Edited eBook On Global Lockdown: Reminisces, Repercussions, and Lessons for the Mankind





Anekant Education Society's ANEKANT INSTITUTE OF MANAGEMENT STUDIES (AIMS)

NAAC Accredited with B++ (CGPA 2.93) Permanent Affiliation- SPPU ISO9001:2015 Certified, Green Audited Baramati, Pune-413102 (MH), India. Ph. 02112-227299 Visit us at <u>www.aimsbaramati.org</u> Email: director@aimsbaramati.org

Edited Book

On

Global Lockdown: Reminisces, Repercussions, and Lessons for the Mankind

PATRONS

Shri. Arhatdas Hirachand Shah (Saraf) Chairman, Anekant Education Society, Baramati

Shri. Jawahar Motilal Shaha (Wagholikar) Secretary, Anekant Education Society, Baramati

Shri. Milind Rajkumar Shah (Wagholikar) Secretary, (AIMS), Baramati

PROVOST

Prof. (Dr.) M.A. Lahori Director, AIMS, Baramati

EDITORIAL ADVISORY BOARD

Prof. (Dr.) C. V. Murumkar Principal, T.C. College, Baramati

Prof. (Dr.) S. H. Pawar Director, AES's Centre for Innovation & Applied Research, Baramati

> **Prof. (Dr.) Mohsin Shaikh,** Zeal Education Society, Pune

Prof. (Dr.) Hansa Jain Sardar Patel Institute of Economics and Social Research, Ahmedabad

EDITORIAL REVIEW PANEL

Dr. U. S. Kollimath & Dr. T.V. Chavan

EDITORIAL BOARD

Prof. (Dr.) V.N. Sayankar Dr. A.Y. Dikshit Dr. Dr. P.V. Yadav Prof. Prof. S. S. Khatri Prof. Prof. S.S. Badave Mrs. F

Dr. D.P. More Prof. M. A. Vhora Prof. S.S. Jadhav Mrs. P.D. Hanchate

EDITORIAL BOARD

ISBN: 978-81-925257-9-2

5thMay 2020

© Research Cell, Anekant Institute of Management Studies, Baramati

No part of this publication should be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording and/or otherwise without the prior permission of the editors.

Note

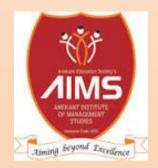
AIMS does not take any responsibility for any mistakes/error incorporated in the article of the authors, either in setting, grammatical, printing of text or visuals.

ISBN: 978-81-925257-9-2

Published by:

AESs Anekant Institute of Management Studies, Baramati

Global_Lockdown_EditedBook_9788192525792_AIMS



Preface

India's nationwide coronavirus lockdown that was announced on 22nd March, 2020 is the biggest in the world. It has already seen two extensions one from March 21st to May, 3rd and now another extension up to May 17th. The future is still far from clarity. As the second most populous country of the world ramps up efforts to contain the spread of the novel coronavirus, we at AIMS decided to take up a literary initiation. The eBook titled "Global Lockdown: Reminisces, Repercussions and Lessons for the Mankind" is the idea sprouted from AIMS research think tank during these testing times of complete lockdown and absolute uncertainty!

Locking down a 130 Crore population is unimaginable, especially when sizeable cross section of it lives in slum dwellings, and poverty, ignorance, illiteracy are rampant. Further, the things get worsened as sixty percent of the population is young and rearing to go out everyday!

Making the morning walkers and exercise mavericks to do yoga or frog jumping the estranged migrants, Penalizing spitting in public spaces and banning sale of gutka/liquor; India's 40-day lockdown to counter covid-19 has paved the way for a change in the nation's mindset.

We contemplated bad as well as good outcomes from the ongoing lockdown. Therefore, our research team thought to unleash the wild imagination of the academicians, the research scholars, and the industrialists to visualize the potential fallouts of COVID 19 Lockdown.

Here is a bouquet of fifteen chapters which have been lucidly written each with unique imagination, scientific analysis, and a remarkable forethought. I am sure the book shall be a useful reading during these adverse circumstances and shall remain as a chronicle of an unprecedented standstill of human life.

Regards,

Dr. M. A. Lahori Director, AIMS

ISBN: 978-81-925257-9-2

Edited Book

Global Lockdown: Reminisces, Repercussions, and Lessons for the Mankind Contents

Ch.						
Cn. No.	Title	Author/s Name	Pg. No.			
10.						
1	Lockdown; A Constructive	Dr. M.A. Lahori	1-6			
	Episode	Director,				
	– Humanity Approach	AIMS, Baramati				
	A Study on Impost of COVID 10	Dr. Prakash K.Vadavadagi Associate Professor,	7-10			
2	A Study on Impact of COVID-19 on Selected Sectors	B.V.V.S's Inst. of Management				
	on Selected Sectors	Studies, Bagalkot				
		Prof. P A L N S Kalyani				
	Global Lockdown: Lessons For Indian Masses	Dean-Academics	11-19			
3		St. Mary's Centenary Degree College				
		Hyderabad				
		Dr. Rahul Kharat				
4	Global Lockdown: Reminisces and	Dept. of Commerce, M. S. Kakade	20-26			
	Repercussions	College, Someshwarnagar				
	A Study on Impact of Corona virus	Prof. Mrs. KV. Sayankar				
5		Assistant Professor	27-32			
	COVID-19 on Education	SKN SSBM, Ambegaon(BK), Pune				
	Corona – A Crown with Spikes	1. Bhupendra Chandrashekhar Tope				
		Dy. Manager - HRM&A, ARAI, Pune				
6		2. Dr. Mrs. Anita Khatke	33-38			
		Director				
		J SPM's IM&R, Pune				
	A Study on Effect of Lock down	Dr.RajendrasingPardeshi				
7	on Indian Economy due to COVID	Associate Professor,	39-44			
	19 Outbreak	DVVPF's IBMRD, Ahmednagar				
8	A Study on Lessons Learnt for	Dr. Vinod N. Sayankar				
	Mankind from the Novel Corona	Professor,	45-51			
	virus Disease	AIMS, Baramati				
	Testing Times: Radical Changes or	Prof. Smita S. Khatri				
9	Colossal Challenges for Virtual	Assistant Professor,	52-55			
	Learning	AIMS, Baramati				

ISBN: 978-81-925257-9-2

Edited Book

Global Lockdown: Reminisces, Repercussions, and Lessons for the Mankind

Contents

Ch.	Title	Author/s Name	Da No
No.	The	Author/s manie	Pg. No.
10	Indians and COVID- 19	Dr. Tanaji Vitthal Chavan Associate Professor, AIMS, Baramati	56-59
11	The lockdown effect on jobs in India	Dr. Pravin V. Yadav Assistant Professor AIMS, Baramati	60-64
12	COVID-19 Lockdown: Repercussion on Migrant Workers	Dr. P.K. Sinha Senior Academician and Writer, Pune	65-72
13	COVID 19 – Current Insights on IT Sector	Prof. Manisha A. Vhora Assistant Professor, AIMS, Baramati	73-78
14	COVID-19 Pandemic: An Antecedent to the Spiritual Rise of India	Dr. Umesh S. Kollimath Associate Professor AIMS, Baramati	79-85
15	Work from Home: The New Normal: Adapt to Enable	Dr. Abhishek Dikshit Associate Professor AIMS, Baramati	86-92
16	Impact of Covid 19 Outbreak on Rural Economy	Dr. D. P. More Associate Professor AIMS, Baramati	93-96
17	Social Distancing: Age-Structured Impact on the COVID-19 Epidemic in India	Prof. Sachin S. Jadhav Assistant Professor, AIMS, Baramati	97-106

Lockdown; a Constructive Episode – Humanity Approach

Dr. M.A.Lahori

Director,

Anekant Institute of Management Studies (AIMS) Baramati- Pune 413102 Email: drmalahori@yahoo.com

Abstract: The lockdown phenomenon is a complementary product of COVID-19. In December, 2019 a pneumonia outbreak was reported from Wuhan, China and subsequently it was traced as a Novel Corona virus. Later it has global spread, the World Health Organization (WHO) on 11th March, 2020 declared COVID-19 as Pandemic virus. As far as India is concerned, the first confirmed Corona virus patient was noticed on 30th January, 2020 when students from a University of Wuhan travelled back to Kerala State.

The novel Corona virus is basically a soft and invited virus. Generally the victims are those with poor immunity particularly, old-age and children. The best, easy and economical way to treat Corona virus is by keeping ourselves hygienic and distancing physically and mentally from others. The Covid-19 is a soft virus potentially leading to exponential multiple infections, which will spread unnoticed, during first2-3 weeks but on ascertaining the symptoms it will have very less time to cure the infection. Therefore, it is a dangerous enemy of human being. The Covid-19 in fact characterized by exponential multiple infection, hence to eradicate this, Govt. of India took a decision to lockdown; which is the only answer to stop the spread of Corona virus. The very purpose and essentiality of 'Lockdown' is the social and physical distancing since it curbs the spread and it is said that, distancing is the sole effective measure.

Keywords: soft and invited virus, poor immunity, hygienic, social and physical

Keystone:

Primarily, lockdown means an official order that restricts people from outdoor activities and confine at home due to the pandemic situation. The transport services like road, rail, water and air were suspended with exceptions like essential goods, fire and police, medical and emergency services. All educational sector and manufacturing sector were put on halt. A strict social and physical distancing norm announced and if fails to comply with, an enforcement is in place. Nonetheless, the Lockdown mantra (be indoor/at home) was very much essential to control the spread of the Novel Corona virus, at large in the communities.

A study done at Shiv Nadar University, Greater Noida Uttar Pradesh said, India could have witnessed a surge of 31,000 cases in between 24th March, 2020 to 14th April, 2020 without lockdown. Further, a research team at the University of Oxford rated India's Lockdown to counter the pandemic as one of the most stringent in the world scoring *'100 out of 100'*on their tracker.

As a whole, lockdown at initial phase has see-saw situation because most of the people never understood what is lockdown and why for it is. The vacuum of understanding was really a herculean task to handle and there was a lack of cooperation from the general public. However the time. situation and enforcement of laws have made the people to understand the pandemic and effect of lockdown but still it has hiccups. Thus, the risk of lockdown today outweighs the huge potential benefits for human wellbeing and economy as a whole.

Objectives of the Study:

The core objectives are;

- a) To study the significance of the lockdown.
- b) To examine lockdown as a counter to pandemic.
- c) To analyse new normal concept of work from home during lockdown.

Crux of the Study:

In today's competitive and race like scenario man is all the time trying to do lot for 'Hype &Hoopla' for lifestyle and chasing for superfluous things for their lives. In fact man is not sparing any quality time or rather no time slot for their family members, neighbours, relatives, friends and even Almighty obeisance, just on the pretext of "I am busy and I don't have time" syndrome. The real problem and crux of the study is the paucity of the time. Hence to test availability of time, this study has carried out 'Lockdown; A Constructive Episode-Humanity Approach'.

Study Method:

This is basically a descriptive type of study and it strengthens the existing concept. All the information is driven from the relevant and authorized sources. The tool of observation of the happenings in the different parts of India is also used.

The author of the paper has selected 5 (five) known families as realistic respondents in the study. The size of the family is nuclear and author has directly

commenced the inferential analysis in the study. The constructs of framework has variant (variables) of connect with family, neighbour, relatives, friends, colleagues have been tested in real term of lockdown episode. As said by Aristotle that, man is a social animal. It means that man has an intrinsic social connect habits knowingly or unknowingly in his/her lives. But due to the busy schedule, engagement after engagement has created the situation of paucity and lack of time resulting into the priority hiatus. In real sense the lockdown is the golden opportunity/lesson to review the 'Priority Schedule' of our happy living by 'Connect' of our relations with our kith and kin. The author has reviewed opinions of 5 families on the variables. The analysis and interpretation is as follows;

Table/Figure 1:

Fly	Fan	nily	Neigh	bours	Rela	tives	Frie	ends	collea	agues
1	Y 10	-	Y 10	-	Y 10	-	Y 10	-	Y 10	-
2	Y 10	-	Y 10	-	Y 10	-	Y 10	-	Y 9	Y 1
3	Y 10	-	Y 10	-	Y 10	-	Y 10	-	Y 10	-
4	Y 10	-	Y 10	-	Y 8	Y 2	Y 10	-	Y 10	-
5	Y 10	-	Y 10	-	Y 10	-	Y 9	Y 1	Y 10	-

Significance of Variables in the Lockdown (out of 10
--

Source: Family opinion

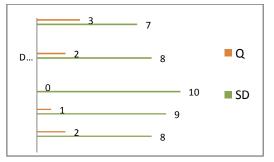
The matrix of the above table is, **Y** stand for yes (agreed), and the significance level is 10 is the maximum and 1 is the minimum. The level of significance for all the variables has taken in for maximum and minimum from the families in study.

It is revealed in the above table all the 5 families have indeed given importance and significance to the variables viz., family, neighbour, relatives, friends and colleagues ranging from 8 to 10. And a sporadic response of 1 and 2 out of 10 doesn't have any significance in this study. Thus, during

the lockdown period, the study revealed that, the families have realised the importance of others in their life or rather learnt a lesson on importance of relationships with other in own life.

Table/Figure 2:

Lockdown to Counter Pandemic (Out of 10)



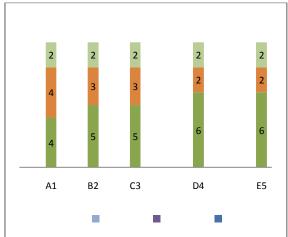
Source: Family opinion

The above table is read as, all the 5 families are shown in A1 to E5 and the red colour bar indicates Q=Quarantine and green colour bar stand for SD= Social/physical Distancing. The counter (treatment) and protection tentacles for pandemic are the Quarantine and Social/physical Distancing.

In the above graph the best way to counter Covid-19 the pandemic is 'Social Distancing' secured the score 7 to 10 out of 10 whereas for 'Quarantine' the score is 0 to 3. It means the social distancing and quarantine are the best weapons to fight with Covid-19 as per the opinion of the above families. Thus, lockdown prefer to read as social distancing and quarantine are the only suitable counter reply to the pandemic Covid-19. And in the study of Shiv Nadar University it is stated that, India could have witnessed a surge of 31,000 cases in between 24th March, 2020 to 14th April, 2020 without lockdown. Even a research team at the University of Oxford rated India's Lockdown to counter the pandemic as one of the most stringent in the world.

Table/Figure 3:

Leanings of New Normal Work Culture from Home (out of 10)



Source: Family opinion

In the above table the 5 families has classified into A1 to E5. The dark green colour refer to SC=Soft Communication (bottom colour) the middle brick colour indicates BL=Better Language and the top faint green colour read for PD=Prompt Documentation. And the weightage given by families are out of 10.

The analysis of the above data says that, the new normal work culture from home during lockdown has significantly improved the hand on soft combination, followed by the better language because in soft verbal mode of communication communication is emphasised more rather than non-verbal. Hence there is always opportunity to improve upon the language. The final is the prompt documentation; since all the work is paperless without any cumbersome and shuffling the papers it will be documented. Thus, in new normal work culture from home has taught people to use soft communication as their meeting tool, reading has increased to improve the language/vocabulary and folders-wise work system leads to proper documentation.

Findings:

Based on the above analysis, the following interpretation and findings have been recorded;

1. Without any doubt during lockdown the connect and relationship among family

members, neighbour, relatives, friends and of course with co-staff has affectionately increased.

- 2. A review of table No.1 summarily depicts that, all the 5 families in the study gave significance to family members connect, neighbour, relatives, friends and colleagues ranging from 8 to 10. Thus, during the lockdown period. the study revealed that. members of the families have realised importance of others in their life instead of being self-centric. It has developed the human relationship and KYR-know Your Relations.
- 3. Covid-19 declared has been as pandemic by (WHO) World Health Organization on 11th March, 2020. Yet, the preparation of the vaccine is on its way. Hence to counter, stop and treat virus: the Novel Corona social distancing and quarantine are the best tools.
- During the study, it is found that, one has to take care of hygienic housekeeping practices in and around the places as well as often ablutions and bathing.
- The lockdown has brought-in new culture of work, internet has become place of meeting, and home has become convenient place of working (Office)

and these are new normal. In the above table No. 3 the important skills learnt are the soft combination, use of better vocabulary for verbal communication and documentation methodology.

Conclusion:

Thus, the lockdown precisely has taught us to be among kith and kin in the descending order family members, neighbours, relatives, friends and colleagues. Further our human relation between family members also improved by respecting each other and understanding the magnitude of the household work and parenting.

The Covid-19 pandemic essentially being a pandemonium controlled by 'Lockdown' means social distancing, quarantine is being at home as one of the best tool/medicine to eradicate. And the 'Lockdown' has shown us the greater value of human life and relations. The humanity approach towards our known ones has re-appeared. The phobia of paucity of time on pretext "I am busy or don't have time "syndrome has disappeared and a new life has begun. Thus, lockdown indeed has proven to be 'A Constructive Episode Humanity Approach'.

References:

i. "WHO Statement Regarding Cluster of Pneumonia Cases in Wuhan, China". Www.who.int. 2020-01-

Global Lockdown: Reminisces, Repercussions, and Lessons for the Mankind

09. Archived from the original on 2020-01-14. iv. Retrieved 2020-01-10.

- *ii.* Ward, Alex (24/3/2020). 'India's corona virus lockdown and its looming crisis, explained'.
- iii. Hall, R. (1993) A Framework Linking v. Intangible Resources and Capabilities to Sustainable Competitive Advantage Strategic Management Journal, 14:607-18.

Wagner, J.A. (1995). Studies of individualismcollectivism: Effects on cooperation in groups. Academy of Management Journal, 38(1), 152-172.

Ruptured, M., Bales, D., &Hanula, G. (1998). Gateway to a Better Life, Module C: Balancing Work and Your Personal Life. Athens, GA: University of Georgia

A Study on Impact of COVID-19 on Selected Sectors

Dr. Prakash K. Vadavadagi

Associate Professor B. V. V. Sangha's Institute of Management Studies, Bagalkot-587102 E-mail:vadavadagipgmail.com

Abstract: Corona virus is a virus of a large family of viruses that will cause illness. The illness may range from a common cold to respiratory infection. The novel Corona virus is a new virus which has not been identified in human so far.

The outbreak of COVID-19 in china has a significant impact on the economy globally including economic slowdown, trade, supply chain disruption, commodities, and logistics.

It is estimated that the GDP of China is expected to slow down by 1-1.25 % by 2020. Chain accounts for 19.71% of global GDP. China is the world's largest exporter (13% of world export) and second-largest importer (11% of world imports).

Keywords: COVID 19, Sector, Impact, etc.

Introduction

COVID-19 will impact at a large on the Indian economy. The real GDP of decelerated to its lowest in over six years in Q3 2019-20. China accounts for a significant share in India's imports. 45% of India's electronics items are from China. Automotive parts, fertilizers, pharmaceutical ingredients, mobile phones are major items imported from China.

The Indian economy has already under the demand depression, increasing unemployment and decreasing industrial output and profits and the lockdown of the country due to the corona pandemic will accelerate the slowdown further.

"Care Ratings Chief Economist MadanSabnavis said that India's 2020-21 GDP could be impacted by 0.5%."

According to CII, GDP could fall below 5% in FY 2021, if policy action is not taken immediately. The report says that strong fiscal stimulus to the extent of 1% of GDP to the poor, which will help them financially and manage consumer demand.

"FICCI survey showed 53% of Indian businesses have indicated a marked impact of COVID-19 on business operations."

According to the UN Conference on Trade and Development, there is an estimate that the outbreak of corona virus global economy will cost around \$ 1-2 trillion in 2020.

Impact of COVID-19 on Selected Sectors: Aviation Sector

The aviation sector accounts for more than \$70 billion to the national GDP. The impact of COVID-19 all International and domestic flights are cancelled till April 14th 2020 except planes that continue to fly are those that are used to transport medical equipment, medical staff, military/security officials, etc. This will have a huge impact on the margins of all international and domestic airlines operating in the region.

International Air Transport Association estimated that the airline industry would require \$200 billion in bailouts to survive the COVID crisis.

According to the data shared by Government in LokSabha, Indian private carriers have cancelled 93 International flights and 492 flights globally. India on March 12th 2020 onwards cancelled all visas for a month. This will result in approximately a 25% decline in industry revenues, the Indian aviation sector may be staring at around \$1.5 billion-\$2 billion of losses, given the current lockdown parameters.

Hospitality Sector

As almost all companies restricting essential travel for the employees and cancellation of National and International flights leads to a lot of empty rooms and affected the hospitality sector. As per the experts saying the occupancy rates could fall from 70% - 75% to 20%. Restaurants have reported sharp decline in sales and profitability. Due to continuing, lockdown multiplexes are affected a lot. Move producers globally and in India deferred the release dates.

Chairman and MD Patanjali G Keswani told "The impact is disastrous. The hotels are businesses which are very capital intensive and also have very high fixed costs".

According to the World Travel and Tourism Council, the COVID-19 pandemic could slash 50 million jobs worldwide in the travel and tourism industry, reflecting a 12-14% reduction in jobs. It was estimated that due to this COVID-19 pandemic there will be an overall revenue of the Indian hotel sector is set to decline by anywhere between US\$ 8.85 billion to US\$ 10 billion, reflecting an erosion of 39% to 45% compared over last year.

Apart from the actual business loss, the hotel owners will also incur losses due to fixed operating expenses, debt repayments, interest payments and several other compliances required to be undertaken as part of the sector.

Real estate Sector

Real estate sector was estimated to be hardest hit by the corona virus (COVID-19) epidemic in India between April and June 2020 compared to the same period in 2019. This is sector is one of the largest employment generator in the country and has multiplier effect on around 250 allied industries. This sector is among the top contributors to the nation's economic growth. The sector is going to be affected by three kinds of problems such as Labour, Financial and Demand.

The Covid19 outbreak has negative impact on economy has pushed the sentiment in real estate to its all-time lowest level. The residential and commercial real estate sectors are expected to be hit in term of launches, sales and prices.

Automobile Sector

The COVID-19 pandemic has severe impact on automobile sector. The automobile sector contributes around 7.1% GDP and automotive components contribute around 2.3% and created 40 million employment. The industry hit on multiple demand fronts: slump domestically and exports as well as negative global and domestic supply disruptions involving both forward and backward linkages. It is estimated that there will be an overall revenue impact of at least \$1.5 -2.0 bn per month across the industry. Even after we open up, further decline in passenger vehicles demand is expected with discretionary spend taking a backseat. This will be coupled with transition to BS-

VI norms that will increase cost of ownership

Conclusion

The increasing widespread of COVID-19 has created uncertainty worldwide. The current downturn is different from recession what we have seen in the past. The event has affected a lot to the economy. Now government is focusing on securing the people of the country from health hazard and providing relief, especially to the poor. There is urgent need to mobilise resources to stimulate the economy.

