance in Economic Development

Micro finance plays a major role in development of india. It works as anti-poverty vaccine for people living in rural areas. The utmost significance of micro finance in India is to provide loans to small entrepreneurs it acts as a tool of women empowerment by making them financially independent. All gender inequalities could be vanished by making women self dependent. Microfinance institutions establish their offices to rural areas to allow all the people especially women in the rural areas to access the formal financial services and expand their business as possible so that contribute to economic development successfully.

Schemes of Rashtriya Mahila Kosh

RMK extends micro-credit to the women for income generation activities. RMK has taken a lot measures to make popular the concept of micro finance, enterprise development, thrift and credit and development of Women-SHGs through IMOs. The various schemes run by RMK are—

(1) Loan Promotion Scheme

This scheme is for providing loans upto Rs. 10 Lacs to new and smaller organizations with experience of at least 6 months in thrift & credit.

(2) Main Loan Scheme

This scheme is for providing loans to organizations having minimum 3 years' experience in thrift & credit activities. The limit to loan is upto Rs. 2 crores for 1 state and to a maximum upto Rs. 6 crores i.e. for 3 states.

(3) Gold Credit Scheme

This scheme is for providing bulk loans to medium and large NGOs upto a limit of Rs. 5 Crores. This scheme is for the old borrowers of RMK with good track report in terms of repayment.

(4) Housing Loan Scheme

This scheme is for construction, repair and maintenance of houses to women who have membership of Self Help Group/ Joint Liability Groups (JLGs). This loan is provided through IMOs/NGOs/VOs. The organization can get a loan up to Rs 1 lac per beneficiary for construction of low cost house. Organizations can get a loan of maximum Rs. 6 crore under this scheme for a maximum of three states.

(5) Working Capital Loan Scheme

This scheme is for providing working capital term loan to the IMOs for backward and forward marketing linkage of product of Women SHGs/Individuals and group entrepreneurs, namely technology transfer, education and skill up gradation. A detailed project proposal is required to avail the benefits of this schemes.

(6) Repeat Loan Scheme

For this scheme, the NGOs/IMOs must have promptly repaid 80% of the previous loan without any irregularity. All other criteria for assessment, approval etc. will be the same as other schemes mentioned above.

Suggestions

- The need of hour is to expand the schemes of RMK in every nook and corner of India. For this RMK should open its regional/branch offices in various parts of India.
- RMKs activities, its various schemes and its working methodology should be made popularized in Indian society specially in those areas where women's social/financial status is comparatively not satisfactory.
- For the better impact of its activities RMK should also conduct Impact Studies and Feasibility Studies of its various activities and schemes.

- RMK should expand its activities also in the area of development of women skills specially their entrepreneurial skills
- RMK should make a database of social & economical status of women and also of the concerning entrepreneurial activities.

Conclusion

RMK believes that investing in women's capabilities empowers them to make choices, which will contribute to greater economic growth and development. Through its Information-Education-Communication activities RMK is also developing the market of Micro finance and it is also advocating the Importance of Micro finance activities. The aim is to bring in larger numbers of new and small intermediate organizations into the RMK fold to increase its outreach, specially in undercovered areas. This is done by RMK through its IEC activities which include conducting various orientation/training programmes, seminar/workshops, exhibition/fairs and continuous interaction/coordination with the Govt./Non-govt. bodies etc. RMK helps the well-established, tried and tested NGOs/reputed Govt. organisations which possess the necessary infrastructure and experience in group dynamics and micro-finance and; thus helping the SHGs. The need of hour is to expand and popularize RMKs activities, its various schemes and its working methodology in every nook and corner of India specially in those areas where women's social/financial status is comparatively not satisfactory.

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NATURAL DISASTERS, ITS IMPACT ON DIFFERENT SECTORS AND THEIR MITIGATION

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Abstract

Natural disaster such as earthquakes, flood, fire etc. can create such disruptions because they impair business functions and decrease the productive capacity of firms operating in the affected region. It just throws the growth back of the economy near about decade. Disasters can cause loss of human and animal life, field crops, stored seeds, agricultural equipment/materials, and their supply system (e.g. infrastructure) as well as associated indigenous knowledge, thus disrupting not only the immediate growing season but also future seasons. Growth is the joint phenomena of the productivity of the entire sector. Although in all sector the production is going in different ways, but all the sectors are interdependent. The impact on one sector affect the other sector, extent may be different. In this paper author try to explain the different type of natural disasters and their impact on the different sectors of an economy.

Key Words— Natural disaster, productive capacity region, future seasons, interdependent, supply system

Introduction

A natural disaster is an event that is caused by a natural hazard and leads to human, material, economic, and environmental losses, which exceed the ability of those affected to cope. Disaster is an undesirable occurrence resulting from forces that are largely outside human control, strikes quickly with little or no warning, which causes or threatens serious disruption of life and property including death and injury to a large number of people, and requires therefore, mobilization of efforts in excess of that which are normally provided by statutory emergency services.

Based on the cause disaster can be classified into natural disaster and human-induced but today we will be looking on natural disasters only.

Types of Natural Disasters

Atmospheric-tornadoes, tropical cyclones, lightning thunderstorms, drought, hailstorm

Terrestrial-earthquake, landslide, avalanches, soil erosion

Aquatic-flood, tidal wave, tsunami, storm surge

Biological-Plants and Animals as colonizers (Locusts, etc.). Insects infestation— fungal, bacterial and viral diseases such as bird flu, dengue etc.

Natural Disasters and Hazards in India

India is vast and diverse in terms of its physical and socio-cultural attributes. It is largely due to its vast geographical area, environmental diversities and cultural pluralities that scholars often described it using two meaningful

adjectives like the 'Indian-subcontinent' and the 'land of unity in diversity'. Its vastness in terms of natural attributes combined with its prolonged colonial past, continuing various forms of social discriminations and also equally large population have enhanced its vulnerability to natural disasters. These observations can also be illustrated by focusing on some of the major natural disasters in India.

Objectives:

- To know the concept of different type of natural disasters.
- To know the hazards from disasters.
- To know the impact of natural disaster on different sectors of an economy.
- To discuss some mitigation to reduce the losses due to natural disaster.

Methodology:

The study is essay type in nature. The secondary information is used for the analysis of the problem. Sources for the secondary data are originated from the various sources like special investigation team report, newspaper, journal, and papers of different scholars.

Brief Introduction of Few Natural Disasters

Earthquake

Earthquakes are by far the most unpredictable and highly destructive of all the natural disasters. Earthquakes that are of tectonic origin have proved to be the most devastating and their area of influence is also quite large. Indian plate is moving at a speed of one centimeter per year towards the north and northeastern direction and this movement of plates is being constantly obstructed by the Eurasian plate from the north. As a result of this, both the plates are said to be locked with each other resulting in accumulation of energy at different points of time. Excessive accumulation of energy results in building up of stress, which ultimately leads to the breaking up of the lock and the sudden release of energy.

Tsunami

Earthquakes and volcanic eruptions that cause the sea-floor to move abruptly resulting in sudden displacement of ocean water in the form of high vertical waves are called tsunamis (harbor waves) or seismic sea waves. Normally, the seismic waves cause only one instantaneous vertical wave; but, after the initial disturbance, a series of afterwaves are created in the water that oscillates between high crest and low trough in order to restore the water level. The speed of wave in the ocean depends upon the depth of water. It is more in the shallow water than in the ocean deep. As a result of this, the impact of tsunami is less over the ocean and more near the coast where they cause large-scale devastation. After reaching the coast, the tsunami waves release enormous energy stored in them and water flows turbulently onto the land destroying port-cities and towns, structures, buildings and other settlements.

Floods

Inundation of land and human settlements by the rise of water in the channels and its spill-over presents the condition of flooding. Unlike other natural disasters, the causes of floods are well established. Floods are relatively slow in occurrences and often, occur in well-identified regions and within expected time in a year. Floods occur commonly when water in the form of surface run-off exceeds the carrying capacity of the river channels and streams and flows into the neighboring low-lying flood plains. At times, this even goes beyond the capacity of lakes and other inland water bodies in which they flow. Floods can also be caused due to a storm surge (in the coastal areas), high intensity rainfall for a considerably longer time period, melting of ice and snow, reduction in the infiltration rate and presence of eroded material in the water due to higher rate of soil erosion. Though, floods occur frequently over wide geographical area having disastrous ramifications in many parts of the world. Indiscriminate deforestation, unscientific agricultural practices, disturbances along the natural drainage channels and colonization of flood-plains

and river-beds are some of the human activities that play an important role in increasing the intensity, magnitude and gravity of floods.

Droughts

The term ‘drought’ is applied to an extended period when there is a shortage of water availability due to inadequate precipitation, excessive rate of evaporation and over-utilization of water from the reservoirs and other storages, including the ground water.

Landslides

Have you ever read about the blocking of roads to Srinagar or disruption of rail services by stones falling on the Konkan Railway track? It happens due to landslide, which is the rapid sliding of large mass of bedrocks. Disasters due to landslides are in general, far less dramatic than due to earthquakes, volcanic eruptions, tsunamis and cyclones but their impact on the natural environment and national economy is in no way less severe. Unlike other disasters that are sudden, unpredictable and are largely controlled by macro or regional factors, landslides are largely controlled by highly localized factors. Hence, gathering information and monitoring the possibilities of landslide is not only difficult but also immensely cost-intensive. It is always difficult to define in a precise statement and generalize the occurrence and behaviour of a landslide. However, on the basis of past experiences, frequency and certain causal relationships with the controlling factors like geology, geomorphic agents, slope, land-use, vegetation cover and human activities, India has been divided into a number of zones.

Impact of Natural Disaster on Different Sectors

According to a report by the World Bank, the real cost of natural hazard-induced disasters to the global economy is a staggering USD 520 billion per year, with disasters pushing 26 million people into poverty every year (Hallegatte et al. 2017).

There is a consensus that natural hazard-induced disasters pose a threat to the stable and sustainable development of society and its economic systems. Natural disasters cause tremendous human suffering. Locally, they often also yield substantial physical and economic damages, which may temporarily, or even permanently. As theory suggests that different type of disasters can have diverse effects on growth. Disasters that affect the provision of essential intermediate inputs in production, for instance, such as droughts in agriculture, should have an adverse impact on growth, but disasters that affect adversely the capital-labor ratio, such as earthquakes, can in principle have a positive impact on growth through increasing returns and high reconstruction investments. Consequently, the impact should also vary across sectors for instance; droughts are likely to significantly affect agriculture, but less so industry, while earthquakes are more likely to affect industry.

Three important channels emerge through which natural disasters could affect (transitional) growth; they may affect—

- 1) total factor productivity (A),
- (2) the supply of materials and intermediate inputs (m), and
- (3) the relative endowment of capital and labor (k).

If a natural disaster hurts general productivity (decreasing A), the average product of capital declines for every level of capital per worker and growth is expected to decrease. The same occurs if the supply of intermediate inputs declines as a consequence of a natural disaster. However, if a natural disaster destroys more capital than labor, thus reducing k, growth is expected to increase. The model can also inform regarding the growth effects of other variables, such as factor intensities, population growth, and capital depreciation rates, but these variables seem less relevant in explaining the effects of natural disasters.

Primary Sector

Between 2003 and 2013, natural hazards and disasters in developing countries affected more than 1.9 billion people and caused over USD 494 billion in estimated damage. How much of this damage was on the agriculture

sector is unreported and is therefore unknown. Global statistics on the economic impact of disasters are collected and reported as a total sum for all sectors, and do not capture the impact on individual sectors. National and international disaster loss databases typically report population affected and damage to housing and other infrastructure, but seldom report damage or losses in the agriculture sector. As a result, there is no clear understanding of the extent to which natural hazards and disasters impact the agriculture sector and subsectors in developing countries.

Sector-specific quantitative data on disaster losses is necessary to understand the breadth and scope of disaster impact on agriculture and livelihoods. Disasters destroy critical agricultural assets and infrastructure, and they cause losses in the production of crops, livestock and fisheries. They can change agricultural trade flows, and cause losses in agricultural-dependent manufacturing subsectors such as the textile and food processing industries. Disasters can slow economic growth in countries where the sector is important to the economy. However, there is a critical information gap in terms of the quantitative economic impact of disasters on agriculture and on the livelihoods and food security of populations affected. FAO has undertaken a study to help fill this information gap, and to quantify where possible the impact of natural hazards on the agriculture sector in developing countries over the past decade where it makes a significant contribution to national Gross Domestic Product (GDP). . Agriculture contributes as much as 17.32 percent of national GDP in India. When disasters strike, they have a direct impact on the livelihoods and food security of millions of small farmers, pastoralists, fishers and forest-dependent communities in developing countries. Agriculture employs over 50 percent of the labour force in India.

Secondary Sector

A natural disaster is the occurrence of an abnormal or infrequent hazard that impacts on vulnerable communities or geographical areas, causing substantial damage, disruption and possible casualties and leaving the affected communities unable to function normally. From an economic perspective a disaster implies some combination of losses in terms of human, physical and financial capital, and a reduction in economic activity, such as income and investment, consumption, production and employment in the 'real' economy. There may also be severe impacts in terms of financial flows, such as revenue and expenditure of public and private bodies (Benson and Clay, 1998). The losses in stocks of capital and inventory and reductions in short-term economic flows are sometimes confounded in reporting the costs of disaster impacts. Stock losses and short-term flow effects may be so extreme as to result in a modification in the medium to longer-term trajectory or development path of an enterprise, region or national economy.

Besides households, extreme precipitation events affect businesses through damage to building structures, machinery, equipment, and inventory and disruptions to normal business activities. Most retail businesses operate from the ground floor of buildings or in single-story roadside structures. Hence, much of the damage cost involved repairing grounds and fencing, foundations, walls, windows, and doors. Businesses also reported damage to machines and tools, refrigerators, escalators, electrical switches, and wiring. Raw materials, inventory, and finished products also sustained extensive damage. Since retail businesses are unwilling to report annual turnover, and business size varies substantially across different types of retail businesses and outlets, it was not possible to estimate damage costs as a percentage of their revenues. However, most businesses (93%) did not have flood insurance cover. Hence, they would have had to use their own resources to cover repairs and replacements.

Most surveyed firms suffered damage to buildings, equipment, and inventory. For two-thirds of those interviewed, damage to equipment was far greater than damage to buildings and inventory. Most of the building damage was from water seepage affecting floors or ceilings. Many firms also lost important work-related documents and even soft copies of documents were lost when electronic equipment, such as computers, were washed away. Some SMEs had to sell their assets, close their business, and find wage employment elsewhere because of the lack of financial support after the December 2015 floods. Most smaller entities had invested their own money or borrowed from private sources to set up their business. They also typically had slim margins and limited supplier credit. These businesses losses were amplified by a lack of access to emergency funds and additional finance. With the shutdown

of production, lack of inputs, and loss of clients, many firms reported significant financial distress and an inability to repay existing business loans. The extreme disasters also exposed a very high reliance on informal financing channels, such as friends and moneylenders. Insurance payouts for those covered were very low and cases were left pending for months.

Tertiary Sector

The growth of the Services Sector in India is a unique example of leap-frogging traditional models of economic growth. Within a short span of 70 years since independence, the contribution of the service sector in India to the country's GDP is a lion's share of over 60%. However, it still employs only 25% of the labour force. Consequently, agriculture (which is stagnant) and manufacturing (which has not yet risen to its full potential) continue to sustain the majority of our employed population. This presents a unique challenge to future economic growth in India and requires out of the box solutions that will help rapidly harness the potential of the service industry in India. Invest India takes a look at the contribution of the services sector in the Indian economy, its successes and also explores potential enablers for future equitable economic growth. Services comprise a diverse array of sub-sectors, ranging from transport, travel, communications to financial and business services. Large natural disasters can have major negative impacts on exports in some service sub-sectors, particularly these that rely on physical capital and infrastructure. At the same time, natural disasters can also trigger an increase in demand for certain services imports

We observe that communications services and transport services are most affected by a large natural disaster. On average, the occurrence of one additional large disaster can reduce exports communications services by 5%-9% and transportation services by 2%-4%. The range of percentage change reflects the different coefficients reported by the OLS and PPML estimators. Transport services consist of the cross-border carriage of passengers and movement of goods, and communications services cover telecommunications as well as postal and courier services. The negative impact may be explained by the fact that both service sub-sectors rely on physical infrastructure: the supply of communications services is reliant on a functioning telecommunications network and postal routes, and trade in transport services depends on roads, ports and cross-border logistics. When large natural disasters damage or destroy physical infrastructure, the exports in these services sectors are negatively impacted. The exports of travel are also negatively correlated with natural disasters, with one large natural disaster leading to a decline of travel exports by 3% according to one estimate. This decline may be explained by a decrease in tourist arrivals due to disruptions to transportation or cancellations of trips for fear of negative impact can also be observed in relation to royalty license fees, with an additional large natural disaster leading to a decline of 2.2% - 2.6% of royalty license fee income. In addition, the exports of computer and information services, other business services as well as personal, cultural and recreational services can also experience a decline after a large natural disaster, although the effect on these sub-sectors are statistically insignificant in some cases. Overall, we find that large natural disasters can have particularly severe negative impacts in services sectors that rely on physical infrastructure and exhibit higher capital- and knowledge intensify risks in the aftermath of a natural disaster.

A country hit by a large natural disaster can see a sharp rise in insurance claim payments, likely recorded as insurance exports. Similarly, the rise in financial service exports may be due to an increasing amount of foreign aid and remittances into the affected country. The exports of construction services increase two to three years after a large disaster occurs. This may be related to the reconstruction and rebuilding that occur in the aftermath of a disaster, as construction materials and services sourced locally by foreign construction firms are often recorded as services exports.

Mitigation of Natural Disaster

Unlike other disasters, the damages caused by earthquakes are more devastating. Since it also destroys most of the transport and communication links, providing timely relief to the victims becomes difficult. It is not possible to prevent the occurrence of an earthquake; hence, the next best option is to emphasis on disaster preparedness and mitigation rather than curative measures such as:

- (i) Establishing earthquake monitoring centres (seismological centres) for regular monitoring and fast dissemination of information among the people in the vulnerable areas. Use of Geographical Positioning System (GPS) can be of great help in monitoring the movement of tectonic plates.
- (ii) Preparing a vulnerability map of the country and dissemination of vulnerability risk information among the people and educating them about the ways and means minimizing the adverse impacts of disasters
- (iii) Modifying the house types and building designs in the vulnerable areas and discouraging construction of high-rise buildings, large industrial establishments and big urban centers in such areas.
- (iv) Finally, making it mandatory to adopt earthquake-resistant designs and use light materials in major construction activities in the vulnerable areas.

It is beyond the capacity of individual state or government to mitigate the damage. Hence, combined efforts at the international levels are the possible ways of dealing with these disasters as has been in the case of the tsunami that occurred on 26th December 2004 in which more than 300,000 people lost their lives. India has volunteered to join.

The Government of India as well as the state governments are well aware of the menace created by floods every year. How do these governments generally respond to the floods? Construction of flood protection embankments in the flood-prone areas, construction of dams, a forestation and discouraging major construction activities in the upper reaches of most of the flood-creating rivers, etc. are some steps that need to be taken up on urgent basis. Removal of human encroachment from the river channels and depopulating the flood plains can be the other steps. This is particularly true in western and northern parts of the country which experience flash-floods' the International Tsunami Warning System after the December 2004 tsunami disaster.

Droughts have both immediate as well as long-term disastrous consequences on the social and physical environments. Consequently, planning for drought has to take both aspects into consideration. Provision for the distribution of safe drinking water, medicines for the victims and availability of fodder and water for the cattle and shifting of the people and their livestock to safer places, etc. are some steps that need to be taken immediately. Identification of ground water potential in the form of aquifers, transfer of river water from the surplus to the deficit areas, and particularly planning for inter-linking of rivers and construction of reservoirs and dams, etc. should be given a serious thought. Remote sensing and satellite imageries can be useful in identifying the possible river-basins that can be inter-linked and in identifying the ground water potential.

It is always advisable to adopt area-specific measures to deal with landslides. Restriction on the construction and other developmental activities such as roads and dams, limiting agriculture to valleys and areas with moderate slopes, and control on the development of large settlements in the high vulnerability zones, should be enforced. This should be supplemented by some positive actions like promoting large-scale a forestation programmers and construction of bunds to reduce the flow of water. Terrace farming should be encouraged in the northeastern hill states where Jhumming (Slash and Burn/Shifting Cultivation) is still prevalent.

Conclusion

On the basis of the above discussion, it can be concluded that disasters can be natural or the results of human activities, and all hazards need not turn into disasters since it is difficult to eliminate disasters, particularly natural disasters. Then the next best option is mitigation and preparedness. There are three stages involved in disaster mitigation and management:

- (i) Pre-disaster management involves generating data and information about the disasters, preparing vulnerability zoning maps and spreading awareness among the people about these. Apart from these, disaster planning, preparedness and preventive measures are other steps that need to be taken in the vulnerable areas.

- (ii) During disasters, rescue and relief operations such as evacuation, construction of shelters and relief camps, supplying of water, food, clothing and medical aids etc. should be done on an emergency basis.
- (iii) Post-disaster operations should involve rehabilitation and recovery of victims. It should also concentrate on capacity building in order to cope up with future disasters, if any.

These measures have special significance to a country like India, which has about two-third of its geographical area and equal proportion of its population, vulnerable to disasters. Introduction of the Disaster Management Bill, 2005 and establishment of National Institute of Disaster Management are some examples of the positive steps taken by the Government of India.

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FACTORS INFLUENCING THE BUYING BEHAVIOUR IN DIFFERENT GENERATIONS OF CONSUMERS TOWARDS PURCHASE OF FMCG PRODUCTS DURING COVID-19 LOCKDOWN.

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Abstract

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing pandemic of coronavirus disease 2019 (COVID 19) caused by severe acute respiratory syndrome coronavirus 2 (SARS CoV 2). The outbreak was identified in Wuhan, China, in December 2019. The World Health Organization declared the outbreak a Public Health Emergency of International Concern on 30 January, and a pandemic on 11 March. This pandemic has stopped the cycle of the world and the whole of the India too was under lockdown. This lockdown changed the consumer behaviour and their preferences. People realised that health and hygiene was most important and it not only kept them healthy but even helped them to save money as they bought only what was necessary. This paper finds out the factors influencing buying behaviour of various generations of consumer towards purchase of FMCG products during this lockdown.

Keywords: COVID-19, FMCG, baby boomers, traditionalist, generation X, generation Y, millennials.

Introduction

What is coronavirus COVID-19

The coronavirus COVID-19 pandemic is the defining global health crisis of our time and the greatest challenge we have faced since World War Two. Since its emergence in Asia late last year, the virus has spread to every continent except Antarctica. Cases are rising daily in Africa the Americas, and Europe.

Countries are racing to slow the spread of the virus by testing and treating patients, carrying out contact tracing, limiting travel, quarantining citizens, and cancelling large gatherings such as sporting events, concerts, and schools.

The pandemic is moving like a wave—one that may yet crash on those least able to cope. But COVID-19 is much more than a health crisis. By stressing every one of the countries it touches, it has the potential to create devastating social, economic and political crises that will leave deep scars.

We are in uncharted territory. Many of our communities are now unrecognizable. Dozens of the world's greatest cities are deserted as people stay indoors, either by choice or by government order. Across the world, shops, theatres, restaurants and bars are closing.

Every day, people are losing jobs and income, with no way of knowing when normality will return. Small island nations, heavily dependent on tourism, have empty hotels and deserted beaches. The International Labour Organization estimates that 195 million jobs could be lost.

What is Fast-Moving Consumer Goods (FMCG)

Fast-Moving Consumer Goods (FMCG) or Consumer Packaged Goods (CPG) are products that are sold quickly and at a relatively low cost. Examples include non-durable goods such as packaged foods, beverages, toiletries, over-the-counter drugs, and other consumables.

Many fast-moving consumer goods have a short shelf life, either as a result of high consumer demand or as the result of fast deterioration. Some FMCGs, such as meats, fruits, vegetables, dairy products, and baked goods are highly perishable. Other goods, such as pre-packaged foods, soft drinks, candies, and toiletries have high turnover rates. Sales are sometimes influenced by holiday and/or seasonal periods and also by the discounts offered.

Packaging is critical for FMCGs. To become successful in the highly dynamic and innovative FMCG segment, a company not only has to be acquainted with the consumer, brands, and logistics, but also, it has to have a sound understanding of packaging and product promotion. The packaging has to be both hygienic and customers-attracting. Logistics and distribution systems often require secondary and tertiary packaging to maximize efficiency. Unit or primary packaging protects products and extends shelf life while providing product information to consumers.

The profit margin on FMCG products can be relatively small, but they are generally sold in large quantities; thus, the cumulative profit on such products can be substantial. According to BASES, 84% of professionals working for fast-moving consumer goods are under more pressure to quickly bring new products to the market than they were five or ten years ago. With this in mind, 47% of those surveyed confessed that product testing suffers most when deadlines are accelerated.

The growth of the internet over the past quarter century and the rise of the brand community phenomenon have contributed greatly to the demand for FMCGs.

FMCGs can be divided into several different categories including:

- Processed Foods: Cheese products, cereals, and boxed pasta.
- Prepared Meals: Ready-to-eat meals.
- Beverages: Bottled water, energy drinks, and juices.
- Baked Goods: Cookies, croissants, and bagels.
- Fresh, Frozen Foods and Dry Goods: Fruits, vegetables, frozen peas and carrots, and raisins and nuts.
- Medicines: Aspirin, pain relievers, and other medication that can be purchased without a prescription.
- Cleaning Products: Baking soda, oven cleaner, sanitizer, window and glass cleaner.
- Cosmetics and Toiletries: Hair care products, concealers, toothpaste, and soap.
- Office Supplies: Pens, pencils, and markers.

The respondents undertaken are categorised as under:

- Traditionalists are ages 73 and above.
- Baby Boomers are 51 to 72.
- Generation X are 31 to 50.
- Generation Y are 19-30.
- Millennials are 8-18.

Figure 1

Gender
120 responses

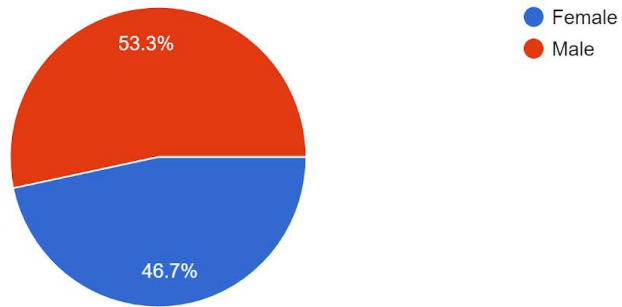


Figure 2

Occupation
115 responses

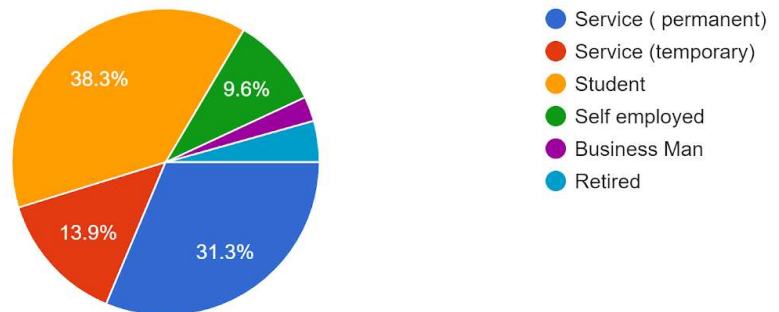


Figure 3

Monthly Income
120 responses

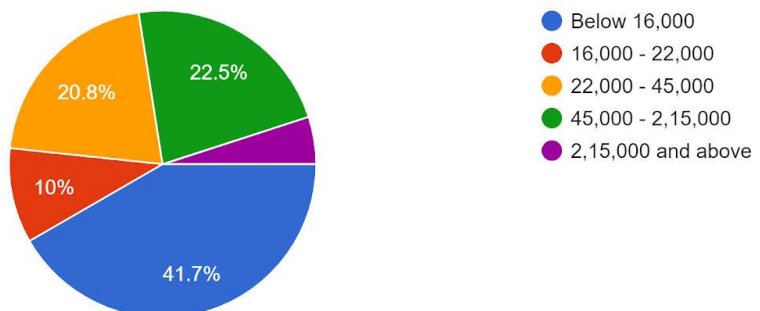


Figure 4

Age
120 responses

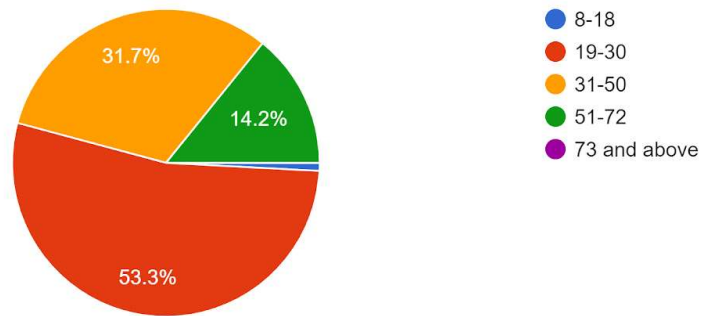


Figure 5

Has your income increased during the COVID-19 lockdown ?
120 responses

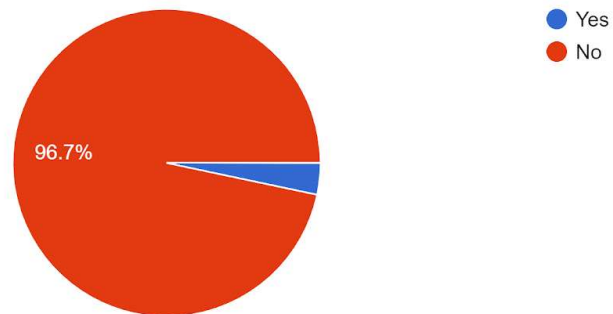


Figure 6

Has your income decreased during the COVID-19 lockdown ?
120 responses

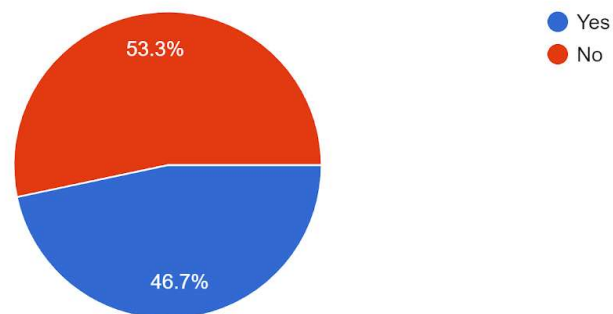


Figure 7

Do you know what is FMCG
120 responses

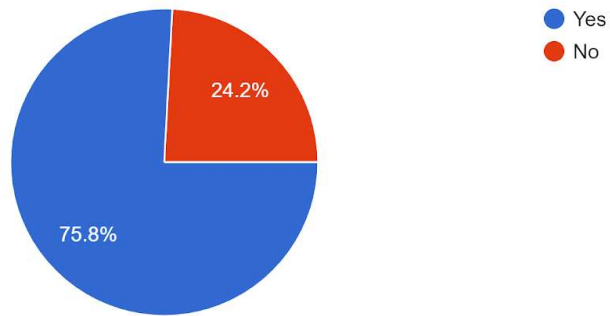


Figure 8

Are you aware of COVID-19?
120 responses

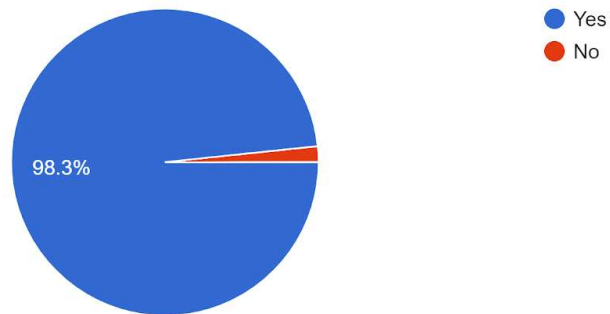


Figure 9

What did you often buy during lockdown?
120 responses

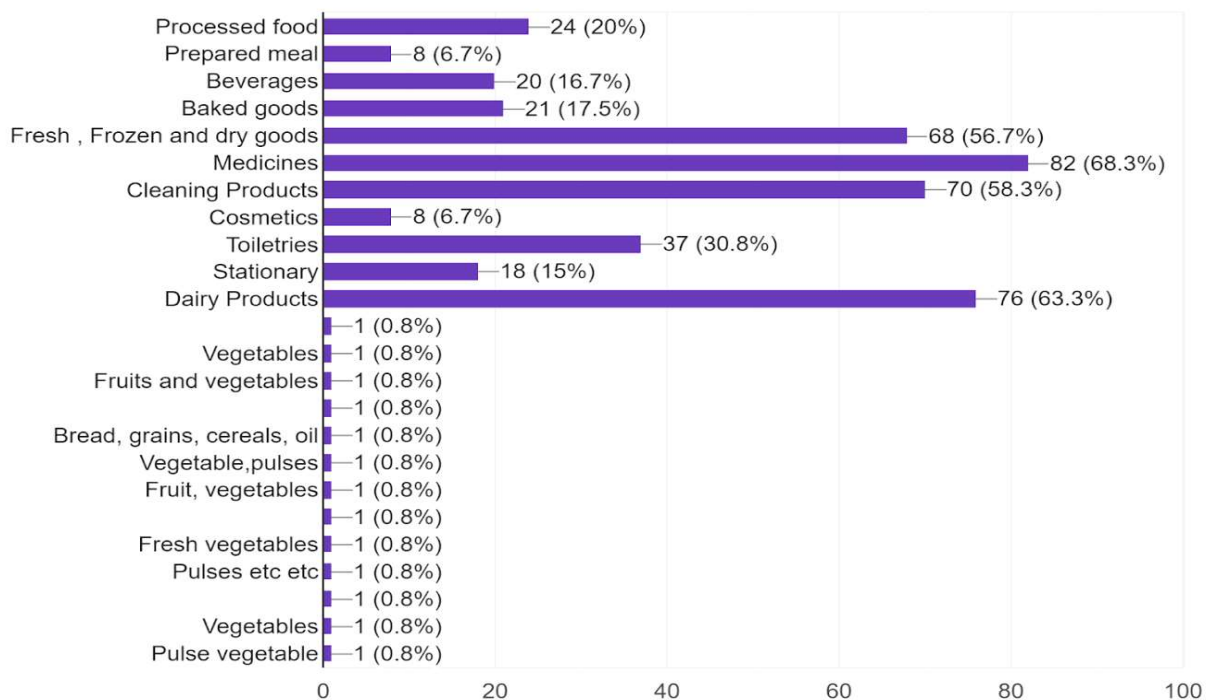


Figure 10

What were the things you missed (unavailable in market) buying during COVID-19 lockdown