References

- i. https://www.jagranjosh.com/generalknowledge/what-is-the-impact-ofcoronavirus-on-indian-economy-1582870052-1
- https://www.businesstoday.in/current/econo my-politics/coronavirus-lockdown-seriousimpact-on-indian-economy-gdp-highunemployment-covid-19-economicgrowth/story/399444.html
- iii. https://www.businessstandard.com/article/economypolicy/economic-impact-of-coronavirus-badin-jan-march-worse-in-april-june-120031800699 1.html
- iv. https://www.jagranjosh.com/generalknowledge/what-is-the-impact-ofcoronavirus-on-indian-economy-1582870052-1
- v. https://economictimes.indiatimes.com/news/e conomy/policy/how-different-sectors-of-theeconomy-are-bearing-the-brunt-of-the-

coronavirus-

outbreak/articleshow/74630297.cms?utm_so urce=contentofinterest&utm_medium=text& utm_campaign=cppst

- vi. https://www.indiatoday.in/business/story/cor onavirus-how-covid19-grounding-indiaaviation-sector-1661492-2020-03-30
- vii. https://home.kpmg/in/en/home/insights/2020/ 04/navigating-the-covid-19-crisis.html.
- viii. https://www.moneycontrol.com/news/busines s/economy/nationwide-lockdown-to-costindian-economy-4-64-bn-every-day-acuiteratings-5101031.html
- ix. https://economictimes.indiatimes.com/industr y/services/hotels-/-restaurants/lockdown-hashad-disastrous-impact-on-hospitality-sectorgovt-support-needed-

industry/articleshow/75105300.cms?utm_sou
rce=contentofinterest&utm_medium=text&ut
m_campaign=cppst

- x. http://bwhotelier.businessworld.in/article/CO VID-19-Impact-on-the-Indian-Hotels-Sector-A-Report-by-HVS/10-04-2020-188770/
- xi. https://economictimes.indiatimes.com/wealth /real-estate/covid-19-impact-real-estatesentiments-hit-lowestlevel/articleshow/75175857.cms?utm_source =contentofinterest&utm_medium=text&utm_ campaign=cppst
- xii. https://home.kpmg/content/dam/kpmg/in/pdf/ 2020/04/potential-impact-of-covid-19-onthe-Indian-economy.pdf
- xiii. https://www.bloombergquint.com/coronaviru s-outbreak/three-ways-to-assess-covid-19simpact-on-indias-real-estate-sector https://auto.economictimes.indiatimes.com/n ews/industry/opinion-covid-19-impact-onindian-economy-and-the-auto-industrywhats-ahead-of-us/74862940
- xiv. https://home.kpmg/content/dam/kpmg/in/pdf/ 2020/04/potential-impact-of-covid-19-onthe-Indian-economy.pdf

Global Lockdown: Lessons for Indian Masses

Prof. P A L N S KALYANI

DEAN-ACADEMICS ST. MARY'S CENTENARY DEGREE COLLEGE 1-9-485/6/1, PLOT NO.103, FLAT NO301, VENKATA RAMANA VIHAR, RAMNAGAR GUNDU, ADIKMET, LALITHANAGAR COLONY HYDERABAD: 500044 satyakalyani.999@gmail.com

Abstract: The World Health Organization has officially declared the outbreak of pandemic and has called on all countries to continue efforts that have been effective in limiting the number of cases slowdown the spread of the virus. Countries around the world implementing various measures to slow the spread of corona virus, right from national quarantines to closure of schools. More than a third of the world's population is under some form of restriction. 'Lockdown' is referred as mandatory quarantines geographically to non-mandatory suggestions to stay at home; closures of certain types of businesses, or bans on gatherings and events. The people who are living along are experiencing silence since longer periods, but until only till the lock down is imposed. For all those who understand the science driving the current government policy, there is no way of knowing the cost of people's peace of mind of isolation which may continue for months on end. The present article reflects COVID-19 and lessons to mankind with reference to India. We are experiencing small acts of kindness between neighbors and support from local charities which is making a great difference. The present article discusses about changes brought by COVID-19, challenges ahead and reminders send by COVID-19.

Keywords: Digital Connectivity Gap, Work from Home, quarantine, lockdown, Made in India, etc.

Introduction:

The Global Lockdown due to Corona Virus Disease 19 (COVID 19) is a severe phenomenon observed by many countries across the globe. It has reignited a sense of community among the people. The officials and governments couldn't able to answer about how long this disaster could remain and it seems it could go on for months. As the COVID-19 is continuously spreading in many countries are putting their citizens on various forms lockdown. Major countries like UK, China, India, Newzealand, Italy, Poland etc., have implemented the world's largest and restrictive mass quarantines. The pandemic has resulted in the largest amount of lockdowns worldwide at the same time in the history. Various nations' response to corona virus pandemic is varied and it includes measures such as curfews, quarantines and lockdowns. As of Late April 2.4 million COVID-19 cases; approximately 1, 64,000 deaths happened in 185 countries across the world. Wuhan is the first place started its lockdown on 23/1/2020. The Government of India has confirmed that country's first case of Corona virus disease 2019 on 30 /1/ 2020 in Kerala state, when a university student from Wuhan travelled back. As the number of confirmed COVID-19 positive cases closed to 500, Prime Minister Shri. Modi on 19 March 2020, asked all citizens observe 'Janata Curfew' (people's to curfew) on Sunday, 22 March, 2020 started its First phase of lockdown on 25 March 2020 to 14 April 2020; second phase being started from 15 April 2020 to 3 May 2020.

Objectives of the Study:

1. To understand the changes took place in social life due to COVID19

- 2. To analyze the key observations about Indian Economy and Life style during lockdown period
- 3. To offer suggestions to mankind about post corona initiatives.

Discussions:

- A. The Changes took place due to COVID-19 pandemic are as follows:
- 1. Travel: Thousands of planes were grounded, coaches and trains have suspended routes and there is a rapid decline in the use of local train travel and buses. Thus the lockdown has left the Travel Industry in an uncertain state. Technology has made business travel obsolete. As the people travelling up and down using motorways are just to hold meetings, they are considered to be inefficient, expensive and environment unfriendly. It is expected that the use of Planes, Roads and Rails will be decreased after the crisis. We can survive vacations without trips to Europe and USA.
- Work: There is transition from Office Based working to home based working, which is considered to be lucky for many people. Explosion in the usage of

conference apps like Skype, Google Zoom etc., Meets. has been increased. Remote Working and Video Conference is more reliance than it was used once where the people previously shut out. Such phenomenon saves the travelling time to the office and provides the employee to spend more quality time with family members. More number of people is likely to ask to work from home in future also for one to two days per week, which may ease the pressure on transport system and reduction of stress among the workforce.

- 3. Broadband: For everyone stuck indoors, speed internet has been a godsend. But there is a problem of internet black spots which is still common in rural areas. It is the crucial time for the Government to think about bridging the gap between funding and support for digital connectivity gap.
- 4. Air Quality: There has been a rapid increase in the quality of air in cities as motor vehicles sit idle and many people have remarked on how clear the bird's song is without the disturbances of heavy traffic. Even though many measures were introduced for limiting most polluting vehicles, lack of progress

on toxic air is one of the biggest frustrations of time in office. Many industries and Governments have already introduced schemes like ultra low emission zone and further rolling out of electric vehicle charge points which are vital, we need to have cleaner air all the times once the current emergency has passed.

- 5. Demise of Cash: Cash is no longer a king in the present age of infection, as people are contemplating on how many hands their notes have passed through. Many shoppers have allowed making larger amount of purchases without punching their pins into potentially dirty and infectious keypads. This kind of system may be convenient to internet enabled age groups and salaried classes but elderly aged may face difficulties when banks shut their doors and in the removal of ATMs. The economy is moving towards cashless.
- 6. Local Shops: Unexpected renaissance is being experienced by independent grocery shops during COVID-19 crises otherwise; there is a miserable outlook for high street. Customers are witnessing empty shelves and we are hearing about tales of month long waiting lists for deliveries from top supermarket

chains. Many corner shops are keeping calm and well stocked. There is a change in the way consumers shopping behavior where prioritization is given only necessities. Such changes act as catalysts for shopping locally and supporting small local stores.

- 7. Waste: People started thinking creatively and exploring ways to reduce wastage and saving cash in uncertain times. Many households started preparing their own masks and other needy articles.
- 8. Community: The Nations, States, Governments, Parties, Communities are coming together and etc. supporting each other. Many people have signed up as crisis volunteers and stories are published about how are the people showing their solidarity. Increasing Donations to PM CARES Fund, CM Relief Fund by Industrialists and Celebrities; distribution of essential commodities by Non Government Organizations and Individuals are increasing every day. Thus this time of crisis is bringing all the citizens together. Doctors, Municipal Cleaners, Water Supply, Electricity, Food Supply, Police etc., are treated as Gods who are protecting and serving the people without rest.
- 9. Childcare: Parents started playing the roles of Teachers and live-in entertainers for their kids. No dependency on Day Care centers and summer camps due to lock down. It has provided an opportunity not only to know the psychology of the child by spending valuable time with them but also adequate time is left to prepare their favorite dishes, exploring their hobbies and interests, training them on household chores and providing value education. Only women are not supposed to know cooking.
- 10. Self Dependent and Self Reliant: Servant maids in many residents are not available, so the households started performing regular domestic chores like sweeping, cleaning, mopping, and washing clothes and utensils on their own with the support of family members, by dividing the responsibilities between the members of family.
- 11. Government Intervention:
 Government is assuring the Poor in form of support schemes, free ration etc., Directives have been issued to organizations not to remove employees and reduce their salaries. On the call of Prime Minster Shri Narendra Modi, many people across the country and in other nations

clapped or rang bells for 5 minutes and lit Candles/Diyas for 9 minutes by switching off their electrical bulbs / Lamps at their residences. This act has been performed by citizens irrespective of caste, religion, community, political parties, income differences etc., across the country.

- 12. Social Responsibility of Celebrities: Many celebrities not only donated for social cause but also acting as role models by staying at home. They released videos to create awareness on COVID 19 and making videos by staying at home. Short films, creative messages have been designed and developed by connecting the artists across different places. We can spend Billions of Rupees on poor without red tapism.
- 13. Indian Culture and Food Habits: The traditions and values we follow from ancient times, the culture is protecting the Country majorly from this panic situations. Our family system is still intact and the elders are the back bone of the family.
- 14. Opportunity during Challenging Conditions: Manufacturing facilities to set up in India, in preference to China, by various corporations from all over the

world.100 USA companies and 200 Japanese companies already leaving from China. India will become the hub for manufacture of every item from mobile phones to pharmaceuticals. The biggest and the best brands will realize that the Indian people are hard-working, honest, reliable, and talented and were underrated so far.

- 15. Food Habits: Preference to home food, completely cooked with hygienic conditions and vegetarian cuisine is given more importance. We and our kids can survive without junk food.
- 16. Patriotism: The Slogan of Make in India and Made in India has increase and the public decided to boycott foreign products especially Chinese products. A fall in number of subscribers to Tiptop can be seen during the month of April, 2020.
- 17. Nature Cure in place of Fitness Centers: Ayurveda and Naturopathy will also become very popular. Yoga and Pranayam teachers will be in great demand. After all, the best way for potential breathing related issues is exercising the lungs. Health professionals are worth more than a celebrity or a football player. Living a hygienic life is not difficult.

- 18. Money: Money is abundant if we use it wisely. We spend a lot on Petrol which is unnecessarily burdening our economy. Buying every new designer lawn is not important. Necessities for life are Health, Food and Shelter.
- 19. Education: It realized the fact that if we build more schools, we can construct fewer hospitals. Governments need to give importance for Research and Value the findings and suggestions of Research Scholars. This is the time to improve and establish the research laboratories in the country.
- 20. Decrease in Pollution: All sorts of Pollution viz Air, Water, Soil etc, has decreased. It is observed that Ozone Layer is recovering. River water is clean and clear during lockdown time.
- 21. Discretionary spending: For individuals, health and safety will becomes top priority on their agenda from 3rd and 4th place. There will be more spending on this area and reduction in other discretionary spends.

B. Key Observations About Indian Economy And Life Style During This Lockdown Period Is: (Aditya Puri, Md, Hdfc)

1. India's rural economy is not affected by corona and going on strong

2. India, being a young peoples' nation won't have must health effect of corona compared to Europe.

3. Merchants and small shops are not over leveraged (not too many loans) so will emerge strong once shops reopen.

4. Fall in oil prices would lower the inflation and other costs.

5. Our country's internal consumption is strong.

6. Even if we have to keep India locked down for 14 days or 28 days (two cycles) in larger scheme of things it won't matter

7. Even if stock market collapses and has to enforce few circuits closures it's mainly because of automated algorithms which are forcing stock selling and nothing to worry.

8. Work from home is reducing costs for all companies and may see increase in profits eventually.

9. Our medical facilities will be appreciated for their easy availability, quickness and price efficiency. We can build hospitals within days.

Reminders Sent By Covid to Human Life:

 All are equal regardless of religion, culture, financial situation, occupation or how famous one may be. This disease treats everyone equally.

- Even though we are well connected, something that affects one person will affect another, Small borders we created have little value and the virus does not need a passport.
- It is reminding us about the preciousness of our health and we are neglecting it by eating junk food, contaminated water etc,
- It reminds us about the shortness of life and important things in life.
- It reminds us about the materialistic society we are living in and the important essentials for life as Food, Water, Medicines etc, as opposed to luxuries but unnecessarily we are valuing them.
- 6. It reminds about the importance of family and home life and how the people are neglecting them. It is an opportunity provided to strengthen the family unit.
- 7. It reminds us that the true work is not our job or what we do or what we were created to do. Our true work is to take care, protect and be of benefit to each other.
- It is reminding to keep the egos in check , how great we think of ourselves, how great others thinks about ourselves, does not matter, a virus can bring the whole world to a standstill.

- 9. It reminds us that the power of freewill is in our hands. Human beings choose to cooperate, help, give, share, support each other or they can also choose to be hoard, selfish, to look only after our self. Human beings true colors are brought out during difficulties.
- 10. Whether we need to be patient or become panic, we can decide by understanding the type of situation which happened many times before the history will pass.
- 11. It is reminding us about an uncertain situation, that it can either be a new beginning or an end. It is the time to reflect and understand, learn from mistakes and restart a cycle which continue until we learn the lesson we are meant to learn.
- 12. It is sending a signal that the Mother Earth is sick and looks at the rate of deforestation and provides us an urgency to take care of it.
- 13. It also reminds us that after every difficult situation, there is always ease. Life is cyclical and the present phenomenon is just a phase in that great cycle. There is no need to become panic and this too passes and life goes on.

C. Challenges Ahead:

On the other hand, the real pandemic starts the day when the lockdown ends. COVID 19 is a crisis of math. The corona virus is an easy problem to resolve, if we can understand exponentials. We cannot intuitively perceive how a small number can grow so large in such a small amount of time. Everyone is accusing and blaming China for hiding the exact number of cases. But the important aspect is that 80,000 cases in 2 months should have been enough for the world to wake up to the scary reality of this exponential growth. Despite seeing the data, the leaders of the world did nothing. Every nation is eagerly waiting to lift its lockdown as soon as there are fewer cases. The real pandemic will start the day we start lifting the lockdown. Every country or state has announced a date at which lockdown will be lifted. They should instead declare that they will lift the lockdown the day the number of new cases has been zero for the past two week's period. If we take a hit of some percentage loss in the world GDP by locking down the entire world synchronously, we could save millions of lives. Or we do nothing and millions get killed with a loss in GDP anyway. The challenge before leaders is that they need to make a choice: Do we want to throw money at the problem? Or throw bodies at the problem?

Findings & Suggestions: Our Duty – Post Corona:

On account of the national closedown, the economy has suffered a severe slump. The reduced purchase of goods and services has lead to slow down of domestic manufacturing and agricultural sectors, leading to severe unemployment in urban industrial areas and contraction of the rural economy. India with a population of 130 crores can help the country overcome this crisis by doing the following.

1. Target the population: Even with the existing purchasing power, if the population of this country focuses on its own effort as individuals, it could mean 130 crore individuals purchasing goods and services.

2. Weaponries your expenditure: If every one of us sees that Rs.1000/- of our expenditure is focused on goods and services originating purely in our domestic economy, it means Rs. 1,30,000 crores a month and Thirteen lack crores in ten months. If you can do it with Rs.5,000 per month per individual on the average it means, 65 lakh crores in ten months and if every one of us, on the average is able to spend Rs. 10,000/- deliberately on purely domestically originating, rural and small scale sector goods with a little compromise on availability, (searching effort), packing (may not be attractive) and price (may be a little higher), then we would be pumping Rs.1,30,00,000 crores (one hundred and thirty lakh crores or nearly 3/4 the of our GDP into employment generation in urban small scale sector, and expansion of rural economies, where the most vulnerable informal employment sections of the country lie.

3. Organize the information: Just go about organizing a network of information on goods that originate in your known local urban industrial areas and rural areas around you or villages/areas known to you. 4. Contribute your time: Just make conscious and deliberate calls focusing on people whom you know well and where you are sure of outcomes, and convince them. Please be positive and don't allow stray and distractive thoughts for a period of 10, ten months, and you will see the Indian economy making a quantum leap in terms of tackling domestic unemployment and expanding rural economy, which is also more environment friendly, by the way.

Conclusion:

Declining public services and Poverty have made it much more difficult to gain access to various collective facilities. Government has witnessed underinvestment in the areas of social support and medicine over the decades and it has to struggle to compensate through last minute funding changes. Humans are the real virus on the planet. The statement is applicable to those who are not following the lockdown rules. Many have seen Corona / Covid 19 virus as a great disaster, but we need to prefer to see it as a great corrector. It is sending to remind us about important lessons that we seem to have forgotten and it is up to us if we learn them or not. Stay Home, Stay Safe and Stay Healthy.

References:

- *i.* ICAI Report on Impact of Corona Virus on Financial Reporting, March 2020
- Report of the Centre for Research in Economics and Strategic Stress (CRESS), Hyderabad. March, 2020
- iii. https://starofmysore.com/lessons-fromlockdown/
- iv. https://theconversation.com/lockdownlessons-from-the-history-of-solitude-134611

i.

Global Lockdown: Reminisces and Repercussions

Dr. Rahul Sadashiv Kharat

Department of Commerce, M. S. Kakade College, Someshwarnagar. Email: srass229@gmail.com

Abstract: Declining public services and Poverty have made it much more difficult to gain access to various collective facilities. Government has witnessed underinvestment in the areas of social support and medicine over the decades and it has to struggle to compensate through last minute funding changes. Humans are the real virus on the planet. The statement is applicable to those who are not following the lockdown rules. Many have seen Corona / Covid 19 virus as a great disaster, but we need to prefer to see it as a great corrector. It is sending to remind us about important lessons that we seem to have forgotten and it is up to us if we learn them or not. Stay Home, Stay Safe and Stay Healthy.

Keywords: Lockdown, effects, Repercussions, Sector, etc.

Introduction:

A Lockdown is nothing but an emergency protocol issued by highest authority in any industry, business organization or a government; that usually prevents or restrict people or information from leaving an area. The purpose of lockdown may be to protect people or information from a risk, threat or any other external event. There are basically four types of Lockdown lockdown, i.e. Emergency Preventive lockdown. Drill lockdown and Full lockdown.

Emergency lockdown:

Emergency lockdowns are declared when there is substantial risk or threat to human beings and lives on earth.

Preventive lockdown:

Preventive lockdown is a situation in which preemptive action plan is executed to ensure safety and security of people, organization and system from unusual scenario or weakness.

Drill lockdown:

Drill lockdown is nothing but lockdown of particular area or building in which such building or area is restricted from entry or exit for people. The purpose of such lockdown is to reduce the risk or threat or restrict the area or number of people from spread of such risk or threat.

Full lockdown:

Full lockdown is nothing but lockdown in particular area i.e. city, state or nation. It

strictly restricts people to enter or exit such city, state or nation during the lockdown period.

History of Lockdown:

According to Mr. Modzeleski, 'Lockdown' tactics were first developed in late 1970's, possibly in South California in Los Angeles Unified School District. The purpose of such lockdown was to secure school children's from street level crime and frequent shooting. But this is not that much true. As we look at the past, we should come to know that, the word lockdown is as old as evolution of industrialization. It is frequently used in context of various labour organizations in different countries of Europe, where labour organization took lead to lockdown industries to ratify their demands of pay and many more. The context in which we look towards lockdown history, we can say that the first official lockdown to protect lives of human being is declared in late 1970's. But it is not true because lockdown is one of the old measures of 16th and 17th century, where Italy had declared full force lockdown during the Plague pandemic in Florence. There were no vaccine or therapeutic drugs to cure from disease, so confinement and quarantine have been prominent and proven measures taken across the world during the various kinds of Pandemics all over the

world. In 21st century, there were various incidences in which lockdown took place.

In 2001, three days civilian airspace lockdown were initiated in the wake of the 11th September 2001 air attack.

In 2008, six hours lockdown were initiated at University of British Columbia on 30th Jan 2008, when an unknown threat was made.

In 2008, George H. Henry Academy, Toronto and New Westminster School, British Columbia were locked down on 10th April 2008, due to suspected firearm threats.

In 2013, entire Boston City was locked down on 19th April 2013, during the manhunt for terrorist Dzhokhar and Tamerlan Tsarnaev.

In 2015, Brussels city was locked down for a day while security services sought suspects involved with November 2015 Paris attack.

In 2019, Indian government imposed total lockdown in August 2019 at state Jammu and Kashmir for three month and extended to six month, after revocation of the special status.

In 2020, due to the Corona Virus Pandemic in all over the world, Most of the nations declared total lockdown to prevent and restrict the disease and to save the life of people.

Repercussions of the Lockdown:

There is popular say in English, "we are responsible for our own misery". Lockdown is nothing but effect of adversity caused by human being. This time China is under the scanner of world leaders due to doubt of intentional spread of Corona virus pandemic all over the world. Current world lockdown situation is an effect of a Corona Virus Pandemic. Whatever may be the causes, lockdown has adverse effect on human being and its allied activities. These effects depend on area, size, period and location of the Lockdown. For this article purpose writer has focused of factorial repercussions of Lockdown. These factors are given as below:

- 1. Economic effects.
- 2. Psycho-social effects.
- 3. Political effects.
- 4. Other effects.

Economic effects:

Government of India declared total Lockdown on 23rd March 2020. After implementation of decision agricultural sector, Industries, banking and other services are totally shut their door and stopped their smooth functioning. So, total economic cycle has been collapsed. So, lockdown in India has been hugely disruptive. Various credit rating agencies, experts in the field and world bank chief has already downgraded India's growth for fiscal year 2021 and will reach to lowest of last 30 years. Chief economic advisor of GOI. Krishnamurthy Subramanian predicted negative growth rate in FY 2021 and advised PMO, to prepare from the same to save economy. Due to unfruitful decisions of central government like Demonetization, GST reform, privatization of public sector industries, Indian economy was in continuous trouble. Lockdown made addition to the same. So, there is continuous fall GDP of India. The quarterly GDP growth has consistently fallen since Q4 of FY 2018. The India-Economic forecasts 2020-2022 Outlook has predicted negative growth rate (i.e. -7.2%) for Q2 of FY 2020 and -3.4% for Q3 of FY 2020 whereas current account GDP will be -1.6 for the same period. The deficit for Balance of Trade will be US\$ 14200 million & US\$ 9300 million for same period. Current account deficit will be reach to US\$ 8000 million & US\$ 7000 million.

Considering the above challenges, he also estimated a stimulus of US\$ 10 trillion to overcome on this crisis. It may be increased to double, if lockdown situation is extended for further two month.

As per the experts, Indian economy is expected to lose everyday US\$ 4.5 billion approximately. Lockdown significantly affected on all the three sectors of economy i.e. Agriculture, Industry and Service sector.

Agriculture Sector:

Indian economy is an agrarian economy. Till today, it contributes to 23% to the GDP of India. Even after enough Liberalization, Privatization and globalization, more than 42% of population of India is directly depend on Agriculture whereas more than 12% population of the nation is indirectly depends upon allied activities of agriculture and bye product processing of agriculture. So total population depends on agriculture is more than 50%. Due to the lockdown all agricultural activities are totally stopped. Crops are ready to send in the market but there is no labour available for work, transport facility is also not available. So the farmer's investment in agriculture is not vet recovered. Farmers use to take loan from banks and cooperative societies. There is no option to sell their final product in the market. So their investment is not released and they fail to return their dues. So banks and cooperative societies are not ready to give them loan for further farming activities. It is affected not only on farmers but also effects on bank and cooperatives.

Industrial Sector:

Industrial sector is one the important sector in India. It contributes to 32% to GDP of India and provides employment to more than 10% of working population of India, directly or indirectly. But due to total lockdown, all kind of small, middle and large scale industries have shut their doors. Production, distribution and selling activities and other financial and nonfinancial operations are also subsiding. Labour and employees are not working even after willing to work but companies are bound to pay wages and salaries to them. So industries are in trouble due to financial crisis. At the same time new startups have also been impacted due to fallen in funding. According to the joint survey conducted by FICCI and DHRUVA advisors, there will be deep impact of lockdown on industrial sector due to unprecedented collapse of all kind of Industrial activities. There could be permanent impairment of some large scale industries.

Considering such worsen situation most of the industries hold their installation and/or expansion plan of new/existing units for a year or more. Fund raising plans are also postponed for the same period. They are also facing heavy losses in import and export activities.

There is also a risk of unwanted external reconstruction, amalgamation or merger of the important industries. So, Indian industries can lose their ownership if large share of their investment is acquired by foreign investors especially country like expansionist China is keen interested in acquisition of Indian industries.

Service Sector:

Service sector plays crucial role in Indian economy. It contributes to 63% to the GDP of India and provides more than 27% employment direct and indirectly. Due to lockdown major services have either shutdown or run in a very limited manner. Service sector in India are very capital intensive. Also most of them are labour intensive. Government of India requested them, not to lay off them and cut their wages and salaries. IT sector allows their employees to work from home; it is possible to work to certain extend only. Top 10 service sectors like health & medical services, Hotel & restaurants, Insurance, Road transport, Railways, public administrations, education, consultancies and recreation services contributes 69% to total GDP of service sector. Most of these service operations are stopped totally due to total lockdown in European and western countries. So, service sector is going to go sick very fast.

Psycho-social effects:

Human being is a social animal. "To stay together and stay happy" is social as well as psychological need of every human being. To stay in touch and share every kind of feeling to each other make them happy, relax and reduce their sorrow. Lockdown forcefully restricted them to do so and keep physical distance from each other. Being isolated from family, relatives, friends and colleagues can be unbalanced and traumatic for most of the persons. It may cause mental and physical problems. The diseases like anxiety, aggression, depression, memory loss, fantasy and many more psychological effects.

Staying with family for all time in a confined place is not at all rosy picture for everyone. It becomes oppressive for most of the low income group families, especially women and children. As per the government reports, cases of domestic violence have also been increased to two fold during the period of lockdown. Negligence towards senior citizen and bed reddens are also increased. Children don't have option to play or enjoy high cost electronic games. School going children between age group 6-14, missing there playtime with their regular peers, causes making them irritable, nervous and tense.

Political effects:

Most of the developed and developing countries have adopted capitalistic model of economy. Even developing countries like India are also on the way of capitalism. After formation WTO and signing GATS agreement, no countries of the world have option to capitalism. But after the COVID-19 pandemic, most of the Industries and services has been shut their door for more than a month. Countries having financial stability and power fail to control deaths and diseases. People of these nations realize that, this model of development is totally useless and worthless in terms of security and assurance of human life. So, capitalistic model is havoc and outdated. Human being requires health assurance and strong infrastructural facilities instead of nuclear bombs, mission Mars and many more. So, there will be chances to change political agenda of all the political parties of most of the nations of the world. The political party which will focus and will give assurance basic and security needs fulfillment will come in to power in near future. So, most of the capitalistic countries may become more socialistic and caring for human being and nature.

Other effects:

- Due to lockdown large scale industries and IT sector companies may cutoff 25% of their employees, to survive from losses. So more than 10 crore youth of the world may be jobless in next six month. Same problem may arise in India.
- 2. Countries like India, more than 80% working population is working in an unorganized sector. They don't have any kind of job assurance, as they are working on contract basis or piece rate basis. Due to lockdown more than 40% people lost their job and don't have

option to earn money and survive themselves and their family. GOI has not taken firm stand to pay them during the period of lockdown. So, their employers don't have compulsion to pay them for period of lockdown. Most of them refuse to pay. So, cases of privation, malnutrition and starvation have been increased in developing and under developed countries during the period of lockdown.

Positive impact of Lockdown:

- Lockdown shuts door of all industries in the world. Due to this, air, water and noise pollution is completely reduced. All the water resources become clean due to compete stoppage of disposal of hazards waste in water resources.
- Environmental experts and scientists say that, there are automatic repairs in Ozone layers, so that threats of global warming may reduce at some extent. First time in last thirty years, people of Jalandhar (Panjab) saw mountain Himalaya from their native place.
- 3. Delhi, Mumbai, Chennai, Kanpur and Kolkata are highly polluted cities of the India and world also. Due to lockdown, air pollution of these cities is completed stopped and people and animal enjoyed clean and fresh air after long time.

- 4. Lockdown forcefully restricted to people to stay at their home. So, most of the wild animals and birds exiled due to deforestation returned at their home, and seen wondering at street in many cities and villages.
- 5. Ever after total prohibition to continue services like hotels, tourism industries, shopping malls and many more due to lockdown. It does not affect more on common people as their basic needs are fulfilled. So, lockdown proves that people can survive without prestigious needs, which is the product of capitalism. Even capitalistic world economy is collapsed due to such long term lockdown. It does not affect more on common people.
- 6. There may be chances of rise of new economic and political approach all over the world, which may be more socialist, human centered and may think out of rat race.

References:

- i. Hendry, A.J. (2020), 'The origin of Lockdown', ALICE Training Institute, Ohio, pp.1-8.
- ii. Powar, R. (2020), 'Psycho-social impact of the Covid lockdown', The Tribune, accessed on Thursday 30, April 2020, 12.45 p.m.
- iii. Khadilkar, D. (2020), '17th Century Florence: When Lockdown Became a Template to Fight Pandemic', accessed on twitter on Thursday, 30th April, 2020, 3.10 p.m.
- iv. Amruta, D. & Juliet, M. (2017), 'The Role of the Service Sector In Indian Economy', unpublished, pp.1-10.
- v. World economic outlook: Jan to March, 2020.
- vi. Central Statistic Organization.
- vii. India-Economic Forecasts-2020-2022 Outlook.

A Study on Impact of Corona virus COVID-19 on Education Kalpana V. Sayankar

Assistant Professor SKN Sinhgad School of Business Management, Ambegaon (BK), Pune Email: kvsayankar@gmail.com

Abstract: COVID 19, corona virus was observed first in China and within a short period it spread all over the world. The entire world gets calmed. The World Health Organization (WHO) declare this corona virus an epidemic. Almost all the countries have taken various steps to prevent from this virus. Everything was stopped. People were stucked at the respective places. Globally almost all the countries have declared the complete lockdown. The emergency services were open during this period. Government has postponed / cancels the scheduled activities. Universities, Schools, Colleges, Institutes were closed during this lockdown period. Many of the institution have their syllabus completion and examinations were pending. Schooling has greatest impact on this lockdown. In this research, researcher trying to find the various factors of impact of education.

Keywords: COVID 19, Epidemic, World Health Organization, Lockdown, Education, etc.

Introduction:

Corona virus which was named as COVID 19 by World Health Organization (WHO). The virus was first identified in Wuhan City of China. The virus spread in all the countries within a short period. Following are some of the symptoms of corona virus.

S.No.	Symptoms
1	A general feeling of being unwell
2	Sore throat
3	Headache
4	Cough
5	Fever

According to the World Health Organization (WHO), a novel corona virus is a new strain that has not been previously identified in humans. Viruses are named based on their genetic structure to facilitate the development of diagnostic tests, vaccines and medicines. Almost all the countries have declared lockdown in their countries. The educational respective systems worldwide were disturbed, which leads to the total closures of schools, universities and colleges. Till 21 April 2020, nearly 1.723 billion learners have been affected due to closure of schools, universities and colleges globally.

Objectives of the Study:

The basic and important objectives of the study are as follows;

a) To know the history of corona virus

b) To study the measures taken by government

c) To investigate the impact of corona virus on education

Research Methodology:

This paper is a collectively assortment of literature and data collection on various government, WHO, UNESCO and other websites. Hence author of this paper has undergone an extensive study of literature and is coherent with impact of corona virus on education system. The research paper is wholly on secondary data and farsightedly used to arrive at meaningful findings and fruitful conclusion. Simple statistical tools are used at the appropriate place to find a path on meaningful way.

Significance of the Study:

In this research paper, the study being carried out to comprehend the Impact of COVID-19 on education system. Therefore it must have to take appropriate measures for the benefit of student fraternity. Hence there is a need to have strategic plan, organize and conduct necessary steps to carry out completion of curriculum.

Statement of the Problem:

The corona virus or COVID 19 spread in all most all the countries. The virus first identified in Wuhan the city of China. All the systems were hanged in the respective countries. As of now there was no vaccine found on this dangerous corona virus. The complete lockdown declared globally. In India also government declared complete lockdown. All schools, university, colleges, closed. institutes were The entire curriculum Syllabus was hampered. completion, examination, internship, placement etc were found the noncompletion remark because of the situation. Thus, looking to the societal need, researcher has made anhonesteffort, by virtue of this paper to emphasis on the impact of corona virus on the education system.

Literature Review

History of Corona virus

Numerous theories were there regarding where first case also called patient zero may have instigated. On December 1, 2019 in Wuhan, Hubei in China country first case was trace back. Within a short period, in a month corona virus cases in Wuhan progressively increased. A pneumonia cluster of unknown cause was observed on 26 December and treated in Hubei Provincial Hospital, on 27 December. A group of doctors at Wuhan Central Hospital on 30 December, alerted their colleagues of a "SARS-like corona virus".

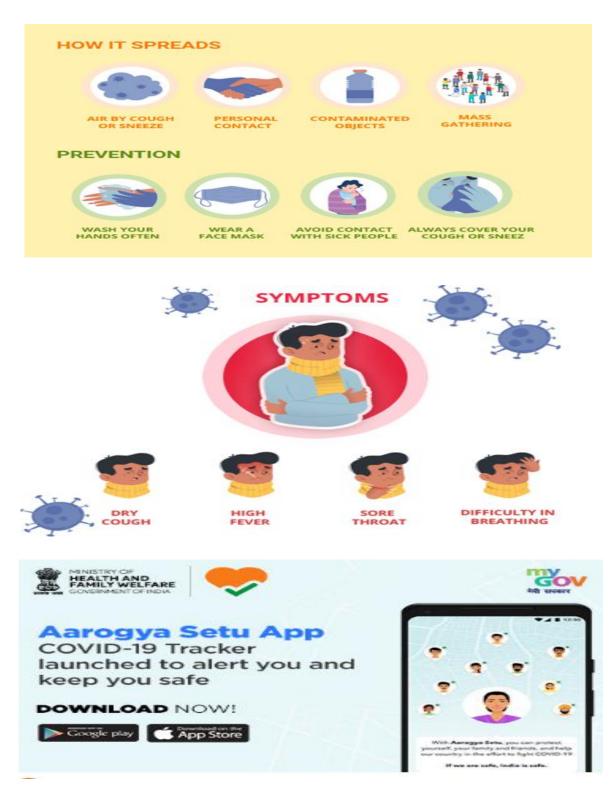
On 31 December, the Wuhan Municipal Health Commission released a public notice. Enough cases of unknown pneumonia had been reported to health authorities in Wuhan to trigger an investigation in early January. The number of cases doubled approximately every seven and a half days during the early stages of the outbreak. In early and mid-January 2020 the virus spread to other Chinese provinces. On 20 January, China reported nearly 140 new cases in one day, including two people in Beijing and one in Shenzhen.

As of 23 April 2020, more than 2.74 million cases have been reported worldwide; more than 192,000 people have more than 752,000 died and have recovered. Previous outbreaks of infectious diseases have prompted widespread school closings around the world, with varying levels of effectiveness.

Measures Taken by Government

nationwide In India the lockdown announced by Prime Minister of India. The lockdown was put in place to contain the spread of novel corona virus in the country. The lockdown was introduced to break the chain of Covid-19 infection across the country and 'flatten the curve'. The government has taken a various measures to ensure that the lockdown remains in place and is followed by all citizens. Many steps have been taken to make sure that people from different walks of society don't feel the pinch of the lockdown. Government has appeal the people to stay at home, be safe, take precautionary measures and follow the instructions.





The precautionary measures were published on television and other social media. So that this corona virus should not spread further. Schools, universities, colleges, institutions were closed during the lockdown period. The scheduled examinations of schools and colleges were either cancelled or postponed.

Impact of Corona virus on Education

The government is taking utmost care so that corona virus should not spread further and link of spreading of corona virus should break. Government declares complete lockdown for 21 days and further it was extended. People were requested to stay at home and follow the government instructions. During this period many of companies, private sectors, and software based companies have informed their employees to do their routine work from home using modern technology.

Globally 191 countries have declared and implemented nationwide lockdown according UNESCO monitoring. Because of nationwide lockdown about 98.4 percent of world's student population impacting. Some of the cases of cancellation of Cambridge IGCSE, Cambridge O Level, Cambridge International AS & A Level, Cambridge AICE Diploma, and Cambridge Pre-U examinations for the May/June 2020 series across all countries. This was as per release of statement of Cambridge International Examinations (CIE) dated 23 March 2020. To abide by the socialdistancing recommendations in preventing wide-spread of this pandemic, the universities, colleges, institutes and schools across the world have switched from classroom-based online-based to techniques. In countries like the US and Canada etc.all provincial the and universities have cancelled the classes and are making use of virtual mediums. Many children worldwide rely on free or

discounted meals at schools. When schools close, nutrition is especially compromised for children in schools where food is provided.

The examinations of Indian schools. universities, colleges, institutes carried out in the period of February to May and have impacted its time table of examination due to corona virus. Many of the schools have either completed or awaiting for completion its examination. The schools examinations were cancelled by the Government. The next academics of schools were hampered due to the pandemic. Hence many schools have moved to online distance learning using platform viz Google Classroom, ZOOM etc.



The Academics of professional courses were also hampered due to corona virus. The completion of syllabus, the schedule of examinations both internal and university were hampered. The examinations were postponed. Universities, colleges, institutes have also moved to online distance learning using platform viz Google Classroom, ZOOM etc.for the curriculum.

Schools, colleges, institutes are also hubs of social activity and human interaction. When schools are closed, many children and youth miss out of on social contact that is essential to learning and development.

Findings:

The closure of schools, universities, colleges impact not only students, teachers, have parents but also far-reaching economic and societal significances. The closures due to corona virus have thrown light on various social and economic issues. Many children worldwide rely on free or discounted meals at schools. When schools close, nutrition is especially compromised for children in schools where food is provided. The syllabus completion and examinations were hampered. Though platform like ZOOM, Google classroom were used in curriculum.

Conclusion:

The corona virus which was first identified in Wuhan city of China and spread in all most all the countries. To break the chain non-spreading of and corona virus nationwide lockdown were declared. People were instructed to follow the government instructions. School. universities, colleges, institutes were closed. The examinations were either canceled or postponed. The platform like ZOOM, Google classroom was used for syllabus completion, sharing of study materials etc. This novel virus has also thrown major challenges to the researchers and scientists all over the world and making them brainstorm in coming-up with the treatment and management strategies... When universities, colleges, institutes and schools are closed, many children and youth miss out of on social contact that is essential to learning and development.

References:

- *i.* https://en.wikipedia.org/wiki/Impact_of_th e_2019%E2%80%9320_coronavirus_pand emic_on_education
- *ii.* http://dtemaharashtra.gov.in/StaticPages/fr mSearchInstitute.aspx
- *iii. https://en.wikipedia.org/wiki/2019%E2%8* 0%9320_coronavirus_pandemic
- iv. https://www.businessstandard.com/about/what-iscoronavirus#collapse
- v. https://www.ncbi.nlm.nih.gov/pmc/article s/PMC7152888/
- vi. https://en.wikipedia.org/wiki/Education_i n_India

Corona – A Crown with Spikes

Bhupendra Chandrashekhar Tope

Dr. Mrs. Anita Khatke

Research Scholar, NWIMSR , Pune. <u>bhupendratope1974@gmail.com</u> Director J SPM's Institute of Management & Research, Pune <u>anitakhatke7@gmail.com</u>

Abstract: Viruses were one of the first living things on Earth...but they are not alive like we are. They need to hijack other living cells to reproduce and that's their only goal...to survive and replicate themselves. The widespread of COVID-19 terror has impacted our life to such an extent that the entire mankind is terrified with it. This virus has actually disrupted the normal life and has taken us back in the past where we are now forced by the "Mother Nature" to learn from our past mistakes. This article gives an insight on how we have been dealing with such deadly viruses and how the lockdown period has made a great change.

Keywords: Viruses, Outbreak, Pandemic, Containment, Vaccines, Social Distancing, etc.

Introduction:

The lockdown period, declared by the Hon. Prime Minister, Shri. Narendra Modi beginning 21 March, 2020 in India has given very good lessons for all of us. Many of the organization and educational institutions actually started observing the lockdown even before it was declared by the government. It was an imperative decision by the government rightly taken, although it could have been taken a bit early. Nonetheless, the government has tried to control the spread of this outbreak to a greater extent as compared to other countries in the world. It never happened in the history that the entire nation came to halt for almost two months and it still continues.

Past Experience:

It is very much evident from the past experiences of the mankind that whenever such kind of outbreak happened, they took it very lightly. Careless approach with minimal or no precautions at all worsened the situation.

The virus outbreaks have been there since generations and yet there is no learning. The government authorities all over the globe has been giving the guidelines what is to be done but all in vain. It is not the first time the Mother Nature has tried to teach the humans a lesson and yet there is a failure.

Few facts:

The "EBOLA" outbreak, originated from the Democratic Republic of Congo

formerly known as Zaire happened due to the transmission from animals to humans and from humans to humans. Case fatality was 88%. Finally a vaccine named "rVSV-ZEBOV" was developed to control it.

"NIPAH Virus (NiV)" a fatal neurological disease in humans originated in Malaysia because of the direct pig to human transmission. The case fatality here was somewhere between 50% to 75%. In spite of the significance of this virus as a disease with a potential for pandemic, unfortunately, there is no vaccine for this virus which has been approved for human or animal use.

"Dengue", the most critical mosquito borne disease in the world most rapidly spread. Originated in Japan, this virus has been increased by 30 times in the last 50 years. Affecting almost 141 countries all over the globe. More than 40% of the world's population is at risk of this infection. Every year almost 390 million infections of dengue occur. Out of which, around half a million cases develop into severe dengue, or dengue hemorrhagic fever, a more severe form of the disease which results in 25000 deaths per year all over the world. This continues each year. The scientists have been successful in developing a vaccine called "CYD-TDV".

"Cholera"– The world's longest running pandemic originated in India. The WHO says, it sickens approximately 2.9 million people every year, and kills 95000. This disease is widespread in more than 47 countries across the globe. It is the effect due to lack of investment in the basic requirements like human clean and adequate water. hygienic sanitation infrastructure, maintenance of these facilities and the governance of it. Oral vaccines available for this virus ShanChol EuvicholareDukoral, and Plus/Euvichol.

The "H1N1", commonly known as the Swine Flu: Originated in the USA in April 2009. This virus represented a unique combination of influenza viruses which was never noticed before either in humans or in the animals. 151700 to 575400 people died from swine flu in the first year of the pandemic. The drug namedPanvax was developed for preventing infection with the H1N1 virus strain.

"SARS" – The Severe Acute Respiratory Syndrome: A viral respiratory disease originated in China in 2002 caused by severe acute respiratory syndrome corona virus (SARS-CoV or SARS-CoV-1). Again, transmitted from animals to humans and then humans to humans. This virus is mainly spread through the respiratory droplets in the air. As per the Wikipedia, 774 deaths occurred due to this virus (China and Hong Kong not considered). As of today, there is no cure or protective vaccine for SARS that has been proved to be both safe and effective in humans.

"COVID-19" - The Corona Virus Disease 2019. Corona means crown, and the virus is named for its crown like spikes. The most lethal threat to the mankind till now is the ongoing COVID-19 virus originated in China. Transmitted from animals to the humans and from humans to humans. This virus is structurally related to the virus that causes severe acute respiratory syndrome (SARS). According to Anthony S. Fauci, M.D., H. Clifford Lane, M.D., and Robert R. Redfield, M.D., "the emergence of corona virus disease in the past 18 years -SARS (2002 and 2003) and Middle East respiratory syndrome (MERS) (2012 to the present) — the Covid-19 outbreak has posed critical challenges for the public health. research, and medical communities".

The virus that causes COVID-19 and the one that caused the outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003 are related to each other genetically, but the diseases they cause are very much different.COVID-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or speaks. These droplets are too heavy to hang in the air. They quickly fall on floors or surfaces. You can be infected by breathing in the virus if you are within 1 meter of a person who has COVID-19, or by touching a contaminated surface and then touching your eyes, nose or mouth before washing your hands. The number of affected people and the deaths caused due to this virus all over the globe is catastrophic. There is no vaccine for COVID-19 but scientists around the world are doing research and are working on developing a vaccine against Covid-19.

The bitter truth:

In spite of all these facts and the history of the pandemic caused so far, the human kind is continuously failing to perform its duty for fighting against such diseases. The humans are witnessing such outbreaks since generations and it is not that they are aware of the consequences yet they seem to ignore them. The past has always been alarming the mankind to be super cautious when facing such deadly viruses. Almost all these viruses were transmitted from animals to humans and still killing such animals or birds and eating them has not stopped. In the past, very little was known about the virus, the method of transmission of the diseases but now with the help of the advance technology science has always been able to provide the solution or precautions to fight against such outbreaks. The humankind has to understand the magnitude of the collaborative efforts put in by the scientists across the globe to study

the characteristics and contain the infection which may still seem to be unknown.

The Repercussions:

"If not now, it's going to be never".

Currently, many countries in the various parts of the globe are scattered into pieces because of this pandemic. The economy of many countries has collapsed which has forced them to go few years back. The downfall in the economy has not only affected the rich ones but has severely affected the poor as well of such countries. Careers are on stake for many people across the globe. The uncertainty in the employment may not only disturb the economic conditions of the nation but it may also result in pulling back the nation in terms of the economical growth. Many public health tools come into picture to contain such diseases. These tools tried to control the spread of such deadly diseases. The best possible way suggested by the public health officials of many countries is social distancing, isolation and self quarantine. Movement outside the house should be limited so as to support the administration by not spreading the virus in the society. This process actually helps in slowing down the spread of the virus in absence of the vaccine.

The Lockdown:

Lockdown in the COVID-19 proved to be the most significant solution to gain control over the spread of the outbreak. One cannot imagine the condition of the nation in absence of the lockdown. It becomes a tough job for the public health officials to administer the activities and control this invisible threat if the citizens' co-operation is missing. The WHO, since its foundation, has been circulating advisories with regard to the outbreaks and asking the entire world follow their guidelines. But the to humankind seems to take it very casually and is paying a huge price for the same. However, this lockdown has helped the Mother Nature to heal from the wounds. No doubt, the lockdown has hit the fossil fuel industry with less number of vehicles running on the road and less planes in air, the price of oil has come down almost two third since last year. The lockdown has definitely hit the human kind but it has also proven to be beneficial to the animals. During this period, the wildlife has already started filling the vacuum which was created in the past. The number of wild animals getting killed on the road due to vehicles has also come down drastically or has completely stopped in many places. The world just witnessed few of the advantages and disadvantages of the lockdown. Various industries like, the hotel industry - mainly restaurants, travel and tourism, the aviation industry and the ebuying/selling) commerce (online are severely hit by this lockdown. This hit has gulped jobs of quite a lot number of people engaged with these industries. However, industries like health insurance, the online coaching/training, the communication infrastructure and technology are the ones benefitted from the lockdown.

What do we learn from all this:

Well, the COVID-19 has taught us a lesson worth remembering lifetime. The pandemic is the greatest risk for everybody living on this Earth. If we are talking about the death toll, a pandemic world challenges even the massive wars of the past. The economy has come to nearly a stage of shut down and the cost of humanity has become unbelievable. Nobody seems to notice the fact that not a single nation on this earth is immune from the problem this virus has created. Who knows, there must be other viruses out there, more lethal, poisonous and deadly which may be better at getting transmitted to humankind where the world does not have drugs or vaccine.

How do we put an end to a pandemic like this? The best possible way to defeat it is through the immunity. When certain virus spread through population, is some numbers of infected people die, but others survive. It is because their immune system. This immune system has learned to distinguish the virus and fight against it. When that happens in an adequate quantity of people, it's becomes much difficult and harder for the virus to spread. This type of immunity is called the "herd immunity". Here, the rate of infection slows and the virus dies out there itself. But this is not the

case with the COVID-19, if world would have just waited to achieve the herd immunity naturally, the number of death by now would have gone up significantly and millions would have died.

However, it does not guarantee that such pandemic outbreak won't occur in future. Unfortunately, this problem may resurface again and again in future whenever the mankind faces new infections. Finally, the fight against such outbreaks can succeed only if the public cooperates. The mankind has to now avoid consuming infected wild animals and be more cautious in doing so, if required.