120 responses

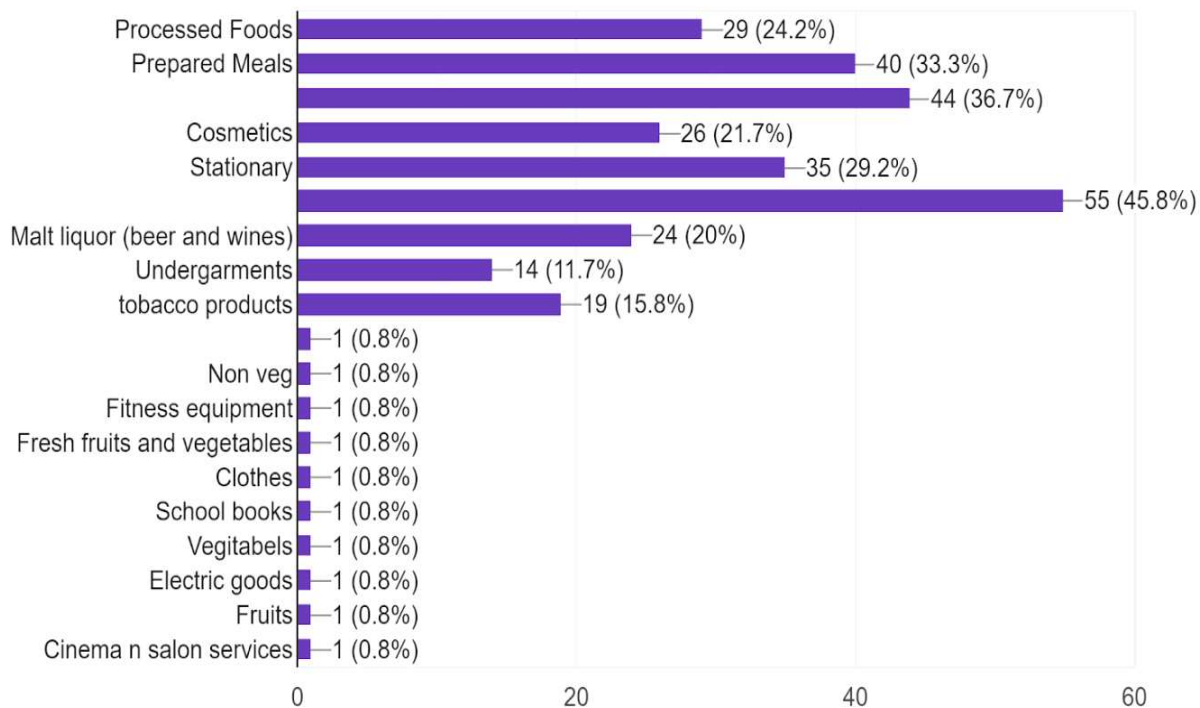


Figure 11

What were the things you over bought during lockdown as compared to normal days before lockdown

120 responses

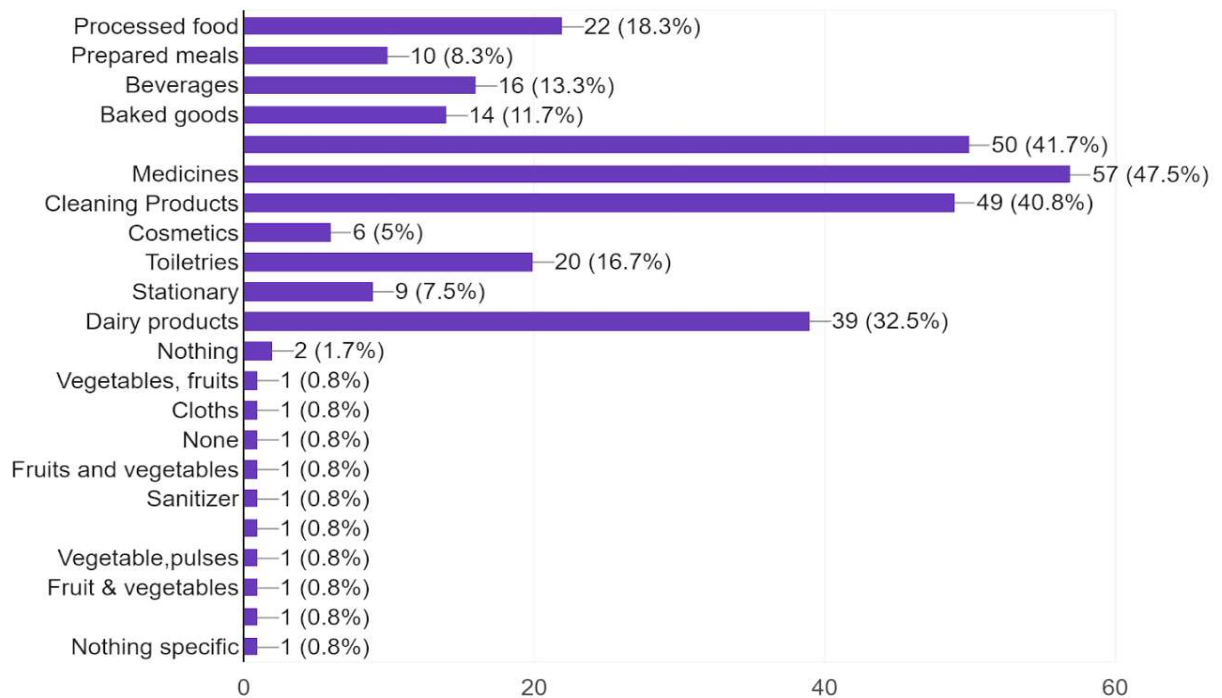


Figure 12

What were the things you under bought during lockdown?

120 responses

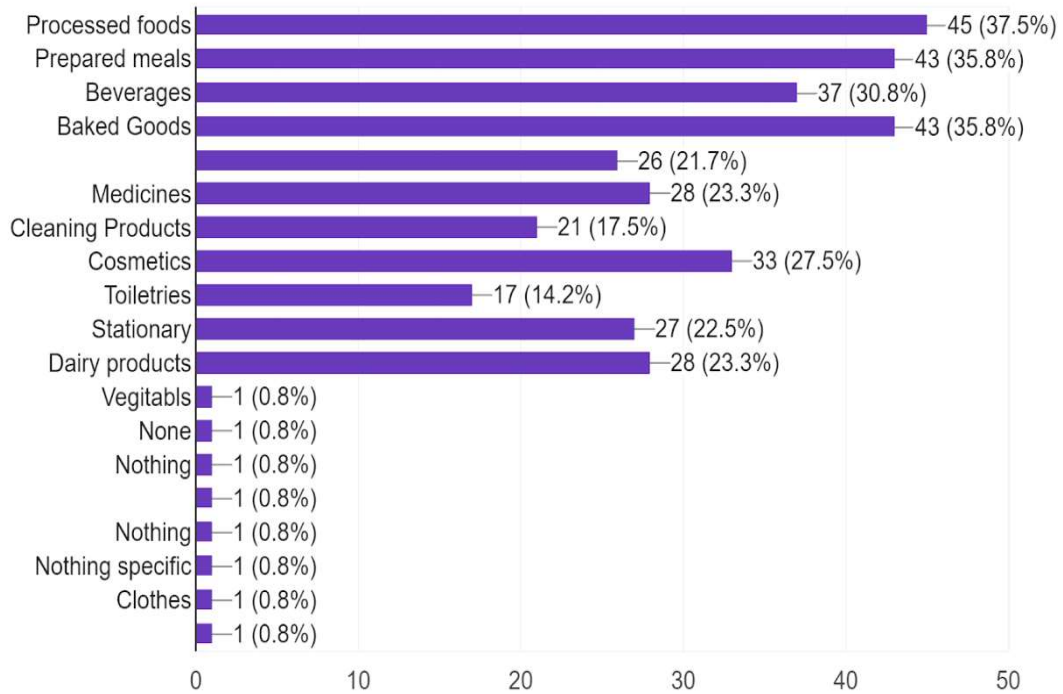


Figure 13

How did this COVID -19 lockdown affected your monthly expenses?

120 responses

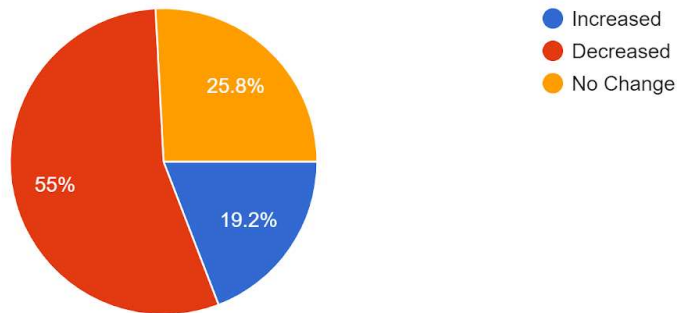


Figure 14

If Increased or decreased then by what percent?

120 responses

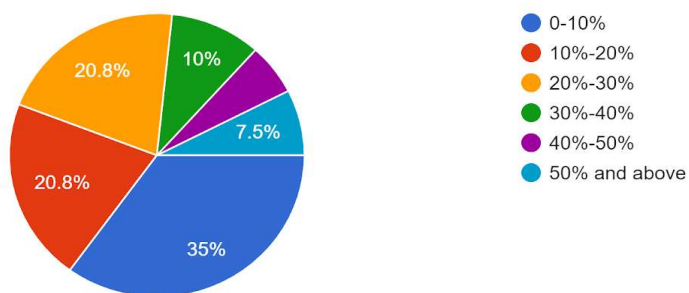
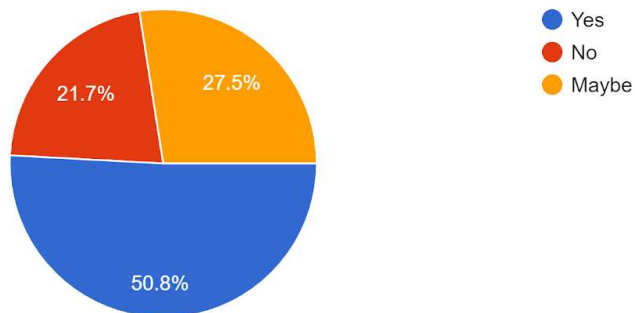


Figure 15

Did the decrease in other expenses (fuel , parlour, restaurants, outings) durir consumption of FMCG products?

120 responses



Conclusion

One reason why this industry is particularly different is that at the centre of what we do, is the average common man. In order to survive in this space, with ever-changing consumer preferences, it's imperative that constant innovation be a part of our strategy to retain consumers and attract potential customers. Those who adapt to the new normal faster than the others will be the ones who come out on top. As an investor, it is critical to keep looking for organisations that are able to capitalise on opportunities in such a chaotic environment, innovate and deliver products quicker to the consumer by effectively navigating through the maze of logistical and regulatory hurdles. These would be the companies who truly would not have 'let this crisis go to waste'.

In the immediate to medium term, we can see a lot of changes in consumer behaviour, due to which FMCG companies will be forced to adapt their strategy for customer acquisition and retention. The composition of the consumption basket has changed due to COVID and some of these changes will be more permanent than others. An increased focus on health and hygiene will become the norm. Demand in the discretionary categories is likely to come back slowly but not immediately.

For the average consumer, we are seeing a surge in demand for products that enhance personal hygiene in and around homes and workplaces. Products such as soaps, handwashes, sanitisers, disinfectants, wipes, masks, home cleaning products such as floor cleaners, kitchen cleaners, toilet cleaners are seeing a surge in demand and this trend is expected to continue into the future as cleanliness and hygiene are going to be the new mantras. FMCG companies servicing these requirements are likely to do well. Similarly, companies which focus on food staples, and convenience foods such as instant noodles, biscuits, frozen foods, flour, cooking oils, instant mixes, and nutrition are going to be in demand. Products that help in building immunity against illnesses are also in significant demand from the consumers.

Having said that, some categories within the FMCG sector are likely to take a back seat for a while. It will be wise for companies to shift their focus from non-essential categories such as deodorants, fragrances, skincare and other cosmetics, gourmet foods, etc. It will also be imperative to manage inventory better to avoid concerns surrounding freshness and expiry of products.

The shopping behaviour of consumers is also set to see a change in 2 broad ways :

Consumers will try as hard as possible to reduce their trips to supermarkets. This would mean that the average amount an individual would spend on each trip is likely to increase as they would want to avoid making frequent trips to the supermarket.

Online shopping is going to be the new norm. Initiatives like ‘no-contact delivery’ by key players are going to accelerate this trend in online shopping and people will have the luxury of procuring the goods from the comfort of their homes.

We are witnessing a paradigm shift in consumer behaviour, businesses and business models, wherein there will be a decline of certain businesses, and slow down in others. A pandemic of this nature has opened our eyes to how vulnerable human life can really be – these are those rare times when every human being is on a quest for survival. Those who come out of this victorious, businesses and people alike, will be the ones who would have adapted to the new normal faster than others. The impact of Covid-19 on the FMCG sector can be felt – organisations which can adapt quickly to the changing demand patterns and show agility in thought and execution will be the ones who gain market advantage.

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EFFECT OF COVID-19 CRISIS ON FOREIGN TRADE OF INDIA

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Abstract

The world faces two interesting phenomena in relation to the pandemic and globalization: the rapid spread of the virus on a global scale and the disruption of the global supply chain. Globalization accelerates the movement of goods, services and people. However, it is also a result of globalization that the coronavirus has spread easily across the world in a matter of days. During this COVID-19 crisis, the concept of open trade has clearly been harmed. As no country is well prepared for the pandemic; many have banned the export of various medical instruments so they can meet domestic needs. Seventy five countries had imposed restrictions on the export of medical devices, including the United States, the European Union, India, China and Turkey. Food exports have also been restricted.

Key words—Indian EXIM Trade, Global slowdown, challenges for supply chain and demand Globalization, COVID-19

1. Introduction

The decline in exports has been mainly due to on-going global slowdown, which got aggravated due to the present COVID-19 crisis. In India, the countrywide lockdown to contain the spread of the coronavirus outbreak began on March 25, shutting industrial units and restricting movement of goods. Lockdown around the world have not only pushed business sentiment to the lowest levels but also impacted supply chains and economic growth.

The latter consequence is large scale devastation in supply chains and demand resulting in cancellation of orders. Barring iron ore and Pharmaceuticals, all the remaining Twenty eight key sectors registered negative growth in the month under review.

Gems and jewellery shipment declined by 98.74 per cent, followed by leather (-93.28percent), petroleum products (-66.22percent), engineering goods (-64.76 percent), and chemicals(-42 percent). Oil imports in April 2020 were \$4.66billion, which was 59.03percent lower as compared to the same month last year. All thirty key imports sectors like gold, silver, transport equipment, coal, fertiliser, machinery, and machine tools reported negative growth during the month. Non-oil imports fell by 58.5 percent.

2. Objectives of Study

- To highlight the Challenges for supply chain and demand due to Covid-19 crisis

- To study the changes in export import in India and effect of Covid-19
- To develop suggestions to boost the Indian export
- To develop suggestions to overcome from Global slowdown

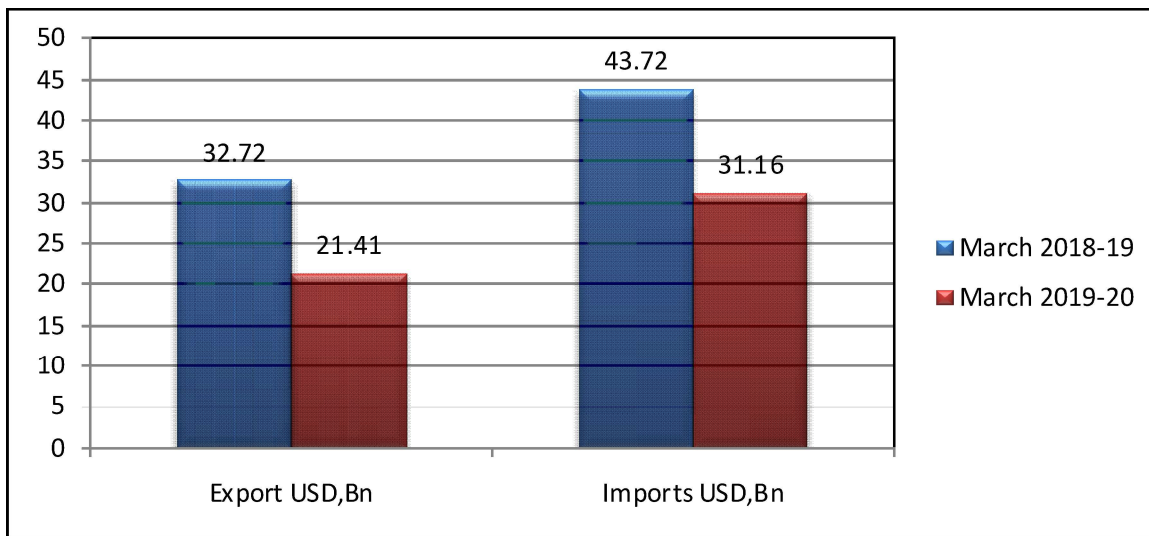
3. Data base and Methodology

It is necessary to understand the attributes of various sources of data on Export import before an analysis of trade patterns. Definitions and other kind of differences exist between different sources of data –each with different sets of advantages and limitations. The data structure floated by different sources like RBI, Department of commerce, Government of India and UNCTAD handbook of statistics, DGFT to track trends in patterns and structure of international trade relating to India the analytical techniques relate analysis of trends using graphs and tables charts the analysis pertains to data from January 2019 to march 2020

4. Trends in Indian Export -Import and effect of COVID-19

Global markets are in free fall with supply –chain disruption and manufacturing falling to the lowest levels in decades. Reduced international trade, falling PMIs across the globe and deep cuts in GDP forecasts for the year indicate that we have entered the anticipated recessionary period. With indices fluctuating wildly and crude oil futures hitting negative prices on the dollar, this is uncharted territory for traders and policy makers alike.

Diagram 1
Exports- Imports of India



Source— Ministry of Commerce

4.1 Trends in Indian Exports (Including re-exports)

Exports in March 2020 were USD 21.41 billion as compared to USD 32.72 billion in March 2019, exhibiting a negative growth of 34.57 per cent. In rupee terms export were Rs.159157.98Crore in March 2020 as compared to Rs.227318.25Crore in March 2019, registering a negative growth of 29.98 per cent. The decline in exports has been mainly due to the on-going global slowdown, which got aggravated due to current COVID-19 crisis. The latter resulted in large scale disruption in supply chain and demand resulting in cancellation of orders. Except of Iron ore, which registered a growth of 58.43%, all other commodity/commodity groups have registered negative growth in March 2020 vis-a vs. March 2019.

Major commodities related to Exports and Imports showing negative growth during March 2020 Vis-a-Vis March 2019 are oil meals (-69.85%), Meat, dairy and poultry products (-45.8%), Engineering goods (-42.32%), Gems and Jewellery (-41.05%), Leather and leather products (-36.78%), plastic and Linoleum (-35.67%), RMG of all textiles (-34.91%), carpet (-34.72%), Mica Coal and other ores, minerals including

processed minerals (-34.06%), tea (-33.74%), other cereals (-33.42%), Organic and inorganic chemicals (-32.88%), cotton yarn/fabrics/made-up-Handloom products etc. (-32.16%), Petroleum products (-31.12%) and Rice (-28.28%).

Cumulative value of exports for this period April –March 2019-20 was USD 314.31 billion (Rs.2226566.71Crore) as against USD 330.08 billion (RS.2307726.19Crore) during the period April-march 2018-19, registering a negative growth of 4.78 percent in Dollar terms (negative growth of 3.52 percent in rupee terms).

Non-petroleum and Non-gems and jewellery exports in March 2020 were USD 16.90 billion as compared to USD 25.68 billion in March 2019, exhibiting a negative growth of 34.19 percent. Non-petroleum and non-Gems and jewellery exports in March 2019-20 were USD 235.73 billion, as compared to USD 243.27 billion for the corresponding period in 2018-19, showing decrease of 3.10 percent.

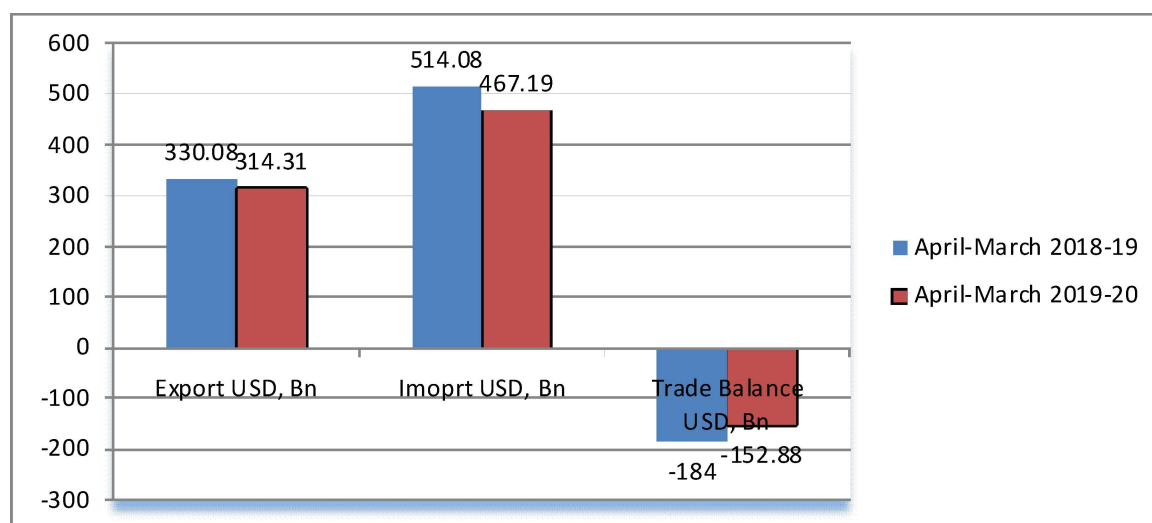
4.2 Trends in Indian Imports and Trade Balance

Imports in March 2020 were USD 31.16 billion (Rs.231710.92 Crore), which was 28.72 percent lower in dollar terms and 23.72 percent lower in rupee terms as compared to imports of USD 43.72 billion (Rs.303753.76Crore) in March 2019. Cumulative value of imports for the period April-March 2019-20 was USD 467.19 billion (Rs.3307977.05Crore) as Against USD 514.08 billion (Rs.3594674.61Crore) during the period April–March 2018-19, registering a negative growth 9.12 percent in dollar terms (negative growth of 7.98 percent in Rupee terms). Rise in imports during March 2020 was witnessed only in Transport equipments, which registered a growth of 11.94% over March 2019.

Chief commodity groups of import showing negative growth in March 2020 over the corresponding month of last year are:

- Crude oil imports in March 2020 were USD 10.1 billion (Rs.7462.00Crore), which was 15.00 percent lower in rupee terms), compared to USD 11.78 billion (Rs.81857.53Crore) in March 2019. Oil imports in April-March 2019-20 were USD 129.43 billion (Rs.917306.25Crore) which was 8.15 percent lower in Dollar terms (6.99 percent lower in rupee terms) as compared to USD 140.92 billion (Rs.986275.06 Crore) during the same period last year.
- Non-oil imports in March 2020 were estimated at USD 21.15 billion (Rs.157248.92Crore) which was 33.78 per cent lower in Dollar terms (29.13 percent lower in Rupee terms), compared to USD 31.94 billion (Rs.221896.23 Crore) in March 2019. Non-oil imports in April-March 2019-20 were USD 337.76 billion (Rs.2390670.80Crore) which was 9.49 per cent lower in Dollar terms (8.35 percent lower in Rupee terms), compared to USD 373.16 billion (Rs.2608399.55Crore) in April- March 2018-19.

Diagram 2
Exports, Imports and Trade Balance of India



Source— Ministry of Commerce

5. Supply vs. Demand during COVID -19

The effects of change in demand are already visible in the USA which remains India's largest Export market accounting for more than \$50 billion worth of exports annually. Analysing recent import data of the USA between January and April 2020, the composition of shipment has drastically changed from the pre COVID months.

It is articulate that while the inflow of essential goods has remained consistent (with a little increase of around 1%), particularly before the start of the pandemic in January 2020, to March 2020 when it hit its top in the USA, the inflow of non-essential and luxury goods has decreased by around 18% and 35% respectively. April provided some mixed signals as many trade member countries for example China started industries and exports again, making up for delayed orders that had been stuck in the country from January,2020 while other countries, including India, put their economies on hold. Extrapolating this data for other geographies at various stages of the pandemic curve, we can expect to see a similar demand composition across the globe. Interestingly, out of the overall exports from India to the USA, worth over \$50 billion, around 21% of goods fall in the essential goods bucket which is above the national average. This may turn out to be another much-needed silver lining among this depression for our battered exports.

6. Globalization and Challenges for Indian EXIM Trade

The increasing interaction of domestic economies with the world economy is generally termed as globalization. Globalization is reflected in the rising share of international trade in world output. International trade is experiencing its biggest slump at least the Great Depression. The world Trade Organization anticipates an "Optimistic scenario" in which global merchandise trade would plunge by 13% in 2020 and a pessimistic scenario with a 32% these numbers is unprecedented in modern times.

As we live in a world more dependent on international trade than ever before, we have to heed the lessons from previous trade slumps, in particular the Great Trade Collapse of 2008-09. Given the severity of the COVID-19 shock, policy-makers and researchers alike might have to rethink their approach to international trade in fundamental ways. The COVID -19 slump is a combined supply and demand shock. Will COVID-19 make firms scale back international value chains? Not necessarily. A more resilient network could mean more international diversification. Will protectionism lead to less international trade? It depends on how successfully elected leaders face up to the challenges of the crisis.

7. Short run Vs. Long run Impact of COVID-19

COVID-19's impact is expected to differ across the world and nations depending on each country's initial conditions the measures taken as well as global transmission of economic shocks due to integration with world market. The main sources of negative short-term macroeconomic impacts are threefold: First losses due to restrained mobility, second losses due to lower trade and falling export prices; and the impact of capital flows, this is exacerbated by exchange rate fluctuations by trading member countries .

A lot of dependence to the international market spreads the disease in Asian countries like India. There is a need to allow income generating activities that are not in line with social distancing. Also the depth and duration of global demand shortfalls matter. We currently expect industrialized economies to almost fully restart their industrial production during summer of 2020.

Losses in revenue could lead to serious balance of payment crisis. Other sources of income will not be able to make up for lost government revenue and at the same time, increasing public spending in health, income support and other economic stabilizers would be warranted. Public deficits are thus likely to rise. The fiscal burden of dealing with COVID-19 might also adversely affect government expenditures on important social services such as schooling and primary health care. Overall poverty trends in the medium term will depend very much on the extent to which economic growth resumes.

8. Suggestions

- A major issue facing exporters is credit access. The extension of the interest subvention scheme available for MSME exporters could be announced immediately. Further, to bridge over the present crisis situation, the scheme could be extended to all exporters as well as those manufacturing mainly for exports. Banks need to prioritise credit document and provide special cash credit funding.
- As an immediate measure to protect exports, CII has suggested that exports be classified under essential services so that they can operate with free movement cargo across states.
- Delays in filling of bills of entry and payment of customs duties should be given a one –time relaxation of three to six months.
- Another challenge for exporters due to the current lockdown measure is delays in clearance of import containers which attract increase in demurrage and container freight. Certain ports and airport should be specifically identified for handling exports on priority basis.
- Most nations are enthusiastically supporting their exporters during these difficult times Countries like China increased their export refund facility by 2% recently. Such moves make Indian goods less competitive in global markets and an additional duty drawback of at least 3 to 4 percent for the next six to eight months should be compensated to avert mass closure of enterprises.

9. Conclusion

As an immediate aftermath of the spread of the COVID-19 pandemic to multiple countries, global demand has fallen significantly and many orders have been cancelled. Further, the disruption of supply chains due to the ongoing lockdown has aggravated the poor performance of Indian exports. India is an important trading partner with many countries across the world. Although running a trade deficit, the gap between the country's imports and exports has been steadily declining in recent months. Due to a Crash in global oil prices, this is likely to continue further too. India's supremacy in specific sectors such as mineral fuels, gems and jewellery, pharmaceuticals, chemicals, textiles, engineering goods and food commodities has contributed to it becoming a key part of the global value chain. In the current crisis policy makers do not face the challenges of dealing with COVID-19 on a day to day basis. We therefore need international cooperation to shape a future global trading system that does not get bogged down by emergency measures inherited from a crisis. If we are not clear about long-run strategy, the risk is that we stumble into a new form of protectionism that ultimately few people want. The time to coordinate is now.