References:

- 1) Various websites of the WHO, Wikipedia, etc.
 - a) https://www.google.com/search?q=sar s+virus+2003&rlz=1C1CHBD_enIN7 17IN717&oq=sar&aqs=chrome.0.69i 59l2j69i57.2691j0j7&sourceid=chrom e&ie=UTF-8
 - b) https://en.wikipedia.org/wiki/Severe_a cute_respiratory_syndrome
 - c) https://www.who.int/csr/don/archive/y ear/en/
 - d) https://www.who.int/news-room/factsheets/detail/ebola-virus-disease
 - e) https://www.frontiersin.org/articles/10 .3389/fvets.2019.00016/full
 - f) https://www.who.int/csr/disease/nipah/ en/
 - g) https://www.worldmosquitoprogram.or g/en/learn/mosquito-bornediseases/dengue
 - h) https://www.beckershospitalreview.co m/public-health/swine-flu-8-factsabout-the-world-s-last-pandemic-in-2009.html
 - i) https://journalofethics.amaassn.org/article/sars-revisited/2006-04

Global Lockdown: Reminisces, Repercussions, and Lessons for the Mankind

- 2) Covid-19 Navigating the Uncharted, Anthony S. Fauci, M.D., H. Clifford Lane, M.D., and Robert R. Redfield, M.D. Dated : 28-02-2020 https://www.nejm.org/doi/10.1056/NEJMe2 002387
- 3) Climate crisis: in coronavirus lockdown, nature bounces back – but for how long? https://www.theguardian.com/world/2020/ apr/09/climate-crisis-amid-coronavirus-

lockdown-nature-bounces-back-but-forhow-long

- 4) Coronavirus, Explained Documentary Film on COVID-19, Source:Netflix.
- 5) COVID Worst Hit Sectors and Opportunity Sectors : Twitter Post of Mr. Harsh Goenka and Mr. Ananta Purekar, https://twitter.com/AnantaPurekar/status/1 253666000865595393?s=09

A Study on Effect of Lock down on Indian Economy Due To Covid 19 Outbreak

Prof. Dr. Rajendrasing Pardeshi

Associate Professor, DVVPF's IBMRD, and Ahmednagar kavirajthakur@yahoo.co.in

Abstract: It is always a hot issue of discussions that how environmental forces impacts businesses and economy at large. From Macro perspective ,one can see how Natural environmental forces affects economy .To mitigate ill effects of COVID-19 virus, In India A lockdown of first 21 days was announced and later it has been extended by 19 days up to 3rd May 2020. The world's biggest lockdown may have cost economy Rs 10 -12 lakh crore during the first 40-day period, It is believed that there is a risk of a contraction of April-June (2020-21 fiscal) GDP to the extent of 5-6 per cent, with Q2 (July-September) also likely to post modest growth in a best-case scenario. In this Research paper researcher tried to identify and analyze estimated sector wise impact of lockdown due to COVID-19 outbreak on Indian economy.

Keywords: COVID-19, Lockdown, Indian economy, GDP, etc.

Introduction

It is always a hot issue of discussions that how environmental forces impacts businesses and economy at large. From Macro perspective ,one can see how Natural environmental affects forces economy .To mitigate ill effects of COVID-19 virus, In India Lockdown of first 21 days was announced and later it has been extended by 19 days up to 3rd May 2020.

The world's biggest lockdown may have cost economy Rs10 -12 lakh crore during the first 40-day period, It is believed that there is a risk of a contraction of April-June (2020-21 fiscal) GDP to the extent of 5-6 per cent, with Q2 (July-September) also likely to post modest growth in a best-case scenario. The world's biggest lockdown that shut a majority of the factories and businesses, suspended flights, stopped trains and restricted movement of vehicles and people,

With the intent to contain the spread of COVID-19, Prime Minister Narendra Modi with effect from March 25 announced a nationwide complete lockdown that brought as much as 70 per cent of economic activity, investment, exports and discretionary consumption to a standstill. Only essential goods and services such as agriculture, mining, utility services, some financial and IT services and public services were allowed to operate.

Unfortunately this pandemic came at the most inopportune time for India whose

economy was showing signs of recovery after bold fiscal/monetary measures, Centrum Institutional Research said the country again stares at the possibility of low single-digit growth for FY2021 (April 2020 to March 2021). It is estimated that the lockdown will cost the Indian economy almost USD 4.64 billion (over Rs 35,000 crore) every day and the entire 21-day lockdown will result in a GDP loss of almost USD 98 billion (about Rs 7.5 lakh crore).

The rapid spread of COVID-19 has not only disrupted the global economy but also triggered a partial shutdown in many parts of India from early March and an almost complete shutdown from March 25.

Sector wise Effect:

Manufacturing Sector

The industry's demand for opening manufacturing - 80-odd per cent of which is shut or operating at very low utilization was unfounded and was rejected. Opening up manufacturing at a time when demand in most sectors has crashed between 50-90% would have been suicidal. It would have only locked up precious cash in producing goods which could not be sold as shops, showrooms and malls stay shut.

OEM auto component supplier to automobile companies can open factories after Automobile manufacturing company's restarts. It will take a couple of weeks to figure out impact of lockdown on manufacturing sector, when all production can be started. Unless the whole supply chain works, it is difficult to resume operations.

However, export-oriented plants may restart as most international markets have not blocked exports and ports of entry and exit continue to function with some restrictions. Especially so for continuous process manufacturers whose plants have least human intervention. A steel producer like JSW, which exports nearly 30% of its requirement, is going ahead with its plan to reopen manufacturing to cater to markets in US and Europe. According to report of Confederation of Indian Industries (CII), existing export orders and opportunities should be met to retain India's export market share in the post-COVID period.

Aviation Sector

Passenger-less aviation sector has had a lease of life hauling cargo for government and private firms in India and abroad. Since lockdown began, Air India, Spice jet, Go Air and Indigo have logged seven lakh kilometers in more than 600 flights lifting more than 4,300 tons of cargo. However, even that's no solace for the industry that was clocking over 3,000 flights per day.

Airline sector has already been pushed to the wall. According to Sydney based Centre for Asia Pacific Aviation (CAPA) recently said that the combination of COVID related travel restrictions and an economic downturn is likely to result in first quarter of FY21 being a virtual washout for Indian aviation. The extension of lockdown and suspension of services till May 3, 2020 further impacts cash flow significantly. As part of a number of steps taken to conserve cash and save costs, industry players had to make the difficult decision of further reducing our staff costs with the objective of preserving jobs. Most of the Aviation workforce had to undertake compulsory no-pay leave of several days, depending on employment grades.

With FY2021 set to be an exceptionally challenging year, all segments of the aviation value chain will need to immediately start planning for much smaller scale operations, supported by serious enterprise wide restructuring.

Travel/Tourism Sector

With all modes of transport being suspended, the nationwide lockdown has deeply impacted the country's travel and tourism sector. Those stranded could have preferred to travel back to their homes, but the extension has thwarted their plans. Allowing public transport following the expiry of 21 days lockdown could have helped operators to generate some cash, but now they will have to wait longer. According to an analysis of Travel and tourism sector suffers worst. It is estimated that economic loss to the travel and tourism sector in the lockdown period remains the biggest concern, but an even bigger worry for the sector is how long it would take to recover after removal of restrictions as travelers would still follow social distancing norms and there may be mandatory restrictions such as booking of alternate seats. Fear and apprehension would be there in the minds of travelers till the time a long-term solution of Corona virus comes. We see the sector taking a longer time than expected to recover.

Agriculture sector

While lockdown and extended lockdown means more pain for most of the industries, the agriculture sector could cheer a bit as almost all farm sector activities have been during this permitted period. With harvesting near 100% in Gujarat and 70odd per cent in Madhya Pradesh and Punjab heading for wheat harvesting starting April 15, the farming community got a huge relief with the opening up of the sector, including allied sectors such as food processing and cold storages - vital for securing the produce.

Learning from previous experience, the Centre has this time clearly spelt out in its order that farm sector would be exempted from the extended lockdown through May 3. Accordingly, transportation of seeds, fertilizers, food grains would get the green channel. But agriculture sector experts still fear a slight delay in harvest of crops due to lockdown as policies set by the Central government are not properly executed at the local level. While harvesting of wheat has neared completion in many states, it is yet to wrap up in the key states of Haryana and Punjab.

Delay in harvesting of Rabi crops could lead to late sowing of Kharif crops which could result in lower yield. The harvesting could be further delayed by untimely rain and hailstorm. There are issues related to transportation, storage and agriculture market being nonoperational. In case of perishable items in some states like Karnataka, farmers are facing difficulty in harvesting as labour is not available. Transportation of processed seeds is another issue as they are transported from one state to the other. The demand for processed seeds is quite significant in the Kharif seasons. The seeds may not reach farmers in time if its smooth supply is affected. Even as government has allowed mandis dealing in agricultural produce, many markets are reported shut.

Given that agriculture is the mainstay for two-thirds of the population, any negative impact of extended lockdown on it could multiply the problems. Lower yield means lower income for farmers and hence poor demand for consumption.

Transport Sector

The accumulated losses to truckers during the first 15 days of lockdown were about Rs 35,200 crore given an average Rs 2,200 loss to per truck per day. More than 90 per cent of the about one crore trucks in the country are off roads during the lockdown as truckers with only essential commodities are on the move, Even if the lockdown is lifted, it will take at least 2 to 3 months for truckers to limp to some normal scale as we apprehend consumption of non-essential items to remain hit on the account of lack of purchasing power.

Real Estate Sector

Real estate sector is going to face difficult time than it had already faced before COVID-19 outbreak. Changing customer priorities during and Post COVID-19 outbreak could be disastrous for Real estate sector. It is scared to estimate what the losses would be. Though we can estimate a potential loss of maybe Rs3 lakh crore on a conservative basis on an all India basis. It is a conservative figure.

Retail Sector

The Confederation of All India Traders estimates that the losses incurred by the retail trade of the country in the second half of March due to the COVID-19 pandemic were a massive USD 30 billion. The Indian retail sector comprising 70 million small medium and big traders employing 45 crore people, does a monthly business of approximately USD 70 billion. A host of international agencies have cut India's economic growth estimate for FY21 on concerns about the fallout of COVID-19 outbreak.

Some Estimates by International Agencies and Financial Institutes on Overall Indian Economy

1. As per World Bank estimates, India's economy is expected to grow 1.5 per cent to 2.8 per cent in 2020-21 fiscal which started on April 1. This will be the slowest growth rate recorded since the economic reforms of 1991.

2. Asian Development Bank (ADB) sees India's economic growth slipping to 4% in FY21

3. S&P Global Ratings has further slashedits GDP growth forecast for the country to3.5 per cent from a previous downgrade of5.2 per cent.

4. Fitch Ratings puts its estimate for India growth at 2 per cent while India Ratings & Research has revised its FY21 forecast to 3.6 per cent from 5.5 per cent earlier.

4. Moody's Investors Service has slashed its estimate of India's GDP growth during

the 2020 calendar year to 2.5 per cent, from an earlier estimate of 5.3 per cent and said the corona virus pandemic will cause unprecedented shock to the global economy.

5. Acuite Ratings believes there is a risk of a contraction of April-June (2020-21 fiscal) GDP to the extent of 5-6 per cent, with Q2 (July-September) also likely to post modest growth in a best-case scenario.

6. A Barclays research estimates India's loss of economic activity could be as high as \$234 billion in the lockdown period, resulting in zero per cent GDP growth this fiscal.

7. ICRA expects GDP to shrink by 1% in FY21.

8. Centrum Institutional Research have cut GDP estimates of INDIA for FY21 from 5.2 per cent to 3.1 per cent and believe that too will be back-ended,"

Conclusion

It is estimated the overall GDP growth for 2020-21 to be in the band of 1-3 per cent which takes into account a significant economic revival in the second half of the financial year. The extended lockdown is set to cost the Indian economy up to Rs 17.78 lakh crore and mount the woes of sectors such as travel and tourism, manufacturing, auto mobile sectors. The Centre's move to allow manufacturing across Special Economic Zones (SEZs), Export Oriented Units (EOUs) and units operating from rural areas is being seen as

part of the strategy for a gradual exit from the lockdown.

References

- i. Asian Development Bank (ADB) Report
- ii. Centrum Institutional Research Report
- *iii.* Report of Confederation of Indian Industries (CII)
- *iv.* Report of Commission for Agricultural Costs and Prices (CACP)
- v. S&P Global Ratings
- vi. World Bank estimates
- vii. India Today Report

A Study on Lessons Learnt for Mankind from the Novel Corona

virus Disease

Dr. Vinod N. Sayankar

Professor, Anekant Institute of Management Studies, Baramati vnsayankar@gmail.com

Abstract: Corona Virus Disease or COVID19 is a new virus disease was first found in Wuhan, China. The virus spread all over the world. Most of the countries were infected by this virus. Moreover all the countries are combating against this virus and are trying their best to curb the spread of COVID19 as much as possible. The World Health Organization (WHO) has declared it as a Pandemic. This virus disturbs the day today life of humans in entire world. In the past epidemics of viruses such as the Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome, the lessons from these epidemics lessons were learned globally. Currently, as a global pandemic, COVID-19 forcing the entire world to lockdown and poses major challenges. However, the disease has prepared humankind in facing such epidemics at present as well as in the future. Additionally it has also taught various lessons and implementing to prepare the world a better reality.

Keywords: Corona virus, World Health Organization, Severe Acute Respiratory Syndrome, lockdown, etc.

Introduction

A novel corona virus was first reported and identified in the province of Hubei, China in December 2019. As of 20 April 2020, a total of 24, 16,135 cases and 1, 65,939deaths have been detailed globally. Corona virus disease is an infectious disease caused by a newly discovered corona virus. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness. This can be infected to anybody, to an elder people, and cardiovascular disease. diabetes. chronic respiratory disease, and cancer problem people are more likely to develop serious illness. In order to prevent and minimize the spread the transmission is to aware the people about the COVID-19 virus regarding the disease it causes and how it spreads. Inform the people, the best practices to follow and government instructions. Peoples have to the utmost care so that it should spread. As of now there are no specific vaccines for COVID-19. However, there are many ongoing clinical trials evaluating potential treatments.

Objectives of the study

To study overview of Novel Corona virus Disease.

To study overview of other disease in the past.

To know the common symptoms of Novel Corona virus Disease.

To Analyse lessons learned by Health Care Sectors

Research Methodology

The research paper is a conceptual research, based on the secondary data sourced from various research journals and articles.

Theoretical background:

1. Overview of Novel Corona virus Disease.

Corona virus disease 2019 is an infectious disease caused by severe acute respiratory syndrome coronavirus. The disease was first recognized in December 2019 in Wuhan, the capital of China's Hubei province. It has since spread globally which was resulted in the ongoing 2019-20 corona virus pandemic. The first confirmed case identified in the month of November year 2019 at Hubei province, which was then an unknown corona virus traced back. Fever, cough, and shortness of breathier the common symptoms of this disease. Fatigue, muscle pain, diarrhea, sore throat, loss of smell, and abdominal pain are the other symptoms. The time from exposure to onset of symptoms is typically around five days however may range from two to fourteen days. While the

majority of cases result in mild symptoms, some progress to viral pneumonia and multi-organ failure. As of 21 April 2020, more than 2.47 million cases have been reported across 185 countries and territories, resulting in more than 170,000 deaths. More than 651,000 people have recovered.

The spread of this virus is primarily between people during close contact, often via small droplets produced by coughing, sneezing, or talking. These droplets are breathing out; they produced when generally fall to the ground or onto surfaces rather than remain in the air over long distances. This may also become infected to people by touching а contaminated surface and then touching their eyes, nose, or mouth. The virus can survive on surfaces for up to 72 hours. It is most contagious during the first three days after the onset of symptoms, although spread may be possible before symptoms appear and in later stages of the disease.

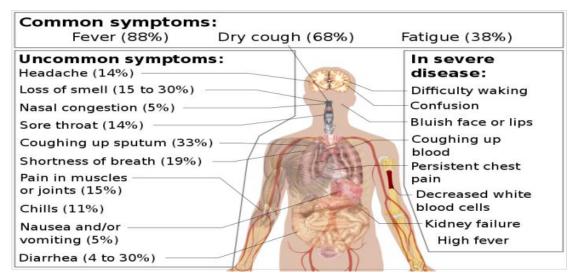
2. Common Symptoms of Novel Corona virus Disease.

The recommended measures to prevent this infection by following frequently hand wash by a soap or sanitizer, by maintaining physical distance from others, covering coughs and sneezes with a tissue or inner elbow, and keeping unwashed hands away from the face. Recommended the use of masks is for those who suspect they have the virus and their caregivers. Recommendations for mask use by the general public vary, with some authorities recommending against their use, some recommending their use, and others requiring their use. There is no vaccine or specific antiviral treatment for COVID-19 till now. The requirement of management which involves treatment of symptoms, isolation, supportive care and experimental measures. The World Health Organization (WHO) declared the 2019–20 corona virus outbreaks a Public Health Emergency of

International Concern (PHEIC) on 30 January 2020 and a pandemic on 11 March 2020. Local transmission of the disease has been recorded in most countries across all six WHO regions.

Common symptoms:

Common Symptoms	Percentage
Fever	88
Dry Cough	68
Fatigue	38



By supportive care, which may include fluid therapy, oxygen support, and supporting other affected vital organs, the people are managed. Those who suspect they carry the virus wear a simple face the CDC recommends mask. that. Extracorporeal membrane oxygenation (ECMO) has been used to address the issue of respiratory failure; however its benefits are still under consideration. A healthy lifestyle, personal hygiene and proper diet have been recommended to improve immunity. Those with mild symptoms at the early stage of infection, supportive treatments may be useful.

3. Overview of other Disease in The Past

Currently India is tackling the novel corona virus outbreak (COVID-19)

responsible for more than 7,000 deaths across the world. A similar outbreak in 1918 can be the basis of many vital lessons for the country. The 'Spanish Influenza' of 1918 has many parallels to the current outbreak, according to experts. It was initially noticed in military camps during World War I. The 'Spanish flu', as it was also known. When the disease emerged in Spain, the outbreak was reported with accuracy and was hence dubbed the Spanish Flu. The flu reached the shores of Mumbai then known as Bombay on May 1918.It was responsible for the deaths of around 10 to 20 million people in India: A fifth of the total number of 50 to 100 million deaths across the world. The severity of the disease in Mumbai led researchers to call it 'The Bombay Influenza' or 'The Bombay Fever'. "In one day alone, 6 October 1918, there were 768 registered deaths from influenza in Bombay city," wrote researcher David Arnold, in a paper titled Death and the Modern Empire: The 1918-19 Influenza Epidemic in India.

It was in two waves, The Bombay Fever came .The first wave affected children and elderly people. The second wave much more aggressive claimed the lives of people between the ages of 20 and 40.Those infected with the disease had very violent deaths. They coughed blood, bled from their ears and noses and suffered extremely painful body aches. Precautionary measures like self-isolation or self-quarantine were recommended to keep a check on the outbreak at that time. Similarly, the union and state governments were spurred into issuing several advisories and precautions on March 17, 2020 for citizens, including the closure of movie theatres. shopping malls. postponement of major cultural events and curbing inessential public gatherings.

The government also suspended issuing visas to foreigners. India must learn from China and South Korea and adopt two measures immediately. Large-scale gatherings should be banned and a massive information and awareness campaign on basic hygiene and social protection must be conducted.

4. Lessons Learned by Health Care Sectors

The health care sectors in tackling the conditions of this unpredicted calamity. It should be a major lesson to be learned from COVID-19 that is preparation is a key. In India hospitals are implementing disaster readiness and just-in-case scenario plans. Hospitals are stocking up on equipment and personal protective supplies, including gowns, eye protection and masks. While the risk of COVID-19 to the public is on the rise day by day. They

are not taking chances and are doing workouts for worst-case scenarios. Thus, hospitals are getting equipped by setting up quarantine centers, arranging for the extra beds in accommodating the patients. Also facilitating for infection control, ordering more medical supplies in advance, and organizing crossemergency departmental response committees.

Recommendations that India must build strong manufacturing bases for medicines and medical devices. Every time a health emergency challenges the world, the mask comes off. Even the best of healthcare systems struggle to cope with increasing numbers of patients during such times. India, on its part, see-sawed between stopping the export of masks, fearing supplies may fall short internally, to eventually allowing exports. However this has led to a situation where some manufacturers have stopped taking calls, unable to manage the demand from other countries. Ground reports further suggest shortages of products like digital and contact-fewer thermometers, used in screening people for infection at entry points into the country.

Several lessons were learned globally because of COVID 19. Some of the vital lesson is:

Lesson 1: Leveraging Technology

To adopt QR codes for medical service, Hangzhou, the headquarters of tech giant Alibaba, was the first Chinese city. The local city government asked citizens to register themselves with their names, telephone number and social security card on an online system that rated infection risks as red, yellow or green based on a self-reported survey about recent travel with infected history, contact people/people from Wuhan and prevailing Government is symptoms. using technology for contacting people on various media. Government, private sector officials, teachers, students are using the latest technology in their respective areas.

Lesson 2: Complete nationwide lockdown

First time China imposed an extremely harsh lockdown in the areas most affected, in its effort to stop the spread of Covid-19. Everyone who entered residential communities had their temperature taken by a government volunteer. Shoes, the biggest source of infection. were disinfected using bleach solution before entering the gates and, at the height of quarantine, one needed a ration ticket to go outside. India has chosen to go down a similar path with complete nationwide

lockdown. The emergency services were open during lockdown. Special timings were given for essential services.

Lesson 3: Free testing and treatment

China did not make people pay for tests and treatments. The risk of charging for testing and treatment is that patients with early and mild-symptoms will not test, which could lead to further spread of the disease, as appropriate steps might not be taken. It would be like flying blind.

For example, while both China and India imposed a lockdown, India could have prepared better to strengthen supply chains, and maintain availability of essential commodities.

Lesson 4: Mobilizing society and redistributing resources

Using their "signature red" propaganda banners, China was able to convey the seriousness of the disease to its people, and enlist them in the fight against the pandemic. Through messages such as "to eat together is to seek death, to visit relatives is to harm them" and "staying indoors in your contribution to the party and the government", they were successfully able to sensitize the masses to stay indoors.

The corona virus outbreak, which was earlier supposed to be a crisis within China, has now reached more than 165 countries and caused more than 8,000 deaths including in the Indian subcontinent. Henk Bekedam, the WHO Representative to India, was quoted as saying that the "commitment of the Indian government from the top level has been enormous, and very impressive".

Discussion:

The Indian government was quick to activate its health management system and issue necessary travel advisories. Many state governments followed suit, leading to the early detection and isolation of infected patients. The state machinery led by the Ministry of Health and other related agencies were prompt enough to issue 'valid precautionary guidelines' to keep the public well informed and prepared. The action and well-coordinated plans which include careful airport checking, active health laboratories and the quick establishment of quarantine facilities across the country. The prevention is better than cure model is the strategy of the government. Indian efforts have remained completely aligned to guidelines from the WHO, which has been monitoring the crisis since it began and advocating the aggressive testing, tracking and isolation of as many Covid-19 cases as possible. Moreover it has also taught various lessons and implementing to prepare the world a better reality.

References

- i. https://qz.com/india/1824059/indiashouldnt-respond-to-coronavirus-withonly-lockdowns/
- *ii.* Accessed on 22/04/2020
- iii. https://www.downtoearth.org.in/video/hea
 lth/how-1918-bombay-influenza-carries lessons-india-must-learn-to-tackle-novel coronavirus-69797Accessed on
 22/04/2020
- iv. https://www.indiatoday.in/newsanalysis/story/coronavirus-india-

government-response-1657502-2020-03-19Accessed on 22/04/2020

- v. https://en.wikipedia.org/wiki/Impact_of_th e_2019%E2%80%9320_coronavirus_pan demic_on_educationAccessed on 21/04/2020
- vi. https://en.wikipedia.org/wiki/Coronavirus _disease_2019Accessed on 21/04/2020
- vii. https://www.thehindubusinessline.com/spe cials/pulse/health-security-is-key-lessonfrom-covid-19crisis/article30823528.eceAccessed on 21/04/2020

Testing Times: Radical Changes or Colossal Challenges for Virtual Learning

Smita Shyamsunder Khatri

Assistant Professor Anekant Institute of Management Studies (AIMS), Baramati smitakhatri22@gmail.com

Abstract: World is fundamentally unpredictable —life feels more fragile than it once did. Around half of the world's population is on lockdown in an attempt to stop the spread of 'Contagion', a public health emergency that has claimed thousands of lives and sparked fears of the worst global recession since the Great Depression. This is much more than a health crisis. The world has really come to a standstill. It can be said that it has brought a radical change & also pose innumerable colossal challenges before us, be it an industry or people in general. One must agree with this fact that in a developing nation like India, 'Future is Digital' and this will be the 'New Normal.' Though in developed countries, the 'New Normal' may be 'Old Normal'; but a sea change is likely to appear particularly in Indian Education System. The current pandemic has resulted in schools shut all across the world. Globally, over 1.2 billion children are out of the classroom. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. This is an ideal time to experiment and deploy new tools to make education delivery meaningful to students who can't go to campuses. It's a chance to be more efficient and productive while developing new and improved professional skills/knowledge through online learning and assessment. This article deals with this 'New Normal' virtual learning; change that occurred & challenges posed for Indian students & teachers.

Keywords: Contagion, Sea Change, New Normal, Virtual Classroom, Change & Challenges, etc.

Introduction:

With the sudden shift away from the classroom in many parts of the globe, some are wondering whether the adoption of online learning will continue to persist post-pandemic, and how such a shift would impact the worldwide education market. Even before this pandemic, there was already high growth and adoption in education technology, with global edtech investments reaching US\$18.66 billion in 2019 and the overall market for online education projected to reach \$350 Billion by 2025. Whether it is language apps, virtual tutoring, video conferencing tools, or online learning software, there has been a significant surge in usage since arrival of 'Contagion'.

In response to significant demand, many online learning platforms are offering free access to their services, including platforms Bangalore-based like BYJU'S. a educational technology and online tutoring firm founded in 2011, which is now the world's most highly valued edtech company. Since announcing free live classes on its Think and Learn app, BYJU's has seen a 200% increase in the number of new students using its product, according to Mrinal Mohit, the company's Chief Operating Officer. While some believe that the unplanned and rapid move to online learning - with no training, insufficient bandwidth, and little preparation - will result in a poor user experience that is unconducive to sustained growth, others believe that a new hybrid model of education will emerge, with significant benefits.

Changes in Indian Education due to Contagion:

1. Closure accelerated the development of the online learning environments.

2. Tested the readiness of centers to deal with a crisis that requires online and remote

Measures.

3. Classroom learning to remote learning.

4. Changing pedagogy in digital education.

5. Parents are learning new digital ways to equally play a doting role of a teacher for their wards.

Major Challenges Posed for Indian Students & Teachers:

1. For professionals across industries it has been an easier transition as many of them work on

Their laptops and smart devices even in office. They can simply plug in at homes now. But

Students and teachers have had to make far bigger adjustments as teaching & learning has

Always been in classrooms which they can't go to now.

2. Some students & teachers in remote areas without reliable internet access and/or technology struggle to participate in digital teaching & learning thereby widening the digital divide.

3. The effectiveness of online learning varies amongst age groups & call for a 'Structured Environment' especially for kids.

4. To adapt digital teaching, teachers have to undergo online training programs & equip them with latest collaboration tools to give the best to their students. But the mindset of some of the teachers could challenge them in adapting this kind of learning.

5. Rigid mindset of teachers as well as students can make them redundant when the world is changing so fast & facing such a grim situation.

Discussion:

"There is no education like adversity." (Benjamin Disraeli). The current pandemic is no different than this thought. True to fact is a change posing colossal challenges that can be welcomed with a flexible & changed mindset. Trainers are being trained, teachers are learning, students are acquainting with this change and parents struggling and juggling between their office assignments, ward's online classes/assignments along with household chores. Any change is good if it brings out better performance out of an individual. This change due to the current pandemic is also a challenge which needs to be dealt with utmost persistence.

To overcome these challenges, Government of India, state governments and private players have had tried to come up with some of the solutions and have regularly been publishing information on various initiatives undertaken by ministries like MHRD, Department of Technical Education, NCERT and others to support and benefit students and other stakeholders of education sector.

A few of the initiatives are SWAYAM online courses for teachers, UG/PG MOOCs for non-technology courses, e-PG Pathshala or e-content containing modules on social science, arts, fine arts, natural and mathematical science, CEC-UGC YouTube channel, Vidwan – a database of experts who provide information to peers and prospective collaborators, NEAT - an initiative by AICTE based on the PPP model to enhance the employability skill among students, in collaboration with Education Technology Companies and Digital Library (NDL), National а repository of learning resources with single window facility. Many noteworthy initiatives have been taken up like Spoken Tutorial, Free and Open Source Software for Education (FOSSEE), e-Yantra, Google Classroom and so on.

It is fact that the government of India as well state governments, through their various ministries/departments, have created infrastructure to deliver e-These include education. National Knowledge Network (NKN), National Project on Technology Enhanced Learning (NPTEL), National Mission on Education through Information and Communication (NMEICT), National Technology Academic Depository (NAD), among others. All these enhance our ability to easily with institutions connect and enhance our access to learning resources. Pandemic has only accelerated adoption of technologies to deliver education.

Conclusion:

Digital India vision of the government is emerging as a vital instrument for solving the present crisis due to 'Contagion'. In this *ii*. alarming situation, adapting this change is the key to success. The occasion is to rise *iii*. up and evolve much stronger than before.

Bibliography

i. https://www.financialexpress.com/econ omy/indias-covid-19-crisis-responsechallenges-are-greater-getting-moneyto-individuals-and-firms-is-not-aseasy/1917479/ https://economictimes.indiatimes.com/b logs/et-commentary/the-challenge-ofcovid19-and-the-great-india-lockdown/ https://www.weforum.org/agenda/2020/ 04/coronavirus-education-globalcovid19-online-digital-learning/ https://economictimes.indiatimes.com/b logs/et-commentary/covid-19-creatinga-paradigm-shift-in-indias-educationsystem/

v. https://www.techrepublic.com/article/de loitte-highlights-top-9-challenges-forenterprises-during-covid-19-crisis/

iv.

Indians and COVID-19

Dr Tanaji Vitthal Chavan

Associate Professor, Anekant Institute of Management Studies, Baramati tanaji.chavan@aimsbaramati.org,

Abstract: Entire World is facing the trouble due to Pandemic situation. The natural living is rarely possible in this century. We human beings are part of nature and adoptability is the major characteristic of living animals. We needs to be a part nature, live in the nature, and then we can sure the survival of human being as per the law of Einstein "Survival of fittest"

Keywords: COVID 19, Corona Virus, World, Impact, etc.

Introduction

In the upcoming years the situation will be more uncertain. Every year we must be ready for new challenge and our well being should not be too much depends on the artificial things. The natural way of living with limited wants will lead to stay happier.

Review of Literature

2019, Wuhan, Hubei In December, province, China, became the centre of an outbreak of pneumonia of unknown cause, which raised intense attention not only within China but internationally. Chinese an immediate health authorities did investigation to characterize and control the disease, including isolation of people suspected to have the disease, close monitoring of contacts, epidemiological and clinical data collection from patients, development of diagnostic and and treatment procedures. By Jan 7, 2020, Chinese scientists had isolated a novel

corona virus (CoV) from patients in Wuhan (Wang et al. 2020).

The economic shutdown in China cleared the map of China viewed from the sky, the halt in travel, counseled first within the country, then internationally, was too late to stop the diffusion outside of China, and meanwhile has destroyed enterprises such as Flybe, while changing the economy of airlines and airports the world over. Hospitals and medical structures, in China, then Korea, Italy and France, abound with people either infected, or afraid of being so. The stock of respiratory machines has never been used so prominently, while facial masks, visors of all sorts and handkerchiefs, wipes and tissues have never been expended more often, and are even depleted in certain regions. (Min Hua Zheng, Luigi Boni 2020)

With dealerships shut and uncertainty over when the walk-in retail will open up, embattled companies have started to roll out 'lockdown offers' to prospective customers, valid only while the movement restrictions are in place. The offers are on luxury products such as watches, cars and shoes, just as many other players also join the 'lockdown bandwagon'.

The rollout of the offers makes more sense considering that even the big online retail giants such as Flipkart and Amazon are barred from selling the so-called 'nonessential' products, which basically prohibits the sale of nonfood and nonmedicine goods. The offers allow you to pre-book, and then make the full payment and take deliveries once the lockdown is lifted.

Ethos Watch Boutiques, a luxury watch retailer, is offering discounts of up to 50% on high-end watches. So, a Rs 8 lakh watch can now be bought for only Rs 4 lakh by paying half of the discounted price upfront. Similarly, BMW retailers in the national capital are offering a flat cash discount of Rs 2 lakh across most of the line-up to attract buyers, along with a special service package worth Rs 1.25 lakh..(TNN 2020a) The United Nations' main labour body again raised its prediction of job losses due to the coronavirus pandemic, estimating the equivalent of 305 million full-time jobs could be lost in the second quarter alone.

The International Labor Organization says the expansion of longer lockdown measures has underpinned the increase from its previous estimate of losses 195 million fulltime job equivalents -- based on an average 48-hour work week -- in the current quarter.

The agency, which unites business, labour groups and governments, estimated how many work hours are likely to be lost, and calculated how many full-time jobs that would make.

The ILO also projects that 1.6 billion workers in the "informal economy," which includes work without proper contracts or oversight by government regulation and taxes, "stand in immediate danger of having their livelihoods destroyed." (AP 2020)

The government has begun consultations with stakeholders on ways to step up foreign investment into the country, with commerce and industry minister launching discussions with investment bankers, consulting agencies and law firms.

While the ministry was already engaged in a dialogue with potential investors, the efforts had slowed down due to the corona pandemic and virus have gained momentum over the last few days after Prime Minister repeated calls to focus on domestic production. Besides, companies also looking to diversify their are production bases beyond China, which had become the mainstay for many global corporations.

The focus will be manifold. For instance, one approach will be to focus on areas where India has competitive strengths, such as textiles and auto parts, and scale them through more investments, especially from international companies, so that they can develop local facilities that meet international standards.

The other approach is to look at products, where large imports are taking place, and try to substitute them through domestic production, something that the government has been trying to do but has seen little gains so far. This will mean greater attention to sectors such as electronics and defense, which are large items on India's import bill.

A list of so-called champion sectors has been prepared, which can be among the focus areas. A third strategy is to get Indian MSMEs to scale up and an attempt is being made to identify some of the areas, where it ispossible to do so. But policy constraints such as investment caps are seen to be hobbling the plan.

A source engaged with the deliberations, however, said these are initial consultations as companies are currently focused on battling the corona virus pandemic, with many of them trying to resurrect their existing operations and also looking for liquidity.

One of the concerns for the government is the inability of local industry to build Brand India, which is recognized worldwide. This is seen to be crucial to attract international investors. (TNN 2020b)

Findings

As per the review of literature some of the findings are as follows:

- Government is doing well to control the spread of disease.
- Corporate are also agree for working aligned with mission of government.
- There is high chance to face situation of job cuts in the various sector.
- 4. The informal sectors will suffer due to disturbance of supply chain.
- 5. Farm sector has to face the challenge for demand and supply equilibrium.
- 6. There is high profanity of less recruitment in the market.
- Unemployment and inflation will be the biggest challenges for all Indians.

Conclusion

The government is doing effort to recover the situation, but there is responsibility of each constituent to be a part of nation building. Each has to think of others, sensitivity towards the others will lead to stabilize the satiation. The natural living with limited wants is the need of era. Finally the most thing matters in the life is the peace of mind

Bibliography

- i. AP. 2020. "Coronavirus : ILO Estimates 305 Million Full-Time Jobs Could Be Lost." Apr 29, 2020, 2020.
- Min Hua Zheng, Luigi Boni, Abe
 Fingerhut. 2020. "Minimally Invasive
 Surgery and the Novel Coronavirus

Outbreak: Lessons Learned in China and Italy." Annals of Surgery 6–9.

- iii. TNN. 2020a. "Companies Lure Luxe Buyers with 'Lockdown Offers." Apr 30, 2020, 7–8.
- *iv.* TNN. 2020b. "Govt Charts Plan to Boost FDI Flows." The Times Of INdia, Apr 30.
- wang, Chen, Peter W. Horby, Frederick G. Hayden, and George F. Gao. 2020. "A Novel Coronavirus Outbreak of Global Health Concern." The Lancet 395(10223):470–73.

The Lockdown Effect on Jobs in India

Dr.Pravin V. Yadav

Assistant Professor Anekant Education Society's Anekant Institute of Management Studies, Baramati, Dist-Pune Email: - pravin.yadav@aimsbaramati.org

Abstract: The Covid-19 pandemic has impacted economies around the world like no other event that experts can recollect since the Great Depression. Some of the strongest economies around the globe are struggling to cope with the situation in the wake of an unprecedented demand shock and a shutdown of all key economic activities that drive growth. In the United States, the world's most powerful economy, a massive number of jobs losses have been reported due to the Covid-19 pandemic. The situation is so bad that US President Donald Trump on Thursday said the "US has been attacked and *Covid-19 is not just any flu". India, too, has been hit hard. Global rating agency today* slashed India's GDP projection for FY21 to 0.8 per cent. The Covid-19 pandemic has been a huge blow to India, especially since many sectors were already facing a crisis when the virus storm hit. The virus not only accelerated the crisis but also ended the good run that some sectors were enjoying. Adding to the worries in a steep demand shock that experts say classified as a long-term worry, citing uncertainty in the postpandemic landscape. If not all, key sectors that make up a larger portion of India's GDP have been taken completely or partially out of action. Reports of job losses, unpaid leaves and other concerns are being reported on a daily basis from such sectors. CMIE data shows how unemployment in India spiked in the month of April. The situation is expected to worsen if the situation shows no improvement over the next few months.

Keywords: lockdown, jobs, India, GDP, etc.

Introduction:

Lockdown Effect on Jobs in India:

India's unemployment rate could have climbed to more than 20% as the economy lost jobs after a nationwide lockdown took effect in the last week of March, according to a survey by the Center for Monitoring Indian Economy Pvt. The jobless rate was 23.4% for the week ended April 5 based on a sample size of 9,429 observations, Mahesh Visa, the chief executive officer of CMIE, wrote. The private sector research group relied on telephonic interviews after suspending their regular survey in the last week of March. For the full month of March, CMIE estimated the jobless rate to be 8.7% compared with 7.8% in February. "Labour statistics for March 2020 are worrisome," Vyas said. "These are very big variations and are subject to the usual sampling errors. It, therefore, may not be very wise to focus on the magnitude of those movements but on the certainty of the movements." It is evident that there was a significant fall in employment and there is a simultaneous significant increase in unemployment in March 2020, according to CMIE, whose usual sample size for monthly estimates is more than 117,000 individuals.

In the two weeks following the lockdown that began on March 24, the estimated share of the unemployed in India has reached a peak. While urban workers are the most hit, rural workers too recorded significant iob losses. The labour participation rate (employed plus those searching for jobs) also significantly decreased. Fewer people are actively searching for jobs than before, and of them, more now are unemployed.

Joblessness

The overall unemployment rate (represented by the blue line, left axis) in India, as measured by The Centre for Monitoring Indian Economy (CMIE*), showed a sharp increase in the two weeks following the lockdown (measured on Mar. 29 and Apr. 5). Notably, the overall labour participation rate (represented by the yellow line, right axis) recorded a drastic decrease to 36.1% on April 5 from about 42% two weeks back.

Urban workers most hit

The migrant exodus that followed the lockdown resulted in the urban unemployment rate (represented by the blue line in the following chart) crossing the 30% mark by April 5. While the effect was relatively lower in rural areas, the unemployment rate (represented by the red line) crossed the 20% mark. Since 2016, the rural rate crossed the 12% mark only once (Jan. 31, 2016).

Most States hit

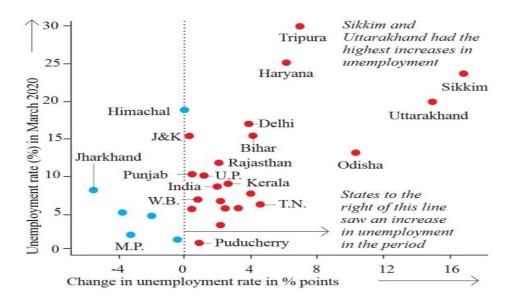
The graph plots the overall unemployment rate as of March 2020 (vertical axis) against the change since March 2019 figures (horizontal axis) across 28 States/U.T.s for which the numbers were available.

Which States were the most affected?

The State-wise numbers are for the entire month of March 2020. As the lockdown was announced on March 24, they do not capture the picture fully unlike weekly or daily charts.

*These data were sourced from the Consumer Pyramids Household Survey conducted by CMIE. The survey was conducted using telephonic interviews (albeit with a reduced sample size).

CMIE report says India's urban unemployment rate soars to 30.9% even as overall rate rises to 23.4%, indicating covid-19's impact on the economy. Early estimates of jobs data indicate that the corona virus effect may have left a devastating impact on the economy, sending urban unemployment rate soaring to 30.9%. Overall unemployment rose to 23.4%.The figures, based on the Centre for Monitoring Indian Economy's weekly tracker survey, have held steady for two weeks now. The latest data for the week ended 5 April was released on Monday evening. CMIE's estimates on unemployment shot up from 8.4% in mid-March to the current 23%.Based on a rough calculation, about 50 million people might have lost jobs in just two weeks of the lockdown, said PronabSen, a former chief statistician of India."Since some may have just been sent home for now, the actual scope of unemployment may be even higher and may show up a little later," he added.



India does not have reliable, official highfrequency data on jobs. While CMIE's jobs data has been the centre of a political slugfest in the past, with government officials repeatedly questioning the survey's methodology, Sen. said that it doesn't matter now because what we are interested in is "capturing change". "This unemployment number) is (the also somewhat expected," said Himanshu,

associate professor of economics at the Jawaharlal Nehru University, Delhi. Rampant job losses have gripped many other economies, too, in the face of the pandemic. Roughly 10 million US workers filed unemployment claims in the past fortnight, for instance. "What happens after the lockdown is removed is more important," said Himanshu, adding: "My hunch is, even then, unemployment will remain high."Nearly one-third of the workforce is also made of casual workers, who may not have much of a safety net if the economic flux continues. Since those without incomes will begin to consume less and less, it may leave a more lasting effect on the economy if left unaddressed, Himanshu said. "There might be second and third-order impacts (on firms and governments). The government needs to step in and help the economy bounce back after the lockdown. People need income," he added. The CMIE's jobs survey is based on a panel, which essentially means observations are derived by following a sample of people (a panel) over time at a regular frequency. The latest weekly survey had about 9,000 observations (or participants). Since two weekly surveys seem to have indicated roughly the same level of unemployment (about 23%), the numbers are reliable, said Mahesh Vyas, managing director and chief executive of CMIE. "It's a huge spike. We didn't expect it to be this high," he said.

Around 80,000 jobs expected to be cut by various retailers due to the ongoing corona

virus pandemic, according to a survey by RAI.The Retailers industry body Association of India (RAI) had conducted a survey of 768 retailers, which employ 3,92,963 people across India, to gauge their view on the impact of Covid-19 on their business and manpower."Small retailers are expecting to lay-off 30 per cent of their manpower going forward, this number falls to 12 per cent for medium (sized) retailers and 5 per cent for large retailers. On the whole, retailers who responded to the survey expect lay-off of about 20 per cent of their manpower," RAI said. The expectation of retrenchment of 20 per cent of employees by those featured in the survey amounts 78,592 people. to According to the industry body, small retailers featured in the survey employ less than 100 persons and accounted for 65 per cent of the respondents. Medium retailers have 100-1,000 employees making up for 24 per cent of respondents, while large retailers employ over 1,000 people and accounted for 11 per cent of the

Hiring in March 2020:

Sector	Hiring in March 2020
Hotels, restaurants, travel, airlines etc.	-56%
Retail	-50%
Automobiles and ancillaries	-38%
Pharmaceuticals	-26%
Insurance	-11%
Software	-9%
Banking and financial services	-9%

respondents.

Conclusion:

100 million and more Indian jobs will be at risk during and after the COVID-19 lockdown stage. CII, a leading industry association, asked industry bosses how they felt things would pan out-of the 200 CEOs surveyed one-third expected job losses of 15-30 per cent in their respective sectors. Another 47 per cent felt the figures might be slightly less than 15 per cent. But translated into actual numbers, the scenario still seems scary. Tot up the estimates of those likely to be unemployed in the various sectors, and it's a horror movie coming to a screen—sorry, office—near vou. From end-March, most companies have resorted to one of these three decisions—sacking people. asking employees to go on indefinite leave without pay, and slashing salaries by as much as 85 per cent.

References:

i. https://www.businessinsider.in/policy/econ omy/news/india-unemployment-job-lossesat-manycompanies/articleshow/75130701.cms?utm _source=contentofinterest&utm_medium=t ext&utm_campaign=cppst

- ii. https://economictimes.indiatimes.com/jobs/ india-jobless-rate-swells-above-23-amidcoronavirus-lockdown-survey shows/articleshow/75023958.cms?utm_sou rce=contentofinterest&utm_medium=text& utm_campaign=cppst
- iii. https://www.thehindu.com/data/data-thelockdown-effect-on-jobs-inindia/article31284460.ece
- iv. https://www.livemint.com/news/india/covid
 -19-lockdown-impact-unemployment-raterises-to-23-4-11586202041180.html
- v. https://www.thehindubusinessline.com/eco nomy/coronavirus-impact-retailers-expectaround-80000-job-losses-due-to-lockdownsays-survey/article31280985.ece
- vi. https://www.indiatoday.in/business/story/c oronavirus-5-indian-sectors-that-needurgent-help-as-virus-ravages-economy-1670099-2020-04-23
- vii. https://www.outlookindia.com/magazine/st ory/business-news-100-million-and-moreindian-jobs-are-at-risk-after-covid-19lockdown-is-your-job-safe/303094

COVID-19 Lockdown: Repercussion on Migrant Workers

Dr. P. K. Sinha

Senior Academician and Writer, Pune Pradipsinha48@gmail.com

Abstract: The challenges faced by the migrant labourers are more complex. An analysis of this migrating pattern makes it clear that though the migrant labourers contribute more to India's economy, they are not in a protective and prosperous zone. The Central and State Governments have to provide adequate measures to safeguard the interests of the migrant labourers, and derive context-specific solutions . A concerted national policy to facilitate and promote the wellbeing and a system that ensures access to entitlements and basic work conditions is highly recommended.

Keywords: Repercussion, Lockdown, Migrant, Workers, etc.

Introduction

Migration is a complex phenomenon said to be caused by a multiplicity of factors, sometimes bifurcated in 'push' and 'pull' aspects. There is a need to differentiate 'migration' from 'displacement'.

'Migration' may include both voluntary movement and forced of people. 'Displacement' implies the use of force or generation of conditions that displaces people from their source of origin. Political crisis and ethnic clashes, reasons of development or natural or man - made disasters, people are forced to flee their homes to new destinations. So, while migration implies both voluntary and forced migrants and includes the element of 'choice' or pull factors alongside the possibility of 'force' or push factors, displacement is solely dependent on the

push factors. It takes away the voluntarism from the individual and the collective.

It is also necessary and inevitable in this study to differentiate 'Labour Migration' from the General concept of migration. Migration is 'any movement of people from one permanent residence to another more or less permanent residence for a substantial of time'. The period crossing of administrative boundaries, socio - cultural boundaries and socio _ economic boundaries are normally involved in migration. In its most general sense 'migration' is ordinarily defined as the relatively permanent movement of persons over a significant distance", Change of residence is one criterion of migration, but every change of residence cannot be called migration.

A forced change of residence is evacuation and not migration. 'Nomadism' involves change of residence but it is of nomadic nature and not permanent. Statisticians, demographers, geographers and administrators stick to the criterion of crossing of administrative boundaries. All types of migration like international, Inter -State,Intra-State, etcrefers to administrative boundaries.

Labour migration may be defined as form of Labour mobility towards districts or states or outside where industry and employment are expanding. The term 'mobility' is perhaps the most general concept in migration studies. It includes all kinds of territorial movements, whether temporary or permanent. "Workers, who move about systematically, seeking and engaging in seasonal temporary employment without becoming residents of the areas in which they work, are called 'Migrant Labourers'.

In international scenario, Labour migration is generally defined as a cross border movement for the purposes of employment in a foreign country. However, there is no universally accepted definition of labour migration. The term "economic migrant" is sometimes used as an equivalent to the term labour migrant or migrant worker. However, the two concepts may cover different categories. The term "labour migrant" can be used restrictively to only cover movement for the purpose of employment, while "economic migrant" can be used either in a narrow sense, which includes only movement for the purpose of employment, or in a broader sense that includes persons entering a State to perform other types of economic activities such as investors or business travelers. India has two broad groups of migrant labourers one that migrates to temporarily work and another that overseas migrates domestically seasonal on а and employment available basis.