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डॉ० अभय कुमार मीतल

एसोसिएट प्रोफेसर एवं विभागाध्यक्ष, वाणिज्य विभाग

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सार

विश्व के कुछ विशेष भाग अपनी भौगोलिक एवं प्राकृतिक परिस्थितियों के चलते जहां अधिक प्रभावित नजर आ सकते हैं परंतु इन प्राकृतिक त्रासदियों एवं आपदाओं से विश्व का कोई भी भाग अथवा कोई भी शताब्दी अछूती नहीं है। इन प्राकृतिक आपदाओं एवं त्रासदियों से बचाव एवं उनके बाद उनसे निपटने की तैयारियां ही वास्तव में आपदा प्रबन्धन हैं। यहां यह भी महत्वपूर्ण है कि प्राकृतिक, भौगोलिक अथवा सामायिक परिस्थितियों के अनुसार आपदा प्रबन्धन का स्वरूप एवं तैयारियां भिन्न-भिन्न हो सकती हैं। वैश्विक संदर्भ में ताइवान, साउथ कोरिया, सिंगापुर, भूटान आदि के उदाहरण जहां अनुकरणीय हैं, वहीं भारतीय संदर्भ में केरल, भीलवाड़ा मॉडल आदि से सबक लेकर हम आपदा प्रबंधन की भावी रणनीतियों पर कार्य कर सकते हैं यद्यपि समय, काल, परिस्थितिनुसार इन्हें परिवर्तित या संशोधित किया जा सकता है।

मुख्य शब्द—भीलवाड़ा मॉडल, प्राकृतिक त्रासदी एवं आपदा, मानव-जनित त्रासदी एवं आपदा।

आपदा प्रबन्धन वर्तमान समय का सर्वाधिक ज्वलंत प्रश्न है और यह प्रत्येक काल में ज्वलंत बना ही रहता है क्योंकि किसी भी आपदा का आकार, स्वरूप, क्षेत्र एवं समय सदैव अनिश्चित रहता है। यद्यपि बढ़ती हुई वैज्ञानिक संभावनाओं ने कुछ आपदाओं के विषय में पूर्वानुमान व्यक्त किए हैं परन्तु इन पूर्वानुमानों एवं वास्तविकता के अन्तर के कारण आपदाओं की भयावहता मानव जाति को निरन्तर प्रभावित करती रही है। यही वो कारण है जिसके कारण आपदा प्रबन्धन में नवोन्मेष की संभावनाएं भी सदैव बनी रहती हैं। आपदाएं किसी एक देश अथवा राष्ट्र की समस्या नहीं हैं। यह अविकसित, विकासशील अथवा विकसित राष्ट्रों के भेदभाव के बिना किसी भी स्थान और समय पर प्रकट हो सकती हैं। मेरी सम्मति में आपदा एक अतिथि के समान है जिनके आने का कोई समय निर्धारित नहीं होता। वर्तमान परिप्रेक्ष्य में कुछ औपचारिक रूप से आने वाले अतिथि ही कार्यक्रम की पूर्व सूचना दे सकते हैं। कमोवेश यही स्थिति विश्व में आपदाओं की भी है। यदि हम इतिहास के झरोखों में झांके तो हमें सम्पूर्ण विश्व के प्रत्येक भाग में समय-समय पर विभिन्न आपदाओं की दस्तक अवश्य मिल जाएगी। विश्व के कुछ विशेष भाग अपनी भौगोलिक एवं प्राकृतिक परिस्थितियों के चलते जहां अधिक प्रभावित नजर आ सकते हैं परंतु इन प्राकृतिक त्रासदियों एवं आपदाओं से विश्व का कोई भी भाग अथवा कोई भी शताब्दी अछूती नहीं है। इन प्राकृतिक आपदाओं एवं त्रासदियों से बचाव एवं उनके बाद उनसे निपटने की तैयारियां ही वास्तव में आपदा प्रबन्धन हैं।

यद्यपि सामान्यतः विभिन्न प्राकृतिक संकटों, आपदाओं एवं त्रासदियों को ही विश्व समुदाय आपदा की श्रेणी में परिभाषित करता है, परन्तु यदि हम पिछले कुछ दशकों की त्रासदियों का सूक्ष्म विश्लेषण करें तो मेरी दृष्टि एवं सम्मति में वैश्विक आपदाओं को दो श्रेणियों में विभाजित किया जा सकता है—

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इस श्रेणी में तूफान, भूकम्प, बाढ़, वनाग्नि, सूखा, चक्रवाती तूफान, ज्वालामुखी विस्फोट, भूस्खलन, ओलावृष्टि, विभिन्न महामारियाँ जैसे प्लेग, चेचक, हैजा, डेंगू, विभिन्न प्रकार के बुखार या अन्य बीमारियां, हैपेटाइटिस आदि, बादल फटना, बिजली गिरना, टिड्डी दल का आक्रमण, विभिन्न संक्रमण या संक्रमण से फैलने वाली बीमारी आदि को सम्मिलित किया जा सकता है। कोरोना महामारी जिससे आज सम्पूर्ण विश्व त्राहि-त्राहि बोल रहा है, जिसके आगे अमरीका, जापान, इटली, फ्रांस जैसे विकसित देश भी घुटने टेक रहे हैं,

अधिकतम आबादी वाले चीन और भारत इससे जूझते हुए दिख रहे हैं, प्राकृतिक त्रासदी-आपदा का यह सर्वाधिक ज्वलंत और सबसे बड़ा उदाहरण है। सारी वैज्ञानिकता एवं आधुनिकता को मात्र दो ग्राम वायरस ने वैश्विक स्तर पर धरातल पर लाकर खड़ा कर दिया और लगभग 8 माह बीत जाने के पश्चात भी इसकी संक्रामकता निरन्तर बढ़ रही है और कोई भी प्रभावी वैकसीन या औषधि नहीं खोजी जा सकी है। परमाणु ऊर्जा, परमाणु बम बनाने वाले, चांद और मंगल तक पताका फहराने वाले अतिशक्तिशाली कहे जाने वाले साधन-सम्पन्न देश भी इसके सामने बौने नजर आ रहे हैं।

यदि हम मात्र पिछले कुछ दशकों की ही विभिन्न वैश्विक त्रासदियों की ही बात करें तो बीसवीं शताब्दी में अमेरिका; सैंडी, कटरीना, टोरनेडो जैसे तूफानों से दहल गया, ईरान में अनेकों भूकम्प, जापान में विनाशकारी भूकम्प जिसके कारण जापान के फुकूशिया परमाणु संयंत्र में विस्फोट हुआ, पाकिस्तान में बाढ़ का प्रकोप, इंडोनेशिया में भूकम्प जिसके कारण हिन्द महासागर में सुनामी आयी, जावा-सुमात्रा द्वीपों के साथ 14 अन्य देश प्रभावित हुए जिनमें भारत, बांग्लादेश, इंडोनेशिया, थाईलैंड सर्वाधिक प्रभावित रहे, विभिन्न अन्य देशों में ज्वालामुखी से लावा और विनाश आदि और भी न जाने कितनी प्राकृतिक आपदाओं एवं त्रासदियों के उदाहरण दिए जा सकते हैं जिनसे विश्व में लाखों ने जान गंवाई, लाखों बेघर हो गए और लाखों के ऊपर भविष्य के दूरगामी दुष्परिणाम हुए।

यदि हम भारत की पिछले कुछ दशकों की प्राकृतिक आपदाओं की बात करें तो अतिवृष्टि के कारण बाढ़ विभिन्न राज्यों के लिए प्रतिवर्ष की बात है। पहाड़ी क्षेत्रों में बादल फटना, भू-स्खलन, अतिवृष्टि निरन्तर घटने वाली घटनाएं हैं। उत्तरकाशी में भूकम्प, केदारनाथ की त्रासदी का दंश शायद भारतवासी कभी नहीं भूल पाएंगे। आजादी के पूर्व प्लेग, हैजा फैलने और गांव के गांव समाप्त होने की बात तो अब शायद इतिहास की धरोहर हो गयी है। चेचक से न जाने कितने नौनिहालों ने अपनी आंख, सुन्दरता एवं जान गंवाई; यह सर्वविदित है। वर्तमान समय में कोरोना (कोविड-19) से विभिन्न प्रयासों के बाद भी हम इसके संक्रमण को रोकना तो दूर कम भी नहीं कर पा रहे हैं। रोज आने वाले केसों की संख्या में निरन्तर वृद्धि हो रही है। यह इस बात का प्रत्यक्ष प्रमाण है कि कौन सी आपदा कब, कहाँ, कैसे प्रकट होगी; इसका अनुमान लगाना निश्चय ही असंभव न हो परन्तु एक दुष्कर कार्य अवश्य है।

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हो सकता है कि कुछ विद्वान मेरे तर्क से सहमत न हों परन्तु अपने अध्ययन एवं विश्लेषण के पश्चात मुझे यह अनुभव हुआ है कि कुछ त्रासदियां मानव-जनित भी होती हैं। इनके पीछे शक्ति, सत्ता की भूख, विभिन्न कुंठाएं, तृष्णाएं, विकास की अंधी दौड़ आदि प्रमुख कारण होते हैं। क्या ग्लेशियरों के पिघलने, प्राकृतिक एवं भौगोलिक असंतुलन के लिए वनों एवं पेड़ों का कटान या बढ़ता हुआ प्रदूषण उत्तरदायी नहीं हैं जिसकी परिणति अल्पवृष्टि या अतिवृष्टि या अन्य आपदा के रूप में होती है।

क्या केदारनाथ आपदा के लिए वहां पर भवनों का अति निर्माण एवं विशुद्ध पर्यावरण को निरन्तर दूषित किया जाना उत्तरदायी नहीं था? क्या हिरोशिमा या नागासाकी के बम विस्फोटों की त्रासदी, जिसे सदियों तक जापान की तत्कालीन और भविष्य की पीढ़ी ने झेला, मानव-जनित नहीं थी? क्या भोपाल गैस रिसाव त्रासदी मानवीय भूल एवं सुरक्षा कारणों में कमी नहीं थी? क्या विभिन्न भवनों एवं बहुमंजिली इमारतों में समय-समय पर लगने वाली विशाल अग्नि एवं त्रासदी से बचने के लिए सुरक्षा मानकों की कमी अथवा मानवीय कृत्य उत्तरदायी नहीं होते? 11/9 की अमेरिकन त्रासदी या 26/11 की मुंबई ताज होटल त्रासदी एवं आपदाओं का भी विश्व ने सामना किया है जिनके लिए परोक्ष अथवा अपरोक्ष रूप से मानव ही उत्तरदायी है। मानवीय महत्वकाक्षाओं, शक्ति के गुरुर, धर्मान्धता, कटुता एवं कट्टरता आदि पर नियंत्रण करके, पर्यावरण के प्रति जागरूकता प्रचारित करके, वनों के कटान को रोककर, प्रदूषण कम करके, भौगोलिक एवं प्राकृतिक असंतुलन को कम किया जा सकता है और विभिन्न मानवजनित आपदाओं पर अंकुश लगाया जा सकता है।

यदि हम वर्तमान वैश्विक पटल पर आपदा की बात करें जिसके सम्मुख समस्त आपदा प्रबन्धन के दावे निष्फल हो गए, सारा विज्ञान नतमस्तक दिखायी दे रहा है, सारी आधुनिकता धरी की धरी रह गयी, समस्त वैश्विक महाशक्तियां समवेत रूप से भी जिसका सामना नहीं कर पा रहीं, वह निर्विवादित रूप से कोरोना महामारी (कोविड-19) है। सम्पूर्ण विश्व में संक्रमित प्राणियों की संख्या 2 करोड़ को पार कर चुकी है, लगभग साढ़े सात लाख लोग काल के गाल में समा चुके हैं और लगभग 9 से 10 माह की अवधि में भी न तो इसकी कोई प्रभावी दवा खोजी जा सकी है और न ही वैकसीन का निर्माण हुआ है। बस अगर मन को संतोष प्रदान करने वाली यदि कोई बात है तो वह यह कि लगभग 1 करोड़ से अधिक लोग इस बीमारी से ठीक हो चुके हैं और यदि मृत्यु प्रतिशत की बात की जाए तो वह काफी कम है। यदि हम भारतवर्ष की बात करें तो कुल संक्रमित व्यक्तियों के आंकड़े 20 लाख को पार कर चुके हैं तथा लगभग 50 हजार लोग मृत्यु को प्राप्त हो चुके हैं, बस राहत की बात पुनः यही है कि लगभग 15 लाख लोग संक्रमण के पश्चात स्वस्थ हो चुके हैं। इस महामारी ने मानव को यह अहसास दिला दिया है कि प्रकृति से शक्तिशाली कोई भी नहीं।

जहां यह महामारी वैश्विक पटल पर एक विशाल दानव की भांति जनमानस को त्रस्त किए हुए है, वहीं नकारात्मकता से सकारात्मकता की भांति इसने मानव मूल्यों को पुनर्जीवित कर दिया। पारिवारिक मूल्यों का पुनर्जागरण कर दिया। मनुष्यों को लाकडाउन की परिस्थितियों ने ये स्वीकार करने पर विवश कर दिया कि बिना होटल, रेस्टोरेन्ट या फास्ट फूड खाए भी मनुष्य आराम से जीवन यापन कर सकता है। जिस वायु प्रदूषण एवं जल प्रदूषण को दूर करने के लिए सभी देश अपने अपने स्तर पर करोड़ों डालर खर्च कर रहे थे, जिस ओजोन परत के छेद को बन्द करने के लिए समस्त विश्व के वैज्ञानिक प्रयासरत हैं परन्तु सफलता बहुत दूर दिखायी देती थी; इस महामारी के चलते हुए वैश्विक लॉकडाउन ने इन समस्याओं को दूर कर दिया और प्राकृतिक स्वच्छता अपने चरम पर पहुंच गयी, पर्यावरण स्वच्छ एवं शुद्ध हो गया, ओजोन परत स्वतः श्रेष्ठ स्थिति में आ गयी। वहीं दूसरी ओर विश्व के सभी देशों को अपनी आपदा प्रबन्धन व्यवस्था के मूल्यांकन का अवसर भी मिला। यह सत्य प्रमाणित हुआ है कि आपदा प्रबन्धन की किसी भी स्तर की तैयारी कर ली जाए परन्तु आपदा नवीन एवं आकस्मिक रूप से इस प्रकार प्रकट हो सकती है कि पुनः वह तैयारियां अल्प प्रतीत होने लगें।

निष्कर्ष

यदि हम विश्लेषणात्मक दृष्टि से देखें तो आपदा प्रबन्धन एक अत्यन्त व्यापक विषय है जिस पर परिस्थिति अनुसार निर्णय लिए जाने की आवश्यकता होती है। विभिन्न अवसरों पर आपदा के सम्बन्ध में पूर्वानुमान विफल हुए हैं जहाँ बिना पूर्वानुमान के आपदाएं प्रकट हुई हैं। वास्तव में आपदा प्रबन्धन के माध्यम से पूर्वानुमानों के आधार पर (यदि संभव हो तो) मानव मात्र को या प्रभावित होने वाले क्षेत्रों को सावधान रहने, पलायन करने आदि की चेतावनी जारी करके आपदा के नकारात्मक प्रभाव को कम किया जा सकता है। कुशल एवं प्रभावी आपदा प्रबन्धन के माध्यम से प्राकृतिक अथवा मानव-जनित आपदा या त्रासदी को न्यूनतम करने के प्रयास किए जा सकते हैं और भविष्य की रणनीतियों को तदनुसार तैयार किया जा सकता है। यहां यह भी महत्वपूर्ण है कि प्राकृतिक, भौगोलिक अथवा सामायिक परिस्थितियों के अनुसार आपदा प्रबन्धन का स्वरूप एवं तैयारियां भिन्न-भिन्न हो सकती हैं। पिछले उदाहरणों से शिक्षा ग्रहण की जानी चाहिए, विभिन्न सफल संदर्भों का अनुकरण इस दिशा में सहायक सिद्ध हो सकता है। वैश्विक संदर्भ में ताइवान, साउथ कोरिया, सिंगापुर, भूटान आदि के उदाहरण जहां अनुकरणीय हैं, वहीं भारतीय संदर्भ में केरल, भीलवाड़ा माडल आदि से सबक लेकर हम भावी रणनीतियों पर कार्य कर सकते हैं यद्यपि समय, काल, परिस्थितिनुसार इन्हें परिवर्तित या संशोधित किया जा सकता है।

संदर्भ

- दैनिक अमर उजाला-विभिन्न अंक
- इंडिया टुडे-विभिन्न अंक
- आरोग्य सेतु ऐप पर उपलब्ध विभिन्न जानकारियां
- राष्ट्रीय आपदा प्रबंधन प्राधिकरण की वेबसाइट

डा० अनूप सिंह सांगवान

एसोसिएट प्रोफेसर

राजकीय महाविद्यालय, फरीदाबाद

सार

आज विकास व आधुनिकता के नाम पर मानव ने शहरीकरण, औद्योगिकीकरण और विज्ञान एवं तकनीकी प्रगति द्वारा अपनी सुख सुविधाओं में भारी वृद्धि कर ली है लेकिन इस सब की भारी कीमत उसे प्राकृतिक एवं मानव जनित आपदाओं से होने वाले जान-माल के रूप में चुकानी पड़ रही है। दुनिया की तेजी से बढ़ रही जनसंख्या खाद्यान्न, वस्त्र और आवास के साथ अन्य मूलभूत आवश्यकताओं की पूर्ति हेतु प्राकृतिक संसाधनों जैसे वनों, पृथ्वी, जल, खनिज पदार्थों, कोयला, पेट्रोलियम व प्राकृतिक गैस व ऊर्जा संसाधनों का अंधाधुंध दोहन किया जा रहा है जिससे पर्यावरण में पारिस्थितिक असन्तुलन पैदा हो रहा है। इससे जलीय, थलीय एवं वायु मण्डलीय परिस्थितियों में प्रतिकूलता उत्पन्न होती है तथा बाढ़, भूकम्प, सूखा, भू-स्खलन, हिमस्खलन, जंगलों की आग, चक्रवात, शीत एवं ताप लहरे, प्लेग, हैजा, फ्लू और कोविड-19 जैसी महामारियों सम्बन्धित आपदाएँ घटित होती हैं। इन सब आपदाओं से हजारों/लाखों की संख्या में मासूम मानवों व पशु-पक्षियों को अकाल मृत्यु का सामना करना पड़ता है और पीड़ित राष्ट्र को करोड़ों/अरबों रुपये की भौतिक सम्पत्ति का भी नुकसान उठाना पड़ता है। यद्यपि हम इन आपदाओं को रोक नहीं सकते हैं, परन्तु अपने प्रयासों से इन पर नियन्त्रण अवश्य पाया जा सकता है तथा इसमें अन्तर्राष्ट्रीय संगठनों, सरकार, गैर-सरकारी संगठनों, समुदाय व मीडिया की महत्वपूर्ण भूमिका होती है। प्रस्तुत लेख में समुदाय और मीडिया की आपदा-प्रबन्धन व निवारण में सहभागिता पर चर्चा की गई है।

मुख्य शब्द: आपदा-प्रबन्धन, औद्योगिकीकरण, पर्यावरण, विज्ञान व तकनीकी।

प्रस्तावना:

आपदा वह विषम स्थिति है जो अचानक आती है तथा मानव सभ्यता, सम्पत्ति, सामान्य कार्यशैली को व्यापक रूप से प्रभावित करती है। इन आपदाओं से सामान्य जन-जीवन अस्त-व्यस्त हो जाता है, शारीरिक तथा मानसिक तौर से प्रताड़ना होती है तथा बड़े पैमाने पर जान-माल का नुकसान होता है। संयुक्त राष्ट्र के अनुसार आपदा का अर्थ है कि किसी समुदाय, समाज या राष्ट्र का कामकाज अस्त-व्यस्त हो जाना, जिससे व्यापक रूप से मानवों, सम्पत्ति या पर्यावरण पर नकारात्मक असर पड़े और इसकी भरपाई करने में वह समुदाय, समाज या राष्ट्र असमर्थ एवं असहाय महसूस करे।

आपदाओं को मुख्य रूप से निम्न दो भागों में वर्गीकृत किया जा सकता है:-

- (1) प्राकृतिक आपदाएँ जैसे बाढ़, भूकम्प, ज्वालामुखी, चक्रवात, भू-स्खलन, हिम-स्खलन, सूखा, अकाल, ओलावृष्टि आदि-आदि।
- (2) मानव जनित आपदाएँ, इनमें मुख्य रूप से जल, वायु, ध्वनि व नाभिकीय प्रदूषण, दुर्घटनाएँ, आग, आतंकवाद एवं युद्ध आदि शामिल हैं।

यद्यपि मनुष्य ने विज्ञान एवं तकनीकी दिशा में काफी प्रगति हासिल कर ली है, परन्तु जब प्राकृतिक आपदाएँ आती हैं तो हमारे हाथ-पांव फूल जाते हैं और हम इनको रोकने में अपने आप को असहाय महसूस करते हैं। हाल ही में कोरोना वायरस से फैली महामारी कोविड-19 इस का ताजा उदाहरण है जिसने समस्त विश्व की अर्थव्यवस्था एवं स्वास्थ्य-ढाँचे को हिला कर रख दिया है।

यह भी सच है कि हम प्राकृतिक आपदाओं को रोक नहीं सकते हैं परन्तु पर्यावरण प्रबन्धन एवं सावधानी रख कर इनसे होने वाले जान-माल के नुकसान को काफी हद तक कम जरूर कर सकते हैं। आपदा निवारण के लिए एक उचित नियोजन, संगठन, कार्यान्वयन एवं मूल्यांकन की आवश्यकता होती है जो जोखिम न्यूनीकरण, तैयारी, अनुक्रिया एवं पुनरुत्थान में सहायक हो तथा जिससे पीड़ित लोगों का राहत, पुनर्वास एवं पुनर्निर्माण कार्य किया जा सके।

इस पृथ्वी पर घटने वाली विभिन्न प्रकार की प्राकृतिक एवं मानवजनित आपदाएँ समस्त आर्थिक, सामाजिक एवं मानवीय तन्त्र को अवरुद्ध एवं अस्त-व्यस्त कर देती हैं और इस सब से उभरने के लिए कई वर्ष लग जाते हैं। आपदा या संकट कैसा भी हो, इससे निपटना किसी एक सरकार, संस्था या व्यक्ति के बस से बाहर होता है। सो आपदा जोखिम के निस्तारण एवं न्यूनीकरण के लिए समग्र प्रयास जरूरी है।

आपदा निवारण अथवा प्रबन्धन में कोई भी समुदाय अपनी महत्वपूर्ण भागीदारी अदा कर सकता है तथा साथ ही आज के युग में कार्यपालिका, विधायिका व न्यायपालिका के बाद कहा जाने वाला चौथा स्तम्भ मीडिया भी आपदा के समय अपना अहम् योगदान दे सकता है। अतः समुदाय एवं मीडिया की आपदा-प्रबन्धन व निवारण में महत्वपूर्ण भूमिका सिद्ध हो सकती है जो निम्न प्रकार से है:-

समुदाय (Community)

प्राकृतिक आपदाओं को रोकना कठिन है, पर आपदा प्रबन्धन के विभिन्न उपाय कर इनसे होने वाले नुकसान को कम अवश्य किया जा सकता है। आपदा को कम करने में समुदाय की विशेष भूमिका होती है। हम सब समुदाय के अंग हैं। किसी भी आपदा से प्रायः समुदाय के लोग ही प्रभावित होते हैं। अभी तक वह निष्क्रिय नहीं रहे हैं बल्कि किसी भी आपदा को उन्होंने बड़ी तत्परता से सामना किया है। क्योंकि समुदाय के लोग स्थानीय भू-विज्ञान से भली-भान्ति परिचित होते हैं और खतरों के बारे में जानते हैं। अतः आपदा प्रबन्धन की क्षमता विकसित (Capacity Building) करने हेतु समुदाय को शुरु से ही अपनी योजनाओं में शामिल कर लेना चाहिए।

आपदा प्रबन्धन में स्थानीय लोगों की महत्वपूर्ण भूमिका को देखते हुए तो समुदाय को संसाधनों और बुनियादी सेवाओं का नियन्त्रण दिया जाता है जिससे आपदाओं के समय उपयुक्त कदम उठाने में उनकी क्षमता बढ़ जाती है।

समुदाय आधारित आपदा प्रबन्धन दृष्टिकोण से स्थानीय समुदाय को अपने पहले के अनुभवों के आधार पर अपनी स्थानीय स्थिति का मूल्यांकन करने के बेहतर अवसर मिलते हैं।

आपदा प्रबन्धन में समुदाय का अहम् योगदान हो सकता है सो विभिन्न नियोजन, कार्यान्वयन और नीतियों के द्वारा समुदाय की सहभागिता जरूरी है:-

- समुदाय की अपनी समस्याओं अथवा मुद्दों को समझने हेतु बैठकें, आयोजनों और जनसंचार माध्यमों से जन जागरूकता लाई जानी चाहिए।
- आजीविका अवसरों एवं समुत्थान हेतु समुदाय में तकनीकी व कुशल प्रबन्धन की क्षमताओं का विकास किया जाना चाहिए।
- परिवार और समुदाय स्तर पर लोगों को जोखिम और प्रतिकूल हालतों से निपटने के लिए योग्य बनाया जाए।
- समुदाय और अन्य एजेंसियों के मध्य विश्वास स्थापित किया जाना चाहिए ताकि आपदा प्रबन्धन योजनाओं को अमली जामा पहनाया जा सके।
- गुजरात और उड़ीसा में आने वाली आपदाओं में समुदाय ने डटकर सामना किया है और एक उदाहरण प्रस्तुत किया है।

आपदा के समय शरण स्थलों के रूप में स्कूलों, महाविद्यालयों व अन्य सार्वजनिक इमारतों का प्रयोग किया जा सकता है क्योंकि यहां पर रहने व खाने की पर्याप्त व्यवस्था के लिए एक सुरक्षित जगह हो सकती है। इसके अतिरिक्त सामान्य समय में से शिक्षण संस्थान अपने छात्रों को विभिन्न प्रकार की आपदाओं के सम्बन्ध में ज्ञान भी प्रदान कर सकते हैं क्योंकि यही पढ़ने वाले छात्र आगे चलकर देश के जिम्मेदार नागरिक बनते हैं।

दूसरे, भारत में बड़े पैमाने वा समुदाय आधारित आपदा प्रबन्धन के विस्तार के लिए पंचायती राज संस्थाओं की भूमिका और कार्य विस्तृत करने की आवश्यकता है। उन्हें प्रशिक्षण एवं संसाधनों से लैस करना होगा।

तीसरे, समुदाय अपने स्तर पर वहां के लोगों से अनिवार्य या ऐच्छिक स्तर पर चन्दा एकत्र कर सकता है जिसका उपयोग आपदा की स्थिति में किया जा सकता है और इससे समुदाय का आर्थिक आधार मजबूत होगा और किन्हीं परिस्थितियों में सरकारी सहायता में देरी की वजह से समुदाय के पास एक पर्याप्त कोष रहेगा।

अन्त में, आपदाओं से सबसे अधिक प्रभावित लोग गरीब परिवार होते हैं। भारत के गरीब लोग, खाना-पीना, कपड़ा, शिक्षा, चिकित्सा सेवा जैसी बुनियादी सुविधाओं से वंचित हैं। सो समुदाय द्वारा इन अक्षम लोग के जीवन और जीविका को सुरक्षित किया जा सकता है।

5) मीडिया (Media)

किसी प्रकार की प्राकृतिक या मानव जनित आपदा प्रबन्धन में सरकार और समुदाय का एक अन्य महत्वपूर्ण संगठन स्वतन्त्र मीडिया होता है। वह सरकार और सामान्य जनता को आपदा के कारण, प्रभावों एवं उसके उचित समाधान के सम्बन्ध में जानकारी प्रदान करने का एक मजबूत मंच होता है। मीडिया को हम मुख्य रूप से निम्नलिखित चार भागों में बांट सकते हैं:—

1. प्रिन्ट मीडिया: इसमें मुख्य भाग पुस्तकें, पत्रिकाएं, समाचार पत्र व अन्य बुकलेट हैं।
2. नॉन-प्रिन्ट मीडिया: इसे इलेक्ट्रॉनिक मीडिया भी कहा जाता है। इसमें ई-बुक्स, ई-जर्नल, ई-मैगज़ीन, ई-समाचार पत्र, दृश्य व श्राव्य साधन, रेडियो, फिल्में व उपग्रह संरचना शामिल हैं।
3. इन्टरनेट: आधुनिक समय यह महत्वपूर्ण साधन बन कर उभरा है। इसमें हम विभिन्न वेबसाइट्स, सर्च इंजन, सोशल मीडिया व अन्य संचार सेवाएं जैसे ई-मेल को शामिल कर सकते हैं।
4. मोबाइल सेवायें: एक स्मार्ट फोन के माध्यम से हम अपने और बाहर के ज्ञान को सन्देश, वाट्सएप, वीडियोकॉल, इन्टरनेट व अन्य जन-जागरण सेवाओं का आदान-प्रदान कर सकते हैं।

उपरोक्त सभी माध्यमों से मीडिया सार्वजनिक एवं आपातकालीन संगठनों के बीच एक सीधा संवाद बनाता है। वह आपदा के प्रबन्धन के सम्बन्ध में सरकारी प्रयासों और उनकी हकीकत के बारे में जनता को बताता है व उन्हें अफवाह से बचने तथा अधिक पेनिक न होने की शिक्षा भी प्रदान करता है।

मीडिया सामान्य जन मानस को आपदा से निपटने के लिए सरकारी प्रयासों व उपलब्ध अन्न, फल, दूध, दवाईयाँ और अन्य जरूरी वस्तुओं की वस्तुस्थिति से भी अवगत करवाता है और सरकार को उसके प्रयासों में कमियाँ और उन्हें दूर करने के सम्बन्ध रास्ता बताता है। इसके साथ ही सरकारी संसाधनों को मजबूत करने की दिशा में जनता से प्रधानमंत्री या मुख्यमंत्री राहत कोष में दान राशि सहयोग करने की प्रभावकारी अपील भी करता है।

मीडिया के सकारात्मक पहलू:—

- मीडिया तत्कालिक सूचना व जागरूकता लाने का एक विश्वसनीय स्रोत माना जाता है।
- मीडिया द्वारा किसी आपदा की तथ्यात्मक कवरेज से सहायता निर्णय और प्रतिक्रिया से देश के काफी जन-धन का बचाव हो सकता है।
- मीडिया आपदा के समय में एक अमूल्य सम्पत्ति है जो घटना के सम्बन्ध में जानकारी का प्रयास करके लोग व सरकार को सचेत करता है।
- मीडिया जनता को पल-पल की जानकारी प्रदान करके उनमें विश्वास जगाने व डर भगाने का कार्य भी करता है।
- यह पीड़ितों को स्वास्थ्य, पुनर्वास एवं अन्य आर्थिक सहायता दिलवाने में भी एक संरक्षक के तौर पर अपनी जिम्मेदारी निभाता है।

मीडिया के नकारात्मक पहलू:—

- मीडिया द्वारा कई बार गलत सूचनाएँ दिए जाने से लोगों में भय, अविश्वास व आतंक का माहौल पैदा हो जाता है।
- प्रभावशाली व्यक्ति या राजनेता अपने लाभ के लिए मीडिया में हेर-फेर कर सकता है।
- पीली पत्रकारिता, लम्बससवू श्रवणतदंसपेउद्ध की वजह से कई बार मीडिया अविश्वास का कारण भी बन जाता है।

आपदाओं के सभी चरणों में मीडिया की महत्वपूर्ण भूमिका है और घटनाओं के दौरान चेतावनी और सूचनाओं को तेजी से प्रसारित करके समुदाय को जागृत करने का कार्य करता है। इसलिए निम्नलिखित सुझाव, समुदाय, सरकार एवं मीडिया के बेहतर सम्बन्धों को बनाकर और ज्यादा प्रभावकारी एवं सकारात्मक परिणाम आपदा प्रबन्धन के सम्बन्ध में प्रदान कर सकते हैं:—

- आपदा प्रबन्धन एजेंसियों और मीडिया के बीच रिश्तों को मजबूत करना।
- विशेष प्रसारकों के साथ औपचारिक सहयोग के लिए आधार तैयार करना।

- राष्ट्रीय आपातकालीन चेतावनी प्रणाली (NEAS) की योजना एवं स्थापना होनी चाहिए।
- प्रसारण केन्द्रों के लिए सीधी सम्पर्क व्यवस्था बेहतर की जाए।
- सभी सम्बद्ध संस्थाओं के लिए एक विनिमय सूचना तन्त्र का निर्माण हो।
- आपदा पत्रकारों को प्रशिक्षण व उच्च तकनीक से जोड़ा जाए।
- संकटमय परिस्थितियों में अपनी जान को जाखिम में डालकर कार्य करने वाले संवाददाताओं, फोटोग्राफरों एवं अन्य तकनीकी स्टाफ की सुरक्षा के साथ-साथ उन्हें उचित बीमा कवरेज प्रदान किया जाना चाहिए।

सोशल मीडिया (Social Media)

हाल के वर्षों में, सोशल मीडिया विशेष रूप से आपदाओं के दौरान सूचना के नए स्रोतों और तेजी से संचार प्रदान करने के लिए एक लोकप्रिय माध्यम के रूप में उभरा है। यह सामाजिक सम्पर्क के माध्यम से प्रसारित सूचना और संचार प्रौद्योगिकी का एक रूप है। यह आपातकालीन स्थिति से बचाव, पुनर्वास एवं राहत के सम्बन्ध का एक उपयुक्त साधन है।

सोशल मीडिया इंटरनेट प्रौद्योगिकी पर आधारित है। इसमें फेसबुक, ट्विटर, वाट्सएप, इन्सटाग्राम, स्काईप आदि माध्यमों से सूचनाओं का आदान-प्रदान किया जाता है। यह आपदा प्रबन्धन में अपनी अकल्पनीय भूमिका अदा कर सकता है बशर्ते कि इन सभी का प्रयोग सही दिशा में किया जाए।

निष्कर्ष

सृष्टि का निर्माण ही सृजन एवं विनाश प्रक्रियाओं का परिणाम है तथा जब से पृथ्वी पर जीवन कर उदभव हुआ है, तब से ही भुकम्प, बाढ़, सुनामी, चक्रवात, भूस्खलन, ज्वालामुखी विस्फोट, जंगलों की आग, सूखा, अकाल एवं महामारियों जैसी प्राकृतिक आपदाएँ घटित होती आ रही हैं। इन आपदाओं से पृथ्वी पर भारी मात्रा में जन-धन की हानि होती है तथा इससे उभरने व जन-जीवन की सामान्य स्थिति बहाल करने में वर्षों लग जाते हैं। दूसरी तरफ तेजी से बढ़ती जनसंख्या, औद्योगिकीकरण तथा शहरीकरण के परिणाम स्वरूप लोगों की रोटी, कपड़ा और मकान की मूलभूत आवश्यकताओं की पूर्ति हेतु जलीय एवं थलीय संसाधनों का अन्धाधुंध दोहन किया जा रहा है। इससे मरुस्थलीकरण, विश्व-उष्णता, हरित गृह प्रभाव, जल, थल, एवं वायु प्रदूषण को बढ़ावा मिल रहा है तथा मानव, जीव-जन्तुओं एवं वनस्पति जगत के स्वास्थ्य व विकास पर दुष्प्रभाव पड़ रहा है।

यद्यपि आपदाएँ हमारे नियन्त्रण से बाहर हैं परन्तु कुछ सावधानियाँ एवं उपायों द्वारा, इनसे होने वाले जन-धन के नुकसान को कम अवश्य कर सकते हैं। आपदा प्रबन्धन एवं निवारण पूर्ण रूप से ना ही सरकार के बस में है और ना ही जनता के बस में, क्योंकि जब कोई इस प्रकार की आपदाएँ आती हैं तो सरकारी मशीनरी के हाथ-पांव फूल जाते हैं। कोरोना वायरस तेजी से फैल रहा है इसका ताजा उदाहरण है। अतः यह एक संयुक्त प्रयास है तथा इसमें सभी की भागीदारी होगी तो बेहतर तरीके से आपदा प्रबन्धन किया जा सकता है। समुदाय तथा मीडिया की भागीदारी इसके लिए कारगर उपाय सिद्ध हो सकता है। वहां की भौगोलिक स्थिति, समस्याओं व उपचार सम्भावनाओं के बारे में स्थानीय समुदाय भली-भांति अवगत होता है। इसी प्रकार प्रिन्ट एवं इलैक्ट्रॉनिक तथा सोशल मीडिया भी आपदा से पूर्ण, वर्तमान स्थिति व भविष्य की सम्भावनाओं से सामान्य-जन को अवगत करवाने में अपना अहम योगदान दे सकता है, बशर्ते की इनका प्रयोग पक्षपात रहित एवं सही तथ्यों व जानकारी प्रदान करने के लिए किया जाए।

सन्दर्भ

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डा० बलराम सिंह

एसोसिएट प्रोफेसर एवं विभागाध्यक्ष, समाजशास्त्र विभाग

साहू जैन महाविद्यालय, नजीबाबाद

सार

भारत में ग्राम स्वशासन के तीन स्तर, जिला, खण्ड और ग्राम स्तर पर स्वशासन की संवैधानिक संस्था को स्थापित हुए लगभग 25 वर्ष पूरे हो गये हैं। इन 25 वर्षों में ग्राम स्तर पर वैचारिक, व्यावहारिक और भौतिक अवस्थाओं में सकारात्मक परिवर्तन हुए हैं। सामाजिक स्तर पर जाति आधारित संरचनात्मक मूल्यों व मानकों का प्रभाव कम हुआ है। अनुसूचित जाति, अनुसूचित जनजाति व महिलाओं के पंचायतों में चुनाव के माध्यम से सत्ता प्राप्त कर लेने के कारण उच्च जातियों व वर्गों द्वारा उनकी वैधानिक सत्ता को मान्यता दी जाने लगी है। उच्च जातियों और निम्न जातियों के बीच सामाजिक दूरी के कम होने के साथ-साथ जातिय पंचायतों का महत्व बहुत कम हो गया है। ग्रामीण क्षेत्र में सत्ता प्रतिष्ठानों में भागीदारी से हजारों वर्षों से वंचित सामाजिक समूहों को पंचायत राज व्यवस्था द्वारा सत्ता में स्थापित कर जन सहभागिता के लोकतान्त्रिक मूल्यों का विस्तार हुआ।