Migration of workers has become a social, economic and universal phenomenon in modern times. Due to the expansion of transport and communication, it has become a part of worldwide process of urbanization and industrialization. Industrialization widens the gap between rural and urban areas, including a shift of the work force towards industrializing areas. The collapse of rural livelihood in many parts of India also forces the workers to migrate from their native places in search of employment.

Migration of workers can be classified into two types: 'In-Migration' and 'Out-Migration'. 'In-Migration' means migration with in a country whereas 'Out Migration' means migrating out of the country. While the former is for livelihood the later is for economic development. 'In-Migration' is also called as internal migration. Again 'InMigration' is sub classified into 'Inter-State Migration' and Intra-State Migration'. Inter-State Migration refers to migration from one State to another State for earning livelihood. Intra-State Migration refers to migration within a State. 'Out Migration' is also called as International Migration or Cross Border Migration. 'Immigration' and 'Emigration' are to characteristic features of 'Out-Migration'. They mean, 'Moving out of the place of origin and entering the place of destination'. The factors causing migration can be divided into two groups of factors; push and pull factors. Push factors are things that are unfavourable about the area that one lives in and pull factors are things that attract one to another area. The Inter – State migration of workers is a serious problem for any developing country like India.

Migration of labour started in India during the period of British colonial rule. It was aimed at meeting the requirements of capitalist's development both in India and abroad. The labour was moved from the hinterland to the sites of mining, plantation and manufaftories. It was recruited from the rural areas and regulated in such a manner that women and children remained in the villages while males migrated to the modern sector. (Gill, 1998).

Generally, there are two basic factors of migration: i) Distance ii) Duration.

From the distance point of view, migration can be classified under four categories: i) Rural to Rural ii) Rural to Urban iii) Urban to Rural iv) Urban to Urban.

Besides, migration can be divided into following categories: i) Intra-district, ii) Inter-district iii) Intra-state iv) Interstate v) National and International.

From the duration point of view migration can be studied under three categories: i) Casual-temporary ii) Periodic- seasonal iii) Permanent.

Statement of the Problem

The problems faced by Inter – State Migrant Workers have many facets to deal with sociological, psychological, economical, political and legal. Migrant worker is also seasonal worker and a regular feature of the unorganised sector. Therefore, the migrant workers don't always enjoy formal employer - employee relationship in their workplace.The important key questions, we need to seek answers like, (i) who are the migrant workers? (ii) Why do they migrate from their native places? (i) Where do they migrate? What is the status of migrant labour in respect of labour standards in India? Do they know about their labour rights? The present article attempts to put the above concerns in a logical perspective.

Significance of the Study

Inter - State migration in India was in existence historically but in the context of urbanization, Industrialization and it globalization assumes special significance. Inter - State migration of workers has drawn considerable attention after the initiation of economic reforms. Economic. Social. Political and Geographical push and pull factors are responsible for the movement of workers within the nation and across the nations. In modern age, in order to earn more and improve the standard of living, the importance of migration of workers within the country is increasing day by day. The development policies by all the governments on one side and lack of sincerity on the part of the rulers and policy makers, lack of effective legislations on the other since independence have accelerated the problem of migrant workers.

The policy makers have brought out much labour legislations including the legislation pertaining to Inter – State migrant workers conscientiously to improve the conditions of Inter – State migrant workers. The Inter – State Migrant Workmen Legislation aims at protecting the rights and interests of migrant workers who though moves from their 'home state' to 'host state' to seek conducive employment, yet they suffer continuously. The provisions of the various labour laws are not being observed in their case and they are subjected to various malpractices. Majority of the Inter – State migrant have not been benefited by the protective legislation framed by the policy makers. The policy makers, the government failed to prevent and eliminate all forms of malpractices and exploitation prevailing on Inter – State migrant workers. The issues and problems relating to law on inter – State migrant workers have not gained much attention.

No adequate statistical information on migrant workers, their issues, level of access to legal rights and protection and information with regard to their socio – economic background are available.

In this backdrop, and in the context of present lockdown, the present study will make an useful attempt to address the issues and identify the problems of inter – state migrant workers comprehensively byremedial measures and suitable recommendations.

- (i) The study has covered the literature on migration of workers and by the reporters highlighting human tragedy relating to Migrant workers during current lockdown.
- (ii) The study is an attempt to identify and understand the issues and problems of inter – state migrant workers.

(iii)The findings presented in the study indeed present effective guidelines for the policy conceivers, policy makers and policy executors and all those who are interested in this field of research.

Review of Literature

Summary of review of numerous studies made on labour and migration in India

* Migrants form the largest part of India's vast unorganized work sector. Their entry into the labour markets is marked with several endemic disadvantages. Devoid of critical skills, information and bargaining power, migrant workers often get caught in exploitative labour arrangements that forces them to work in low-end, low-value, hazardous work. Lack of identity and legal protection accentuates this problem. The hardships of migrant workers are especially magnified when state boundaries are crossed and the "source" distance between the and "destination" increases. Migrants can also become easy victims of identity politics and parochialism.

*The construction industry is one of India's largest employers. Thousands of construction workers who have to build the new apartments and offices live in squalor in roadside tents that sit uneasily among the city's new glamour. They are migrants from the decimated agricultural sector; escaping from poverty and disease at home they are sucked into a labour economy that is characterised by exploitative labour practices, unsafe working environments, and inhuman living conditions with little access to basic amenities and almost complete social exclusion. They have little or no work security and their income varies according to seasonal or other fluctuations in the demand for labour.

*India needs to address concerns of migrant workers

According to UN General Secretary, Ban Ki-moon statement "Migration is an expression of the human aspiration for dignity, safety and a better future. It is part of the social fabric, part of our very makeup as a human family".

After the Lockdown was announced reporters highlighted on one common human tragedy relating to Migrant workerswhich reads as below:

Mr Modi announced the lockdown with barely four hours' notice. The decision unleashed chaos that India is still struggling to deal with.

In the absence of work, many migrant workers are now dependent on food handouts from governments or charities for survival- some reduced to begging. Under lockdown, well-off Indians isolate indoors, work from home and get groceries delivered.

But outside their windows, it's a different story: Poor laborers amass in the streets, hungry and homeless.

- (i) Migrant workers and their family members line up outside a New Delhi bus terminal hoping to board a bus for their villages. Millions have lost their ability to earn an income because of the governmentimposed lockdown aimed at limiting the spread of the coronavirus.
- (ii) Another tragic fallout that has been reported is about the daily wage workers from Pune, Mumbai, Delhi, etc., resorting desperately to a long and uncertain walk back home, aiming to reach their native place hundreds of kilometres.
- (iii)"The staying power of India's poor is very, very short. People like casual laborers, rickshaw pullers and migrant workers are basically living from hand to mouth at the best of times," Jean Dreze, a Belgian-born Indian economist, narrated in a telephonic phonic interview from his base in the eastern Indian state of Jharkhand. "Now suddenly overnight they are

told that they have to spend 21 days inside their homes? Naturally, many of them are already running out of food."

Scope of the present study

The present study relates to long pending Problems of Migrant workers which have come into focus due to present lockdown conditions.The author has attempted to address the reasons for the present conditions of the migrated workers and how can they be solved.

Method of data collection

(i)Observations madeby self and colleagues on the situation.

(ii) Secondary date based on the report by the reporters during the present lockdown and studies made on migrant labour in India

Limitations of the study

- (i) It is the personal opinion of the researcher who has got vide experience in various corporates in four sates
- (ii) (ii) Time constraint.

Key Findings

1.Poverty, Lack of employment and low wages are the three major socio - economic key factors leading to migration of workers from their Home- state. 2.Law of Inter –state migration is not adequate enough to protect the inter-state migrant workers

3. Inter-state migrant workers have no awareness / knowledge about labour laws applicable to them.and the benefits listed therein

4.Settlement initiatives of migrant workers by NGOs and other organizationsthat take care of many unemployed labourers from northern states such as YUVA or Aajeevika Bureau that have been working with these labour settlements.

5.Corporate India employing a large number of migrant labourers, has been doing its bit to provide shelter and other amenities as part of their corporate social responsibility.

Given below are the initiatives taken by corporates during the critical period of lockdown

(i)Construction giant Larsen & Toubro Ltd said it is taking care of food, accommodation and wage requirement of its 160,000 migrant workers and has allocated ₹500 crore per month towards expenses.

(ii)Godrej group, which runs Godrej Properties Ltd, said it is particularly concerned about the plight of migrant workers. "Godrej has ensured that the company's project sites across eight cities are being sanitized frequently, and have health screenings and adequate food and hygiene supplies..

(iii) Shapoor P. Mistry, chairman of ShapoorjiPallonji group, in an internal letter to its employees said that it is taking care of its 110,000-strong workforce. The group has 45,000 workers manning 430 sites in India, and 25,000 workers at 130 sites abroad. These workers are supported by 40,000 subcontracted workers, taking the total worker strength to 110,000.

(iv) TheLodha group, which has one of the largest inventories of under-construction homes and properties, said it is ensuring daily wage earners are not left helpless. Further, they also provided advance salaries for the month of March 2020 to all their employees from lower to mid management level, so that they can take care of their daily needs and families in such a scenario," it said in a press statement.

(v) The permanent and temporary workers employed by the Pune belt's manufacturing industry, largely automobile and auto ancillary companies, also appear to be doing better than their counterparts elsewhere.

DilipPawar, president of Pune-based ShramikEktaMahasangh, an umbrella group of small labour unions, said, "Companies like Bajaj Auto Ltd, Tata Motors, Mahindra & Mahindra and others were very transparent about the incoming crisis with their employees. They had given a clear notice to all before closing down their plants. While they have paid salaries to all the workers, irrespective of the factory shutdown, they have also assured that no job would be lost during this crisis." (vi) Meanwhile, the Mumbai Metropolitan Regional Development Authority (MMRDA) is taking care of 11,000 workers working on Mumbai's metro project, the trans-harbour link and other road projects.

"All labourers staying in labour camps are given all necessary medical facilities including food. Sanitation in labour camps is maintained, regular health check-ups are also conducted," said RA Rajeev, Metropolitan Commissioner, MMRDA.

6.Improved Access to Formal Financial Services especially catering to migrant workers..

Conclusion:

The challenges faced by the migrant labourers are more complex. An analysis of this migrating pattern makes it clear that though the migrant labourers contribute more to India's economy, they are not in a protective and prosperous zone. The Central and State Governments have to provide adequate measures to safeguard the interests of the migrant labourers, and derive context-specific solutions . A concerted national policy to facilitate and promote the wellbeing and a system that ensures access to entitlements and basic work conditions is highly recommended.

Bibliography:

- i. "Coronavirus in India: Desperate migrant workers trapped in lockdown" <u>www.bbc.com</u> (22 April 2020).
- ii. "Coronavirus Lockdown Sends Migrant Workers On A Long And Risky Trip Home" www.npr.org(March 31, 2020).
- iii. "India's looming battle to save its workers from the coronavirus" by Tish Sanghera-www.aljazeera.com (25 Mar 2020)
- iv. "Drivers of migration: why do people move?" J Travel Med. 2018 Jul 1;25(1). doi: 10.1093/jtm/tay040

COVID 19 – Current Insights on IT Sector

Prof. Manisha A. Vhora

Assistant Professor, Anekant Institute of Management Studies, Baramati-413102 manishavhora@aimsbaramati.org

Abstract: The outbreak of corona virus offers a unique opportunity for vendors offering communications and collaboration services. However, organizations need to continue to collaborate to remain productive. Estimation reveals that the overall communications and collaboration spending in coming year will be approximately US\$40.8bn in 2020. Of which, services alone are estimated to account for 91% in China. Further, software/applications are forecast to account for 8%. This can significantly go up, depending on how long the outbreak continues. This is just an indicator of what is going to happen in rest of the world.

Keywords: IT Sector, COVID 19, Insights, corona virus, etc.

Overview of COVID-19

Corona virus hit is all over the world, and consumed all within months. Corona virus is spreading everywhere, various corners of the world failing to discriminate people based on their status, wealth, age or citizenship leading to a global lockdown. Various countries go for lockdown. A lockdown ensures safety to people. Lockdown has caused a worldwide disorder and has left people with fear and distress. Nobody expected that it would kill so many people, force countries to lockdown, shut schools and public places and put life on hold. It made the whole world bleed, and like wildfire. During spreading this disorder, all human realize the weight of humanity, the implications of human actions and how all are connected. There are so many lessons of humanity to take on from there: racism, health, love and how to embrace uncertainty and make something out of it.

Pneumonia of unknown cause detected in Wuhan, China was first reported to the WHO Country Office in China on 31 December 2019.

WHO is working 24/7 to analyses data, provide advice, coordinate with partners, help countries prepare, increase supplies and manage expert networks. The outbreak was declared a Public Health Emergency of International Concern on 30 January 2020.WHO released a substantial update to its COVID-19 information dashboard as -

- A mobile-friendly version of the dashboard.
- New and confirmed cases and deaths globally with daily statistics.

- National info by clicking on any country on the interactive map.
- Reported cases by WHO region including daily and cumulative statistics.
- Confirmed cases and deaths, and changes over time in a specific country, region, or territory, on the interactive chart.

A new explorer tab designed to provide complex datasets for easy access and use, with variables selectable across three axes. In future, the platform should be updated with new data sets from national and subnational levels, as well as clinical trials and country-specific public health measures.

An Overview on IT industry in the backdrop of COVID 19

For millions of individuals and businesses, the threat of COVID-19 is financial ruin, Are parts of the technology but there industry that are benefiting from the considerable changes forced on society? More positively, the disruption has caused an acceleration of remote working, and a rapid focus on evaluating and de-risking the end-to-end value chain. The effects of COVID-19 are having a significant impact on the technology sector, affecting raw materials supply, disrupting the electronics value chain, and causing an inflationary risk on products. In addition, potential carbon emission reductions could result in

renewed focus on sustainability practices. This article considers the shifting landscape across a number of areas, including:

- Hardware/software
- IT services
- Semiconductors
- Network equipment

The fear is justified, considering the US and Europe, which together account for more than two-thirds of India's IT exports, are among the worst affected geographies by the pandemic. Clients could significantly reduce their IT spending this year.

In the short term, it is a challenge as IT spends is expected to decline in 2020. Over time, though, companies will consider revisiting their IT spend portfolio and consumption models, which will bring in more automation, remote working and collaboration, Indian IT services will be negatively impacted as companies in these markets will renegotiate existing contracts and put on hold growth initiatives and discretionary IT initiatives.

IT and IT-enabled services companies in India may have to trim their workforce or hire more flexi staff as part of cost cutting measures with projects getting delayed due to the Covid-19 pandemic. Contrary to popular belief that flexi staff could be the first to be laid off during such times, experts believe they may actually have an advantage as they come with variable cost structures and minimal compliance requirements.

SanchitVirGogia, CEO and chief analyst, Greyhound Research opined that - a result of continued slowdown in business, companies will ensure tight control on costs and trimming of staff will be one of the many measures. Also when this stage does arrive, IT-IT eS companies will use factors like skills & competency, outcomes & impact, and costs & compliance when deciding which employee types will be given a trim.

Imaging Science Foundation (ISF) is the apex body of the domestic flexi staffing industry. The sector's flexi workforce is expected to grow to 720,000 by 2021 from 500,000 2018, according in to ISF.RituparnaChakraborty, president, ISF said that the IT-ITeS sector tops flexi-staff adoption with around 12 out of every 100 employees being contractual or flexi staff, according to Indian Staffing Federation If Covid-19 becomes а long-term phenomenon, all companies will have to bear the brunt with varying degrees of impact. Flexi staff will be impacted in terms of the salary they can command amid subdued hiring.

Startups are already feeling the heat as they are unable to bear the losses. For the IT sector, a lot of the business comes from outside of India with high exposure to the US and Europe, so it's even more uncertain.

Effect on IT sector

Corona virus outbreak has disrupted, trade, business cycles, halting global economic activity

Significantly to many industries and Information Technology (IT) industry is the major among them. Due to the fall in the economy, as a many of companies are compulsory to ask their employees to work from home (remotely) keeping in the account of the public health concerns.

The impact might be even more profound as spread seems to overcome many countries beyond China. While the major impact is expected to be on Hardware business, the Software and Services businesses are also expected to slow down as the spread of Corona virus.

The cancellation of international events for fear of corona virus translates into more direct and indirect financial losses to thousands of technology companies. In fact, most recently, Microsoft lowered its revenue estimates for the current quarter, saying it will feel the impact of the corona virus epidemic with lower sales of Windows software and Surface devices.

Existing project executions have also taken a hit due to travel restrictions in place. IT vendors will be forced to relook at their growth targets for the rest of the year as the impact will become evident in the next few quarters.

According to the International Data Corporation (IDC), growth in global IT Spending is expected to reduce by 3-4% by the end of 2020, considering "Pessimistic Scenario" due to the outbreak of Corona virus disease (COVID-19) pandemic, as per IDC Worldwide Black Book Live Edition, February 2020.

Technology nowadays plays the most important part. In the case of COVID-19, facial recognition is a key player. Adoption of collaborative applications, security solutions, Big Data and AI are set to see an increase in the coming days. It has also given an opportunity for IT vendors to test some concepts of "Future of Work" and some of them might become mainstream as the dust settles. It also provides an opportunity to IT vendors to step-up as consulting partners to handhold their clients in helping them sail through the crisis. It has provided an opportunity to IT vendors test their resilience on business to remote connectivity, continuity, and security as they look at innovative ways to service their clients.

COVID-19, the tech industry is committed to playing a constructive role in responding to and helping to mitigate the spread of the virus. From free platforms that can help teachers connect with students to guidance on how to optimize managing a team of employees remotely, technology companies are making tools and resources available to communities, educators, employers, and governments across the world that will help as we face challenges associated with COVID-19. Work from home is not a new concept for corporate, it certainly is a testing time to see the success at this scale. Enterprises are also exploring ways of working together that leverages conversations, meetings, and assets across platforms with employees working remotely from wherever they are located to serve customers better and ensure business continuity.

However, back-office and desk job working class is trying their level best to provide their services and complete assignments and projects online to meet their targets and deadlines. Professionals from sales. marketing, research, teaching and many more sectors are using modern tools of technology and different social media applications to run their routine work from their homes. The role and cooperation from top management of these sectors is also very effective and supportive during working from home situation.

Discussion:

In current pandemic crisis, modern tools and equipment of science and technology are available so majority of working class is contributing with their efforts to run the system. Following are some illustrations of everyday work-life and life as a whole is continuing with the help of IT:

• Cloud Computing

The cloud computing segment has been on the rise for years, though as more employees find themselves restricted to their homes more workloads will have to be migrated to the cloud to ensure the business can function as usual.

For the cloud companies, the corona virus outbreak is effectively forcing some organizations through a very rapid digital transformation project, to embrace the cloud and mobility trends. From an IaaS perspective it means more money, from SaaS it means more engagement and PaaS more opportunity.

• Video conferencing and collaboration Many businesses are encouraging more meetings to be conducted via video links rather than email to not only ensure effective communication but ensure wellemployees. being of Contact with colleagues via video link, Zoom video Communications. It is а remote conferencing services for webcasting and webinar services to ensure lead generation projects can continue.

• Electronic payments

The likes of Visa, MasterCard and AMEX are already benefitting from long-standing trends. In the short-term, some shops are now only accepting digital payments; this is change for some, both in terms of consumers who adopt digital payments and the shops who will now only accept digital currency.

• Streaming, gaming and video content platforms

In terms of video streaming, parents will need to occupy children, while adults will also need entertaining as clubs, theatres, parks, beaches, holidays. Netflix is already immensely popular, but with more people stuck at home in the evenings, it may well become more so, but this benefit is not limited to the content king. In terms of video platforms outside of streaming, YouTube is enjoying particular success.

Indian IT services industry is expected to see an adverse impact for a short-term due to COVID-19 outbreak with the sector clocking a lower growth of 3-5 per cent in current financial year, according to ratings agency ICRA. ICRA previously expected the sector to grow at 6-8 per cent. With the slowdown in growth during the first half of 2020-21, the margins will also be negatively impacted before a likely recovery in next the financial year.

New projects to be commissioned will be delayed by a minimum of 3-6 months, while projects in the pipeline will also face delays, the agency cautioned. Though management of IT companies has restrained to quantify the potential impact of the COVID-19 breakout on the financials, there has definitely been disruption in service delivery and execution due travel restrictions. to client's confidentiality clauses, and work-fromhome (WFH) advisories COVID-19 outbreak will be evident in months to come, it has provided an opportunity for IT vendors to become more resilient and innovative. IT vendors should look at offering incentives on the existing extensions contract and also build conversations on business continuity and disaster recovery in the cloud.

Conclusion:

The outbreak of corona virus offers a unique opportunity for vendors offering communications and collaboration services. However, organizations need to continue to collaborate remain productive. to Estimation reveals the overall that communications and collaboration spending in coming year will be approximately US\$40.8bn in 2020. Of which, services alone are estimated to account for 91% in China. Further, software/applications are forecast to account for 8%. This can significantly go up, depending on how long the outbreak

continues. This is just an indicator of what is going to happen in rest of the world.

The overall data trace on the Telco's network is expected to surge exponentially, as companies will interact virtually with their counterparts in the outbreak affected regions. A large section of these people will be discussing on video chat apps or other productivity software/platforms like We Chat, Skype and Zoom. Thus, despite the challenges of the outbreak, the current situation offers a mutually beneficial scenario for both the vendors as well as potential clients under a real-world usecase scenario, until thecoronavirus outbreak is brought under control.

Bibliography

- i. "A Third Of The Global Population Is On Corona virus Lockdown..."Juliana Kaplan,LaurenFrias, Morgan McFall-Johnsen, APR 17, 2020
- ii. www.who.int
- iii. "Who is set to benefit from the COVID-19 outbreak?" Jamie Davies, https://telecoms.com, 23 March 2020
- iv. "Increase in flexi-staff hiring may eat into IT industry's margins" AyushmanBaruah, 14 Sep 2019.
- v. "COVID-19: Consequences and opportunities for the ICT sector" www.telecomreview.com
- vi. 05 March 2020

vii. "COVID-19 to hurt IT services sector https://economictimes.indiatimes.com, Apr 09, 2020

COVID-19 Pandemic: An Antecedent to the Spiritual Rise of India

Dr. Umesh S. Kollimath

Associate Professor Anekant Institute of Management Studies (AIMS), Baramati-413102 umeshkollimath@gmail.com

Abstract: If we track the history of Indian subcontinent, a consensus may be arrived that there were three distinct periods marking different political rulers when the region was considered as 'the most powerful' in the world: (i) Mauryan Empire (268 BCE to 232 BCE under Ashoka), (ii) The Gupta Empire (380 AD to 415 AD under Chandragupta Vikramaditya) (iii) Mughal Empire (1658 AD to 1707 AD under Aurangzeb)in the given chronology. Among these three periods, arguably the Mauryan period under Ashoka was considered as the most influential power globally. The point to be made here is, even though Ashokabegan as a military might expanding his empire, subsequently took to Buddhist-spiritualism to win over the world rather than conventional warfare.Therefore, understanding, nurturing and disseminating spirituality has a greater potential to restore past glory to the region. Empirical studies have highlighted the need for exploring philosophical and cultural concepts to facilitate a fuller understanding of Indian spirituality so that Indian subcontinent can guide the contemporary world crippled with materialism. This article explores Indian spirituality and ancient philosophy to regain the world order and restore human life to normalcy from the present onslaught of COVID 19 outbreak.

Keywords: Spirituality, Indian philosophy, Ashrama, COVID 19, personal wellbeing, etc.

Introduction:

Indian subcontinent has been in the spotlight for international travelers, historians, merchants, academicians, researchers, anthropologists for its exquisite tourist/archeological destinations, spiritual structures, monuments, spiritual centers, universities, and indigenous commodities. But, irrespective of the reason, the countries across the world hold this region as a remarkable place where spirituality is part of everyday life for the most. As Dr. AshaGoswami says "In India, spiritualism is not an obsession of the human mind, rather it is a heritage as well as a continuous tradition"

Indian culture is woven with diverse values evolved over thousands of years by many civilizations, several rulers (domestic and foreign; dynastic, imperial, democratic) and multiple religions. Albeit this dynamism, those based on spiritualism have only contributed to our ethos harnessing the spirit of the Indians throughout the ages. With the result, the spiritual-minded Indians have succeeded in maintaining their originality which otherwise could not have been possible. It has been also possible due to the fact that the Indian life is dominated by the temperament which is well marked with spiritualism.

Consequent upon that, the Indians have developed various thoughts of philosophy and spiritualism and gave to the world number of maximum systems of spiritualism in the form of philosophical thoughts such as Nyaya, Vaisheshika, Yoga and Vedanta. The Vedas provide spiritual orientation to the Indians giving them the basics of spiritual and moral life. Hence, the Vedic rishis should be acclaimed as the earliest spiritual masters on earth as their mantras resound with the kernel of spiritualism, and the Indian nation as the cradle of spiritualism. This is exactly the reason for emergence of Indian Spiritual Gurus coming to global limelight time and 19th SwamyVivekanand-late again:

Century, Jiddu Krishnamuthy-20th Century, Mother Theresa-20th Century, Sri SriRavishankar, Jaggi Vasudevan-21st Century; continue to influence the world by their spiritual and philosophical invocations.

Thus, the Indian spiritualism Indian philosophy have always coexisted and have intrinsic synergies when practiced together. Darshana or sight, and the Upanishads form the base of Indian spiritualism. According to Swami Vivekananda (1863-1902), a great spiritual leader, thinker and reformer of India, spirituality is the very backbone of India. He observes that every nation has a particular ideal running through its whole existence, forming its very background. With some it is politics, while with others it is social culture, intellectual culture, and so on. Vivekananda says, Our motherland has religion and religion alone for its backbone, for the bedrock upon which the whole building of its life has been based.' Since spirituality is the essence of religion, we should mark that Vivekananda has used the term religion in the same sense as spirituality However, under the purview of spiritualism are also included queries regarding the nature of God, about the creation of the world; essential values of a human being and his ethics.

Thus, Spiritualism, as a philosophy of values if adapted at large by people, would usher in civilization that is socially just (satyam); emotionally integral (shivam); and aesthetically beautiful (sundaram). No wonder, if the age-long spiritual formula of India claiming creation is full so the creator, the individual is full equally, the absolute is full, turns out as the highest watermark of man's spiritual speculations about the supreme power. If India wishes to regain its preeminence (prehistoric or historic), spirituality is the only way ahead.

The relevance of Indian Spiritualism to the Contemporary World

The foremost noble laureate writer and philosopher of India i.e., Rabindranath Tagore, who became internationally acclaimed for professing love for the common man, had said in his acceptance speech after he was awarded the Nobel Prize in Literature in 1913: "Is not the East the mother of spiritual humanity and does not the West, do not the children of the West amidst their games and plays, when they get hurt, when they get famished and hungry, turn their faces to that serene mother, the East?"There are contradictory views among the Indian and Western intellectuals about the authenticity of Indian spirituality, yet every time the material world starts haunting the human souls, Indian spirituality has rescued them.

Empirical studies conducted by scholars of disciplines-ranging various from psychology to occult sciences-from the Indian context indicate the influence of Indian philosophical thoughts and the spirituality across the globe. Indian philosophical and spiritual concepts often appear in fresh brands of Meditation, Yoga, and devotional practices attracting people troubled by the ruthlessness of materialism. Considering the profound relationship between Indian spirituality and Indian philosophy, exploring the philosophical foundations of aspects of Indian thought worldview and impact that the understanding of spirituality have becomes crucial to the contemporary materialistic world.

Components of Indian Spirituality

Indian Spirituality, if studied comprehensively without prejudices, one may realize that there are multiple components to it which suit multiple religions. Following is an attempt to put them together:

1. Realization of self and the divine : AsSwamyVivekanandsays, 'Religion is realization; not talk, nor doctrine, nor theories"In contrast with spirituality as perceived by rest of the world, Indian spirituality focuses on being and becoming, not hearing or acknowledge; it is the whole soul becoming changed into what it believes. That is religion. Therefore, here spirituality transcends the boundaries of manmade religions.

2. The practice of Yoga: Spiritual growth can be achieved only through а comprehensive spiritual technique called yoga. The word yoga ('union'), primarily signifies the process by which an aspirant is unified to his highest ideal In order to suit the different natures and temperaments of men and women. There are different forms of yoga. For the spiritual development of four main types of personality - the intellectual, the active, the emotional and the psychic or introspective - the respective forms of yoga are jnana yoga, karma yoga, bhakti yoga and raja yoga. Through hard practice of the yoga, the ancient sages of India realized spiritual truths and prescribed them as ways of verification of these truths. The same continues in the present world through the new age spiritual gurus.

3. Pluralism of Castes, Beliefs and Religions: The Rig Veda proclaims, "Ekam sat viprabahudhavadanti", meaning: Truth is one but sages call it by different names.' This universal Vedantic truth lived and taught the illustrious by guru of SwamyVivekanand i.e., Sri Ramakrishna, Vivekananda's and own realizations forming the basis for his message of the unity of all religions. In his view, though the different religions of the world differ from one another, their underlying purpose is the same-God-realization. He illustrates this point in the following way. Just as the same water can be collected in vessels of different sizes and shapes, Truth can be seen through different religions. In each vessel (of religion), the vision of God comes in the form of the vessel. So, it is the unique Indian spirituality which acts as a binding force among the often conflicting socio-cultural plural entities of the subcontinent.

4.Indian Ethos and Values: In the history of India, we find concretization of the two Universal ideas viz.. tolerance and Acceptance. Through centuries, India has sheltered the persecuted and the refugees of all religions and all nations of the earth. Further, frugality-living happily with the less; generosity-donating to the needy; bravery-protecting the weaker (children, women and elderly) from the evil, truthfulness, transparency and so on are common to all, irrespective of their faith. Further, Indians wish to identify themselves as affiliated to a particular religion or cult rather than being part of a political movement or party.

The Context:

When COVID 19 outbreak began by the end of 2019, there was a simultaneous and more lethal mistrust emerging among the countries and regions. The so called global powers started blame game of who is responsible for the outbreak, rather than focusing on timey measures to save their masses. India, on the contrary took measures at lightning speed to lockdown with single most objective of saving lives.

Fallouts of COVID 19 Lockdown

As known to all, COVID 19 is a universal nomenclature to an infectious virus, that erupted from Wuhan, China in December, 2019. There are political arguments over the origin, hostility, longevity of the virus on all possible platforms of human debate. But, the virus has put havoc on the human life across the world like never before. The anthropologists may agree that COVID 19 is completely different from the earlier devastations imposed during World Wars, Plague and Famines.

Worldwide, the people at the helm of the political affairs, the rich, the middles class and the poor are realizing certain harsh truths of life. Some are mentioned below:

1. The conventional modes of global supremacy have become irrelevant:

Today, leadership of the most powerful countries in the world are standing clueless in arresting the sabotage of COVID 19. Put together, US, Germany and Japan form roughly USD 30 trillion of GDP (10 times that of India). But, they have miserably failed to counter the havoc played by the tiny virus. Whereas, India, in spite of inherenview weaknesses such as populous cities, poor migrant labours, diverse political viewpoints, heterogeneous masses have sttod in unison to fight against the potent killer virus. The military might or the economic affluence of the developed world has least helped in checking the onslaught of COVID 19 on its citizens' life. On the contrary, the relatively closed economies of Asian countries have helped them keep the virus at bay.

2. Too much of human development is harmful to the flora and fauna:

There are recurring reports of wild animals freely moving in deserted human habitats; rivers and beaches becoming uncharacteristically clean; environment becoming purer; rare birds appearing in the galleries of housing societies, etc., in the social media. It is indeed amazing to note that, just one month halt of human activities has generated so much of ecological wellbeing. Then the question arises: whether economic development that we boast about really worth? We must replace materialistic western models the of economic growth with our ancient holistic and humane growth models with necessary alignment to the modern life.

3. Social Connectivity:

We all have experienced over last two decades that the real person-to-person social connectivity has reached extinction and we have become slaves to the electronic gadgets and virtual social media. Thanks to the (perhaps the most rigorous) lockdown executed in our country, most of us have realized and the excitement and goodness of being connected to our families, neighbors, friends and relatives. It is high time one must realize that virtual connectivity at the best can augment social connectivity and cannot replace it altogether.

4. Importance of personal wellbeing

The practice of meditation is intrinsic to all the religions practiced in the Indian subcontinent. The author, while working on this article, discussed with people from different walks of life, practicing religions such as Hinduism, Buddhism, Jainism, Sikhism, Islam, and Christianity. The revelation was: all the religions have one thing in common, i.e., physical and mental wellbeing of the individual is single most purpose of practicing religion. Therefore, people are increasingly adopting the concept of personal wellbeing by accepting to ancient breathing techniques, meditative science, and Yogic exercises cutting across the religions. Thus, modern age spiritual Gurus of India have emerged as universal influencers of lifestyles and beliefs; be it Mata Amrutanandmayi preaching universal brotherhood, Ramdev Baba preaching Yoga, Sri SriRavishankar preaching

breathing and meditation or JaggiVasudev for his philosophical discourses.

5. Slowing down

There is a concept of "Ashrama" discussed in Indian texts of the ancient and medieval eras, which essentially isfour age-based life stages. The four ashramas are: Brahmacharya (student), Grihastha (householder), Vanaprastha (retired) and Sannyasa (renunciate). Following table signifies each of these stages in an individual's lifecycle:

Ashrama / Life Stage	Age (Yea rs)	Description	Significance
Brahmach arya (Student)	Till 24	Academic pursuits: science, philosophy, Literature and logic. Career goal:Earn stipend(Daks hina) to be paid for the Teacher(guru)	Imbibing Values: self- discipline, righteousness , morals, duties
Grihastha (Househol der)	24- 48	MaterialPurs uits: intense physical, sexual, emotional, occupational, social and material attachments	Marriage, raising a family, educating children, and leading a family- centred and a religious(dhar mic) social life
Vanaprast ha (Retired)	48- 72	Transition from material pursuits to the practice of Moksha (spiritual liberation).	Transferring household responsibiliti es to the next generation, taking advisory role, and gradually withdrawal from the material

			world
Sannyasa (Renunciat e)	72+	Renunciation of material desires and prejudices	Focused on Moksha, peace and simple spiritual life.

As the Indian subcontinent was subjected to Colonial rule for about 200 years, and western philosophy and education system was systematically instilled in the Indian society, we lost the profound influence Ashrama Concept on our lives. Consequently, our lives became an endless pursuit of materialism (characteristic of Western Lifestyle). This, in effect has completely deteriorated the human life in India as much as in Western culture.

Conclusion:

After going through several spiritual / philosophical references, opinions of life coaches, and deliberations with peers, the author has come to the conclusion that Indian Spirituality can only salvage the mankind from the current ordeal of COVID 19 outbreak. The spread of disease is not to be taken as another Viral infection which eventually find a remedy in some kind of vaccine. Rather, it is to be taken as a final warning bell for the mankind to wake up. We must weigh higher the ecological coexistence over individualism, humane values over materialism, and conservatism over consumerism. We may be able to achieve this only by promoting Indian Spiritualism to suit the contemporary setting of human life world over. If an individual plans his/her life complying with four Ashramas, many miseries of modern life can be spared.

Bibliography

- *i.* "Spiritualism in India" Asha Goswamy, 28 May 2017www.dailypioneer.com
- *ii. "Indian Spiritualism Made for the Modern Age" Manu Joseph, July 6, 2011*
- iii. www.nytimes.com
- iv. "Indian philosophical foundations of spirituality at the end of life" Hamilton Inbadas, 19 Jul 2017 www.tandfonline.com.
- v. "Vivekanand Jeevancharitra", Swami Nikhilanand (Marathi edition 2013) Ramakrishna Math.
- vi. "Bhagwan Buddhaur Unka Dharm" Dr. Bhdatt Anand Kausalyayan (Hindi Edition 1996), Buddha bhumi Prakashan.
- vii. "Bhagavad gita Yatharoopa" Shrimad Bhaktivedant Swamy Prabhupada (Kannada Edition 2007, ISCON)

Work from Home: The New Normal: Adapt to Enable

Dr. Abhishek Dikshit

Associate Professor AES' Anekant Institute of Management Studies (AIMS), Baramati abhishek.y.dikshit@aimsbaramati.org

Abstract: Interestingly, work from home being practiced during the ongoing corona virus-induced lockdown might become a trend in coming days, IT and Telecom Minister Ravi Shankar Prasad on Thursday said at a meeting of G20 ministers. The minister highlighted India's action plan to fight corona virus by leveraging digital technology and called for a coordinated global digital response to fight the pandemic. "Work from home may become a new norm. Spoke about the tremendous role played by Indian IT/ITeS industry in providing uninterrupted support to global businesses during COVID-19 by switching to the work from home mode," Prasad said on social media platform Twitter.

The best practices of "Adapt to enable" have shown to provide consistency, visibility, and structure for virtual and remote-work teams. Above all, remember that each person on your team is experiencing this international crisis from their own perspective. Maintain awareness of stress levels. Be flexible. And look for opportunities to support each other in this time of need.

Keywords: Work from Home, Adapt to Enable, Corona virus impact, etc.

Every dark cloud has a silver lining: India accepts working from home

In 1973, NASA engineer Jack Nilles coined the term "telecommuting" or the use of electronics to work remotely. At the time, he estimated this style of work to become the norm in about 20 years. His estimation was right and remote working did pick up in many parts of the world in recent decades, but in India, its acceptance has remained limited. A majority of Indian employers—particularly in traditional industries—do not allow work from home. Even as new-age startups are open to remote working, at larger companies, it's an option that is often offered as a perk or for special needs. The corona virus outbreak has, however, made remote working a necessity overnight.

Over recent weeks, several Indian companies have mandated their staff to work from home in an attempt to socially distance people and reduce the spread of Covid-19. But why did Indian companies wait for a pandemic to adopt a practice that has many benefits, for both employees and employers? "With globalization, teams are spread all over the world and technology facilitates us to work from anywhere, anytime," said Harriet Molyneaux, managing director of Hot Spots Movement, London-based a specialist research consultancy focused on the future of work. "The rise of the gig economy means that many people work for themselves and do this from their own homes as a costeffective solution to office space."

"Work" is not a place

Meera Sapra knows the benefits of working from home all too well. A marketing lead at Chennai-based online office suite provider Zoho, Sapra has been working remotely for 12 years now. After her employer recently made it mandatory for all of it's over 8,000 employees to work remotely, she feels her peers are performing better than before. "Remote working enables my team to think at its own pace," she said. "Everyone has their own physical and mental space and I have noticed better quality of ideas that have come up. Digital presence has its own kind of serendipity that physical presence does not; digital presence makes you value a co-worker's time much more."

At Delhi-based software testing startup Wingify, the staff is "learning to use existing technology more efficiently and creatively" while working from home, said founder and chairperson Paras Chopra. The company's staff of over 230 has been working remotely for about 15 days now. "The silver linings we will see are the benefits to the environment as more conferences go virtual," he added. Despite all its benefits, a sudden shift to remote working can prove disruptive.

....But cans it happen overnight?

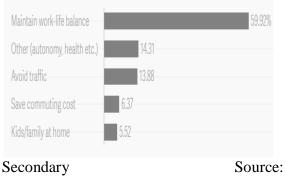
While smaller startups are swiftly finding workarounds, in some businesses, such as banking, financial services or firms that deal with critical data, it might be almost impossible to make teams work remotely all of a sudden. Even for young companies, it isn't a cakewalk. When Bengaluru-based human resource tech startup Spring Works (previously Spring Role) recently asked all of its 150 employees to work from home, they complained about missing their water cooler conversations."Our challenge was to mitigate loneliness," said Spring Works CEO Kartik Mandaville. "We have come up with a couple of solutions, including a mass coffee break where all employees login over a video call in the evenings for coffee or virtual birthday celebrations."

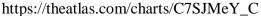
It is essential that companies that have been forced to roll out remote working for employees amid corona virus outbreak, interact with their staff frequently and clearly, Mandaville said. In addition, a conscious effort must be made to document each conversation and make it available to employees so they can reference it as and when needed. For remote working to be effective, an organization needs a shift in its culture and managerial mindset. Companies must prepare for situations where employees hesitate in asking certain questions over emails or instant messengers, or managers are not effective in virtually responding to queries."Managers will have to be trained to handle people differently in this new world of work," said Gautham Ghosh, a digital HR consultant. "Policies will have to change. Take for example, what is the etiquette of conducting meetings online and who follows it up?"

India's millennial love work from home: Research based evidence

Over three-quarters of Indian respondents in a recent survey said they should have a work-from-home option. The survey was conducted by jobs portal Shine.com and included over 1,200 respondents aged between 22 to 30 years, of which 70% were office goers, 10% involved in work-fromhome jobs, and the rest a combination of the first two. Work-life balance is the top reason Indians don't want to work within the four walls of their offices—nearly 60% of the survey participants said so. Avoiding traffic, saving on commuting, and tending to kids were the other factors.

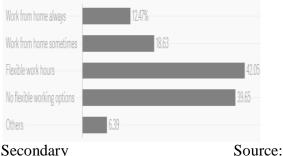
Graph 1: Why Indian employees want flexible work options:





A two-year-long Stanford study found that work-from-home boosts productivity in a big way. Earlier, research done at Harvard Business School had displayed half the rate of attrition compared to office goers, while they reported much higher job satisfaction. Moms with flexible work hours and workfrom-home options make more money than those who do not, a recent study found. It's also a more environment-friendly concept as fewer commuters implies lesser pollution. Some employers have already included these options, considering their merits. Over seven in 10 employees surveyed said their firms offer work from home-always or sometimes-or flexible work hours.

Graph2: Indian employees on flexible working options their firms already give



Secondary

https://theatlas.com/charts/UuhFZPa3y

Also, only 6% of the employees wanted the work out of home option always. It's the flexible hours that topped their wish list, so that they get to control their schedules better.

Graph3: How frequently Indians want employer's flexible working privileges



Secondary

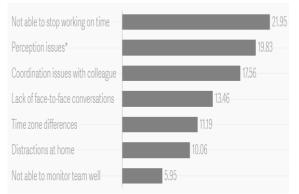
https://theatlas.com/charts/gaHthELDp

All work, no play

However, Indian workers recognize that out-of-office work comes with its own set of challenges. One in five found it difficult to put an end to their work day, attending calls, checking emails, and completing tasks beyond the stipulated working hours. A similar share felt their bosses and

colleagues have perception issues and do not realize how much they really work from home. "Without any visibility and appreciation for the work that put in from home, such perception issues can bring down employee morale significantly," the survey found. A lack of coordination with colleagues was also a pressing concern. "Factors like slow data connections or weak phone signals can cause major communication roadblocks," the report noted.

Graph4: Challenges of working from home, according to Indian employees



Source: https://theatlas.com/charts/BN56r9-**P9**

What if it continues over next six months: India Inc.'s single biggest concern?

The ongoing health crisis is also forcing organizations to re-look at the HR processes and operations through a digital lens, said the EY survey titled 'HR resilience planning - COVID-19 impact and preparedness'.

As many as 72 per cent of organizations feel that the impact of the corona virus pandemic will be felt beyond six months single-biggest and the concern for continued remote working is fall in productivity, according to a survey by consultancy and advisory services provider E&Y. The ongoing health crisis is also forcing organizations to re-look at the HR processes and operations through a digital lens, said the EY survey titled 'HR resilience planning - COVID-19 impact and preparedness'. The survey incorporates first-hand perspective of HR heads or chief human resource officers of over 100 organizations across sectors in India on the impact of COVID-19 and their preparedness to tackle the current situation, E&Y said in a statement.

"While the COVID-19 impact can be felt by organizations across sectors, 72 per cent of the organizations stated that its impact will be felt beyond six months," the survey said. It further said, "Around 70 per cent of the organizations believe that the singlebiggest concern for continued remote working is fall in productivity."As a result of organizations re-looking at their HR processes, the survey said, "More than 70 per cent of the organizations are now moving to virtual methods of recruitment, and emerging technologies like artificial intelligence, robotic process automation and machine learning are leading this change."

The survey also said that less than 50 per cent of the organizations are prepared to manage this unprecedented crisis that they are facing today, while less than 35 per cent are prepared if the crisis escalated and less 10 per cent have undertaken than contingency and scenario planning. Commenting on the findings, EY India Partner and India Workforce Advisory Leader, People Advisory Services, Anurag Malik, said, "Today, organizations are grappling with an unprecedented crisis that is fundamentally different from what they have ever experienced. In this hour of crisis, the HR function has to be a business partner in anticipating change, co-creating a range of scenarios and planning for the future."

He further said, "It is also the right time for the HR heads to recalibrate their priorities, focus towards managing remote workforce, digitalize the HR function, and re-imagine workforce models." Highlighting the changing ways of working in India, the survey said, "Around 87 per cent of the respondents currently have travel restrictions in place in addition to the mandated ones."

At this time of crisis, organizations must adopt to the changing ways of working, and invest in the right information technology (IT) infrastructure and build in structured mechanisms to institutionalize remote working, it said adding that those that were not accustomed to virtual working have faced the heat and have had to mobilize IT infrastructure and set up data security protocols at a short notice. According to the survey, ensuring workforce productivity while working remotely is a concern area. EY India Partner, Workforce Advisory (Africa, India and Middle East), People Advisory Services, Gopal Nagpaul said, "Organizations will need to focus on building work alignment and work control through a structured work allocation and communication protocol."

Providing meaningful work to employees, increased focus on business improvement and transformation initiatives, and elearning and certifications can be explored in this time of crisis, he added. He further said initial priorities of IT infrastructure, basic communication and operations support are now fading into the background as new priorities emerge."Going forward, we need to focus on sustaining productivity in the context of remote working and shutdowns, ensuring wellbeing and engagement in case of sustained remote working, and building cost management options in case we face a deeper economic downturn," Nagpaul added. When it comes

to cost management, the E&Y survey said 55 per cent of organizations foresee medium-to-significant impact on employee cost, while others are still unclear."Many organizations have adopted an employeecentric view and trying to protect the junior management, a few are also offering additional pay-outs, hazard pay to support their workforce through these tough times," it added. Only 22 per cent organizations are thinking about manpower optimization in the short term (maintaining an employeewhile 35 centric view), per cent organizations want to look at optimization in the future, basis business impact and in line with the newer ways of working, the survey said.

Adapt to enable: Corona virus impact: Work from home may become new norm...

The last couple of weeks have been an entirely new experience for Indians. Never in my memory have so many people been confined to their homes, and never have we been forced to find overnight solutions for maintaining work or learn 'normality'. While working from home may now be the 'new normal', the speed at which individuals and organizations have had to adapt to this change has left them grappling. Not only do they have to find ways of making sure business continues with the least disruption, but they also need to do it in a safe and secure manner.

Interestingly, work from home being practiced during the ongoing corona virusinduced lockdown might become a trend in coming days, IT and Telecom Minister Ravi Shankar Prasad on Thursday said at a meeting of G20 ministers. The minister highlighted India's action plan to fight by leveraging corona virus digital technology and called for a coordinated global digital response to fight the pandemic."Work from home may become a new norm. Spoke about the tremendous role played by Indian IT/ITeS industry in providing uninterrupted support to global businesses during COVID-19 by switching to the work from home mode," Prasad said on social media platform Twitter.

The best practices of "Adapt to enable" have shown to provide consistency, visibility, and structure for virtual and remote-work teams. Above all, remember that each person on your team is experiencing this international crisis from their own perspective. Maintain awareness of stress levels. Be flexible. And look for opportunities to support each other in this time of need.