भारत की लगभग दो तिहाई जनसंख्या (68.84%) ग्रामीण है, जो 5.93 लाख गांवों में रहती है। देश के विकास के लिये जनसंख्या के इस बड़े भाग पर ध्यान देना आवश्यक है। ग्राम समाज में रहने वाले लोग अपनी जीविका कृषि और कृषि से सम्बन्धित व्यवसायों व सेवाओं से प्राप्त करते हैं। भूमि आय का मुख्य साधन है, जनगणना 2011 के अनुसार कुल ग्रामीण परिवारों के केवल 30.10 प्रतिशत परिवारों के पास कुल कृषि भूमि का स्वामित्व है। लगभग 70 प्रतिशत ग्रामीण परिवार भूमिहीन है। आज भी गरीबी रेखा से नीचे जीवन यापन करने वालों की बड़ी संख्या ग्रामीण क्षेत्र में रहती है। भारत के विकास के लिये गांवों का विकास अनिवार्य है। गांधी जी ने स्वतन्त्रता से पहले ही गांवों की दयनीय स्थिति को समझ लिया था। गांधी जी का मानना था कि आत्मनिर्भर गांवों के द्वारा ही वास्तविक लोकतन्त्र की प्राप्ति सम्भव है, गांधी जी के अनुसार "स्वतन्त्रता स्थानीय स्तर से आरम्भ होनी चाहिए। इस प्रकार प्रत्येक गांव एक गणराज्य अथवा पंचायत राज होगा। प्रत्येक गांव के पास पूर्ण सत्ता एवं शक्ति होगी। तात्पर्य यह है कि प्रत्येक गांव को आत्मनिर्भर होना चाहिए और अपनी आवश्यकताओं की पूर्ति स्वयं पूर्ण करनी होगी ताकि वह सम्पूर्ण प्रबन्ध स्वयं चला सकें।" पंचायत राज के सम्बन्ध में नेहरू जी ने भी कहा था कि "पंचायत सरकारी इमारत की नींव है यदि नींव मजबूत होगी तो भारत भी मजबूत होगा।" गांव हमेशा सामाजिक व आर्थिक जीवन की महत्वपूर्ण इकाई के साथ-साथ अतीत से ही प्रशासन की महत्वपूर्ण इकाई रहे हैं।

स्वतन्त्रता प्राप्ति के बाद भारत सरकार ने प्रत्येक पंचवर्षीय योजना में ग्रामीण क्षेत्र के विकास पर विशेष ध्यान दिया, परन्तु जन सहभागिता की कमी के कारण अपेक्षित परिणाम प्राप्त नहीं हुए। सरकार ने ग्रामीण जीवन स्तर में सुधार के लिये पंचायतों के माध्यम से जन सहभागिता बढ़ाकर विकास योजनाओं को प्रभावी-ढंग से कार्यान्वित करने का निर्णय लिया। पंचायतों को सक्षम व प्रभावी बनाने के लिये सरकार ने 73वां संविधान संशोधन किया। ग्रामीण विकास के लिये सत्ता के विकेन्द्रीकरण की त्रिस्तरीय प्रणाली (ग्राम स्तर, खण्ड स्तर और जिला स्तर) पंचायत राज संस्था संविधान संशोधन के बाद 24 अप्रैल 1993 से संवैधानिक संस्था बन गयी है। तीनों स्तर की इकाईयों में सभी सामाजिक समूहों का उचित प्रतिनिधित्व बनाये रखने के लिये अनुसूचित जाति व जनजाति का कुल संख्या में अनुपात के आधार पर आरक्षण की व्यवस्था के साथ-साथ प्रत्येक स्तर पर महिलाओं के लिये एक तिहाई स्थान आरक्षित

किये गये हैं। भारत सरकार का प्रयास है कि लोकतान्त्रिक-ढंग से अधिक से अधिक जन सहभागिता बढ़ाकर ग्रामीण विकास की योजनाओं का जिला स्तर पर निर्माण कर, ग्राम स्तर पर कार्यान्वयन सुनिश्चित किया जाये। गांव आत्मनिर्भर व स्वशासित गणराज्य बनें, साथ ही राज्य व राष्ट्र स्तर की राजनैतिक व्यवस्था में सक्रिय सहभागिता करें। राष्ट्र निर्माण की योजनाओं में विवेकपूर्ण सहयोग कर ग्राम पंचायतें अपने महत्व को स्थापित कर वैसा ही गौरव प्राप्त करें, जैसा कि भारत के प्राचीन साहित्य में उल्लेख मिलता है।

ग्राम पंचायतों की ऐतिहासिक पृष्ठभूमि :-

भारत में पंचायत के रूप में स्थानीय शासन की संस्था प्राचीनकाल से चली आ रही है। इन्हीं पंचायतों को ग्रामीण सरकार कहा गया है। ये ग्राम पंचायतें स्वयं में एक लघु गणराज्य के रूप में न केवल अपना अस्तित्व रखती थीं बल्कि ग्रामीण जीवन के समस्त क्षेत्रों को नियन्त्रित करती थीं। पंचायत शब्द संस्कृत भाषा के "पंचायतन" शब्द से उत्पन्न हुआ है जिसका अर्थ है, "पांच आध्यात्मिक व्यक्तियों का समूह।" ऋग्वेद (9/92/6) में सभा का उल्लेख किया गया है किन्तु उसके गठन और कार्य के विषय में विशेष जानकारी प्राप्त नहीं होती है। ऋग्वेद में कक्ष को सभा, प्रमुख को सभासद एवं सभा के योग्य व्यक्ति को सभेय कहा गया है। ऋग्वेद में उल्लेख है कि राजा की समृद्धि के लिये राजा तथा समिति का एक मत होना आवश्यक है। (ऋग्वेद-10/166/4)। समिति का प्रमुख कार्य राजा का चुनाव करना था। वैधानिक रूप से समिति सर्वप्रधान थी। ऋग्वेद में यह भी माना गया है कि समस्त प्रजा की उपस्थिति में समिति राजा का निर्वाचन करती थी (प्रसाद: 1990,67)। अथर्ववेद की एक ऋचा (6/89/3) में राजा के अनुग्रहों की प्रार्थना की गयी है। उसमें एक अनुग्रह यह है कि समिति अनुकूल रहें। इससे प्रतीत होता है कि समिति शक्तिशाली और प्रभावकारी थी। इस प्रकार के प्रमाण अथर्ववेद (7/13/01) में उल्लेखित है। समिति और सभा प्रजापति (राजा) के द्वारा पुत्रियों के समान पालन करने योग्य है। वे (समिति व सभा) प्रजापति की रक्षा करें। हे पितरों जिनसे परामर्श माँगू वह सभासद मुझे उचित सलाह प्रदान करे। आप हमें सभा में विवेकसम्मत एवं नम्रतापूर्वक बोल सकने की सद्बुद्धि प्रदान करें। मनुस्मृति (10/61, 9/226, 9/251) में ग्राम प्रशासन की सबसे छोटी इकाई तथा उसके प्रशासन के लिये उत्तरदायी कर्मचारी को "ग्रामिक" नाम से जाना जाता था। जिसका मुख्य कार्य "कर" एकत्रित करने का वर्णन मिलता है। मौर्यकाल में ग्राम का अपना स्वतन्त्र संगठन था जो नियम निर्माण तथा शासन का कार्य भी करता था। ग्राम सभा में बनाये गये नियम धर्म स्थानीय न्यायालय में भी मान्य थे (प्रसाद: 1990, 142)। गुप्तकालीन शासन व्यवस्था में ग्राम पंचायतों का विशेष महत्व था। ग्राम पंचायत के अंतर्गत ग्राम सीमा का निर्धारण, करों की वसूली, सिंचाई, उद्यान, मन्दिर, न्याय आदि की व्यवस्था के कार्य हेतु अधिकार प्राप्त थे (प्रसाद: 1990, 186)। इस प्रकार स्पष्ट होता है कि पंचायती राज व्यवस्था के समान इन व्यवस्थाओं का एक निश्चित स्पष्ट और व्यावहारिक संगठन तत्कालीन समाजों में कार्यरत था। समाज के लिये ये संगठन अत्यन्त महत्वपूर्ण और उपयोगी थे।

मध्यकाल में ग्राम पंचायतों की स्थिति :-

मध्यकाल में राजनैतिक स्वरूप में परिवर्तन हुआ और केन्द्रीकरण का तत्व जोर पकड़ने लगा। मुस्लिम और मराठा काल में किसी न किसी रूप में पंचायतों का अस्तित्व था। ग्राम स्वायत्ता, ग्राम की सफाई, बाजार, मेलों की व्यवस्था, जन्म-मृत्यु का ब्यौरा रखना, ग्राम सुरक्षा तथा प्रबन्धन प्रमुख कार्य ग्राम पंचायतों के थे। पंचायतें जीवन का प्रमुख अंग थी। परन्तु अंग्रेजी शासनकाल ने पंचायतों को खोखला बना दिया। पंचायत के इतिहास में यह काल सबसे अधिक घातक सिद्ध हुआ। इसी का परिणाम है कि आज तक पंचायतों को पूरी तरह पुनर्जीवित व सक्रिय नहीं बनाया जा सका। हालांकि अंग्रेजों के शासनकाल में ही पंचायतों को पुनः स्थापित करने का प्रयास आरम्भ हो गया था।

औपनिवेशिक काल में ग्राम पंचायतों की स्थिति :-

आधुनिक काल में सर्वप्रथम सन् 1882 में लार्ड रिपन द्वारा स्थानीय स्वायत्त शासन संस्थाओं सम्बन्धी प्रस्ताव पारित किया गया। ब्रिटिश शासकों ने स्थानीय स्वायत्त संस्थाओं की भूमिका, महत्व और उपयोगिता का सूक्ष्म अन्वेषण करने के लिये सन् 1907 में राजकीय विकेन्द्रीकरण आयोग का गठन किया। इस आयोग में भारतीय स्थानीय संस्थाओं की प्राचीन पंच अथवा गण व्यवस्था को महत्वपूर्ण मानते हुए, उसके स्थानीय विकास के सन्दर्भ में योगदान को अनुभव करते हुए अपने प्रतिवेदन में स्थानीय स्वायत्त संस्थाओं के विकास पर बल दिया। सन् 1920 में संयुक्त प्रान्त, असम, बंगाल, बिहार, मद्रास और पंजाब में पंचायतों की स्थापना के लिये कानून बनाये गये। कांग्रेस पार्टी द्वारा सन् 1900 से 1920 तक के मध्य अपने विभिन्न अधिवेशनों में प्रस्ताव पारित करके पंचायतों के संरचनात्मक व्यवस्था के पुनः निर्माण का समर्थन किया गया। पंचायतों के विचार को जन-जन तक पहुँचाने का दायित्व गांधी जी ने अपने लेखों, विचारों एवं भाषणों के माध्यम से किया। उनका मत था कि अहिंसा पर आधारित निकटतम मार्ग भारत के पहले ग्राम गणराज्य है।

स्वतन्त्र भारत में ग्राम पंचायतों की स्थिति :-

इसी विचारधारा को आगे बढ़ाते हुए संविधान निर्माताओं ने संविधान के नीति निर्देशक तत्वों में धारा 40 को शामिल किया। यह अनुच्छेद राज्यों को निर्देश देता है कि वे ग्राम पंचायतों का संगठन करने के लिये कदम उठाएँ और उनको ऐसी शक्तियाँ एवं प्राधिकरण प्रदान करें जो इन्हें स्वायत्त शासन की इकाईयों के रूप में कार्य करने के योग्य बनाने के लिये आवश्यक हो। इसके साथ ही संविधान की 7वीं अनुसूची में राज्य सूची की प्रविष्ट संख्या 5 में ग्राम पंचायतों को शामिल किया गया। जब सामुदायिक विकास कार्यक्रम की उपलब्धियों का मूल्यांकन किया गया तो यह निष्कर्ष सामने आया कि जब तक स्थानीय संस्थायें स्वायत्त रूप से विकसित होकर कार्य नहीं करेंगी तब तक यह गरीबी उत्थान की महत्वाकांक्षी योजना सफल नहीं हो सकती। क्योंकि इस कार्यक्रम के अधीन खण्डों को इकाई मानकर खण्ड के विकास हेतु सरकारी कर्मचारी के साथ सामान्य जनता को विकास की प्रक्रिया में जोड़ने का प्रयास किया गया लेकिन जनता को अधिकार नहीं दिये जाने के कारण यह प्रयास सफल नहीं हुआ।

सामुदायिक विकास कार्यक्रम व राष्ट्रीय प्रसार सेवा के असफल होने के बाद सन् 1957 में बलवन्तराय मेहता की अध्यक्षता में एक समिति का गठन किया गया। इस समिति के सुझावों के आधार पर सर्वप्रथम राजस्थान राज्य को 2 अक्टूबर 1959 को पंचायती राज अधिनियम पारित करने का गौरव प्राप्त है। पण्डित नेहरू ने गांधी जयंती के अवसर पर उसी वर्ष नागौर जिले में त्रिस्तरीय पंचायती राज व्यवस्था का उद्घाटन किया। शुरुआती उत्साह के बाद (1959-64) पंचायती राज व्यवस्था धीरे-धीरे निष्क्रिय होती गयी। 1977 में पंचायती राज व्यवस्था को प्रभावी बनाने के लिये अशोक मेहता की अध्यक्षता में एक समिति का गठन किया गया। समिति ने 1978 में 132 सिफारिशों से युक्त रिपोर्ट केन्द्र सरकार को प्रेषित की। केन्द्र में सरकार बदल जाने के कारण समिति की रिपोर्ट पर ध्यान नहीं दिया गया। फिर भी स्थानीय शासन को सशक्त बनाने के लिये किसी न किसी रूप में प्रयास जारी रहे। सन् 1985 में ग्रामीण विकास तथा गरीबी दूर करने के लिये प्रशासनिक व्यवस्था में सुधार हेतु सुझाव देने के लिये डा० जी०वी०के० राव समिति, पंचायती राज व्यवस्था संस्थाओं के कार्यों की समीक्षा करने तथा उनके सुधार व प्रभावी क्रियान्वयन के लिये आवश्यक सुझाव एवं परामर्श हेतु डॉ० एल०एम० सिंधवी समिति 1986 और 1988 में पंचायती राज संस्थाओं पर विचार करने के लिये पी०के० थुंगन की अध्यक्षता में समितियों का गठन किया गया। थुंगन समिति ने ग्राम पंचायतों को अधिक सक्षम व प्रभावी बनाने के लिये अपने प्रतिवेदन में जोरदार शब्दों में पंचायती राज संस्थाओं को संविधान में स्थान देने का सुझाव दिया। इस समय 73वें संविधान संशोधन के बाद पंचायती राज संस्थाएं 24 अप्रैल 1993 से संवैधानिक संस्थाएं हैं, जिससे सम्बन्धित प्रावधान संविधान के भाग 9 में निम्न प्रकार हैं—

1. पंचायत व्यवस्था के अन्तर्गत सबसे निचले स्तर पर ग्राम सभा होगी जिसमें एक या एक से अधिक ग्राम शामिल हो सकते हैं। ग्राम सभा की शक्तियों के सम्बन्ध में राज्य विधान मण्डल द्वारा कानून बनाया जायेगा।
2. जिन राज्यों की जनसंख्या 20 लाख से कम है उसमें दो स्तरीय पंचायत होगी। जिला स्तर और ग्राम स्तर। 20 लाख से अधिक जनसंख्या वाले राज्यों में त्रिस्तरीय पंचायत होगी— जिला स्तर, खण्ड स्तर और ग्राम स्तर।
3. सभी स्तर के पंचायत के सभी सदस्यों का चुनाव व्यस्क मतदाताओं द्वारा प्रत्येक पांच वर्ष पर किया जायेगा। गांव स्तर के पंचायत के अध्यक्ष का चुनाव प्रत्यक्ष तथा खण्ड स्तर व जिला स्तर के अध्यक्ष का चुनाव अप्रत्यक्ष रूप से किया जायेगा।
4. पंचायत के सभी स्तरों पर अनुसूचित जाति तथा अनुसूचित जनजाति के सदस्यों के लिए उनकी कुल संख्या के अनुपात में आरक्षण दिया जायेगा। प्रत्येक पंचायत में एक तिहाई पद महिलाओं के लिये आरक्षित होंगे।
5. सभी स्तरों की पंचायतों का कार्यकाल पांच वर्ष होगा। हालांकि इसका विघटन पांच वर्ष से पहले भी किया जा सकता है। ऐसी दशा में छः माह के अन्दर चुनाव कराना आवश्यक है।
6. पंचायतों को कौन सी शक्तियाँ व उत्तरदायित्व दिये गये हैं, इसका स्पष्ट विवरण संविधान की ग्यारहवीं अनुसूची में निम्न प्रकार किया गया है— भूमि सुधार व मृदा संरक्षण, कृषि विकास, लघु सिंचाई, जल प्रबन्ध, पशुपालन, दुग्ध उद्योग, कुक्कुट पालन, मत्स्य पालन, सामाजिक वानिकी और वन उद्योग, वन उत्पादन, लघु उद्योग, खाद्य प्रसंस्करण, खादी ग्रामोद्योग, कुटीर उद्योग, ग्रामीण आवास, पेयजल, ईंधन व चारा, सड़कें, पुलिया, ग्रामीण विद्युतीकरण, गैर पारम्परिक ऊर्जा, गरीबी निवारण कार्यक्रम, प्राथमिक व माध्यमिक विद्यालय, तकनीकी व व्यावसायिक प्रशिक्षण, प्रौढ़ शिक्षा, पुस्तकालय, सांस्कृतिक क्रियाकलाप, बाजार मेले, स्वास्थ्य, परिवार कल्याण, महिला व बाल विकास, समाज कल्याण, कमजोर वर्गों का कल्याण व सार्वजनिक वितरण प्रणाली।
7. राज्य विधान मण्डल कानून बनाकर पंचायतों को कर लगाने, उन्हें वसूल करने तथा प्राप्त करने तथा प्राप्त धन को व्यय करने का अधिकार प्रदान कर सकती है।

8. पंचायतों की वित्तीय स्थितियों के सम्बन्ध में जांच करने के लिये प्रति पांचवें वर्ष वित्त आयोग का गठन किया जायेगा। यह आयोग रिपोर्ट राज्यपाल को प्रस्तुत करेगा।

निष्कर्ष

भारत में ग्राम स्वशासन के तीन स्तर, जिला, खण्ड और ग्राम स्तर पर स्वशासन की संवैधानिक संस्था को स्थापित हुए लगभग 25 वर्ष पूरे हो गये हैं। इन 25 वर्षों में ग्राम स्तर पर वैचारिक, व्यावहारिक और भौतिक अवस्थाओं में सकारात्मक परिवर्तन हुए हैं। सामाजिक स्तर पर जाति आधारित संरचनात्मक मूल्यों व मानकों का प्रभाव कम हुआ है। अनुसूचित जाति, अनुसूचित जनजाति व महिलाओं के पंचायतों में चुनाव के माध्यम से सत्ता प्राप्त कर लेने के कारण उच्च जातियों व वर्गों द्वारा उनकी वैधानिक सत्ता को मान्यता दी जाने लगी है। उच्च जातियों और निम्न जातियों के बीच सामाजिक दूरी के कम होने के साथ-साथ जातिय पंचायतों का महत्व बहुत कम हो गया है। ग्रामीण क्षेत्र में सत्ता प्रतिष्ठानों में भागीदारी से हजारों वर्षों से वंचित सामाजिक समूहों को पंचायत राज व्यवस्था द्वारा सत्ता में स्थापित कर जन सहभागिता के लोकतान्त्रिक मूल्यों का विस्तार हुआ। उनके अन्दर निर्णय लेने की क्षमता के साथ-साथ आत्म सम्मान और पहचान का भाव प्रबल हुआ। गांवों में भौतिक स्तर पर सड़कें, स्वच्छ पेयजल, सफाई, शौचालय, जल निकासी के लिये नालियां, विद्युतीकरण आदि सुविधाएं पहले से बेहतर हैं। शिक्षा, स्वास्थ्य, कृषि, रोजगार आदि के क्षेत्र में विकास सुविधाओं तक पहुंच बढ़ी है। दिव्यांगों, विधवाओं, वृद्धों को सरकारी योजनाओं का लाभ पहुंचाया जा रहा है। सत्ता के विकेन्द्रीकरण ने ग्रामीण विकास के सामाजिक, राजनैतिक व भौतिक सुविधाओं के स्तर पर अच्छा कार्य किया है। आर्थिक क्षेत्र में विकास के प्रयास किये जा रहे हैं। ग्राम पंचायत राज व्यवस्था ग्रामीण जीवन स्तर में सुधार हेतु सकारात्मक योगदान दे रही है।

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डॉ० नीरज कुमार

असिस्टेंट प्रोफेसर, भूगोल

विभाग एस०डी० (पी०जी०) कॉलेज, मुजफ्फरनगर

सारांश

COVID-19 वायरस सबसे पहले चीन के वुहान शहर में 31 दिसम्बर, 2019 को सामने आया। इस वायरस का विस्तार धीरे-धीरे विभिन्न बड़े-बड़े देशों में फैलता चला गया। इस वायरस से आम सर्दी से लेकर Middle East Respiratory Syndrome (MERS-COV) और Severe Acute Respiratory Syndrome जैसी गंभीर बीमारियां हो सकती हैं। नोवेल कोरोना वायरस वायरस का एक नया प्रकार है जोकि अभी तक मानव में नहीं पाया जाता था। इस तथ्य को नजरअंदाज नहीं कर सकते हैं कि चीन और दुनिया के अन्य देशों में COVID-9 के प्रकोप से वैश्विक स्तर पर प्रभाव पडा और विश्व आर्थिक मंदी, व्यापार, वाणिज्यिक गतिविधियाँ एवं सप्लाय चैन का व्यवधान, वस्तुओं और लॉजिस्टिक्स सहित अर्थव्यवस्था पर महत्वपूर्ण प्रभाव पडने की उम्मीद है।

प्रस्तावना:-

कोरोना वायरस की चर्चा पिछले कुछ महीनों से पूरी दुनिया में हर जगह हो रही है और फिलहाल इस वायरस ने तेजी से पूरी दुनिया को अपनी जकड में ले लिया है। जुलाई माह के अंत तक पूरी दुनिया में संक्रमण लगभग 170 लाख और मौत 6.5 लाख के पार पहुंच गया है जबकि भारत में लगभग 16 लाख संक्रमित और 35000 लोगों की मौत हो चुकी है, 10 लाख संक्रमण से ठीक हो चुके हैं। कोरोना वायरस को लेकर कई प्रकार की भ्रांतियां फैली ही हैं जबकि WHO ने इसे सी-फूड से जुड़ा वायरस बताया है। यह वायरस विषाणुओं का एक समूह है जो शरीर को सीधा प्रभावित करता है। इस वायरस की शुरुआत मध्य चीन के वुहान शहर में 2019 के मध्य दिसम्बर में हुई थी। यहां पर सी-फूड मॉर्केट में काम करने वाले अधिकतर लोगों को बिना किसी कारण निमोनिया होने लगा और यह बहुत तेजी से फैलने लगा। वैज्ञानिकों ने शोध में यह पता लगाया कि यह एक प्रकार का वायरस संक्रमण है। इसे कोरोना वायरस का नाम दिया गया। इसका वायरस चीन के वुहान शहर के उस थोक बाजार से शुरू हुआ जहां मछलियों एवं पशुओं का मांस बेचा जाता था। इससे पहले भी सन् 2002 में सॉर्स नामक वायरस चीन से ही शुरू हुआ था। इसमें 27 देशों में 1000 मौतें हुई थीं। कोविड 19 भयंकर बीमारी का सामना सभी देशों को करना पड रहा है जिससे देशों की वैश्विक अर्थव्यवस्था, एवं व्यापार की चेन टूट गयी।

कोरोना वायरस से संबंधित अध्ययनों का पूर्वालोकन:-

1. विश्व स्वास्थ्य संगठन के पूर्व निदेशक प्रोफेसर हैमेन ने कहा, “नये साक्ष्यों को देखते हुए हम एक बार फिर यह समझने की कोशिश कर रहे हैं कि हमें मास्क पहनने के तरीकों में बदलाव करने की जरूरत है या नहीं।”
2. अमेरीका में हुए अध्ययन का कहना है कि कोविड-19 वायरस छींक के जरिए 6-8 मीटर की दूरी तक जा सकता है।
3. प्रोफेसर लिडियाँ के अनुसार, “झीने मास्क से पूरी सुरक्षा तो नहीं मिलेगी लेकिन उसमें तेज गति से आने वाली बूंदों की दिशा कुछ हद तक जरूर बदल जाएगी।”

4. विश्व स्वास्थ्य संगठन के पूर्व निदेशक प्रोफेसर हैमेन कहते हैं कि नई रिसर्च से ऐसा लगता है कि मास्क पहनना सोशल डिस्टेंसिंग से कहीं ज्यादा प्रभावी होगा।
5. ब्रिटेन सरकार के मुख्य चिकित्सा सलाहकार प्रोफेसर क्रिस व्हिट्टी कहते हैं कि भले ही बूढ़ों के लिये दर अधिक है लेकिन अधिकतर बूढ़ों में ये मामूली या मध्यम लक्षणों वाली बीमारी का कारण बनता है।

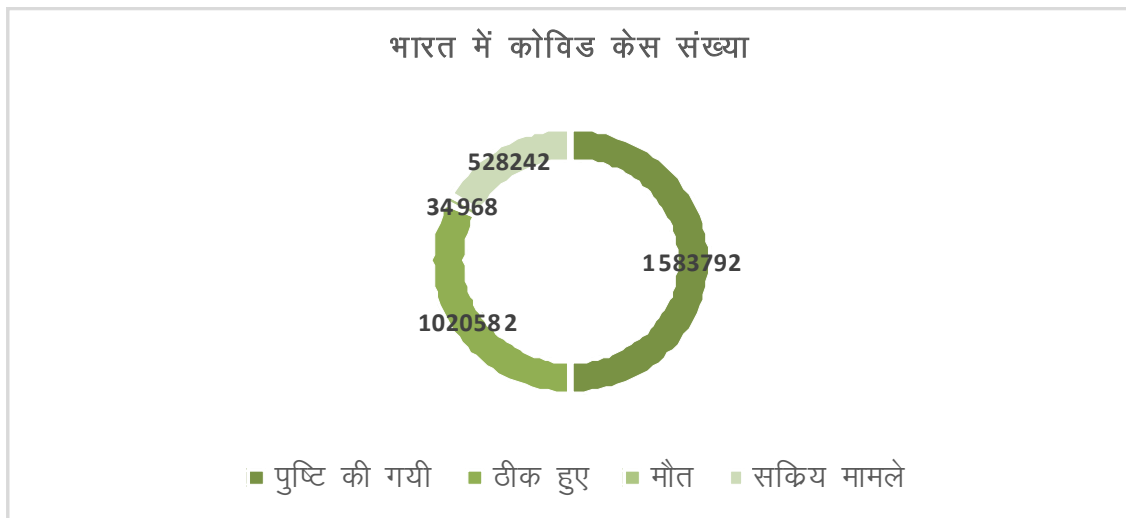
विधितन्त्र -

प्रस्तुत शोध कार्य के सम्पादन एवं निष्पादन हेतु सर्वप्रथम कोविड-19 से संबंधित आंकड़ों का एकत्रीकरण किया गया। इस हेतु द्वितीयक आंकड़ों का विश्लेषण किया गया। द्वितीयक आंकड़े पत्र पत्रिकाओं, इण्टरनेट, समाचार पत्र एवं टी0वी0 चैनल इत्यादि से प्राप्त किये गये। आंकड़ों का सैद्धान्तिक विश्लेषण अनुभाविक विधियों के माध्यम से किया गया। आवश्यकतानुसार सांख्यिकीय विधियों का प्रयोग किया गया। कोरोना वायरस - कोरोना वायरस (COVID -19) एक भयंकर बीमारी का नाम है, जोकि चीन के वुहान शहर से फैलना प्रारम्भ हुई है और अब यह मानव जीवन के लिए एक संकट है। यह वायरस बहुत सूक्ष्म और प्रभावी वायरस है। मानव जाति के लिये घातक हथियार साबित हो रही यह बीमारी प्राकृतिक न होकर मानवीय लगती है जो बहुत जल्द समाप्त नहीं हो पायेगी। इस पर किसी प्रकार की जलवायु का कोई प्रभाव नहीं दिखलाई दे रहा, यह बीमारी रुकने का नाम ही नहीं ले रही है।

भारत में कोविड केस संख्या

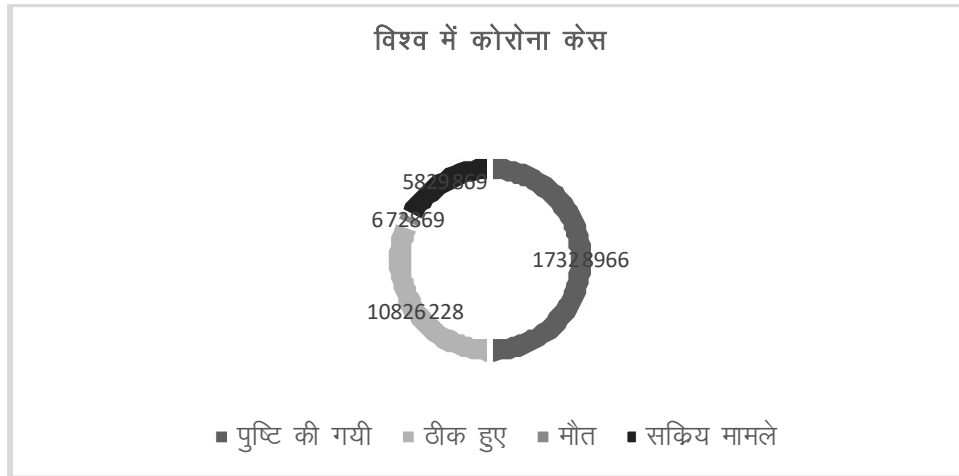
पुष्टि की गयी	ठीक हुए	मौत	सक्रिय मामले
1583792	1020582	34968	528242

स्रोत:- आरोग्य सेतु ऐप 30 जुलाई 2020



विश्व में कोरोना केस

पुष्टि की गयी	ठीक हुए	मौत	सक्रिय मामले
17328966	10826228	672869	5829869



स्रोत:- वेबसाइट वर्ल्डओमीटर 30 जुलाई 2020

COVID-19 के लक्षण:-

1. खांसी, गले में खराश, सांस लेने में तकलीफ आदि इस बीमारी के लक्षण हैं ।
2. इस बीमारी में सबसे पहले बुखार आता है, इसके बाद सूखी खांसी होती है और फिर एक सप्ताह बाद सांस लेने में दिक्कत होती है। बाद में यह बीमारी इतना भयंकर रूप ले लेती है कि मनुष्य की जान तक जा सकती है।
3. घर के बुजुर्ग या जिन्हें अस्थमा, मधुमेह और दिल की बीमारी होती है, उन्हें कोरोना से बचाना मुश्किल होता है क्योंकि यह वायरस शरीर में बहुत तेजी से फैलता है। इसके साथ-साथ ही यह बच्चों को अपनी चपेट में ले सकता है।

यह कोरोना कैसे फैलता है -

1. यह भयावह वायरस किसी कोरोना संक्रमित व्यक्ति को छूने या उसके सम्पर्क में आने से फैलता है।
2. अगर कोरोना वायरस संक्रमित व्यक्ति किसी वस्तु को छुए तो उस वस्तु को छूने से वह दूसरे व्यक्ति को आसानी से हो सकता है।

रोकथाम -

कोरोना वायरस की रोकथाम के लिये डब्ल्यू0एच0ओ0 ने निम्न उपाय सुझाये हैं जैसे -

1. अगर किसी व्यक्ति को कोरोना है तो वह उस व्यक्ति को तुरन्त अस्पताल पहुंचाये और स्वास्थ्य विभाग को सूचित करें।
2. आरोग्य सेतु ऐप को अपनाया जाये।
3. माँस्क को अपनाये एवं सेनेटाईजर का प्रयोग किया जाये।
4. किसी भी स्थान या वस्तु को छूने पर बार-बार हाथों को धोये ताकि कोरोना वायरस का विषाणु समाप्त हो जाये।
5. लॉकडाउन का पालन करें।

कोरोना वायरस के प्रभाव -

COVID-19 के पूरे विश्व में निम्न प्रभाव होंगे जैसे -

1. धार्मिक प्रभाव - आज लोग मंदिरों, मस्जिदों, गिरिजाघरों में एकत्रित नहीं हो रहे हैं।
2. रोजगार पर प्रभाव - COVID-19 के कारण प्राथमिक क्षेत्र, द्वितीयक क्षेत्र एवं तृतीयक क्षेत्र बहुत प्रभावित हुए हैं जिनके कारण लोग बेरोजगार हो गये हैं।
3. सामाजिक प्रभाव - कोरोना के कारण लोगों के बीच सामाजिक सरोकार बन्द हो गया।
4. महिलाओं पर प्रभाव - COVID-19 के कारण महिलाओं में लिंग असमानता, घरेलू हिंसा, रोजगार की कमी, काम का बोझ इत्यादि समस्यायें बढ़ीं हैं।

5. शैक्षणिक प्रभाव – COVID-19 के चलते बच्चों की शिक्षा विभिन्न ई-माध्यमों से हो रही है।
6. कृषि पर प्रभाव – कोरोना के चलते किसान अपनी उपज की घटती मांग और कम कीमतों से जूझ रहे हैं।
7. स्वास्थ्य कर्मियों पर प्रभाव – COVID-19 के परीक्षण के लिए काम कर रहे स्वास्थ्य कर्मियों पर हमले अत्यंत अशोभनीय हैं।

डब्ल्यू0एच0ओ0 की भूमिका –

डब्ल्यू0एच0ओ0 संयुक्त राष्ट्र संघ की एक विशेष एजेंसी है जो अन्तर्राष्ट्रीय सार्वजनिक स्वास्थ्य के लिये जिम्मेदार है। अमेरिका आज COVID-19 से सबसे ज्यादा प्रभावित देश है। WHO ने COVID-19 को 11 मार्च 2020 को महामारी घोषित किया था जबकि 23 जनवरी 2020 को WHO को पता चल गया था कि यह वायरस घातक है फिर भी इसे महामारी घोषित करने में देरी की। जब 118 देश इस महामारी से संक्रमित तथा 121564 लोग संक्रमित हो गये तब WHO ने इसे महामारी घोषित किया। यदि WHO ने देरी न की होती तो आज पूरा विश्व इस संकट से इतना प्रभावित न होता।

निष्कर्ष –

कोविड-19 जैसा कि विदित हो गया कि यह एक भयंकर बीमारी है। इसका प्रभाव समाज के प्रत्येक क्षेत्र पर पड रहा है और देश आर्थिक मंदी से गुजर रहा है जैसा कि 1929 की महामारी में हुआ था और आर्थिक समस्याओं का सामना करना पड रहा है। इस वायरस ने सभी देशों की कमर तोडकर रख दी है। इस तथ्य को नजरअंदाज नहीं किया जा सकता कि चीन और दुनिया के अन्य देशों में COVID-19 के वैश्विक प्रकोप से अर्थव्यवस्था पर बहुत बुरा प्रभाव पडने की उम्मीद है।

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सार

रोजाना हजारों लोगों को शिकार बनाने के अलावा कोरोना संकट का सबसे स्पष्ट प्रभाव समूची दुनिया के राजनीतिक, आर्थिक व सामाजिक उथल-पुथल के रूप में नजर आ रहा है। प्रश्न यह उठता है कि क्या यह वायरस विश्व की राजनीतिक व्यवस्था को परिवर्तित कर देगा ? क्या फिर एक बार विश्व शीत युद्ध के दौर में प्रवेश कर जाएगा ? क्या आने वाले भविष्य में ग्लोबलाइजेशन की परिभाषा बदल जाएगी ? क्या वैश्वीकरण का वर्तमान स्वरूप भविष्य में अपने मूल स्वरूप को खो देगा ? विश्व की राजनीति में क्या बदलाव आएगा तथा भारत की भूमिका बदलते परिदृश्य में क्या होगी ? इस शोध पत्र में इन्ही विषयों पर प्रकाश डालने का प्रयास किया गया है। अगले दो दशकों तक दुनिया की परिस्थिति अप्रत्याशित व जटिल होगी। उसमें जितने अवसर पैदा होंगे उतने जोखिम भी होंगे। दुनिया के लिए भारत का महत्व लगातार बढ़ता जाएगा। स्थिरता, शांति और समृद्धि की शक्ति के रूप में यह एक सकारात्मक भूमिका निभाएगा।

भूमिका— कोविड-19 बेहद करीब से जुड़े विश्व का पहला विकट संकट है। यह चीन के वुहान शहर में एक स्थानीय बीमारी के रूप में शुरू हुआ और कुछ ही हफ्तों में पूरी दुनिया में फैल गया। कोरोना संक्रमण से लाखों लोगों की मौत हो चुकी है तथा लाखों लोग संक्रमित हैं। फिलहाल इसका कोई टीका या इलाज न होने की वजह से यह महामारी भयावह रूप धारण कर चुकी है। रोजाना हजारों लोगों को शिकार बनाने के अलावा कोरोना संकट का सबसे स्पष्ट प्रभाव समूची दुनिया के राजनीतिक, आर्थिक व सामाजिक उथल-पुथल के रूप में नजर आ रहा है। इस वैश्विक आपदा की स्थिति में जहाँ एक तरफ युद्ध स्तर पर बचाव के प्रयास किए जा रहे हैं, वहीं दूसरी तरफ विकसित राष्ट्रों के बीच इस वायरस की उत्पत्ति को लेकर आरोप प्रत्यारोप का दौर भी प्रारंभ हो गया है। जहाँ अमेरिका इसे चाइनीज वाइरस के रूप में संबोधित कर रहा है, वहीं चीन का कहना है कि इस वायरस की उत्पत्ति चीन से नहीं बल्कि संयुक्त राज्य अमेरिका से हुई है। प्रश्न यह उठता है कि क्या यह वायरस विश्व की राजनीतिक व्यवस्था को परिवर्तित कर देगा ? क्या फिर एक बार विश्व शीत युद्ध के दौर में प्रवेश कर जाएगा ? क्या आने वाले भविष्य में ग्लोबलाइजेशन की परिभाषा बदल जाएगी ? क्या वैश्वीकरण का वर्तमान स्वरूप भविष्य में अपने मूल स्वरूप को खो देगा ? विश्व की राजनीति में क्या बदलाव आएगा तथा भारत की भूमिका बदलते परिदृश्य में क्या होगी ? अपने शोध पत्र के माध्यम से मैंने इन्ही विषयों पर प्रकाश डालने का प्रयास किया है। कोविड 19 संकट का वैश्विक प्रभाव बहुत ज्यादा है। जाहिर है विश्व की राजनीति पर भी इसका व्यापक प्रभाव पड़ा है जो निम्नवत् है—

(1) **उदारवाद के बाद दुनिया अब राष्ट्रवाद व तानाशाही की तरफ बढ़ रही है—** अन्तर्राष्ट्रीय स्तर के नामी-गिरामी विचारकों का मानना है कि कोरोना के बाद की दुनिया का नेतृत्व अब अमेरिका नहीं, चीन करेगा। कुछ का कहना है कि चीन का नेतृत्व कमजोर होगा। कई लोगों का मानना है कि वैश्वीकरण का अंत होगा तथा आक्रामक राष्ट्रवाद को बढ़ावा मिलेगा और व्यापार भी कठिन हो जाएगा। मनमाने तरीके से शासन करने वाले नेता कोरोना का फायदा उठाकर खुद को मजबूत करेंगे और उनकी निरंकुशता बढ़ेगी जबकि जनता पर तरह-तरह की पाबंदियां व निगरानियाँ भी थोपी जाएंगी।

सभी प्रकार की सरकारें संकट के प्रबन्धन के लिए आपातकालीन उपाय अपनाएँगीं। संकट खत्म होने के बाद इन नयी शक्तियों को त्यागने के लिए कई लोग अनिच्छुक होंगे। अपने नागरिकों के आगे खुद को सफल साबित करने वाले नेता तो और ज्यादा ताकतवर होंगे। लेकिन जो असफल होंगे उन्हें दूसरों को दोष देना मुश्किल होगा। यदि यूरोपीय संघ अपने 50 करोड़ नागरिकों को सहायता प्रदान नहीं कर सका तो भविष्य में राष्ट्रीय सरकारें ब्रुसेल्स से ज्यादा शक्तियाँ वापस ले सकती हैं। कोरोना वायरस महामारी राजतंत्र व राष्ट्रवाद को मजबूत करेगी। अल्पावधि में कोरोना वायरस संकट पश्चिमी दुनिया की विचारधाराओं की रणनीतिक बहस में विभिन्न विरोधी खेमों को ताकत प्रदान करेगा। राष्ट्रवादी व उसके विरोधी साम्यवादी व सोशल डेमोक्रेट्स यहाँ तक की उदारवादी, अन्तर्राष्ट्रीयतावादी भी अपने विचारों की तात्कालिन प्रासंगिकता के लिए इसमें कुछ न कुछ नए सबूत जरूर खोजेंगे। कोरोना वायरस के कारण जो आर्थिक क्षति हुई तथा सामाजिक तनाव सामने आया है उसे देखते हुए राष्ट्रवादी उभार व ताकतवर देशों की शक्ति प्रतिद्वन्द्विता और बढ़ेगी। किसी भी तरह कोरोना वायरस अन्तर्राष्ट्रीय शक्ति संरचना में जरूर बदलाव लाएगा।²

(2) **शक्ति संतुलन को चुनौती** – दुनिया भर में कोविड 19 का प्रसार रोकने के लिए वैक्सीन की तलाश जिस तेजी व महत्ता के साथ किया जा रहा है वह स्वास्थ्य व चिकित्सकीय अनुसंधान के पहलू से भी आगे निकल गया है। वैक्सीन की ये दौड़ शीतयुद्ध के समय हथियारों के दौड़ से कम महत्वपूर्ण नहीं है जिसका जन स्वास्थ्य, वैश्विक अर्थव्यवस्था और शक्ति संतुलन पर व्यापक प्रभाव पड़ना लाजमी है। वैक्सीन पाने के लिए प्रयासों की गति इस कदर तेज है कि बनाने के लिए हाथ में कुछ न होते हुए भी देश व कम्पनीयाँ उत्पादन लाइन तैयार कर रही हैं। इसका मुख्य उद्देश्य अन्तर्राष्ट्रीय संबंध व शक्तियों का पुर्ननिर्धारण है। चार महीने के भीतर ही विश्व की अर्थव्यवस्था को घुटनों पर लाने वाले इस खतरनाक वायरस को जो देश वैक्सीन बनाकर मात देगा वह निश्चित ही दुनिया में अपनी ताकत का लोहा मनवाएगा। इस प्रकार कोविड-19 के खिलाफ यह लड़ाई उसी तरह से अन्तर्राष्ट्रीय सर्वोच्चता की लड़ाई है जैसा शीत युद्ध के समय था। जो भी देश सबसे पहले अपनी जनसंख्या को वैक्सीन के जरिये प्रतिरोधक देने में सफल होगा उसे आर्थिक बढ़त के साथ ही वैज्ञानिक व उत्पादक क्षमताओं के साथ दुनिया में अपना कद उँचा करने में भी मदद मिलेगी। अगर यह चीन होता है तो इसका भू राजनीतिक प्रभाव अंतरिक्ष में पहले लांच से कम नाटकीय नहीं होगा।³

(3) **वैश्विकरण का खात्मा हो रहा है**— वैश्विकरण जिसका मुख्य उद्देश्य था विश्व व्यापार की तमाम भौगोलिक, सांस्कृतिक व आर्थिक अड़चनों को दूरकर दुनिया के साथ सामंजस्य स्थापित करना तथा वैश्विक अर्थव्यवस्था में साधन सम्पन्न और साधन विहीन दोनों देशों के बीच में संतुलन स्थापित करना। वहीं कोरोना वायरस के इस संकट के बीच अब प्रत्येक देश एकाकी होने की तरफ बढ़ रहा है। वर्तमान वैश्विक राजनीति को देखते हुए लगता है आने वाले समय में वैश्विक अर्थव्यवस्था एक नए किस्म के व्यापार युद्ध का रूप ले सकती है। ये वैश्विक अर्थव्यवस्था के डी ग्लोबलाइजेशन की मजबूत कड़ी साबित हो सकती है। यह सिर्फ कोरोना वायरस के बाद की कहानी नहीं है। इसकी शुरुआत ट्रंप के अमेरिका के राष्ट्रपति बनने से हो चुकी है। कई वैश्विक संधियों को तोड़ने से लेकर ट्रंप ने चीन व अमेरिका के बीच जारी व्यापार युद्ध को एक नए किस्म के टैरिफ युद्ध में बदल दिया और यहीं से डी ग्लोबलाइजेशन की बुनियाद तय कर दी।⁴

(4) **आर्थिक मंदी**— एशियन डेवलपमेन्ट बैंक ने मार्च के पहले हफ्ते में जारी प्रेस रिलीज में यह कहा कि कोरोना का विकासशील एशियायी अर्थव्यवस्था पर व्यापक असर होगा। इसने अनुमान लगाया कि कोरोना से दुनिया की अर्थव्यवस्था को 77 बिलियन डालर से 347 बिलियन तक यानि वैश्विक जीडीपी का 0.1 प्रतिशत से 0.5 प्रतिशत तक का नुकसान हो सकता है। गोल्डमेन सैक्स की (फरवरी के आखिरी हफ्ते में जारी) रिपोर्ट के अनुसार कोरोना वायरस के चलते चीन की अर्थव्यवस्था में रूकावट आने के बाद 2008 में आयी आर्थिक मंदी के बाद अब तक का बड़ा वस्तुओं की मांग को लेकर यह झटका है। कोरोना के चलते चीन में 2020 में फरवरी में उत्पादन और गैर उत्पादन गतिविधियों में ऐतिहासिक गिरावट हुई है। जे0 पी0 मार्गन के चीफ ग्लोबल स्ट्रेटजिस्ट डाक्टर डेविस केली ने बताया कि सामाजिक तौर से दूर रहने का असर साल 2020 के दूसरे क्वार्टर में देखा जाएगा रिपोर्ट में कहा गया –सोशल डिस्टेंसिंग के बाद समुद्री पर्यटन, एयरलाइन्स, होटल्स, कैसीनो, खेलों के कार्यक्रम, मूवीज, थियेटरस, रेस्टोरेट और अन्य उद्योगों पर होगा। उन्होंने अंदेशा जताया कि इसका अमेरिका समेत दुनिया भर की अर्थव्यवस्था पर सीधा असर होगा और आने वाले महीनों में करोड़ों लोगों को नौकरियों से हाथ धोना पड़ेगा।

संयुक्त राष्ट्र की कान्फ्रेंस आन ट्रेड एवं डेवलपमेंट के अनुसार कोरोना वायरस से प्रभावित दुनिया की 15 सबसे बड़ी अर्थव्यवस्थाओं में एक भारत भी है। चीन में उत्पादन में आयी कमी का असर भारत के व्यापार पर भी पड़ सकता है। इससे भारत को करीब 34.8 करोड़ डालर का नुकसान उठाना पड़ सकता है। यूरोप के आर्थिक सहयोग व विकास संगठन यानि आई सी

डी ने भी 2020–21 में भारत को अर्थव्यवस्था में विकास की गति का पूर्वानुमान 1.1 प्रतिशत घटा दिया है। आई सी डी ने पहले अनुमान लगाया था कि भारत की अर्थव्यवस्था की विकास दर 6.2 प्रतिशत रहेगी लेकिन अब इसने इसे कम करके 5.1 प्रतिशत कर दिया है। इधर दूसरे आर्थिक विशेषज्ञों के अनुसार कोरोना के चलते भारत की जी डी पी 3 फीसदी तक गिर सकती है।⁵

(5) **चीन तथा अमेरिका में शीत युद्ध**— अमेरिका व चीन में व्यापार को लेकर शुरू हुई तकरार आखिरकार शीतयुद्ध तक पहुँच गयी है। चीन को लेकर अपने नए विजन में अमेरिका ने उस पर कायदे व कानून पर आधारित वैश्विक व्यवस्था का दुरुपयोग कर उसे चीनी कम्युनिस्ट पार्टी की विचारधारा और हितों के अनुकूल बनाने का आरोप लगाया। साथ ही हितों के टकराव में उससे मिल रही चुनौतियों का सीधा जवाब देने की घोषणा की।⁶

कोरोना से हटकर अब पश्चिमी देशों का फोकस हांगकांग पर गया है। हांगकांग में अधिकारों को कुचलने के लिए चीन एक बिल लेकर आया है। अमेरिका ने सीधे शब्दों में कहा कि अगर ये बिल पास हो गया तो अमेरिका चीन पर कई नये प्रतिबंध थोपेगा, इस बीच हांगकांग में विरोध प्रदर्शन शुरू हो गये हैं। चीन की संसद में हांगकांग पर सुरक्षा विधेयक पर बहस जारी है और जारी है अमेरिका के साथ उसका टकराव। अमेरिका बार-बार आगाह कर रहा है कि हांगकांग की आजादी पर ब्रेक लगाने वाले विधेयक को पास करने से बाज आए ड्रेगेन। चीन है कि अंदरूनी मामला का हवाला देकर अमेरिका की चेतावनी को खारिज कर रहा है। इस मामले को लेकर दोनों में गुत्थम गुत्था चल रही है। अमेरिका ने साफ तौर पर कह दिया है कि चीन किसी भी हालात में सस्ते में नहीं छूट सकता। हांगकांग के लोगों की आजादी छिनेगी तो चीन पर प्रतिबंधों की झड़ी लगेगी।⁷

(6) **तीसरे विश्व युद्ध की आहट**— कोरोना संकट ने वैश्विक परिदृश्य पर विचित्र असर डाला है, जहाँ पूरी दुनिया इस महामारी से जूझने में व्यस्त है, वही दूसरी तरफ जंग की गहमागहमी जारी है। अमेरिका व यूरोप कोरोना संकट को लेकर जिस तरह खफा दिख रहे हैं, उससे तो लगता है कि पूरी दुनिया पर छाया कोरोना तनाव कभी भी विश्वयुद्ध में बदल सकता है। चीन द्वारा परमाणु परीक्षण किया जाना, अपने तेल भंडार में इजाफा करना, समुद्र में चीन के द्वारा अपनी ताकत दिखाना, अमेरिका द्वारा चीन को धमकी देना इत्यादि विश्व युद्ध की आहट हैं। दुनिया की महाशक्तियों में गिने जाने वाले यूरोप तथा अमेरिका आज कोरोना की वजह से घुटने टेकने के कगार पर पहुँच गए हैं। फ्रांस, जर्मनी, ब्रिटेन, स्पेन और यूरोप व पश्चिम के देश जो दुनिया पर आर्थिक नियंत्रण रखते थे, कोरोना वाइरस के चपेट में आकर तबाह होते जा रहे हैं। वो वर्चस्व जो पहले सिर्फ यूरोप व अमेरिका के हाथों में रहता था, वह चीन के हाथों में जाता हुआ दिख रहा है। जो देश सदियों से विश्व की अर्थव्यवस्था का संचालक थे वे आज नाक रगड़ने को मजबूर हैं। ऐसे में अमेरिका व यूरोप कोरोना संकट खत्म होने के बाद अपनी स्थिति वापस पाने के लिए चीन पर दंडात्मक कार्यवाही कर सकते हैं, जिसकी परिणती युद्ध में हो सकती है।⁸

बदली विश्व व्यवस्था में भारत की भूमिका— बदलती विश्व व्यवस्था में भारत को अपनी भूमिका सुदृढ़ करने का अवसर मिला है। भारत ने विश्व को अपनी परंपरा की महानता का ज्ञान कराया। हमारी संस्कृति के विभिन्न आयामों से विश्व को परिचित कराया गया। बदलते परिदृश्य में भारत को अपनी भूमिका कैसे निभानी चाहिए, उसके लिए कुछ सुझाव दिए गए हैं जो कि निम्नलिखित हैं—

1. भारत को अपनी सुरक्षा नीतियों में बड़े बदलाव लाने पड़ेंगे। नौ सेना को और भी सुदृढ़ बनाना होगा। मैन पावर केन्द्रित सेना की जगह फायर पावर केन्द्रित सेना खड़ी करनी होगी। प्रत्यक्ष युद्ध की जगह साइबर युद्ध और प्रचार युद्ध से बचने की तैयारी करनी पड़ेगी।
2. चीन अपनी आक्रमकता और विस्तार वादी नीति के दम पर यथा स्थिति में बदलाव लाना चाहता है। ऐसे में भारत को अपनी चीन की नीति पर नए सिरे से विचार करना होगा। चीन को जबाब देने के सिलसिले में आत्मनिर्भर बनने का प्रधानमंत्री मोदी का आह्वान बहुत मायने रखता है। ऐसे में छोटे तकनीकी उत्पादों की विनिर्माण क्षमताएँ तेजी से विकसित करनी चाहिए, उच्च तकनीकी उत्पादों के मामले में जरूर कुछ समय लगेगा, तब तक चीनी आपूर्ति की धारा को बंद न किया जाय, बल्कि सक्रियता से उसमें विकल्प तलाशे जाएँ।
3. किसी भी देश का वास्तविक सामर्थ्य उसकी अर्थव्यवस्था में निहित होता है। इसलिए भारतीय अर्थव्यवस्था को मजबूत बनाने के लिए हर संभव प्रयास किए जाने चाहिए।
4. तकनीकी क्षेत्र में भारत की भूमिका अहम हो सकती है। आर्टिफिशियल इंटेलिजेंस, मशीन लर्निंग या फिर जैव प्रौद्योगिकी जैसे उभरते क्षेत्रों में जहाँ अमेरिका व चीन दोनों की प्रतिस्पर्धा शुरू हो गयी है, वहाँ भारतीय इंजीनियर और मैनेजमेंट पेशेवर अपना मुख्य योगदान दे सकते हैं। दोनों देशों की कंपनियों और बाकी जी-20 देशों को ऐसे लोगों की विशेष जरूरत पड़ेगी। भारत को इसका फायदा उठाना चाहिए।

5. भारत जितने बड़े देश के हितों की पूर्ति के लिए आवश्यक है कि हमें अपनी क्षमताओं पर भरोसा हो। भारत की आत्मशक्ति कमजोर न हो इसका ख्याल रखना चाहिए।
6. ए शीतयुद्ध काल में भी भारत को किसी एक को चुनने की आवश्यकता नहीं है। हमें दोनों गुटों के झगड़े का फायदा उठाना चाहिए। न सिर्फ अमेरिका व चीन बल्कि रूस, ईरान, आस्ट्रेलिया जैसे देश भी भारत से रिश्ते बेहतर रखने की कोशिश करेंगे।
7. भारत को वैश्विक सहयोग की नैतिकता को पुर्नजीवित करना चाहिए। भारत ने कोरोना महामारी को लेकर सभी देशों के बीच सहयोग की जो पहल की और फिर जी-20 देशों को एक साथ लाने की अग्रणी भूमिका निभाई। उससे स्पष्ट होता है कि भारत वैचारिक और राजनीतिक विविधताओं के समीकरणों के बीच अपनी भूमिका बहुत अच्छे तरीके से निभा सकता है। भारत को ऐसा प्रयास अपने घरेलू राजनीतिक परिदृश्य में भी करना चाहिए।
8. भारत की सीमा पर सबसे बड़ी चुनौती चीन है। हमें उन देशों के साथ कूटनीतिक संबंध मजबूत करने चाहिए जो चीनी आक्रमकता की तपिश झेल रहे हैं जैसे अमेरिका, जापान, और आस्ट्रेलिया। हालांकि इनके साथ संबंध बराबरी व साझा हितों वाले होने चाहिए।
9. कई देशों को इस महामारी में अवसर मिला है कि वो विश्व समुदाय के लिए अपने दरवाजे बंद कर लें। भारत को ऐसी आकांक्षाओं का दमन करना चाहिए। इस मुश्किल समय में भारत का नेतृत्व और वैश्विक प्रशासन को लेकर नई प्रतिबद्धता दुनिया के लिए एक ऐसी वैक्सीन का काम करेगी जो अन्तर्राष्ट्रीय समुदाय को नए दशक की चुनौतियों का सामना करने की शक्ति प्रदान करेगी।

निष्कर्ष— अंत में यह कहना उपयुक्त होगा कि अगले दो दशकों तक दुनिया की परिस्थिति अप्रत्याशित व जटिल होगी। उसमें जितने अवसर पैदा होंगे उतने जोखिम भी होंगे। दुनिया के लिए भारत का महत्व लगातार बढ़ता जाएगा। स्थिरता, शांति और समृद्धि की शक्ति के रूप में यह एक सकारात्मक भूमिका निभाएगा।

संदर्भ सूची

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असि० प्रो०, हिन्दी विभाग

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सारांश

वैश्विक महामारियाँ अपने समय और भविष्य को प्रभावित करती आई हैं। राजनीति और भूगोल के साथ समाज और साहित्य भी इससे अछूता नहीं रहा है। दुनिया जब किसी विपदा में घिरी है तो सांस्कृतिक अभिव्यक्तियों में भी उनका असर हुआ है। महामारियों के कथानक पर केन्द्रित अतीत की साहित्यिक रचनाएँ आज के संकटों की भी शिनाख्त करती हैं। ये हमें मनुष्य की जिजीविषा की याद दिलाने के साथ नैतिक मूल्यों के ह्रास और मनुष्य के अहंकार, अन्याय और नश्वरता से भी आगाह कराती हैं।

हर त्रासदी और आपदा हमें कुछ सिखाती है और यह आपदा भी हमें सीख देती है कि हमें अपने देश का विकास अपने लोगों की आवश्यकताओं और देशज विचारों को ध्यान में रखते हुए करना चाहिए। कोरोना को लेकर डर, भ्रम और घबराहट दूर करने की जिम्मेदारी चिकित्सा विज्ञानियों, चिकित्सा स्टाफ और सरकार की है।

प्रमुख शब्द— वैश्विक, जिजीविषा, नश्वरता, त्रासदी, देशज, आपदा, आगाह।

वैश्विक महामारियाँ अपने समय और भविष्य को प्रभावित करती आई हैं। राजनीति और भूगोल के साथ समाज और साहित्य भी इससे अछूता नहीं रहा है। दुनिया जब किसी विपदा में घिरी है तो सांस्कृतिक अभिव्यक्तियों में भी उनका असर हुआ है। महामारियों के कथानक पर केन्द्रित अतीत की साहित्यिक रचनाएँ आज के संकटों की भी शिनाख्त करती हैं। ये हमें मनुष्य की जिजीविषा की याद दिलाने के साथ साथ नैतिक मूल्यों के ह्रास और मनुष्य के अहंकार, अन्याय और नश्वरता से भी आगाह करती हैं। इतिहास गवाह है कि अपने अपने समयों में चाहे कला हो या साहित्य, संगीत, सिनेमा और तमाम रचनाओं ने महामारियों की भयावहताओं को चित्रित करने के अलावा अपने समय की विसंगतियों, गड़बड़ियों और सामाजिक द्वंदों को भी रेखांकित किया है। ये रचनाएँ सांत्वना, धैर्य और साहस का स्रोत भी बनी हैं और साथ ही दुःखों और सरोकारों को साझा करने वाला एक जरिया और अपने समय का मानवीय दस्तावेज।

समकालीन विश्व साहित्य में महामारी पर विशद् कृति 'प्लेग' को माना जाता है। कहा जाता है कि अल्जीरियाई मूल के विश्व प्रसिद्ध फ्रांसीसी उपन्यासकार अल्बेर कामू अपने उपन्यास 'प्लेग' के जरिये कामू नात्सीवाद और फासीवाद के उभार और उनकी भयानकताओं के बारे में बता रहे थे। इसमें दिखाया गया है कि कैसे स्वार्थी और महत्वाकांक्षाओं और विलासिताओं से भरी पूँजीवादी आग्रहों और दुष्क्रों वाली दुनिया में किसी महामारी का हमला कितना व्यापक और जानलेवा हो सकता है, कि कैसे वो खुशफहमियों और कथित निर्भयताओं के विशाल पर्दे वाली मध्यवर्गीय अभिलाषाओं को तहस-नहस करता हुआ एक अदृश्य दैत्य की तरह अंधेरों और उजालों पर अपना कब्जा जमा सकता है।

'प्लेग' के जरिए कामू समाज की हृदयहीनता को भी समझना चाहते थे। वे दिखाना चाहते थे कि समाज में पारस्परिकता की भावना से विच्छिन्न लोग किस हद तक असहिष्णु बन सकते हैं। लेकिन वो आखिरकार मनुष्य के जीने की आकांक्षा का संसार दिखाते हैं। इसी तरह कोलम्बियाई कथाकार ग्राबिएल गार्सीया मार्केस का मार्मिक उपन्यास 'लव इन द टाइम ऑफ कॉलेरा', प्रेम और यातना

के मिले जुले संघर्ष की एक करुण दास्तान सुनाता है जहाँ महामारी से खत्म होते जीवन के समांतर प्रेम के लिए जीवन को बचाए रखने की जद्दोजहद एक विराट जिद की तरह तनी हुई है।

रवीन्द्रनाथ टैगोर की काव्य रचना 'पुरातन भृत्य' (पुराना नौकर) में एक ऐसे व्यक्ति की दास्तान पिरोई गई है जो अपने मालिक की देखभाल करते हुए चेचक की चपेट में आ जाता है। 1903 ई. में टैगोर ने अपने तपेदिक से जूझती 12 वर्ष की बेटी को स्वास्थ्य लाभ के लिए वर्तमान में उत्तराखण्ड राज्य के नैनीताल जिले के पास रामगढ़ की हवादार पहाड़ी पर कुछ महीनों के लिए रखा था लेकिन कुछ महीनों में उसने दम तोड़ दिया था। चार साल के बाद बेटा भी नहीं रहा। टैगोर ने रामगढ़ प्रवास के दौरान 'शिशु' नाम से अलग अलग उपशीर्षकों वाली एक बहुत लम्बी कविता शृंखला लिखी थी, जो 1913 ई. में छपी। इन कविताओं के संग्रह का नाम 'अर्धचंद्र' कर दिया गया था।

टैगोर की इस रचना की पंक्ति:

अंतहीन पृथिवियों के समुद्रतटों पर मिल रहे हैं बच्चे
मार्गविहीन आकाश में भटकते हैं तूफान, पथविहीन
जल धाराओं में टूट जाते हैं जहाज, मृत्यु है
निर्वध और खेलते हैं बच्चे। अंतहीन पृथिवियों
के समुद्रतटों पर बच्चों की चलती है एक महान बैठक।

इसी तरह निराला ने अपनी आत्मकथा 'कुल्लीभाट' में सन् 1918 ई. के दिल दहला देने वाले 'प्लू' से हुई मौतों का जिक्र किया है जिसमें उनकी पत्नी, एक साल की बेटी और परिवार के कई सदस्यों और रिश्तेदारों की जाने चली गयी थी। निराला ने लिखा था कि दाह संस्कार के लिए लकड़ियां कम पड़ जाती थी और जहाँ तक नजर जाती थी गंगा के पानी में इंसानी लाशें ही लाशें दिखाई देती थीं। उस बीमारी ने हिमालय के पहाड़ों से लेकर बंगाल के मैदानों तक सबको अपनी चपेट में ले लिया था। बेटी की याद में रचित 'सरोज स्मृति' तो हिन्दी साहित्य की एक मार्मिक धरोहर है।

फणीश्वरनाथ रेणु के प्रसिद्ध उपन्यास 'मैला आंचल' में मलेरिया और कालाजार की विभीषिका के बीच ग्रामीण जीवन की व्यथा का उल्लेख मिलता है। प्रेमचन्द्र की कहानी 'ईदगाह' में हैजा का जिक्र है। ओड़िया साहित्य के जनक कहे जाने वाले फकीर मोहन सेनापति की 'रेबती' कहानी में भी हैजे के प्रकोप का वर्णन है। जानेमाने कन्नड़ कथाकार यूआर अनंतमूर्ति की नायब रचना 'संस्कार' में एक प्रमुख किरदार की मौत प्लेग से होती है। ज्ञानपीठ अवार्ड से सम्मानित मलयाली साहित्य के दिग्गज तंकषी शिवशंकर पिल्लै का उपन्यास, 'थोत्तियुडे माकन' (मैला साफ करने वाले का बेटा) में दिखाया गया है कि किस तरह पूरा शहर संक्रामक बीमारी की चपेट में आ जाता है।

उधर विश्व साहित्य पर नजर डाले तो कामू से पहले भी लेखकों ने अपने अपने समयों की बीमारियों और संक्रामक रोगों का उल्लेख अपनी रचनाओं में किया है। ब्रिटेन के मशहूर अखबार 'द गार्जियन' ने एक सूची निकाली है जैसे डेनियल डेफो का 'अर्जनेल ऑफ द प्लेग इयर' (1722), मैरी शैली का लिखा 'द लास्ट मैन' (1826), और एडगर एलन पो की 1842 में लिखी कहानी 'द मास्क ऑफ द रेड डेथ', 1947 में कामू का प्लेग, 1969 में माइकल क्रिस्टन का 'द स्टैंड' और 1994 में रिचर्ड प्रेस्टन का 'द हॉट जोन' आया। नोबल पुरस्कार विजेता और प्रसिद्ध पुर्तगाली उपन्यासकार खोसे सारामायो ने 1995 में 'ब्लाइंडनेस' नामक उपन्यास लिखा था जिसमें अंधेपन की महामारी टूट पड़ने का वर्णन है। 2007 में जिम क्रैस ने 'द पेस्टहाउस' लिखा जिसमें लेखकों ने अमेरिका के प्लेग से संक्रमित अंधेर भविष्य की कल्पना की है। 2013 में डैन ब्राउन का 'इंफर्नो' और मार्गरेट एडवुड का 'मैडएडम' और 2014, 2015 और 2017 में लोकप्रिय ब्रिटिश लेखिका लुइश बेल्ले के 'प्लेग टाइम्स' टाइटल के तीन उपन्यास प्रकाशित हैं।

नॉर्वे वासी वरिष्ठ प्रवासी साहित्यकार श्री सुरेश चंद्र शुक्ल 'शरद आलोक' की कृति 'लॉकडाउन' दुनिया की किसी भी भाषा में कोरोना काल पर केन्द्रित प्रथम प्रकाशित काव्य संग्रह है, जिसमें इस अपूतपूर्व वैश्विक संकट के बीच व्यापक मानवीय चिंताओं, संघर्ष और सरोकारों को वाणी मिली है।

श्री शुक्ल ने विश्वव्यापी महामारी कोविड-19 के दौर में मानवीय रिश्तों और संवेदनाओं की तहस-नहस होते हुए देखा है। इस अभूतपूर्व महामारी की रोकथाम के उपायों में लॉकडाउन की महत्वपूर्ण भूमिका रही है। लॉकडाउन ने इसी महामारी के संक्रमण से तो मानव सभ्यता को बचाया है, लेकिन सामाजिक, आर्थिक, मानसिक, सांस्कृतिक परिवेश पर गहरा असर भी छोड़ा है। इन्हीं की काव्यमयी अभिव्यक्तियों के साथ उनका नवीन कविता संग्रह 'लॉकडाउन' आया है।

शुक्ल जी ने लॉकडाउन, कोरोना के डर से, कोरेण्टाइन में, लॉकडाउन में, माँ आदि शीर्षक सहित अनेक कविताओं में इस अभूतपूर्व संकट से जुड़े कई पहलुओं की मार्मिक अभिव्यक्ति की है। वे इस दौर में जहाँ दुनिया के तमाम हिस्सों में पलायन को विवश प्रवासी मजदूरों की पीड़ा और संघर्ष का आँखों देखा बयान प्रस्तुत करते हैं, वहीं गाँव-घर की ओर लौटने श्रमिकों को आशा और उत्साह का संदेश भी देते हैं।

संग्रह की प्रभावशाली कविताओं में एक लॉकडाउन-2 के माध्यम से कवि सुरेशचन्द्र शुक्ल 'शरद आलोक' ने कोविड-19 से उपजे वैश्विक संकट के दौर में मानवीय त्रासदी के बीच सरकारों के संकट और पूँजीवाद के नृशंस चेहरे को दिखाया है—

दुनिया में कोरोना:

अमेरिका में पचास हजार चढ़ गये
 कोरोना की सूली पर
 दो मीटर की आपसी दूरी पड़ गयी कम
 जनता और सरकार के बीच बढ़ी दूरी।
 × × ×
 भरे हुए सरकारी अनाज के गोदामों को
 भूखी जनता का धैर्य चिढ़ा रहा।
 जनता की भुखमरी पर कमा रहा कार्पोरेट जगत
 सबसे ज्यादा अमीर की सूची में
 नाम दर्ज करा रहा।
 जैसे सरकार को अपनी
 अंगुली में नचा रहा ?

कविवर सुरेशचन्द्र शुक्ल ने लॉकडाउन के वैश्विक संकट को लेकर जो कुछ अनुभव किया है, उन्हें सहज-तरल अंदाज में कविताओं में पिरोया है। वे जब यह देखते हैं कि देश आर्थिक गतिविधियों में रीढ़ की हड्डी बने हुए प्रवासी मजदूर लाठियाँ खाने को मजबूर हैं, तब उनकी आत्मा कराह उठती है। उनकी कविता ये प्रवासी मजदूर-3 की चंद पंक्तियाँ हैं—

जीने के लिए कर रहे प्रदर्शन,
 ये प्रवासी मजदूर।
 अहिंसक मजदूरों को गिरफ्तार किया
 उन भूखों पर लाठी भांजी
 गंभीर दफा पर लगे मुकदमें,
 क्यों तोड़ रहे अनुशासन
 ये प्रवासी मजदूर?
 यदि गाँधी बाबा होते तो
 लड़ते उनके मुकदमे।
 और समझाते अनशन करके,
 जनता का हो शासन?
 तब समझाते बापू,
 बड़े काम के, रीढ़ देश की
 ये प्रवासी मजदूर।

कोविड-19 के संक्रमण से उपजे संकट को वे मानवीय परीक्षा की घड़ी भी मानते हैं, जहाँ बेहद धैर्य की जरूरत है। फिर यह स्वयं को सिद्ध करने का मौका भी है। 'गाँवों' को आदर्श बनाना है', शीर्षक कविता में रचनाकार का संकेत साफ है:

लॉक डाउन
 एक संकट है,
 उसे उम्मीद में
 बदलने का।
 मजदूर अपने गाँव आये हैं,
 उनसे कौशल विकास
 सीखना है।
 श्रमिक बारात ले
 वापस आये हैं
 कारंटाइन में गाँव
 बना जनवासा,
 बच्चों को कौशल
 सिखाओ तो,
 कामगार हैं
 प्रगति के दुर्वासा।

फिल्म निर्देशक अविनाश दास ने भोजपुरी और मैथिली के गीत सुनाकर, सुनने वाले का मन मोह लिया। उन्होंने प्रकाश उदय की नई किताब 'अरज निहोरा' से कई भोजपुरी गीत गा कर सुनाए। मैथिली के गीत उनकी स्वरचित रचनाएँ हैं। विनोद कुमार शुक्ल की कहानी, कंवर नारायण की कविताएँ, गीतांजलि। शिवमूर्ति, अल्पना मिश्रा का उपन्यास पाठ भी जारी है। लेखक गिरिन्द्रनाथ झा के पास गाँव-घर के किस्से हैं, तो दास्तानगो हिमांशु वाजपेयी से शहरों के किस्से सुना रहे हैं।

आज के कोरोना समय में जब अधिकांश लेखक बिरादरी ऑनलाइन है तो दुनिया ही नहीं भारत में भी विभिन्न भाषाओं में कवि कथाकार सोशल मीडिया के जरिए खुद को अभिव्यक्ति कर रहे हैं। डायरी, निबंध, लघुकथा, व्याख्यान और कविता लिखी जा रही है, कहीं चुपचाप तो कहीं सोशल नेटवर्किंग वाली मुखरता के साद। भारत में खासकर हिन्दी क्षेत्र में विभिन्न लेखक संगठन, व्यक्ति और प्रकाशन संस्थान फेसबुक लाइव जैसे उपायों के जरिए लेखकों से उनकी रचनाओं और अनुभवों को साझा कर रहे हैं। हालांकि इस काम में प्रकाशित हो जाने की हड़बड़ी और होड़ जैसी भी देखी जा रही है और अपने अपने आग्रहों और पसंदों के आरोप प्रत्यारोप लग रहे हैं। हिन्दी कवि संजय कुंदन कहते हैं कि हो सकता है जो आज सोशल मीडिया पर शेयर किया जा रहा है वो साहित्य की कसौटी पर खरा न उतरे और गुणवत्ता में कमतर रह जाए लेकिन उन्हीं के बीच से ऐसी रचनाएँ भी अवश्य आयेगी जो आगामी वक्तों के लिए संघर्ष, यातना और संशय के घटाटोप से भरे इस भयावह जटिलताओं वाले समय की सबसे प्रखर और संवेदनापूर्ण दस्तावेज कहलाने योग्य होंगी।

दूर हुआ भ्रम-

शव से कोरोना संक्रमण का कोई खतरा नहीं होता है। यह बात इंडियन काउंसिल ऑफ मेडिकल रिसर्च के इस्टीमेट ऑफ ट्रेडीशनल मेडिसिन के निदेशक और जाने माने वायरोलॉजिस्ट डॉ. देव प्रसाद चट्टोपाध्याय ने कही है। मौजूद समय में यह इसलिए अति महत्वपूर्ण है, क्योंकि कोरोना संक्रमण से मरने वालों के शवों की इस कदर बेकद्री हो रही थी कि मानवीयता तार-तार होने लगी थी। अतीत में भी छूआछूत के अनेक रोग अस्तित्व में रहे हैं, लेकिन ऐसा पहली बार हुआ है जब रिश्तेदार, स्वजन और यहां तक कि सगे सम्बंधी भी कोरोना संक्रमण से भरने वालों के शव से दूर रहते थे। उचित जानकारी के अभाव में भ्रम था कि शव को जो हाथ लगाएगा वह भी कोरोना पीड़ित हो जाएगा। जो जीवन भर हर दुख-सुख में परिवार के साथ रहा, मरने के बाद उसे अपनों का कंधा भी न मिल पाना, इससे बड़ा दुर्भाग्य क्या हो सकता था। कई बार हृदय विदारक और कई बार रोंगटे खड़े करने वाले दृश्य भी सामने आए जब कंधों के अभाव में शव को घसीट कर चिता तक ले जाने के लिए लोगों को मजबूर होना पड़ा। लोग कोरोना से ज्यादा इस बात से घबराए हुए थे, कि यदि वे किसी कारणवश कोरोना के सम्पर्क में आ गए और कुछ अनहोनी उनके साथ हो गई तो फिर

उनके शव का क्या होगा। शव के साथ मानवीयता भरा व्यवहार होगा। अथवा लावारिस की तरह अंतिम संस्कार होगा। लेकिन, अब यह वैज्ञानिक तथ्य सामने आ चुका है कि मृत कोशिकाओं में कोरोना वायरस ज्यादा देर तक जीवित नहीं रह सकता। इसलिए शव से संक्रमण का कोई खतरा नहीं है। वास्तव में कोविड-19 को लेकर लोगों के मन में अभी कई तरह की भ्रांतियाँ हैं। इसीलिए महज कोरोना से संक्रमित होने की आशंका में ही कई लोग जान दे चुके हैं। यह विश्वास भी लोगों के मन में बैठाना होगा कि उचित देखभाल, अनुशासित जीवन शैली – खानपान और चिकित्सा से कोरोना को हराया जा सकता है। कोरोना को लेकर डर, भ्रम और घबराहट दूर करने की वास्तविक जिम्मेदारी चिकित्सा विज्ञानियों, चिकित्सा स्टाफ और सरकार की है।

निष्कर्ष

हर त्रासदी और आपदा हमें कुछ सिखाती है और यह आपदा भी हमें सीख देती है कि हमें अपने देश का विकास अपने लोगों की आवश्यकताओं और देशज विचारों को ध्यान में रखते हुए करना चाहिए। यह महामारी हमें यह सीख देती है कि हमारी शिक्षा प्रणाली, हमारे समाज और समुदाय की आवश्यकताओं के अनुरूप होनी चाहिए, न कि केवल वैश्विक आवश्यकताओं की पूर्ति हेतु।

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विश्व की विभिन्न अर्थव्यवस्थाओं पर कोविड-19 का प्रभाव-एक परिदृश्य

डॉ० रामचन्द्र सिंह

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सार

कोरोना महामारी ने जहां सम्पूर्ण विश्व को हैरान किया है, वहीं विश्व के आर्थिक जगत को भी इस महामारी ने गर्त में पहुँचा दिया है। चारों तरफ महामारी के आतंक से विश्व समुदाय डरा हुआ है। वहीं आर्थिक उन्नति में विश्व के सभी देश पिछड़ गये हैं। अमेरिका, ब्रिटेन, इटली जैसे विकसित देश भी इस महामारी की चपेट से बच नहीं पाये हैं। सभी देशों में आर्थिक हानि के साथ साथ मानवीय हानि भी बहुत हुई है। महामारी के कारण सभी देशों में बेरोजगारी चरम पर है। उद्योगों में श्रमिकों को रोजगार से हाथ धोने के लिए कोरोना ने मजबूर किया है, जिससे औद्योगिक क्षेत्र ठप्प पड़े हैं, उत्पादक हतोत्साहित हो रहे हैं। लोग घरों में रहने के लिए मजबूर हैं। कोरोना महामारी ने समाज में सामाजिक दूरियां बढ़ाने का काम किया है जिससे आर्थिक जगत को बहुत नुकसान पहुँचा है, नतीजा यह हुआ कि सम्पूर्ण विश्व आर्थिक मंदी की चपेट में आ गया। व्यापारिक गतिविधियाँ पूर्णतः शून्य हो गयी हैं। यह मानवीय भूल का ही परिणाम है, जिसका दंश आज सम्पूर्ण मानव जाति को झेलना पड़ रहा है। अर्थव्यवस्था में अचानक आये इस ठहराव के कारण आर्थिक जगत को काफी हानि उठानी पड़ी है। इस महामारी ने विश्व को आर्थिक पतन की ओर धकेल दिया है। कोविड 19 ने अर्थव्यवस्था को जकड़ दिया है। इस महामारी के दौर में आज प्रत्येक देश की अर्थव्यवस्था को लघु उद्योग स्थापित कर आत्मनिर्भर बनने का प्रयास करना चाहिए ताकि अर्थव्यवस्था को विकसित करने हेतु लघु उद्योग अपने क्षेत्र में विशिष्टता प्राप्त कर सकें।

विश्व की अर्थव्यवस्थाओं को कोरोना वायरस ने बहुत अधिक प्रभावित किया है। विश्व की बड़ी अर्थव्यवस्थाएं जैसे अमेरिका, भारत, आस्ट्रेलिया, ब्राजील, ब्रिटेन, इटली, रूस आदि देशों में कोरोना का कहर भयावह स्थिति में देखने को मिला है। चीन के वुहान शहर से फैले इस वायरस ने ऐसा ताण्डव मचाया कि सम्पूर्ण विश्व दहशत में आ गया। इस महामारी के कारण सभी देशों में बेरोजगारी चरम पर है। उद्योगों में श्रमिकों को रोजगार से हाथ धोने के लिए कोरोना ने मजबूर किया है, जिससे औद्योगिक क्षेत्रों में उत्पादन कार्य ठप हो गया, लोग घरों में रहने के लिए मजबूर हो गये। सम्पूर्ण विश्व आर्थिक मंदी की चपेट में आ गया। व्यापारिक गतिविधियाँ पूर्णतः शून्य हो गयी जो मानवीय भूल का ही परिणाम है, जिसका दंश आज सम्पूर्ण मानव जाति को झेलना पड़ रहा है। अर्थव्यवस्था में अचानक आये इस ठहराव के कारण आर्थिक जगत को काफी हानि उठानी पड़ी है। इस महामारी ने विश्व को आर्थिक पतन की ओर धकेल दिया है। कोविड 19 ने एक ओर अर्थव्यवस्था को जकड़ दिया, वहीं व्यापार चक्रों की शिथिलता एवं व्यापक मुद्रा स्फीति ने मुद्रा के मूल्य में लगातार गिरावट उत्पन्न कर दी है। विश्व बाजार में चीन की वस्तुओं का अत्यधिक प्रभाव हमारी अर्थव्यवस्था के औद्योगिक क्षेत्रों को प्रभावित कर रहा है। इस महामारी के दौर में आज हमें देश की अर्थव्यवस्था को मजबूत बनाने हेतु लघु उद्योग स्थापित कर आत्मनिर्भर बनने का प्रयास करना चाहिए ताकि अर्थव्यवस्था को विकसित करने हेतु लघु उद्योग अपने क्षेत्र में विशिष्टता प्राप्त कर सकें। व्यापारिक दृष्टि से चीन के लिए भारत एक बहुत बड़ा बाजार है जहां विनियोग की अपार सम्भावनाएं हैं। किन्तु चीन की चालबाजी उसी की अर्थव्यवस्था में मंदी उत्पन्न कर सकती है, यदि उसके द्वारा निर्मित घटिया वस्तुओं को नजरअन्दाज कर दिया जाय। विश्व में इस समय चारों ओर चीन की साख ध्वस्त हो चुकी है। कोरोना ने जहां उसकी साख को धूमिल

किया है, वहीं उसकी बेईमानी एवं चाल को भी प्रत्यक्ष उजागर किया है। उसका मकसद केवल दूसरे देशों की अर्थव्यवस्था को ध्वस्त कर विश्व बाजार में अपने लोगों के लिये अधिक से अधिक रोजगार का सृजन करना है। तकनीकी वस्तुओं से लेकर सभी प्रकार के घटिया वस्तुओं से चीन का बाजार भरा पड़ा है, इसके लिए विश्व को सजग होना आवश्यक है। चीन की अर्थव्यवस्था को ध्वस्त करने के लिए एक मात्र तरीका उसके उत्पादों का पूर्णतः बहिष्कार है। विश्व की सभी उन्नतिशील अर्थव्यवस्थाएं पूर्णरूप से समझ चुकी हैं कि चीन की गलत नीतियों के कारण आज विश्व पर घोर संकट उत्पन्न हुआ है। यदि समय रहते इस गलती को सुधारा नहीं गया तो आगे विश्व की सम्पूर्ण मानव जाति के लिए खतरा उत्पन्न हो सकता है। अमेरिका, जापान, दक्षिणी कोरिया, आस्ट्रेलिया, भारत, इजराइल जैसे देश चीन की गलत नीतियों को समझ चुके हैं। इसके विपरीत चीन अपनी अर्थव्यवस्था को विदेशी पूंजी से मजबूत कर रहा है। वह अपना निकृष्ट माल सस्ती कीमतों पर बेचकर सम्पूर्ण विश्व में एकाधिकारी बाजार स्थापित करना चाहता है जिस कारण अन्य देशों का व्यापार सीमित होता जा रहा है। अर्थव्यवस्था को समृद्ध बनाने के लिए स्वदेशी अपनाओ की नीति को अपनाना आवश्यक है। अर्थव्यवस्था के त्वरित विकास हेतु हमें अपनी अर्थव्यवस्था को मजबूत करना पहली प्राथमिकता है। इसके लिए यह आवश्यक है कि अपने लघु उद्योगों को प्रोत्साहित किया जाय, विदेशी पूंजी अर्जित करने हेतु लघु उद्योगों से निर्मित माल की बिक्री को बढ़ाना, समुचित विकास हेतु सभी व्यक्तियों की जिम्मेदारी को तय करना, मित्र राष्ट्रों के बीच आपसी व्यापार को प्राथमिकता दी जानी चाहिए। भारत का चीन से आर्थिक सम्बन्ध पूर्णरूप से समाप्त करने में ही फायदा है। चन्द व्यक्तियों को लाभ पहुंचाने के लिए अपनी नीतियों में बदलाव नहीं करना चाहिए, क्योंकि विश्व में एक मात्र धोखेबाज देश जिस पर विश्वास करना अपनी अर्थव्यवस्था को गर्त में डालने के समान है। कोरोना महामारी के कारण विश्व के विभिन्न देशों में निम्न लिखित प्रभाव दृष्टिगोचर हुए हैं—

- 1 – विश्व की अर्थव्यवस्थाएं अपने औद्योगिक उत्पादन को बढ़ाने में असफल हो गयीं तथा उनके उद्योग धन्धे ठहराव की स्थिति में आ गये।
- 2 – विश्व की बड़ी अर्थव्यवस्थाओं में बेरोजगारी में वृद्धि हो गयी, श्रमिकों को रोजगार से हाथ धोना पड़ा। साथ ही बड़ी मात्रा में मानवीय पूंजी की हानि भी हुई है।
- 3 – विश्व में अधिकांश अर्थव्यवस्थाओं की राष्ट्रीय आय गिरने लगी है, क्रयशक्ति में गिरावट उत्पन्न हो गयी, सामाजिक दूरियों के कारण अधिकतर अर्थव्यवस्थाओं में मंदी की स्थिति उत्पन्न हो गयी।
- 4 – कोरोना महामारी ने विश्व में ऐसा ताण्डव मचाया कि सभी देश अपने मानवीय संसाधन को बचाने में असहाय हो गये।
- 5 – सभी देशों को कोरोना के कहर ने वित्तीय संकट झेलने के लिए मजबूर कर दिया।
- 6 – अन्तर्राष्ट्रीय व्यापार स्थिर हो गया, विदेशी यातायात रोक दिये गये। वस्तुओं की मांग में कमी के कारण मंदी की स्थिति उत्पन्न हो गयी।
- 7 – सभी देशों ने सामाजिक दूरियां बनानी शुरू कर दी। आयात और निर्यातों पर रोक लगा दी गयी, जिसका परिणाम यह हुआ कि विदेशी व्यापार पूर्ण रूप से अवरुद्ध हो गया।
- 8 – सरकारों की अधिकतर आय स्वास्थ्य सुविधाओं पर व्यय होने लगी। अस्पतालों के निर्माण से लेकर कर्मचारियों की व्यवस्था तक, दवाइयों से लेकर डाक्टरों की नियुक्ति तक का कठिन दौर की शुरुआत हो गयी।

विश्व के प्रमुख देशों पर कोरोना संक्रमण का प्रभाव

1- चीन

इस में कोई दो राय नहीं है कि चीन की नीति विश्व पर आर्थिक राज करने की थी। कोरोना फैलाना तो एक सोची समझी रणनीति थी, जिसके द्वारा वह अपनी अर्थव्यवस्था को गति देने में सफल हो जाये और अपने नकली माल की आसानी से विश्व के अन्य देशों में आपूर्ति बढ़ा सके। कोरोना का लाभ उठाकर स्वर्ण के भण्डार में वृद्धि करना, अपने उद्योगों को मजबूती प्रदान करना, व्यापारिक दृष्टि से अपने माल के लिए बाजार तलाशना, अधिक से अधिक विदेशी मुद्रा अर्जित करना एवं विस्तारवादी नीति को मजबूती प्रदान करना मुख्य उद्देश्य था। एशिया महाद्वीप में अपने आपको शक्तिशाली समझना, विश्व की महाशक्ति अमेरिका को सीधे चुनौती देना चीन की सोची समझी रणनीति का अहम हिस्सा था। यूरोपीय देशों एवं अफ्रीकन देशों में अपने माल के लिए बाजार की तलाश एवं नकली उत्पादों को इन देशों में निर्यात करना मुख्य लक्ष्य था। किन्तु कोरोना ने उसकी ऐसी पोल खोल कर रख दी कि उसके नकली उत्पाद एवं घटिया सोच धरे के धरे रह गये।

2- अमेरिका

कोरोना महामारी ने अमेरिका की कमर तोड़ कर रख दी, लाखों लोगों को इस महामारी के कारण अपनी जान से हाथ धोना पड़ा है जिसके कारण अमेरिका की चिकित्सा सुविधाओं की पोल खुल गयी। अमेरिका आर्थिक नीति में अपने सहयोगी देशों के साथ व्यापारिक सम्बन्धों को गति प्रदान करना चाहता था जिसमें चीन रोड़ा उत्पन्न कर रहा था। चीन सागर को अपने अधिकार क्षेत्र में बताकर व्यापारिक मार्ग को अवरुद्ध करना चाहता था। इससे अमेरिका, जापान, आस्ट्रेलिया, दक्षिण कोरिया व यूरोपीय देश काफी चिढ़े हुए थे, ठीक उसी दौरान चीन ने कोरोना महामारी को फैलाकर अपने प्रति और नफरत पैदा कर दी। यह एक आर्थिक युद्ध था जिसमें चीन परास्त हो गया।

3- आस्ट्रेलिया

आस्ट्रेलिया में आग की लपटें थमी नहीं थी कि चीन ने कोरोना वायरस को जानबूझकर फैलाकर अन्तर्राष्ट्रीय व्यापार को प्रभावित करने के लिए अपनी चाल शुरू कर दी। जब तक इस बिमारी को समझ पाते तब तक इस बिमारी की चपेट में लाखों लोग आ चुके थे जिससे वहां अधिकतर लोगों को अपने रोजगार से हाथ धोना पड़ा है। अन्तर्राष्ट्रीय व्यापार में चीन द्वारा अवरोध उत्पन्न करने और कोरोना महामारी को फैलाने तथा समुद्र में अन्य देशों की व्यापारिक गतिविधियों को रोकने के कारण भी आस्ट्रेलिया में चीन के प्रति नफरत पैदा हो गयी। चीन समुद्र में अन्य देशों के मालवाहक जहाजों को आने जाने से रोक रहा था, वहीं उसने समुद्री द्वीपों पर अपना कब्जा जमाना शुरू कर दिया जिसको देखकर आस्ट्रेलिया का पारा भी सातवें आसमान पर है। वह चीन की इस नीति को बिल्कुल भी स्वीकार नहीं करता और इसे आने वाले समय के लिए घातक समझता है। आस्ट्रेलिया के प्रधानमंत्री स्टॉक मॉरिसन ने अपने राष्ट्रीय रक्षा खर्च में 40 प्रतिशत बढ़ोतरी करते हुए कहा कि चीन के अति-अभिलाषी नेता शी जिनपिंग ने जिस उद्धत राष्ट्रवाद को अपनाया है, वह खुद उनके देश के लिये भी अच्छा नहीं है।¹

4- जापान

जापान का औद्योगिक स्तर चीन से काफी ऊंचा है तथा सामानों की गुणवत्ता चीन से लाख गुना अच्छी है। वहां के श्रमिकों की कार्य कुशलता उच्चकोटि की है। किन्तु कोरोना काल में व्यापारिक गतिविधियां रुक सी गयी हैं। कोरोना के कारण जापान में भी औद्योगिक उत्पादन प्रभावित हुआ है, इसका सम्पूर्ण जिम्मेदार चीन है।

5- ब्रिटेन

ब्रिटेन भी कोरोना महामारी से अछूता नहीं रहा है। वहां की अर्थव्यवस्था कोविड 19 के कारण अस्तव्यस्त हो गयी। आर्थिक गतिविधियां थम सी गयी, अन्तर्राष्ट्रीय यातायात सब रोक दिये गये। चीन की असली चाल काफी देर बाद ब्रिटेन की समझ में आयी, तब तक उनके हजारों नागरिकों की जान जा चुकी थी, जिसको ब्रिटेन ने चीन की सोची समझी रणनीति करार दिया। इसके बाद वहां की सरकार चीन के छद्म युद्ध को समझने में कामयाब हो सकी और सीधे तौर पर चीन का विरोध शुरू कर दिया।

6- भारत

कोविड 19 को जिस प्रकार से चीन के वुहान शहर के लैब से फैलाया गया वह चीन की एक सोची समझी रणनीति थी। वह चाहता था कि विश्व की अर्थव्यवस्था इस महामारी के जाल में फंस जाय और वह एक महाशक्ति के रूप में विश्व पटल पर अपने उद्योगों को समृद्ध बना सके, जिसे उसका व्यापार तेजी से आगे बढ़े और वह अधिक से अधिक विदेशी मुद्रा अर्जित कर अपने मौद्रिक भण्डार एवं स्वर्ण भण्डार में वृद्धि कर सके जिससे उसको विश्व में महाशक्ति बनने से कोई रोक न सके। भारतीय अर्थव्यवस्था जिस तेजी से आगे बढ़ रही थी, चाइना उसे पचा नहीं पा रहा था। इसलिए उसने कोरोना को सभी देशों में फैला दिया जिसे भारत भी अछूता नहीं रहा। हजारों लोगों को अपनी जान गवानी पड़ी। वही भारत के बाजारों में चीनी सामान अपने पैर फैला चुका था किन्तु केन्द्रीय नेतृत्व ने उसकी मंशा पर पानी फेर दिया। भारत और अमेरिकी सम्बन्धों में नजदीकियों ने चीन की हेकड़ी बाहर निकाल दी। इसे देखकर चीन चिढ़ गया और भारत की सीमा में घुसपैठ करने लगा। इसका नतीजा यह हुआ कि 15 जून को चीनी सैनिकों ने धोखा देकर भारतीय सैनिकों पर हमला बोल दिया जिसमें भारतीय सैनिकों ने अपने पराक्रम से 40 चीनी सैनिकों को मौत के घाट उतार दिया और 20 भारतीय जॉबाज भी शहीद हो गये। अब अमेरिका ये अनुभव करने लगा कि एशिया में भारत उसके लिए एक बेहतर विकल्प हो सकता है। यदि चीन पर पकड़ मजबूत करनी है तो भारत के साथ मित्रता से बेहतर उसके लिए और कोई विकल्प नहीं है। एशिया में जापान, दक्षिणी कोरिया, वियतनाम, भारत से उनके आर्थिक

सम्बन्धों को मजबूत कर सकते हैं। सबसे बड़ी लड़ाई अन्तर्राष्ट्रीय व्यापार की है जो चीन के आर्थिक व्यापार से है जो नकली सामान का विशाल भण्डार विदेशों को निर्यात करता है।

7- अन्य देश

इटली, स्पेन, न्यूजीलैण्ड, रूस, कनाडा, ब्राजील, पाकिस्तान, फ्रांस, जर्मनी, दक्षिण कोरिया, इण्डोनेशिया, मलेशिया आदि देशों में भी कोरोना महामारी का ताण्डव देखने को मिला है।

निष्कर्ष

विश्व की सभी उन्नतिशील अर्थव्यवस्थाएं पूर्णरूप से समझ चुकी हैं कि चीन की गलत नीतियों के कारण आज विश्व पर घोर संकट उत्पन्न हुआ है। यदि समय रहते इस गलती को सुधारा नहीं गया तो आगे विश्व की सम्पूर्ण मानव जाति के लिए खतरा उत्पन्न हो सकता है। अमेरिका, जापान, दक्षिणी कोरिया, आस्ट्रेलिया, भारत, इजराइल जैसे देश चीन की गलत नीतियों को समझ चुके हैं। अर्थव्यवस्था को समृद्ध बनाने के लिए स्वदेशी अपनाओ की नीति को अपनाना आवश्यक है। अर्थव्यवस्था के त्वरित विकास हेतु हमें अपनी अर्थव्यवस्था को मजबूत करना पहली प्राथमिकता है। इसके लिए यह आवश्यक है कि अपने लघु उद्योगों को प्रोत्साहित किया जाय, विदेशी पूंजी अर्जित करने हेतु लघु उद्योगों से निर्मित माल की बिक्री को बढ़ाना, समुचित विकास हेतु सभी व्यक्तियों की जिम्मेदारी को तय करना, मित्र राष्ट्रों के बीच आपसी व्यापार को प्राथमिकता दी जानी चाहिए।

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डॉ० रंजना अग्रवाल

एसोसिएट प्रोफेसर, संस्कृत विभाग

एन.के.बी.एम.जी. कालेज, चंदौसी

सार

वर्ष 2020 में सम्पूर्ण विश्व एक ओर चीन के मानव निर्मित जैविक आपदा (कोरोना महामारी) का दंश झेल रहा है तो दूसरी ओर प्राकृतिक आपदाओं में भूकंप के झटके, चक्रवाती तूफान 'अम्फान', महातूफान 'निसर्ग' का कहर मचा हुआ है। इस प्राकृतिक और जैविक आपदा का कहर यह साबित करता है कि मानव ने काफी लम्बे समय से प्रकृति के साथ खिलवाड़ किया है। इन आपदाओं से बचने के लिए पर्यावरण संरक्षण और संवर्धन और संतुलन ही एकमात्र उपाय है। इस लेख में हम प्राचीन संस्कृत साहित्य के परिप्रेक्ष्य में मानव और प्रकृति के संवेदनशील सम्बन्धों को स्थापित करेंगे। आज समय की बलवती मांग है कि हम अथर्ववेद की शपथ को हम फिर से दोहराए—'हे धरती मां! मैं जो कुछ भी तुमसे लुंगा वह उतना ही होगा जितना तू पुनः पैदा कर सके। तेरे मर्मस्थल या तेरी जीवनी शक्ति पर मैं कभी प्रहार नहीं करुंगा।' आइए! हम मानवीय संवेदनाओं को पुनः जाग्रत करके प्रकृति से प्रेम करें उसे समृद्ध बनाएं क्योंकि प्रकृति के कल्याण में ही मनुष्य का कल्याण है।

वर्ष 2020 में सम्पूर्ण विश्व एक ओर चीन के मानव निर्मित जैविक आपदा (कोरोना महामारी) का दंश झेल रहा है तो दूसरी ओर प्राकृतिक आपदाओं में भूकंप के झटके, चक्रवाती तूफान 'अम्फान', महातूफान 'निसर्ग' का कहर मचा हुआ है। इस प्राकृतिक और जैविक आपदा का कहर यह साबित करता है कि मानव ने काफी लम्बे समय से प्रकृति के साथ खिलवाड़ किया है। इन आपदाओं से बचने के लिए पर्यावरण संरक्षण और संवर्धन और संतुलन ही एकमात्र उपाय है।

इस लेख में हम प्राचीन संस्कृत साहित्य के परिप्रेक्ष्य में मानव और प्रकृति के संवेदनशील सम्बन्धों को स्थापित करेंगे। मानव जीवन का अस्तित्व प्रकृति की गोद में ही पलता बढ़ता है। मानव और प्रकृति का संबंध उतना ही पुराना है जितना इस सृष्टि के आरंभ का इतिहास। सांख्य दर्शन के अनुसार जड़-तत्व जगत् का उपादान कारण है और सांख्य दर्शन में उपादान कारण को 'प्रकृति' शब्द के द्वारा अभिहित किया जाता है—

मूलप्रकृतिरविकृतिर्महदाद्याः प्रकृतिविकृतयः सप्त ।

षोडकस्तु विकारो न प्रकृतिर्नविकृतिः पुरुषः ॥¹

इसमें तनिक भी संदेह नहीं है कि मानव की सहचरी और आश्रयदात्री सभी कुछ एकमात्र प्रकृति ही है। प्राकृतिक सौंदर्य से मोहित होकर हमारे प्राचीन ऋषियों, कवियों की आत्मा से कविता की निर्झरिणी बह निकली थी। क्रौंच पक्षी के वध से महर्षि वाल्मीकि की करुणा श्लोक में परिणत हो गई—

मां निषाद प्रतिष्ठां त्वमगमःशाश्वतीसमाः ।

यत्क्रौंचमिथुनादेकमवधीः काममोहितम् ॥²

हिन्दू धर्म में प्रकृति पूजन को प्रकृति-संरक्षण के तौर पर मान्यता है। फलतः हमारे ऋषियों ने पेड़-पौधे, नदी-पर्वत, ग्रह-नक्षत्र, अग्नि-वायु सहित प्रकृति के विविध रूपों के साथ मानवीय संवेदनाएं जोड़ी हैं। प्राचीन समय से ही भारत के वैज्ञानिक ऋषि मुनियों को प्रकृति संरक्षण और मानव के स्वभाव की गहरी जानकारी थी। वे जानते थे कि मानव अपने क्षणिक लाभ के लिए कई मौकों

पर गंभीर भूल कर सकता है और अपना ही भारी दुश्मन बन सकता है इसलिए उन्होंने प्रकृति के साथ मानव के भावानात्मक सम्बन्ध विकसित कर दिए ताकि मनुष्य द्वारा प्रकृति को गंभीर क्षति पहुंचाने से रोका जा सके। यही कारण है कि प्राचीन काल से ही भारत में प्रकृति के साथ संतुलन करके चलने का महत्त्वपूर्ण संस्कार है।

यह सब होने के बाद भी भारत में भौतिक विकास की अंधी दौड़ में प्रकृति पद-दलित हुई है लेकिन यह भी सत्य है कि हिंदू परंपराओं ने कहीं न कहीं प्रकृति का संरक्षण भी किया है अन्यथा स्थिति और भी ज्यादा भयावह हो सकती थी।

हिन्दू धर्म का प्रकृति के साथ कितना गहरा संबंध है इसे इस बात से समझा जा सकता है कि दुनिया के सबसे प्राचीन वेद ऋग्वेद का प्रथम मंत्र ही अग्नि की स्तुति में रचा गया है—

‘अग्निमीले पुरोहितं ..’³

ऋग्वेद के एक मंत्र में सूर्य जड़ और चेतन जगत् की आत्मा कहा गया है —

‘सूर्य आत्मा जगतस्तस्थुषश्च’⁴

वृक्षों में भी चेतना होती है, इसलिए वृक्षों को मनुष्य के समतुल्य माना गया है। ऋग्वेद से लेकर अनेक उपनिषद और महाकवियों के काव्यों में वृक्षों में चेतनता के अनेक उदाहरण द्रष्टव्य हैं। मत्स्य पुराण में एक वृक्ष को दस पुत्रों के समान कहा गया है—

दशकूप समा वापी दशवापी समो हृदः।

दश हृदः समः पुत्रो दश पुत्रो समः द्रुमः।।⁵

हिन्दू संस्कृति में पीपल और तुलसी के पौधे को देवता मानकर पूजा करने का कारण यह है कि ये दोनों अधिक मात्रा में प्राणवायु आक्सीजन देते हैं। इन पौधों में अनेक औषधीय गुण मौजूद हैं। भगवान श्रीकृष्ण ने श्रीमद्भगवद्गीता में पीपल वृक्ष को अपनी विभूति कहा है —

‘अश्वत्थः सर्ववृक्षाणाम् ...’⁶

प्रकृति की सबसे बड़ी विशिष्टता यह है कि वह अपनी चीजों का उपभोग स्वयं नहीं करती।

पिवन्ति नद्यः स्वयमेव नाम्भः स्वयं न खादन्ति फलानि वृक्षाः।।⁷

इसप्रकार प्रकृति किसी के साथ भेदभाव नहीं करती। पृथिवी, जल, वायु, अग्नि और आकाश यह अनमोल प्राकृतिक संपदाएं सभी मनुष्यों को बिन मोल समान रूप से प्राप्त हैं। पर जब मनुष्य प्रकृति के साथ अनावश्यक खिलबाड़ करता है तो अतिवृष्टि अनावृष्टि और महामारी के रूप में प्रकृति मनुष्य को सचेत करती है।

जल, जंगल और जमीन विकास के पर्याय हैं अर्थात् जब तक जल, जंगल और जमीन है, मनुष्य का विकास होता रहेगा। मानव जो छोड़ते हैं उसे पेड़ पौधे लेते हैं और पेड़ पौधे जो छोड़ते हैं उसे मानव लेते हैं। जल जंगल और जमीन से ही जीवन है यदि जीवन ही नहीं है तो विकास का कोई अर्थ नहीं। हर धर्म ने माना है कि प्राकृतिक विनाश से विकास संभव नहीं है।

वैदिक संस्कृति का प्रकृति से अटूट संबंध है। वैदिक संस्कृति का सम्पूर्ण क्रिया-कलाप प्राकृत से पूर्णतया आबद्ध ऋग्वेद के पर्जन्य सूक्त में ऋषि कहते हैं कि जब पर्जन्य पृथिवी की अपने जल से रक्षा करता है तो भूमि सम्पूर्ण संसार के हित के लिए समर्थ हो जाती है—

“प्र वाता वान्ति पतयन्ति विद्युत् उदोषधीर्जिहते पिन्वते स्वः।

इरा विश्वस्मै भुवनाय जायते यत्पर्जन्यः पृथिवीं रेतसावति।।”⁸

अथर्ववेद के पृथिवी सूक्त में पृथिवी को माता और स्वयं को उसका पुत्र कहा गया है जैसे मां पुत्र का पालन करती है उसी प्रकार पृथिवी हमारे जीवन का प्राणों का आधार है—

माताभूमिः पुत्रोहम् पृथिव्याः।⁹

जंगल और पर्वत मनुष्य को सुख प्रदान करते हैं। अथर्ववेद के पृथिवी सूक्त में ऋषि कहते हैं कि भूमि! तेरे पहाड़, बर्फ से ढके पर्वत और तेरे वन हमें सुख देने वाले हों—

गिरयस्ते पर्वता हिमवन्तोरण्यं ते पृथिवी स्योनमस्तु।¹⁰

जल ही जीवन का आधार है। जल में विभिन्न देवताओं का वास होने के कारण जल को पवित्र मानकर ऋग्वेद के आपः सूक्त में ऋषि जलों से अपनी रक्षा की प्रार्थना करते हैं—

यासु राजा वरुणो यासु सोमो विश्वे देवा यासूर्जं मदन्ति।

वैश्वानरो यास्वग्निःप्रविष्टस्तां आपो देवीरिह मामवन्तु।।¹¹

महान ऋषियों ने धार्मिक परंपराओं से जोड़कर पर्वतों की महत्ता को स्थापित किया। महाकवि कालिदास ने 'कुमारसंभवम्' में हिमालय को देवताओं का हृदय कहते हुए पर्वतराज की महानता और देवत्व स्थापित किया गया है—

अस्त्युत्तरस्यां दिशि देवतात्मा हिमालयो नाम नगाधिराजः।¹²

हमारे वेदों में प्रायः सभी सूक्तों में देवत्व, माहात्म्य और मनुष्य के जीवन का आधार और अनिवार्य तत्त्व बताकर मानव की संवेदनाओं से जोड़ा गया है ताकि मानव प्रकृति के किसी भी घटक को कोई हानि न पहुंचाए और जब प्रकृति में यह सभी तत्त्व संरक्षण और वर्धन को प्राप्त होंगे तो ही मानव सभ्यता का विकास और उत्थान संभव है।

निष्कर्ष

प्रकृति, जिसे वेदों में माता कहा है जिसने अपने मां के धर्म के अनुरूप मनुष्य रूपी पुत्र के लिए अपनी समस्त प्राकृतिक सम्पदाओं को सदैव खुले दिल से प्रदान कर उसकी रक्षा में तत्पर है वही मनुष्य बुद्धि के बल पर प्रकृति का नियंता और नियामक बनकर प्राकृतिक संसाधनों का क्रूरतापूर्वक अतिदोहन करके प्रकृति रूपी मां के अस्तित्व को ही संकट में डाल रहा है या कहिए कि संकट में डाल दिया है। आज समय की बलवती मांग है कि हम अथर्ववेद की शपथ को हम फिर से दोहराए—'हे धरती मां! मैं जो कुछ भी तुमसे लुंगा वह उतना ही होगा जितना तू पुनः पैदा कर सके। तेरे मर्मस्थल या तेरी जीवनी शक्ति पर मैं कभी प्रहार नहीं करूंगा।' आइए! हम मानवीय संवेदनाओं को पुनः जाग्रत करके प्रकृति से प्रेम करें उसे समृद्ध बनाएं क्योंकि प्रकृति के कल्याण में ही मनुष्य का कल्याण है।

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कोरोना महामारी से बचाव में योगाभ्यास एवं प्रतिरक्षा प्रणाली की भूमिका

डॉ० रवेन्द्र राजपूत

असि० प्रोफेसर, शिक्षक शिक्षा विभाग

श्री वाष्ण्य महाविद्यालय, अलीगढ़

शोध-सार

कोरोना महामारी के संक्रमण को रोकने के लिए सबसे अच्छा उपाय है कि घर में ही रहकर शाकाहारी और सन्तुलित आहार लेकर, नियमित योगाभ्यास और भरपूर नींद से व्यक्ति अपनी रोग प्रतिरोधक क्षमता में वृद्धि कर इस कोरोना महामारी से बचाव कर सकता है। नियमित योग द्वारा हम अपनी प्रतिरक्षा प्रणाली को अत्यन्त सुदृढ़ बना सकते हैं क्योंकि योगाभ्यास द्वारा हमारे फेफड़े और श्वसन प्रणाली की कन्डीशनिंग होती है। योगाभ्यास शरीर से विषाक्त पदार्थों को बाहर निकालने के लिए लसिका प्रणाली को उत्तेजित करता है। शरीर के सम्पूर्ण शरीर में अधिक आक्सीजन युक्त रक्त पहुँचता है जिससे सम्पूर्ण शरीर में स्फूर्ति, तेज और जोश बना रहता है। योगाभ्यास एन्टीबॉडी और खेत रक्त कणिकाओं में तीव्र गति से परिवर्तन का कारण बनते हैं जिससे प्रतिरक्षा प्रणाली मजबूत होकर बीमारी से प्रतिरोध करने में सक्षम बन जाती है। यदि किसी व्यक्ति की प्रतिरोधक प्रणाली व श्वसन तन्त्र कमजोर हैं तो कोविड-19 विषाणु उस पर बड़ी तीव्रता से आक्रमण करके श्वसन तंत्र, रक्त परिवहन प्रणाली, हृदय और मस्तिष्क को ध्वस्त कर देता है और व्यक्ति की मृत्यु हो जाती है। इसलिए कोविड-19 से लड़ने के लिए प्रत्येक व्यक्ति को अपनी रोग प्रतिरोधक क्षमता और सकारात्मक सोच में चमत्कारी परिवर्तन लाने के लिए योगाभ्यास करना नितान्त आवश्यक है।

भारतीय संस्कृति विश्व की सबसे अनूठी, अनुपम और अद्वितीय है। जब विश्व की बाकी सभ्यताएँ रेंगना सीख रहीं थीं, उस समय हमारी संस्कृति का गौरव चरम पर था और हमारे यहाँ वेद, उपनिषद, पुराण लिखे जा चुके थे। भारतीय संस्कृति पाँच हजार वर्ष से भी अधिक पुरातन मानी गई है। प्राचीन काल से ही हमारी गौरवमयी संस्कृति में पशु-पक्षी, वृक्षों और प्रकृति को समान महत्ता देकर पूजा की गई। प्राकृतिक सन्तुलन को सदैव बनाए रखा गया जिसके कारण सभी सुखी, निरोगी, स्वस्थ, सम्पन्न और दीर्घायु रहते थे। किन्तु आज का स्वार्थी और निर्लज्ज मानव प्रकृति को रौंदकर उसे दासी बनाने की भूल कर बैठता है और अनावश्यक हस्तक्षेप व कुकृत्यों से प्राकृतिक सन्तुलन को बुरी तरह बाधित करता रहता है जिससे कुपित होकर प्रकृति समय समय पर अपना रौद्र रूप दिखाकर प्रलय मचाती रहती है।

मानव ने जब-जब प्रकृति के कार्यों में अनाधिकृत हस्तक्षेप किया है तब-तब प्रकृति ने अपना रौद्र रूप दिखाकर मनुष्य को उसकी औकात बताई है। किन्तु ये निर्लज्ज मानव अतीत की गलतियों से कोई सीख न लेकर फिर उसी ढर्रे पर चल पड़ता है और प्राकृतिक सन्तुलन को बाधित कर प्रकृति का स्वामी बनने की कोशिश करता है तब प्रकृति की कोख से जन्मतीं हैं अनगिनत आपदाएँ और ऐसी ही एक वैश्विक आपदा-कोरोना महामारी से पूरे विश्व में भीषण तबाही मची हुई है। जन-धन की भयंकर हानि को चुकी है और निरन्तर हो रही है।

आज चीन द्वारा प्रकृति के चक्र से छेड़छाड़ करने का भयंकर दण्ड सम्पूर्ण विश्व को मिल रहा है। कोरोना वैश्विक महामारी से सम्पूर्ण विश्व में भयंकर तबाही मची हुई है। अब तक सम्पूर्ण विश्व में लगभग 174 लाख व्यक्ति कोरोना से संक्रमित हुए हैं जिनमें लगभग 59 लाख सक्रिय केस हैं तथा सम्पूर्ण विश्व में लगभग 7 लाख से अधिक व्यक्तियों की दर्दनाक मृत्यु हो चुकी है। भारत में

लगभग 16 लाख व्यक्ति कोरोना संक्रमित हुए जिनमें से लगभग 5.25 लाख सक्रिय केस है तथा लगभग 35 हजार से अधिक व्यक्ति अपने प्राण गवां चुके हैं। आज सम्पूर्ण विश्व में दहशत का वातावरण बना हुआ है। जन-धन और अर्थव्यवस्था की होती भयंकर तबाही को सम्पूर्ण विश्व विवश होकर देख रहा है। हमारा देश भी इस कोरोना वैश्विक त्रासदी से अछूता नहीं है। सारे उद्योग-धन्धे, कुटीर-उद्योग सब बन्द पड़े हुए हैं। मनुष्य घरों में कैद होने को विवश है। बेरोजगारी और मंहगाई तो सुरसा के मुख की भाँति बढ़ती ही चली जा रही है। वो तो हमारे देश के यशस्वी प्रधानमंत्री श्री नरेन्द्र मोदी जी ने समय से लॉक डाउन का निर्णय लेकर विश्व में मची भयंकर त्राहिमाम् जैसी स्थिति से बचा लिया है किन्तु कुछ विपक्षी दल के नेताओं और गलत मंशा पाले कुछ व्यक्तियों के कुकृत्यों ने इसे भारत में अपनी जड़े जमाने को आमन्त्रित कर दिया है। यदि इन लोगों का सकारात्मक सहयोग देश और देशवासियों के प्रति होता तो हम कब के कोरोना वैश्विक महामारी को मात दे चुके होते। फिर भी 1 अरब 35 करोड़ की आबादी वाले देश भारत का कोरोना महामारी से संघर्ष विश्व के महान और विकसित देशों की तुलना में काफी सराहनीय है। पूरी दुनिया आज प्रधानमंत्री मोदी जी और भारतीय संस्कृति का अनुसरण कर रही है, इससे अधिक गर्व की बात हमारे देश वासियों के लिए और क्या हो सकती है? आज हम अपनी संस्कृति के कारण ही अपने देश में फैले संकट का समाधान तो कर ही रहे हैं, विश्व के अन्य देशों को भी इस स्थिति से उबारने में सहायक बन रहे हैं।

कोरोना वैश्विक महामारी कोविड-19 नामक विषाणु के संक्रमण द्वारा फैली है। यह बीमारी एक कोरोना संक्रमित व्यक्ति से अन्य व्यक्ति के सम्पर्क में आने से फैलती है। संक्रमित व्यक्ति के खाँसने या छीकने पर उसके मुँह और नाक से गिरने वाली बूदों से यह बीमारी दूसरे व्यक्तियों में फैलती चली जाती है। जब कोई संक्रमित व्यक्ति किसी सतह या चीज को छूता है तो उससे यह अदृश्य विषाणु उस वस्तु में चले जाते हैं, फिर कोई स्वस्थ व्यक्ति उस सतह या वस्तु को छूकर अपने हाथों को, अपनी नाक, आँख या मुँह को छूता है तो यह कोविड-19 विषाणु उस व्यक्ति को भी अपनी चपेट में ले लेता है। अब तक के शोध के आधार पर यह विषाणु 4 दिन तक मुँह और गले में रहता है, फिर मनुष्य के फेफड़ों में जाकर उन्हें क्षतिग्रस्त कर देता है जिससे उनका सिकुड़ना-फूलना बन्द हो जाता है और धीरे-धीरे यह विषाणु उसके रक्त में भी मिल जाता है और दो सप्ताह के बाद व्यक्ति की मृत्यु हो जाती है। इस कोरोना महामारी से 10 वर्ष तक की आयु वर्ग के बच्चे तथा 50 वर्ष से अधिक आयु के व्यक्ति अधिक संख्या में संक्रमित हो रहे हैं।

कोरोना महामारी के संक्रमण को रोकने के लिए सबसे अच्छा उपाय है कि घर में ही रहकर शाकाहारी और सन्तुलित आहार लेकर, नियमित योगाभ्यास और भरपूर नींद से व्यक्ति अपनी रोग प्रतिरोधक क्षमता में वृद्धि कर इस कोरोना महामारी से बचाव कर सकता है। आस्ट्रेलिया में मेलबर्न विश्वविद्यालय और रॉयल मेलबर्न अस्पताल के शोधकर्ताओं ने मिलकर कोरोना विषाणुओं के रोगियों में से एक की प्रतिरक्षा प्रक्रिया का परीक्षण किया जिसमें प्रतिरक्षा प्रणाली की शरीर को विषाणुओं से लड़ने और संक्रमण से उबरने में क्षमता दिखाई दी। कोरोना वायरस से संक्रमित 40 वर्षीय एक महिला की रक्त की जाँच में पाया कि शरीर की प्रतिरक्षा प्रणाली कोविड-19 विषाणु से उसी प्रकार प्रतिरोध करती है जिस प्रकार वो अन्य प्रकार के पलू में प्रतिरोध करती है। शोधकर्ता कहते हैं कि "प्रतिरक्षा प्रणाली, मस्तिष्क के बाद शरीर में दूसरी सबसे जटिल प्रणाली है। इसमें सैकड़ों प्रकार की कोशिकाएँ और सूचनाएँ पहुँचाने वाले अणु होते हैं जो लगभग 8000 जीनों द्वारा नियन्त्रित होते हैं। जैसे-जैसे व्यक्ति की आयु में वृद्धि होती जाती है उसकी प्रतिरक्षा प्रणाली की आयु भी कम होती जाती है और वह संक्रमण के प्रति अधिक संवेदनशील हो जाता है। ऐसे व्यक्तियों को रोग प्रतिरक्षा प्रणाली को सुदृढ़ करने के लिए खानपान की आदतों, योग, व्यायाम, पर्याप्त नींद आदि पर विशेष रूप से ध्यान देने की आवश्यकता है ताकि संक्रमण से बचा जा सके। कोरोना संक्रमण से बचने के लिए व्यक्ति अपने हाथों को साबुन से रगड़-रगड़कर 20 सेकण्ड तक धोए, कोहनी आगे कर घींके या मुँह पर कपड़ा रखे, चेहरे, नाक व मुँह को छूने से बचे। अन्य व्यक्तियों से 2 मीटर की दूरी बनाकर रखे और अन्तिम उपाय स्वयं को एक सप्ताह क्वारंटाइन में रखे।

नियमित योग द्वारा हम अपनी प्रतिरक्षा प्रणाली को अत्यन्त सुदृढ़ बना सकते हैं क्योंकि योगाभ्यास द्वारा हमारे फेंफड़े और श्वसन प्रणाली की कन्डीशनिंग होती है। योगाभ्यास शरीर से विषाक्त पदार्थों को बाहर निकालने के लिए लसिका प्रणाली को उत्तेजित करता है। सम्पूर्ण शरीर में अधिक आक्सीजन युक्त रक्त पहुँचता है जिससे सम्पूर्ण शरीर में स्फूर्ति, तेज और जोश बना रहता है। योगाभ्यास एन्टीबॉडी और श्वेत रक्त कणिकाओं में तीव्र गति से परिवर्तन का कारण बनते हैं जिससे प्रतिरक्षा प्रणाली मजबूत होकर बीमारी से प्रतिरोध करने में सक्षम बन जाती है। यदि किसी व्यक्ति की प्रतिरोधक प्रणाली व श्वसन तन्त्र कमजोर हैं तो कोविड-19 विषाणु उस पर बड़ी तीव्रता से आक्रमण करके श्वसन तन्त्र, रक्त परिवहन प्रणाली, हृदय और मस्तिष्क को ध्वस्त कर देता है और व्यक्ति की मृत्यु हो जाती है। इसलिए कोविड-19 से लड़ने के लिए प्रत्येक व्यक्ति को अपनी रोग प्रतिरोधक क्षमता और सकारात्मक सोच में चमत्कारी

परिवर्तन लाने के लिए योगाभ्यास करना नितान्त आवश्यक है। इसके लिए व्यक्ति को समय से सोकर प्रातः ब्रह्ममुहूर्त में सूर्योदय से पूर्व उठकर दैनिक क्रियाओं से मुक्त हो शान्त व हवादार स्थान पर चादर या दरी बिछाकर पहले सूक्ष्म व्यायाम करने हैं, उसके बाद 5 महत्वपूर्ण व अत्यावश्यक प्राणायाम करने हैं जो कि इस प्रकार हैं—

1. भस्त्रिका प्राणायामः— सुखासन में बैठकर नेत्र बन्द कर लम्बी गहरी सांस लेना और झटके के साथ बाहर निकालना। यह प्राणायाम 2—5 मिनट तक अवश्य करना चाहिए। इसके नियमित करने से सर्दी, जुखाम, नजला, एलर्जी, ग्लूटन सब जड़ से समाप्त हो जाते हैं।
2. (i) **कपालभातिः**— यह प्राणायामों में ब्रह्मास्त्र माना गया है क्योंकि इसका प्रभाव सिर के वालों से लेकर पैरों के अंगूठे के नाखून तक होता है। इसमें श्वास निकालने के लिए नाभि पर जोर से झटका देकर बाहर निकालते हैं। साँस अपने आप अन्दर आएगी फिर उसे झटका देकर बाहर निकाला जाता है। इसे प्रतिदिन 10—15 मिनट तक अवश्य करना चाहिए। शरीर में कहीं भी कैसी भी गाँठें (सिस्ट) हो तो प्रतिदिन कपालभाति करके 3—10 माह में उसे समूल नष्ट किया जा सकता है।
(ii) **अनुलोम विलोमः**— सुखासन में बैठकर आँखे बन्दकर सीधे हाथ के अँगूठे से सीधे नथुने को दबाकर केवल बाँयी ओर के नथुने से साँस खींचें, और वायु को अन्दर रोकें, फिर सीधे हाथ के अँगूठे को दाये नथुने से हटाकर मध्यमा अंगुली से बाँये नथुने को दबायें और दाये नथुने से साँस बाहर निकालें फिर उसी दाँये नथुने से साँस खींचें और दाँये नथुने को बन्दकर बाँये नथुने से साँस बाहर निकालें। यह क्रिया 10—15 मिनट अवश्य करनी चाहिए। जब यह प्राणायाम बन्द करें तो बाँये नथुने से ही साँस बाहर निकाल कर बन्द करें। इससे फेंफड़े और स्नायु मण्डल अत्यन्त सबल बनता है और फेंफड़ों में अधिकतम ऑक्सीजन पहुँचती है जो रक्त में मिलकर सम्पूर्ण शरीर में पहुँचकर पूरे शरीर से आलस्य और जम्हाई को दूरकर ताजगी प्रदान करती है। कोविड—19 से बचाव का ये अचूक अस्त्र है।
3. उज्जायी प्राणायामः— कण्ठ द्वारा श्वास को खींचने से थायराइड ग्रन्थि सम्बन्धी और गले से सम्बन्धित सभी रोग दूर हो जाते हैं। इसे प्रतिदिन 3—5 मिनट अवश्य करना चाहिए।
4. भ्रामरी प्राणायामः— आँखे बन्दकर दोनों हाथों के अँगूठे से कानों को इतना दबाते हैं कि बाहर की ध्वनि सुनाई न दे। अब लम्बी गहरी साँस खींचकर मुँह बन्दकर नाक से ऊँ उच्चारण के साथ धीरे—धीरे श्वास को बाहर निकालते हैं। इस समय भँवरे के गूँजने की सी ध्वनि निकलती है। इसी लिए इसे भ्रामरी नाम दिया गया है। इसे प्रतिदिन 3—5 बार अवश्य करना चाहिए। इससे सारा तनाव सिरदर्द और नकारात्मक विचार गायब हो जाते हैं और मस्तिष्क में सकारात्मकता आती है।
5. उद्गीथ— लम्बी गहरी साँस लेकर मुँह से 'ऊँ' का उच्चारण करते हुए साँस को बाहर निकालते हैं। यह क्रिया 3—5 बार करना चाहिए। इससे मानसिक बल प्राप्त होता है। इसके बाद सूर्य नमस्कार करना चाहिए।

निष्कर्ष

प्रतिदिन नियमित योगाभ्यास करने से हमारे फेफड़े मजबूत बनते हैं, श्वसन तन्त्र, परिवहन तन्त्र, हृदय, मस्तिष्क और सम्पूर्ण शरीर पुष्ट बनता है। रोग प्रतिरोधक क्षमता सबल बनती है। योगाभ्यास के साथ खाने पीने के ध्यान से हम अपनी रोग प्रतिरोधक क्षमता को बढ़ाकर कोविड—19 विषाणु से बचाव करने में सफल हो सकते हैं। हमें प्रातः उठते ही 2—3 गिलास गुन—गुना पानी पीना चाहिए। पूरे दिन में भी कम से कम 2—3 बार 1—1 गिलास गर्म पानी अवश्य पीना चाहिए। फास्ट फूड और जंक फूड का पूर्ण परित्याग कर सन्तुलित और शाकाहारी आहार लें जिसमें अंकुरित दाल, पालक, अदरक, लहसुन, दही, बादाम, सन्तरा, नींबू पानी, हल्दी का दूध, पपीता आदि अवश्य हों। पतंजलि की आयुर्वेदिक औषधि 'कोरोनिल' का उपयोग कर हम प्रतिरक्षा प्रणाली को सुदृढ़ कर सकते हैं। रोग प्रतिरोधक क्षमता बढ़ाने के लिए गिलोय, तुलसी की पत्ती, काली मिर्च व गुड का काड़ा बनाकर दिन में 2—3 बार अवश्य लेना चाहिए। भूलकर भी ठण्डी व फ्रिज में रखी खाद्य सामग्री नहीं खानी है। स्वयं को सर्दी, जुकाम, बुखार से बचाव कर रखें और इसमें महत्वपूर्ण भूमिका निभाते हैं हमारी अमूल्य निधि योग व आयुर्वेद। प्रतिरक्षा प्रणाली को प्रबल बनाकर, सकारात्मक विचार एवं शारीरिक दूरी का ध्यान रखकर हम कोरोना वैश्विक महामारी से स्वयं का बचाव कर सकते हैं।

संदर्भः—

1. प्राणायाम रहस्य— स्वामी रामदेव
2. प्रज्ञा अभियान का योग व्यायाम — ब्रह्मवर्चस
3. योग साधना एवं योग चिकित्सा रहस्य— स्वामी रामदेव
4. प्रत्याहार, धारणा, ध्यान और समाधि — पं० श्रीराम शर्मा आचार्य
5. योग शिक्षा — आर०के० शर्मा

कोविड-19 का समाज के लोगों की जीवन शैली, धारणा और व्यवहार पर प्रभाव

डॉ० सरिता तिवारी

असिस्टेंट प्रोफेसर, राजनीति शास्त्र विभाग

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सार

वर्तमान समय में कोविड-19 महामारी ने किस तरह से हमारी मान्यताओं, रहन-सहन और व्यवहार को प्रभावित किया है, इसी की खोज प्रस्तुत आलेख में की गई है। सामाजिक दूरी का पालन, सामाजिक समारोहों से दूरी, समाज में कई प्रकार के दबाव को झेलते हुए लोग, विभिन्न प्रकार के दिखावे से दूर सादगीपूर्ण जीवन शैली की ओर लौटते हुए लोगों का विश्लेषण किया गया है। कोई भी संकटकाल अराजकता को भी जन्म देता है, इस तथ्य को भी वर्तमान के परिप्रेक्ष्य में जानने का प्रयास किया गया है। तकनीक का चलन हमारे दैनिक जीवन में बढ़ा है किन्तु महामारी के आगमन ने अब इसके इस्तेमाल को अनिवार्य कर दिया है। तकनीक से दोस्ती आवश्यक है किन्तु इसके सकारात्मक और नकारात्मक प्रभावों को खंगालने का भी प्रयास किया गया है।

आधुनिक भारत में हम महामारियों के आगमन की शुरुआत सन् 1896 में मुम्बई में आए प्लेग से मान सकते हैं, उस समय अंग्रेजों का राज था। इसके बाद सन् 1918 में भारत में इन्फ्लूएंजा महामारी का प्रकोप हुआ। इस महामारी ने देश में 1 करोड़ 20 लाख से ज्यादा लोगों की जान ले ली।

वर्तमान में कोविड-19 से सारा देश जूझ रहा है। नवम्बर 2019 में चीन के वुहान नगर की एक सी-फूड मार्केट से निकले इस वायरस ने बहुत कम समय में विश्व को अपनी चपेट में ले लिया। "वैश्विक स्तर पर देखे तो लगभग 6.61 लाख लोगों की जान चली गई और 167.76 लाख लोग इस बीमारी से संक्रमित हैं।"¹

कोविड-19 से सबसे ज्यादा प्रभावित होने वाले देशों में इटली और अमेरिका रहे हैं। भारत में इस बीमारी से मरने वालों की संख्या लगातार बढ़ रही है और विश्व में ये तीसरे पायदान पर आ गया है। "भारत में लगभग 15.84 लाख लोग कोरोना वायरस से संक्रमित हैं और लगभग 35000 लोग इस बीमारी से जान गंवा चुके हैं।" 2 ये आंकड़े रोज बढ़ रहे हैं। अलग-अलग विशेषज्ञ इस पर अलग-अलग मत व्यक्त कर रहे हैं। किसी का मत है कि जुलाई 2020 में ये महामारी अपने चरम पर होगी, किसी के अनुसार नवम्बर 2020 में ये चरम पर होगी। भारत जैसे विकासशील देश में जहाँ करोड़ों की आबादी निवास करती है, इस प्रकार के विशेषज्ञों के अंदेशे केवल भय ही पैदा करते हैं और भय महामारियों से लड़ने की क्षमता को कम कर देता है। साथ ही राष्ट्र के मनोबल को भी तोड़ता है। किसी भी महामारी के प्रसार में अब तक के ज्ञात मानव इतिहास को खंगाला जाए तो एक बात स्पष्ट हो जाती है कि इसमें प्रवासी नागरिकों या कहें गतिशील मानव समुदायों की महत्वपूर्ण भूमिका होती है जैसे-व्यापारी, व्यवसायी, छात्र, पर्यटक और श्रमिक वर्ग आदि। भारत में भी इस बीमारी के संवाहक ये ही लोग बने। शुरुआत में संपन्न वर्ग अन्य देशों से इस बीमारी को साथ लाया। बाद में इनके सम्पर्क में आने वाले लोगों ने बीमारी के प्रसार को तीव्र गति से बढ़ाया। अन्ततः कामगारों के काम छिन जाने के कारण और कोई चारा न होने पर अपने गाँव, घरों की ओर लौटते मजदूर इस बीमारी के प्रसार के संवाहक बने। शुरुआत में सरकार ने इस बीमारी की रोकथाम के लिए 21 दिन के सम्पूर्ण लॉकडाऊन की घोषणा मार्च 2020 में की और प्रधानमंत्री मोदी

ने सम्पूर्ण देशवासियों से अपील की कि वे इसका पालन करें अन्यथा देश 21 साल पीछे चला जायेगा। जनसंचार के अनेक माध्यमों द्वारा नागरिकों से इस बीमारी के बचाव हेतु उपाय बताए गए और साफ-सफाई तथा सामाजिक दूरी पर बल दिया गया।

वैश्विक स्तर पर इस महामारी से निपटने के लिए वैक्सीन बनाने का प्रयास भी अनवरत चल ही रहा है जिसके बाजार तक आने में अभी समय लगेगा। “भारत में वित्त वर्ष 2020-2021 के बजट में हेल्थ सेक्टर में 69 हजार करोड़ रूपए देने की व्यवस्था की गई।” 3 इसमें स्वास्थ्य सुधार के लिए अनेक योजनाओं की भी घोषणा की गई जैसे-पी.एम. जनआरोग्य योजना, जन औषधि केन्द्र, मिशन इन्द्रधनुष। साथ ही कुछ अभियान भी देश में चल रहे हैं जैसे-फिट इण्डिया मूवमेण्ट, स्वच्छ भारत अभियान, टीबी हारेगा, देश जीतेगा।

“ज्ञातव्य है ओईसीडी (आर्थिक विकास एवं सहयोग संगठन) के अनुसार भारत सार्वजनिक स्वास्थ्य पर अपने सकल घरेलू उत्पाद का मात्र 3.6 प्रतिशत भाग ही व्यय करता है जो विश्व के अन्य देशों की तुलना में बहुत कम है।” 4

“वहीं वित्त वर्ष 2020-2021 के बजट में डिफेन्स सेक्टर में 3.37 लाख करोड़ रूपए देने की व्यवस्था की गई।” 5 तुलनात्मक दृष्टि से देखे तो केवल भारत ही नहीं वरन् विश्व के अधिकांश देश अपनी रक्षा आवश्यकताओं को जितनी प्राथमिकता देते हैं, उतनी प्राथमिकता बुनियादी आवश्यकताओं को नहीं मिलती और ये स्थिति सोचनीय है। प्रशिक्षित डॉक्टर, नर्स और अस्पताल आज इस महामारी से लड़ने के लिए बहुत आवश्यक हैं जिनकी कमी को आज वैश्विक स्तर पर अनुभव किया जा रहा है।

कोविड-19 के प्रभाव

महामारियाँ जब विश्व को अपनी चपेट में लेती हैं तो ये कई तरह से समाज के व्यवहार, मान्यताओं और जीवन शैली को प्रभावित करती हैं और कई परिवर्तन लाती हैं, कुछ बदलाव अस्थायी होते हैं जो जीवन के सामान्य होते ही समाप्त हो जाते हैं और कुछ बदलाव सदैव के लिए हो जाते हैं। कोविड-19 के उपरोक्त प्रभावों को हम कई स्तरों पर देख सकते हैं—

- **वर्क फ्रॉम होम**—कोरोना महामारी के चलते भारत में घर से ही ऑफिस के काम करने की संस्कृति का चलन शुरू हो गया है। जीविका के लिए काम करना अनिवार्य है, अतः विभिन्न संस्थानों में (चाहे सरकारी हो या प्राइवेट) आज ऑन लाइन प्लेटफॉर्म पर काम करने को प्रोत्साहित किया जा रहा है। लेकिन इस तरह से काम करने की आदी अभी जनता नहीं है, विशेषकर महिलाओं को इस तरीके के काम से बड़ी अड़चनों का सामना करना पड़ रहा है। घर के कामों के साथ-साथ ऑफिस के कामों को निपटाना, ये दोहरा बोझ महिलाओं पर भारी पड़ रहा है। उच्च-अधिकारी या बॉस ये समझते हैं कि घर पर हैं तो कोई काम ही नहीं है लेकिन वास्तविकता इससे अलग है। आमतौर पर भारतीय परिवारों में यदि महिला घर पर ही है तो मानसिकता ये रहती है कि वो ही अपने बच्चों को संभाले और घरेलू काम-काज में हाथ बंटाए। पारम्परिक सास या ननदों की सोच ऑनलाइन काम करने के तौर-तरीकों से परिचित नहीं है, अतः कामकाजी महिलाओं पर दोहरा दबाव ज्यों का त्यों है। लॉकडाउन के कठोर नियमों के चलते घरों में काम करने वाली महिलाओं के न आने के कारण कामकाजी महिलाओं पर कार्यबोझ अधिक है। कम्प्युनिटी स्प्रेड को रोकने के लिए ये तरीका भले ही कारगर हो किन्तु ये मानसिक तनाव और दबाव को जन्म दे रहा है। एक समस्या ये है कि सामान्य दिनों में कोई व्यक्ति ऑफिस में बैठकर अपने काम को निपटाता है तो उसके कार्य करने के घण्टे निश्चित होते हैं लेकिन वर्क फ्रॉम होम में कार्य करने के घण्टे तय नहीं हैं जिसके कारण स्वास्थ्य संबंधी दिक्कतें बढ़ने की सम्भावना है।
- **सामाजिक दूरी** — समुदाय को संक्रमित होने से बचाने के लिए सामाजिक दूरी पर बहुत बल दिया जा रहा है। सामुदायिक संक्रमण तब होता है, जब कोई व्यक्ति किसी संक्रमित व्यक्ति के संपर्क में आए बिना या वायरस से संक्रमित देश की यात्रा के बिना ही उस वायरस के शिकंजे में आ जाता है।

अभी कुछ समय पूर्व तक हम महानगरों में सामाजिक अलगाव की समस्या पर विमर्श कर रहे थे कि किस प्रकार वहाँ की व्यस्ततम जीवन शैली के कारण सामाजिक अलगाव बढ़ा है और अब महामारी के चलते इसमें वृद्धि देखने में आई है। “अरस्तू ने कहा था कि मनुष्य स्वभाव से ही एक राजनीतिक और सामाजिक प्राणी है जो राज्य में रहने में असमर्थ हो जाता है, वह या तो कोई पशु होगा या देवता।”⁶

मनुष्य की स्वाभाविक वृत्ति सामाजिकता ही है, ऐसे में डिजिटल प्लेटफॉर्म पर विचारों का आदान-प्रदान कितना भी कर लिया जाए किन्तु आमने-सामने बैठकर जो हम संवाद करते हैं, उसका प्रभाव अलग ही होता है। आत्मीयता व घनिष्ठता प्रत्यक्ष संबंधों से ही बढ़ती है किन्तु अब सामाजिक दूरी लोगों को अवसाद की ओर धकेल रही है जो समाजशास्त्रियों के लिए चिन्ता का विषय है। अपने मन की बात हम जितना खुलकर या अनौपचारिक रूप से सामने वाले से करते हैं, उस प्रकार का संवाद सोशल मीडिया पर नहीं कर सकते। कई बार सोशल मीडिया पर जिस प्रकार की शब्दावली का प्रयोग किया जाता है, वह भी सभ्य समाज में

स्वीकृत नहीं है लेकिन फिर भी आने वाले समय में सामाजिक दूरी लोगों के मध्य बढ़ेगी जो संवादहीनता और घुटन को जन्म देगी। महामारी से बचाव की दृष्टि से सामाजिक दूरी भले ही आवश्यक हो किन्तु भावनात्मक रूप से अभिन्नता बनी रहनी आवश्यक है।

- **मास्क और सेनेटाइजर का बढ़ता चलन**— आज हर एक व्यक्ति के लिए कोरोना महामारी से बचाव हेतु प्रमुख सुरक्षा उत्पादों में मास्क, सेनेटाइजर और ग्लव्स का प्रयोग अनिवार्य हो गया है। घर से बाहर जाते समय प्रत्येक व्यक्ति इसका प्रयोग कर रहा है जबकि कुछ समय पूर्व केवल कुछ लोग ही प्रदूषण से बचने के लिए मास्क का प्रयोग करते थे। अचानक इनकी माँग बढ़ जाने के कारण व्यवसायियों ने इनको बनाने का काम आरम्भ कर दिया है। अपनी आर्थिक स्थिति के अनुरूप आज सभी लोग मास्क का इस्तेमाल कर रहे हैं। एन एच 95 से लेकर साधारण सूती कपड़े से बने हर प्रकार के मास्क आज बाजार में उपलब्ध हैं। यही स्थिति सेनेटाइजर की है, छोटी सी शीशी से लेकर बड़ी-बड़ी बोतलों में सेनेटाइजर बाजार में उपलब्ध हैं जिन्हें लोग घर से बाहर जाते समय अपने साथ ले जा रहे हैं। चूंकि ये स्थिति अभी बहुत समय तक बनी रहने वाली है अतः ये चीजे अब हमारी जीवन शैली का हिस्सा बनती जा रही हैं।
- **स्वदेशी वस्तुओं को प्रोत्साहन**—कोरोना वायरस का मूल स्थान होने के कारण अन्तर्राष्ट्रीय स्तर पर चीन की छवि धूमिल हुई है। बड़े देशों का आरोप है कि चीन ने यदि अन्तर्राष्ट्रीय समुदाय को पहले ही सजग कर दिया होता और इस खतरनाक वायरस के बारे में बता दिया होता तो इतनी बड़ी संख्या में जन हानि और धन हानि नहीं होती। व्यवसायी, पर्यटक, छात्र चीन में आते रहे और संक्रमित होकर इस बीमारी को अपने देश ले गए जिसने लगभग 150 देशों को अपनी चपेट में ले लिया। इस धोखेबाजी के कारण हमारे देश में भी चीनी उत्पादों के बहिष्कार का आन्दोलन आरम्भ हो गया है और स्वदेशी वस्तुओं के प्रयोग पर बल दिया जा रहा है। गलवान घाटी में जून में चीनी सैनिकों के साथ हुई हिंसक झड़प में 20 सैनिकों के शहीद हो जाने के बाद यह आन्दोलन और तीव्र हो गया।

आर्थिक मन्दी के कारण कई कारोबार बुरी तरह से प्रभावित हुए हैं और चीन पर हमारी निर्भरता अभी बनी हुई है। अतः पूरी तरह आत्मनिर्भरता अभी दूर की कौड़ी है। सरकार को इस स्थिति तक पहुँचने में बहुत समय लगेगा, साथ ही लोगों की सोच भी इस स्थिति से निकलने के लिए आवश्यक है। इससे लाभ यह होगा कि मन्द पड़ी अर्थव्यवस्था को कुछ गति मिलेगी और रोजगार का सृजन होगा।

- **सामाजिक सामारोहों में घटती जन-भागेदारी**— विवाह, सगाई, जन्मदिन या दाह संस्कार में लोग अब सीमित संख्या में भाग ले रहे हैं। धार्मिक उत्सवों में भी लोगों के एकत्र होने की मनाही है। इसके कारण समाज में दिखावा करने की प्रवृत्ति पर रोक लगेगी तथा धन के अनावश्यक अपव्यय पर भी रोक लगेगी।
- **ई-एजुकेशन पर बल**— इस भयानक महामारी के कारण ऑनलाइन शिक्षण को प्रोत्साहित किया जा रहा है ताकि बच्चों के भविष्य पर कोई बुरा प्रभाव न पड़े। शिक्षण के क्षेत्र में तकनीक का बढ़ता चलन पारम्परिक तरीकों पर भारी पड़ रहा है। पुराने और अप्रशिक्षित शिक्षकों के लिए यह बड़ी चुनौती है जो अपने विषय में तो दक्ष हैं किन्तु तकनीक से अपरिचित होने के कारण स्वयं को असहाय अनुभव कर रहे हैं। इसके साथ ही कई अन्य चुनौतियाँ भी जैसे— नेटवर्क की समस्या, छात्रों की पारिवारिक स्थिति का आर्थिक रूप से अच्छा न होना इत्यादि।
- **सामाजिक भेदभाव में बढ़ोतरी**— महामारी ने सामाजिक सौहार्दता के ताने-बाने को भी छिन्न-भिन्न किया है। कोरोना पाजिटिव मरीजों के परिजनों को देश के कई स्थानों पर सामाजिक भेदभाव का शिकार होना पड़ा है। रोजगार छिन जाने के कारण अपने गाँव की ओर लौटते श्रमिकों को भी भेदभाव का सामना करना पड़ा जब उन्हें ग्रामीणों ने गाँव में प्रवेश से रोक दिया। धार्मिक आधार पर भी समाज में वैमनस्यता पैदा करने का प्रयास किया गया।

दिल्ली के निजामुद्दीन प्रकरण के बाद एक समुदाय विशेष को ही कोरोना महामारी के प्रसार का दोषी ठहरा दिया गया। अनेक स्थानों पर समुदाय के व्यापारियों का बहिष्कार कर दिया गया। महामारियाँ सामाजिक अराजकता को भी जन्म देती हैं, ऐसे में आपसी सद्भाव बनाए रखना समाज के प्रबुद्धजनों के लिए आवश्यक है।

- **सादगीपूर्ण जीवनशैली**— इस महामारी ने लोगों के रहन-सहन और विचारों को बेहद प्रभावित किया है। विलासितापूर्ण जीवन के बजाय सादगीपूर्ण जीवन जीने का सबक दिया है। अनावश्यक धन जो उच्च मध्यम वर्ग और मध्यम वर्ग गहनों, कपड़ों, वाहनों की खरीददारी पर, माल्स, रेस्टोरेन्ट के भारी भरकम बिल पर, पार्टियों पर व्यय करता था, वहीं लॉकडाऊन में उसने यह समझा कि अन्ततः दाल, रोटी ही हमारी सबसे प्रमुख आवश्यकता है। इससे भविष्य के लिए धन संचय की प्रवृत्ति को भी बढ़ावा मिलेगा। धीरे-धीरे ही सही यदि ये मानसिकता गहरे में पैठ गई तो उपभोक्तावादी संस्कृति को झटका लगना तय है।

निष्कर्ष

कुल मिलाकर कोविड-19 के बाद समाज के लोगों की आदतों और व्यवहार में बड़े स्तर पर परिवर्तन आना शुरू हो गया है। जब तक इस महामारी के इलाज के लिए कोई वैक्सीन नहीं बनती तब तक हमें इसके साथ ही जीने की आदत डालनी होगी। आगे आने वाले समय में समाज में तकनीक का चलन बढ़ेगा, स्वास्थ्य के क्षेत्र में बजट भी बढ़ेगा क्योंकि जीवन है तो सब कुछ है, स्वदेशी उत्पादों के प्रयोग का रुझान बढ़ेगा, रोजगार का सृजन होगा। सबसे अन्त में विदेश नीति के निर्धारक तत्वों में एक महत्वपूर्ण तत्व है, मनोबल। यदि किसी देश के पास संसाधन कम हैं किन्तु राष्ट्र का मनोबल उच्च है तो वह राष्ट्र शक्तिशाली राष्ट्र माना जाता है। अतः समाज का मनोबल दृढ़ होना आवश्यक है। इस महामारी ने निश्चित रूप से अवसाद और तनाव को जन्म दिया है। हाल ही में रोजगार छिन जाने के कारण आत्महत्या करने के भी कई उदाहरण सामने आए हैं। ऐसे में प्रयास यह होना चाहिए कि समाज का मनोबल बना रहे। मानव जाति के ज्ञात इतिहास में पहले भी महामारियाँ आई हैं जिनके कारण बड़े स्तर पर जन और धन हानि हुई किन्तु मानव जाति पुनः उठ खड़ी हुई।

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सत्ता में रहते हुए कृषकों के हित में चौ० चरण सिंह की भूमिका

डा० (श्रीमति) ममता

पूर्व शोध छात्रा, इतिहास विभाग, के०जी०के० (पी०जी०) कालेज,
मुरादाबाद (उ०प्र०)

डा० सुरेश चन्द

एसोसिएट प्रोफेसर, इतिहास विभाग, के०जी०के० (पी०जी०) कालेज,
मुरादाबाद, (उ०प्र०)

सार

भारतीय राजनीति में चौ० चरण सिंह को एक किसान नेता के रूप में आज भी जाना जाता है। आज भी किसान राजनीति उत्तर भारत में उनके नाम का उल्लेख किये बिना अधूरी है। चौ० चरण सिंह ने राज्य में मंत्री, मुख्यमंत्री, केन्द्र में मंत्री एवं प्रधानमंत्री के पद पर कार्य करते हुए अर्थात् सत्ता में रहते हुए हमेशा कृषकों के हित में जो भी कार्य वे कर सकते थे, उन्होंने किए। इसीलिए चौ० चरण सिंह को किसान नेता की संज्ञा दी जाती है।

भारतीय राजनीति में चौ० चरण सिंह को एक किसान नेता के रूप में आज भी जाना जाता है। आज भी किसान राजनीति उत्तर भारत में उनके नाम का उल्लेख किये बिना अधूरी है। उत्तर प्रदेश में चाहे मुलायम सिंह की समाजवादी पार्टी हो या चौ० अजीत सिंह का राष्ट्रीय लोकदल, हरियाणा में ओमप्रकाश चौटाला का इण्डियन नेशनल लोकदल हो या पंजाब में प्रकाश सिंह बादल का अकाली दल, बिहार में लालू प्रसाद यादव का राष्ट्रीय जनता दल या शरद यादव का जनता दल (यू), सभी चौ० चरण सिंह का उल्लेख अपने-अपने फायदे के लिए एक कृषक हितैषी नेता के रूप में करते हैं, क्योंकि वास्तव में चौ० चरण सिंह के विचारों, कृत्यों तथा आकांक्षाओं का केन्द्र कृषक ही रहा है, इसीलिए उनका पूरा राजनीतिक जीवन कृषक-हित के संघर्ष के रूप में जाना जाता है। परन्तु प्रश्न यह भी उठता है कि सत्ता में रहते हुए उन्होंने अपने विचारों को कृषक हित में कहीं तक यथार्थ रूप में परिवर्तित किया या कृषक हित संबंधी उनके विचार मात्र दिवास्वप्न ही थे। इस प्रकार सत्ता में रहते हुए उनके द्वारा किये गये कार्य ही कृषकों के हित में उनकी भूमिका का सही मूल्यांकन करेंगे। कृषक हित में उनके द्वारा किये गये कार्यों को हम दो भागों में बाँट सकते हैं। प्रथम उत्तर प्रदेश में मंत्री एवं मुख्य मंत्री रहते एवं दूसरे केन्द्र में मंत्री एवं प्रधानमंत्री रहते हुए किए गये कार्य।

चौ० चरण सिंह के राजनीतिक जीवन में शुरू से ही कृषकों के लिए चिन्ता का भाव छिपा हुआ था, इसीलिए 1937 ई० में जब उन्हें उत्तर प्रदेश की धारा सभा के निर्वाचित प्रतिनिधि के रूप में कार्य करने का अवसर मिला तो उन्होंने स्वयं को एक पूर्ण रूप से सक्रिय सदस्य के रूप में प्रस्तुत किया।¹ उन्होंने जन महत्व के अनेक प्रश्नों के साथ ही कृषि सुधार के लिए भी कई महत्वपूर्ण बिल प्रस्तुत किये जैसे यू०पी० एग्रीकल्चरल मार्केट्स प्रोड्यूस बिल², रेण्ट एण्ड रेवेन्यू बिल³ तथा एग्रीकल्चर एण्ड वर्कमैन डेब्ट रिडम्पशन बिल इत्यादि।⁴

उ०प्र० में 1951 में मंत्री बनने के बाद कृषक समस्याओं के निराकरण की दृष्टि से उनका सबसे महत्वपूर्ण कदम जमींदारी उन्मूलन करना था, इसका पूरा श्रेय उन्हें इसलिए दिया जाता है क्योंकि इस कानून का निर्माण एवं क्रियान्वयन वास्तव में एक चुनौतीपूर्ण कार्य था क्योंकि कुछ राजनेताओं तथा समाज के शक्तिशाली जमींदार वर्ग द्वारा इसका पुरजोर विरोध किया जा रहा था तथा कुछ अन्य

राज्यों में तो इस कानून को न्यायालय में चुनौती तक दी जा रही थी, जबकि चौ० चरण सिंह द्वारा निर्मित यह कानून इतने स्पष्ट एवं पूर्ण थे कि इन्हें न्यायालय में चुनौती नहीं दी जा सकती थी।⁵ इस बिल के अन्दर किसानों के समक्ष आने वाली कठिनाइयों को दूर करने का यथासम्भव उपक्रम किया गया था।⁶ परन्तु इस कानून के कार्यान्वयन में एक गम्भीर अवरोध यह था कि भूमि कानून का कार्यान्वयन पटवारी के अभिलेखों पर निर्भर था जो किसानों के लिए पर्याप्त असंतोष का कारण थी।⁷ इस कानून के लागू करते ही सभी पटवारियों ने सामूहिक हड़ताल कर दी तथा सामूहिक त्यागपत्र दे दिया। चौ० चरण सिंह ने सभी के त्यागपत्र स्वीकार कर लेखपाल का पद सृजित कर नई नियुक्तियों कर दीं। इससे पटवारियों के अत्याचारों से कृषकों को मुक्ति मिली।⁸

चौ० चरण सिंह ने दूसरा महत्वपूर्ण कार्य हदबन्दी तथा चकबन्दी कानून लागू करने का किया। इस कानून को लागू करने में भी उन्हें न केवल विपक्ष बल्कि अपनी पार्टी के कुछ साथियों के विरोध का भी सामना करना पड़ा परन्तु उन्होंने 1953 में जोत चकबन्दी कानून पारित कराया जो 1954 में लागू हो गया। 1963 में योजना आयोग के समक्ष अपनी रिपोर्ट प्रस्तुत करते हुए प्रसिद्ध अर्थशास्त्री वुल्फ लेंडनिस्कि ने 30प्र० में चौ० चरण सिंह द्वारा किये गये कृषि सुधारों के विषय में लिखा "भारत में कृषि सुधारों के कई अप्रभावी कानून ही रहे हैं किन्तु 30प्र० में इनको साथ-साथ लागू किया गया और महत्वपूर्ण सफलताएं भी प्राप्त की गईं।⁹ भूमि के केन्द्रीकरण को रोकने के लिए चकबन्दी कानून में एक परिवार के लिए भूमि की अधिकतम सीमा साढ़े बारह एकड़ तय की गई।¹⁰ ब्लाक एवं जिला स्तर पर चौ० साहब ने मिट्टी के वैज्ञानिक परीक्षण की योजना बनाई जिससे मिट्टी की प्रकृति के अनुरूप उर्वरकों का प्रयोग करके कृषि उपज को बढ़ाया जा सके। 1963 में चौ० चरण सिंह ने किसानों को सस्ती खाद, बीज तथा अन्य कृषि आवश्यकताओं की पूर्ति हेतु कृषि आपूर्ति संस्थानों की स्थापना कराई। 03 अप्रैल, 1967 को 30प्र० का मुख्यमंत्री बनने पर उन्होंने किसानों के लिए अनेक योजनाएं बनाई जैसे लगान को समाप्त करना (भूमि कर एवं व्यवसायिक एवं व्यापार कर) कृषि कार्यों हेतु बिजली देने में कृषकों को प्राथमिकता देना, अनाधिकृत एवं कृषि योग्य भूमि को समाज के कमजोर वर्गों में बाँटना, भूमि प्राप्त करने के नियमों में संशोधन जिससे कि भूमि स्वामियों के हितों को सुरक्षित किया जा सके, हदबन्दी कानून का क्रियान्वयन, खाद्यान्न तथा कृषकों के नित्य प्रयोग में आने वाली वस्तुओं के दामों पर नियन्त्रण करना। इस सरकार ने पहली बार खाद्यान्न भण्डारण किया जो कि खाद्यान्न डीलरों एवं बड़े किसानों के लिए एक चेतावनी था।¹¹ कृषकों के उत्थान हेतु यह निर्णय लिया गया कि सूखा पड़ने के कारण छोटे किसानों से लगान की वसूली नहीं की जायेगी।¹² लगान कम करने की माँग पर भी सरकार ने समझौतावादी रवैया अपनाया जिसमें 2 एकड़ तक पूरा लगान माफ कर दिया तथा 6 एकड़ की भूमि वालों का लगान पचास प्रतिशत माफ किया गया। डिटेन्शन पर समिति बैठाने की बात स्वीकार की गई एवं संविद सरकार का समान न्यूनतम कार्यक्रम लागू करना स्वीकार किया गया।¹³ परन्तु यह संविद सरकार कई दलों की मिली जुली सरकार थी। सभी दल अपने-अपने हिसाब से सरकार चलाने के लिए चौ० चरण सिंह पर दबाव बना रहे थे। अतः मजबूर होकर उन्होने त्यागपत्र दे दिया।

1970 में पुनः चौ० चरण सिंह इंदिरा गॉंधी की कांग्रेस के समर्थन से दोबारा 30प्र० के मुख्य मंत्री बने। इस दौरान कुछ लिए गये निर्णयों में से सबसे महत्वपूर्ण निर्णय चीनी मिलों के राष्ट्रीयकरण का था। गन्ने की कीमत भी ₹० 7.37 से बढ़ाकर ₹० 10.00 प्रति कुन्तल की गई। पाँच सदस्य विधि आयोग की स्थापना तथा भूमि हदबन्दी में कमी जैसे महत्वपूर्ण कदम भी उठाये गये।¹⁴ कांग्रेस की माँग यह थी कि 6.25 एकड़ भूमि पर लगान समाप्त कर दिया जाये जबकि सरकार 3.12 एकड़ भूमि पर लगान समाप्त करने के पक्ष में थी।¹⁵ इस विषय पर चौ० साहब का यह मत था कि "किसान जब लगान देता है तो उसे यह लगता है कि जमीन पर उसका हक है, सरकार उसकी जमीन यूँ ही नहीं ले सकती।"¹⁶ सरकार ने कृषि भूमि पर सीलिंग करने का फैसला किया जिस पर अनेक प्रतिक्रियाएं हुईं परन्तु छः महीने की अवधि में ही 628.338 एकड़ भूमि के सीरदारी के पट्टे और 31.188 एकड़ के आसामी पट्टे वितरित किये गये। सरकार ने खाद पर से तीन प्रतिशत कर कम लिया तथा गन्ने की दरों में भी वृद्धि की।¹⁷ भूमि विकास बैंकों की कार्य प्रणाली को और अधिक उपयोगी बनाया गया।

चीनी मिलों के राष्ट्रीयकरण के प्रश्न पर भी कांग्रेस एवं चरण सिंह की सरकार में मतभेद इसलिए थे क्योंकि वे चीनी मिलों के राष्ट्रीयकरण करने के उचित अवसर की तलाश में इसलिए थे क्योंकि 30प्र० में चीनी मिल मालिकों का गुट बड़ा शक्तिशाली था, यहाँ तक कि वे सरकार को गिराने तक की ताकत रखते थे, उन्होंने राजनीतिक शक्ति हासिल कर ली थी तथा आगे चलकर चन्द्रभानु गुप्ता के नेतृत्व में यह गुट सत्ता में भी आया।¹⁸ चौ० चरण सिंह द्वारा चीनी मिलों के अधिग्रहण का अर्थ प्रत्यक्ष राज्य नियन्त्रण नहीं था बल्कि वे यह चाहते थे कि इन्हें सरकारी क्षेत्र में चलाया जाये।¹⁹ स्वयं जो चरण सिंह, सी.बी. गुप्ता सरकार पर प्रायः कानूनी अड़चनों के नाम पर इसे क्रियान्वित नहीं करने का आरोप लगाते थे, अब वही आरोप चरण सिंह पर लगने लगे।²⁰

चीनी मिलों के राष्ट्रीयकरण के इस विवाद ने गन्ना किसानों को प्रभावित किया जिससे गन्ने की खपत कम हो गई तथा चीनी मिलों द्वारा गन्ना न खरीदने के कारण गन्ने की कीमतें नीचे चली गई जिससे गुड़ तथा गन्ने में लाभ केवल व्यापारियों को हुआ, कृषकों को बहुत हानि हुई। यह सब चीनी मिलों के राष्ट्रीयकरण के विलम्ब के कारण हुआ।²¹ इस प्रकार ऐसी गन्ना मूल्य वृद्धि का कोई महत्व नहीं रहा क्योंकि सरकार कृषकों को गन्ने का उचित मूल्य दिलाने में असमर्थ रही।

छोटे किसानों के उत्थान के लिये 'लघु कृषक विकास संस्था' नामक एक प्रयोगात्मक अनुगामी योजना प्रस्तुत की गई जो उ०प्र० में केन्द्रीय योजना का क्रियान्वयन मात्र था।²² इस योजना में लगभग 50-60 हजार छोटे किसानों को तकनीकी व अन्य सहायता पहुँचाने की व्यवस्था थी। यह तकनीकी शासन की कृषि क्षेत्र में एक महत्वपूर्ण उपलब्धि मानी जाती है। इस सरकार की एक अन्य उपलब्धि धान तथा चावल के संचरण पर प्रतिबन्ध लगाना था, यह कदम चावल की कमी के कारण उठाया गया था जिससे चावल की कीमतों में वृद्धि को रोकने में सफलता मिली थी। 11 मार्च को नियम 51 के अधीन वक्तव्य में बताया गया कि गेहूँ में 17 रु० एवं चने के मूल्य में 9 रु० प्रति कुन्तल की वृद्धि हुई थी।²³ तत्कालीन चरण सिंह सरकार की एक अन्य उपलब्धि, उत्तर प्रदेश व्यापार आजीविक और सेवायोजन (संशोधन विधेयक) 1970 था, जिसमें एक वर्ग को कर से राहत प्रदान किये जाने की व्यवस्था की गई थी।

1977 से 1980 के मध्य चौ० चरण सिंह को भारत सरकार के मंत्रिमण्डल में गृहमंत्री, वित्तमंत्री तथा अन्ततः प्रधानमंत्री बनने का गौरव प्राप्त हुआ। गृहमंत्री के रूप में चौ० चरण सिंह ने पंचवर्षीय योजना तैयार करने में विशेष रुचि दिखाई। चौ० चरण सिंह ने भारत तथा अन्य देशों की अर्थव्यवस्थाओं का तुलनात्मक अध्ययन करके एक विस्तृत नोट तैयार कर कार्य समिति के समक्ष प्रस्तुत किया जिसकी मुख्य बातें यह थीं।²⁴ एक-भारत के लिए सहकारी खेती अनुपयोगी है इसलिए अधिक उपज के लिए वैयक्तिक कृषि को प्रोत्साहित किया जाना चाहिए। दो-प्रति व्यक्ति आय बढ़ाने तथा प्रति एकड़ श्रमिकों की संख्या घटाने की आवश्यकता है। तीन-हमारे यहाँ जमीन कम है अतः वैज्ञानिक उपकरणों से पैदावार को बढ़ाया जाये। चार-खेती की चकबन्दी अति आवश्यक है इसलिए मध्यम किस्म के फार्म बनाये जायें तथा एक व्यक्ति के पास ढाई एकड़ से छोटी एवं 27 एकड़ से बड़ी जोत नहीं होनी चाहिए। पाँच-भूमि सुधार सख्ती से लागू कर बड़े भूपतियों को समाप्त किया जाये। छ-उद्योगों में पहले कुटीर फिर लघु उद्योग और अन्ततः भारी उद्योगों को स्थान मिलना चाहिए। सात-सम्पूर्ण बजट का 33 प्रतिशत कृषि पर व्यय किया जाये। आठ-कुल बिजली उत्पादन का 50 प्रतिशत गाँवों में दिया जाये तथा बिजलीघरों की संख्या शहर एवं गाँवों में समान होनी चाहिए। नौ-प्रति दस हजार की जनसंख्या पर गाँवों में अनाज गोदाम तैयार किये जायें तथा इन सुरक्षित अन्न भण्डारों के आधार पर 80 प्रतिशत तक ऋण दिया जाये तथा किसान को बाजार में अनाज की कीमतें बढ़ने पर अन्न निकालकर बेचने की स्वतन्त्रता हो। अपनी इन योजनाओं को आधार बनाकर चौ० साहब ने ग्रामीण किसानों एवं मजदूरों के हितों में अनेक निर्णय कराने में सफलता प्राप्त की।²⁵

वित्त मंत्री के रूप में चौ० चरण सिंह ने अपने बजट में बेरोजगारी तथा अल्प रोजगारी हटाने के लिए श्रम आधारित तकनीक एवं बड़े उद्योगों की तुलना में लघु एवं कुटीर उद्योगों की क्षमता में वृद्धि के उपाय किये। 120 वस्तुओं के बड़े उद्योगों में उत्पादन पर पाबंदी लगाई जिनका उत्पादन लघु उद्योगों में सम्भव था। बड़ी कपड़ा मिलों को यह हिदायत भी दी गई कि वे कम से कम 20 प्रतिशत कपड़ा गरीब जनता के लिए बनायें, विलासिता की वस्तुओं पर अधिक कर लगाये गये ताकि गरीब ग्रामीण इनकी ओर आकर्षित न हों। कृषि वस्तुओं जैसे चावल, चीनी, खाण्डसारी इत्यादि की अंतर्राज्यीय आवाजाही पर लगी रोक हटवाई गई ताकि उनकी मूल्यगत विषमता पर रोक लग सके। पहली बार उन्होंने कृषि बजट में वृद्धि की ताकि कृषि का विकास हो सके। उर्वरकों एवं काले डीजल के दामों में कमी की गई, ताकि छोटे किसान भी अपना कृषि उत्पादन बढ़ा सकें। कृषि यन्त्रों पर भी उत्पाद शुल्क में कमी की गई ताकि कृषि यन्त्र सस्ते हो जायें।²⁷

वित्त मंत्री के रूप में उन्होंने केवल कृषि एवं ग्रामीण विकास की योजनाओं के लिए ऋण प्रदान करने हेतु राष्ट्रीय कृषि एवं ग्रामीण विकास बैंक (नाबार्ड) की स्थापना की।²⁸ ग्रामीण विकास के लिए काम के बदले अनाज एवं अन्त्योदय जैसी योजनाओं की शुरुआत की गई।

चौ० चरण सिंह ने प्रशासन में मितव्ययता एवं कार्य कुशलता लाने का प्रयास किया। श्री एस.एन. मिश्र की अध्यक्षता में उन्होंने एक व्यय आयोग का गठन किया ताकि वह सरकार के खर्चों की जाँच करने, उसे कम करने के सुझाव दे सके।²⁹ चौ० चरण सिंह ने सार्वजनिक महत्व के निगमों आदि की कार्यकुशलता बढ़ाने के लिए आयोग बनाए।³⁰ उनका बजट भी ग्रामीण विकास की अवधारणा

को एक बड़ी सीमा तक प्रतिबिम्बित करता था।³¹ चौ0 साहब ने अपनी इच्छा को यथार्थ रूप प्रदान करते हुए बड़े उद्योगों पर भारी टैक्स लगाया तथा लघु एवं कुटीर उद्योगों के टैक्स घटाकर देश को सही दिशा में बढ़ने का मार्ग प्रशस्त किया यद्यपि उनके इस निर्णय की आलोचना भी हुई परन्तु इसके दूरगामी परिणाम अच्छे हुए क्योंकि किसानों को इससे काफी राहत मिली।

प्रधानमंत्री के रूप में उनका एक अति महत्वपूर्ण कार्य देश में पहली बार ग्रामीण पुनरुत्थान मंत्रालय की स्थापना करना था, जिसका उद्देश्य स्वतंत्र रूप से ग्रामीण विकास की सम्भावनाओं का आकलन कर उन्हें क्रियान्वित करना था।

1977 में जब देश में जनता पार्टी की सरकार आई तो चौ0 चरण सिंह ने जनता सरकार के उद्देश्यों का एक 27 सूत्रीय मसौदा तैयार किया था। इनमें से कई बातें किसानों के हितों की भी थीं जैसे—एक कृषि भारत का मूल उद्योग है अतः इसके विकास को प्रमुखता दी जाये। दूसरे—जमींदारों के शिकंजे को पूर्ण क्षमता के साथ समाप्त किया जाये। जमीन के प्रत्येक जोतदार को मौजूदा कानूनों के तहत स्थाई हक दिया जाये तथा राज्य के सीधे सम्पर्क में लाया जाये। तीसरे—ग्रामीण जनता को अधिकाधिक सुख साधन उपलब्ध कराकर उनके आत्मसम्मान को पुनः स्थापित किया जाये।³² चौथे—सरकार ग्रामीण क्षेत्रों में अधिकाधिक सोद्देश्यात्मक कार्यक्रमों जैसे— 'काम के बदले अनाज', रोजगार गारण्टी योजना के जरिये, सामाजिक योगदान करने के प्रयास करेगी। पाँचवे—शहरों एवं गाँवों के बीच आर्थिक दरार और सांस्कृतिक खाई बड़ी है इसे रोकना अति आवश्यक है। छठे—नैसर्गिक सोच के मुताबिक यदि देश की अर्थव्यवस्था को मजबूत बनाना है तो उद्योगों और कृषि दोनों में ही छोटी आर्थिक इकाईयों की स्थापना करनी होगी।

निष्कर्ष

चौ0 चरण सिंह द्वारा उद्घोषित नए सरकार के उद्देश्यों में से उपरोक्त वर्णित छः उद्देश्य यह साबित करते हैं कि चौ0 चरण सिंह कृषि एवं किसानों के हित के लिए प्रतिबद्ध थे। चौ0 चरण सिंह ने राज्य में मंत्री, मुख्यमंत्री, केन्द्र में मंत्री एवं प्रधानमंत्री के पद पर कार्य करते हुए अर्थात् सत्ता में रहते हुए हमेशा कृषकों के हित में जो भी कार्य वे कर सकते थे, उन्होंने किए। इसीलिए चौ0 चरण सिंह को किसान नेता की संज्ञा दी जाती है।

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