Bibliography

- 1. https://www.captechconsulting.com/blogs/thenew-normal-making-working-from-home-workwell
- 2. https://thriveglobal.com/categories/work-fromhome-solutions/
- 3. https://timesofindia.indiatimes.com/blogs/voices /adapt-to-enable-the-new-normal-work-fromhome/
- 4. https://www.firstpost.com/business/coronavirus -impact-work-from-home-may-become-newnorm-says-ravi-shankar-prasad-at-g20meeting-8319281.html
- https://www.livemint.com/news/india/case-forwork-home-in-the-age-of-corona-11584372182618.html
- 6. https://www.teriin.org/article/can-indiaembrace-work-home-post-pandemic
- 7. https://www.financialexpress.com/industry/indi a-incs-single-biggest-concern-on-work-fromhome-as-coronavirus-impact-to-linger-onbeyond-6-months/1924662/
- 8. https://qz.com/india/1635240/indiasmillennials-root-for-work-from-home-jobssays-shine-com/

"Impact of Covid 19 Outbreak on Rural Economy"

Dr. D. P. More

Associate Professor AES' Anekant Institute of Management Studies (AIMS), Baramati dr.dpmore@aimsbaramati.org

Abstract: Outbreak of Covid 19 has produced an unstable environment across entire globe. This has spread all over the world including India and called as a pandemic by World Health organization. This has resulted in shutdown of economic activities. It has produced economic impact and entire world is facing and going to face economic crisis. It may have cyclical impact economies of many countries across the globe. Indian rural economy will have strong setback due to ongoing lockdown. The households and other economic units in rural area are characterized by deficit or hand to mouth financial resources hence sustainability of these economic units is under question mark.

Keywords: Outbreak, economic activities, lockdown, sustainability, etc.

Introduction:

Slowed down of economic activities in urban areas has an effect on rural areas as well. Numerous studies and experience from the field indicate that a significant proportion of rural household incomes come from migration and daily-wage laborers. The informal industry in cities being badly affected has resulted in loss of rural income. What's more, massive layoffs and lack of relief measures are pushing migrants to return to their villages, which would increase the risk of the spread of the virus.

The feared effects on rural populations have already started to materialize. Take for example:

- Poultry producers in Jharkhand are bearing the brunt of the decreasing demand for broiler chickens, with rates falling as low as INR 20 per kg, from the regular rate of INR 90 per kg.
- There are rotting vegetables in some regions of Tamil Nadu as a result of the transport system partially breaking down, as observed by the field staff of the Tamil Nadu State Rural Livelihoods Mission.
- Rural *haats* in Odisha, West Bengal, and Chhattisgarh, and *mandis* in Madhya Pradesh and Maharashtra are being closed down, as observed by our

team members on the ground, making it difficult for smallholder farmers in these areas to sell their produce



The entire supply chain of fruits and vegetables is disturbed due to restrictions laid down by government. The AMC markets across nation have stopped functioning hence farmers are not able to sell huge quantities of agri-produce directly to consumers. This has resulted in massive reduction of earnings of farmers. In this crisis situation farmers are not thinking to earn refits trying to recover the costs incurred. The daily wages labors are jobless and economy of their family is entirely collapsed.

Challenges emerged due to Covid 19 in Rural Economy

 Reduced Prices of Agri Produce: Prices of agricultural commodities such as perishable vegetables, grapes and sugar have fallen 15-20% as bulk demand from hotels and restaurants has nosedived and there is uncertainty over exports. Various industry bodies, including those representing textile and poultry, have started approaching the government, seeking loan restructuring and financial incentives to survive. The export price of grapes at farm gate has fallen from about Rs 100 per kg to Rs 70-75 per kg.

- **2.** Effect on Poultry: The poultry industry indifferent parts of the country has been hit hard amid rumor that the novel corona virus can transmitted through consumption of chicken, the prices of which have fallen considerably as a result. About two crore people employed in the poultry industry across the country have been impacted. People were avoiding consumption of meat, fish, chicken, and egg etc. Due to the fall in demand, wholesale price of chicken had dropped by as much as 70 per cent.
- **3.** Job Cut in Agriculture Sector: The major impact of COVID-19 is the expected job cuts in the agricultural sector. As per the government, there are nearly nine crore farmers along with a similar number (if not more) landless agricultural labour. While the farmer will be receiving relief from the government directly, the latter is placed in a difficult position at this time.

- 4. Reduced Export of Agri Produce: India has been a major exporter of crops and as per APEDA; India's overall agriexports in 2018-19 were to the tune of Rs 685 billion. Currently, all the ports have been locked and huge inventory has piled up with the traders and huge inventory has piled up at farmers and traders.
- 5. Agriculture Supply Chain: The government has issued permits to trucks allowing them to carry groceries, fruits, and cereals, a large number of transporters are yet to receive their permits. This has increased the time taken for the farm produce to reach the market. On the other hand, there is a slight impact on the demand side as the restaurants have been ordered to shut down for the interim period. This is causing a sizeable revenue loss to many farmers across states. As per a published report, the railway ministry suggests that freight loading has dipped from a usual 10,000 cargo rakes per day to just about 3-4,000 now. As a result, the farmer has to sell his crop at a cheaper price, settle with a lower profit.
- 6. SME's in Rural Area: These include small industry units, businesses/traders, and shops that manage a decent size inventory and employ numerous direct

and indirect employees. Post lockdown, their businesses are shut down and facing a revenue hit. They may have to let go of their employees for a variety of reasons including financial viability, migration, health and other. People stand to lose jobs without a clear idea of when the situation is going to stabilize.

Conclusion:

Covid19 pandemic has severely affected entire country. Government has imposed lockdown to reduce the magnitude of this damage. Saving the life is only priority and has opportunity cost is in terms of shut down of operations, reduced or no income, unemployment etc. The impact of this lockdown on economy can be more severely seen during post Covid19 period. Government has taken various policy initiatives to reduce this impact. Sound policy measures are required to revive the situation in rural area. The efforts should be taken to increase disposable income of marginal farmers. farm workers. construction labors in rural area. Though, RBI has directed all Banks to defer EMI's for 3 months, post Covid it will be a huge burden especially on rural people. Initiatives such as restructuring their existing loan, guaranteed employment for 1 year, subsidies in agriculture inputs, etc. are required to improve their economic condition. To sustain the demand for

agricultural commodities, investments in] key logistics must be enhanced. Moreover, *i*. e-commerce and delivery companies and start-ups need to be encouraged with *ii*. suitable policies and incentives. The small and medium enterprises, running with raw materials from the agriculture and allied sector or otherwise, also need special attention so that the rural economy doesn't collapse.

Bibliography

 https://home.kpmg/content/dam/kpmg/in/pdf/20
 20/04/potential-impact-of-covid-19-on-the-Indian-economy.pdf

https://economictimes.indiatimes.com/news/eco nomy/indicators/coronavirus-chicken-pricesfall-poultry-industry-

affected/articleshow/74546189.

https://economictimes.indiatimes.com/news/eco nomy/indicators/covid-19-outbreak-andlockdown-impact-income-of-85-of-ncrhouseholds-ncaer-survey/articleshow/75120845 https://bigdata.cgiar.org/blog-post/dont-forgetabout-the-impact-of-covid-19-on-the-ruralpoor-and-on-food-security/

'Social Distancing: Age-Structured Impact on the COVID-19 Epidemic in India'

Sachin Shrirang Jadhav

Assistant Professor, Anekant Institute of Management Studies (AIMS) Baramati- Pune 413102 Email: sjadhav@aimsbaramati.org

Abstract: The outbreak of the novel corona virus, COVID-19, has been declared a pandemic by the WHO. The structures of social contact critically determine the spread of the infection and, in the absence of vaccines, the control of these structures through large-scale social distancing measures appears to be the most effective means of mitigation. Here we use an age-structured SIR model with social contact matrices obtained from surveys and Bayesian imputation to study the progress of the COVID-19 epidemic in India. The basic reproductive ratio 0 and its time-dependent generalization are computed based on case data, age distribution and social contact structure. The impact of social distancing measures - workplace non-attendance, school closure, and lockdown - and their efficacy with duration is then investigated. A three-week lockdown is found insufficient to prevent resurgence and, instead, protocols of sustained lockdown with periodic relaxation are suggested. Forecasts are provided for the reduction in age-structured morbidity and mortality as a result of these measures. Our study underlines the importance of age and social contact structures in assessing the country- specific impact of mitigatory social distancing.

Keywords: Social Distancing, COVID-19, lockdown, sustainability, etc.

Introduction

The novel corona virus, COVID-19, originated in Wuhan and has spread rapidly across the globe. The World Health Organization has declared it to be a pandemic. In the absence of a vaccine, social distancing has emerged as the most widely adopted strategy for its mitigation and control [1]. The suppression of social contact in workplaces, schools and other public spheres is the target of such measures. Since social contacts have a strong assortative structure in age, the efficacy of these measures is dependent on both the age structure of the population and the frequency of contacts between age groups across the population. As these are geographically specific, equal measures can have unequal outcomes when applied to regions with significantly differing age and social contact structures. Quantitative estimates of the impact of these measures in reducing morbidity, peak infection rates, and excess mortality can be a significant aid in public-health planning. This requires mathematical models of disease transmission that resolve age and social contact structures.

In this paper we present a mathematical model of the spread of the novel corona virus that takes into account both the age and social contact structure [2]. We use it to study the impact of the most common social distancing measures that have been initiated to contain the epidemic in India: workplace non-attendance, school closure, "JANATA CURFEW" and lockdown, the latter two of which attempt, respectively, complete cessation of public contact for brief and extended periods. We emphasize that models that do not resolve age and social contact structure cannot provide information on the differential impact of each of these measures. This information is vital since each of the specific social distancing measures have widely varying economic costs. Our model allows for the assessment of the differential impact of social distancing measures. Further, both morbidity and mortality from the COVID-19 infection have significant differences across age-groups, with mortality increasing rapidly in the elderly. It is necessary therefore to estimate not only the total number of infections but also how this number is distributed across age groups our model allows for the assessment of such age-structured impacts of social distancing measures.

The remainder of our study is organized as follows. In Section (II) we compare the age and social contact structure of the Indian, Chinese, and Italian populations. Age distributions are sourced from the Population Pyramid website [3] and social contact structures from the state- of-the-art compilation of Prem et.al. [2] Obtained from surveys and Bayesian imputation. We show that even with equal probability of infection on contact, the differences in age and social contacts in these three countries translate into differences in the basic reproductive ratio 0. In Section (III) we study the progress of the epidemic in the absence of any mitigation to provide a base- line to evaluate the effect of mitigation. In Section (IV) we investigate the effect of social distancing measures and find that the three-week lockdown that commenced on 25 March 2020 is of insufficient duration to prevent resurgence. Alternative of protocols sustained

lockdown with periodic relaxation can reduce the infection to levels where social contact tracing and quarantining may become effective. Estimates of the reduction in morbidity and mortality due to these measures are provided. We conclude with a discussion on the possibilities and limitations of our study. An appendix provides details of our mathematical model and the social contact structure.

It has been known from retrospective analyses of the 1918–19 pandemic that delays in introducing social distancing measures are correlated with excess mortality [4, 5]. Our study confirms the urgency and need for sustained application of mitigatory social distancing.

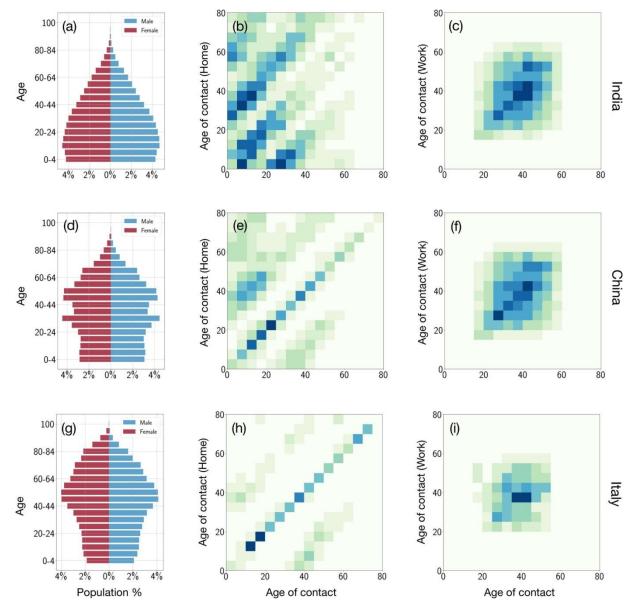


Figure 1. Age and contact structures of the populations of India, China and Italy.

The first column shows population and third columns show the contact pyramids by age and gender. The second structures in households and workplaces

with darker colours representing greater contacts. The diagonal dominance of these matrices shows strong assortative mixing in all three countries. Significant differences appear in the off-diagonals. In India, the pent diagonal character of the household contacts reflects the prevalence of threegeneration households, which are smaller in China and negligible in Italy.

Age And Contact Structures

In Fig. (1) We compare the age and contact structures of the populations of India, China and Italy. The aim of this comparison is to highlight their differences and to emphasize the effect these have on the spread of an infectious disease. Panels (a), (d) and (g) show the fraction of the population (separated by gender) in fiveyear age groups terminating at the age of eighty. The TajMahal dome shape of the Indian age distribution is typical of those undergoing a demographic transition. The narrower base of both Chinese and Italian populations is typical of aging populations at or near sub-replacement fertility. Panels (b), (e) and (h) show the contact be- tween age groups in the household setting, represented by matrices CH where darker squares indicate larger contact

Country	Basic reproductive ratio
India	$R0 = 136\beta$
China	$R0 = 117\beta$
Italy	$R0 = 119\beta$

Table I. Country-specific basic reproductive ratio

Country-specific basic reproductive ratio of the age-structured SIR model for fixed probability of infection on contact β and unit rate of recovery (see text). The difference between countries is attributed to their differing age and social contact structures.

Facts. As noted in [2], the features common to all three are the diagonal dominance, reflecting contact within age groups (i.e. siblings and partners) and the prominent off- diagonals, separated by the mean intergeneration gap, reflecting contacts between age groups (i.e. children and parents). The principal difference in India is the presence of a third dominant diagonal, again separated by the mean inter-generation gap, reflecting the prevalence of threegeneration households. This quantifies the significant contact between children and and the possibility of grand-parents substantial of transmission of contagion from third to first generations. Such contacts are smaller in China and negligible in Italy. Panels (c), (f) and (i) show the contact CW between age groups in the workplace. In contrast to households, the work contact patterns are more homogeneous across age groups in all three countries, indicating that the workplace contributes to the transmission of contagion between age groups that are, otherwise, largely separated from each other in the

household. The boundaries of these age groups are larger in India and China than in Italy. The matrices CS for schools (shown for India in the appendix) are strongly assortative, with primary contacts within the school-going ages and smaller contacts between age groups reflecting studentteacher interactions. The matrices CO for other spheres of contact (shown for India in the appendix) are strongly assortative, reflecting the preferential social con- tact within age groups in this sphere, but otherwise do not show systematic patterns. In summary, then, in India the home provides the main channel of transmission between three generations, the workplace provides the main channel of (largely homogeneous) transmission be- tween working age groups, the school the main channel of transmission within children and to a smaller extent between children and adult teachers, while other spheres of contact, due to the assortative mixing, contribute to transmission within age groups.

Do these differences have a quantitative impact on the transmission of disease? We answer this affirmatively by comparing the basic reproductive ratio 0 for each of these populations for an infectious disease with identical probability of infection on contact β and rate of recovery γ for the agestructured SIR model described in Appendix 1. These differences underline the importance of resolving the age and social contact structure of a population when forecasting the progress of an infection and the impact of social distancing measures. With this background, we now turn to our forecast for the progress of the COVID-19 epidemic in India.

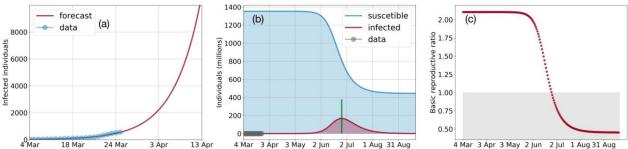
Epidemic Without Mitigation

We fit our mathematical model, described in detail in Appendix, to case data to estimate the probability of infection on contact β . Though our model allows for infective to be both asymptomatic and symptomatic, given the large uncertainty in estimating asymptomatic cases, we assume all cases to be symptomatic. A possible effect of this is to underestimate the severity of the outbreak. We then run the model forward in time to forecast the progress of the epidemic with results shown in Fig. (2). Panel (a) shows the fit to case data available up to 25th March 2020 and a three-week forecast, in the absence of social distancing measures. The basic reproductive ratio is 0 = 2.10. Panel (b) shows a five month forecast, again, in the absence of social distancing. The peak infection is reached at the end of June 2020 with in excess of 150 million infective. The total number infected is estimated to be 900 million. Panel (c) shows the timedependent effective basic reproductive ratio eff (t) which gives the dominant contribution to the linear zed growth at any point in time. This number is greater than unity before peak infection and smaller than unity beyond peak infection. They serve as a useful measure of the local rate of change of infective at any point in time. In fig. (3) We provide estimates of (a) the morbidity and (b) the excess mortality from the unchecked spread of the epidemic. The fraction infected across age groups is the largest for the 15-19 year olds and least amongst the 75-79 year olds. However, due to the strong age-dependence in death rates, mortality is amongst the least for the 15-19 year olds and greatest for the 60-64 year olds. We emphasize that these numbers,

alarming as they are, are counterfactuals, as mitigation measures are already in place of this writing. They do, however, point to the unbearable cost in human life that must be paid for the any lack of, or delay in, mitigatory action.

Impact Of Social Distancing

We now investigate the impact of social distancing measures on the unmitigated epidemic. We assume that social distancing in any public sphere, which in our model is partitioned into workplace, school and all others; removes all social contacts from that sphere. This, of course, transfers the weight of these removed contacts to the household, where people must now be confined. We



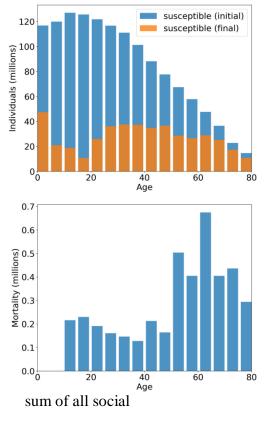
4⁰Mar 18 Mar 24 Mar 3 Apr 13 Apr 4 Mar 3 Apr 3 May 2 Jun 2 Jul 1 Aug 31 Aug 4 Mar 3 Apr 3 May 2 Jun 2 Jul 1 Aug 31 Aug Figure 2. Forecast of the COVID-19 epidemic in India without mitigatory social distancing.

Panel (a) shows the number of confirmed cases of till 25th March 2020 (blue circles) and three-week forecast (red line) from a fit of our model. Panel (b) extends this forecast to 5 months showing the number of infective (red) and the number of susceptible (blue). In the absence of mitigation, an expected 0.9 billion people would be infected in total, with a peak

infection of 167 million people in 114 days as indicated by the green bar. Panel (c) shows the effective basic reproductive ratio eff (t) as a function of time. This reduces to below unity beyond the peak infection. This forecast assumes all cases to be symptomatic so $\alpha^- = 1$. The fit parameter β = 0.0155 and we set $\gamma = 1/7$. Ignore this in the first instance. We interpret the lock- down imposed from 25 March 2020 to remove all social contacts other than the household ones. This is an optimistic interpretation but it does allow us to assess the most favorable impact of such a measure. The results that follow, then, are expected best-case scenarios. Then, the time-dependent social contact matrix at time t is

$$\operatorname{Cij}(t) = \operatorname{Cij} - u(t)(\operatorname{CW} + \operatorname{CS} + \operatorname{CO}) \quad (1)$$

where Cij = CH + CW + CS + CO is the



ij ij ij ij

Figure 3. Estimates of morbidity and mortality without mitigatory social distancing.

The top panel shows the distribution across age groups of the number of susceptible at the start of the epidemic (blue bars) and at the end of the five month forecast (orange bars). Their difference is the total number infected in that five month period. Greatest infection is seen amongst the 15-19 year olds and least amongst the 74-79 year olds. The bottom panel shows the number of mortalities which, due to the strong agedependence, is not proportional to the number of infections. The parameters for these estimates are identical to those in Fig. (2).contacts comprising of contributions from the household, workplace, schools and all others, with obvious super- scripts. The control function, described in Appendix, is constructed to reflect a social distancing measure that is initiated at t =ton and suspended at t = toff. The mea- sure has a lag tw to be effective which we choose to be shorter than a day. The function varies smoothly from zero to one in the window ton toff. For repeated initiations and suspensions, the control function is a sum of such terms with times adjusted accordingly. It is possible, of course, to have differentiated controls which apply distinct social distancing measures at different times and for different durations. We do not explore these here as the general setting for such an investigation would be within the framework of optimal

control theory [6] with an appropriate cost function. We postpone this to future work. Our results are show in in the four panels of Fig. (4) for four different control protocols. Panel (a) shows the effect of the three-week lockdown. While this immediately changes the sign of the rate of change of infective, it does not reduce their number sufficiently to prevent resurgence at the end of the lockdown period. Panel (b) shows the effect a suspension of the lockdown by 5 days followed by a further lockdown of 28 days. This too, does not reduce the number of infective sufficiently to

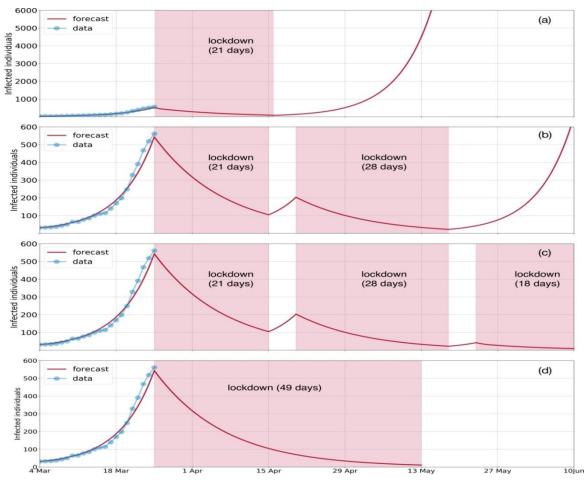


Figure 4. Forecast of the COVID-19 epidemic in India with mitigatory social distancing.

Each of the four panels shows the variation in the number of infective with lockdowns of various durations. The three-week lockdown starting 25 March does not prevent resurgence after its suspension as shown in panel (a). Neither does a further lockdown of 28 days spaced by a 5 day suspension, shown in panel (b). The protocols in panels (c) and (d), comprising

of three lockdowns with 5 day relaxations and a single 49 day lockdown reduce case numbers below 10. This forecast is based on all cases being symptomatic so $\alpha^- = 1$. The fit parameter is $\beta = 0.0155$ and we set $\gamma = 1/7$.

	Case 1	Case 2	Case 3	Case 4
Mortality	2727	11	8	6

Table II. Estimates of mortality in a 73 day window from 25th March with mitigatory social distancing. Cases 1 through 4 correspond, respectively, to panels (a) through (d) of Fig.4. The parameters are identical to those in Fig. (4). prevent resurgence. Panel (c) shows a protocol of three consecutive lockdowns of 21 days, 28 days and 18 days spaced by 5 days of suspension. This brings the number of infective below 10 where explicit contact tracing followed by quarantine may be successful in preventing resurgence. Panel (d) shows a single lockdown period to reach the same number of infective which our model predicts to be 49 days.

Table (II) show the excess mortality that can be expected for each of the social distancing measures above. While we emphasize, again, that these are likely to be best-case scenarios, the substantive message is that of the crucial importance of rapid and sustained social distancing measures in reducing morbidity and mortality.

Discussion and Conclusion

We have presented a mathematical model of the spread of infection in a population that structured by age and social contact between ages. Since contagion spreads through the structure of social contacts and the latter varies with age, it is necessary to resolve both these aspects of a population in any model that attempts to understand and predicts how the modification of the social contact structure through social distancing impacts the spread of disease. Such models become useful when re- liable estimates of contact structures are available. We have combined our mathematical model with the state- of-theart contact structure compilation of Prem et. al. [2] and empirical case data available till the 25 March 2020 to assess the impact of social distancing measures in the spread of the COVID-19 epidemic in India. Our principal conclusion is that the three-week lockdown will be insufficient. Our model suggests sustained periods of lockdown with periodic relaxation will reduce the number of cases to levels where individualized social contact tracing and quarantine may become feasible.

Bibliography

- i. "https://github.com/rajeshrinet/pyross".
- ii. "https://www.populationpyramid.net/".
- iii. "https://www.worldometers.info/coronavi rus,".
- iv. 71, 791–799 (1976).
- v. during the 1918 influenza pandemic," Proc. Natl. Acad.Sci. 104, 7582–7587 (2007).
- vi. G. E. P. Box, "Science and statistics," J. Am. Stat. Ass.
- vii. K. Prem, A. R. Cook, and M. Jit, "Projecting social contact matrices in 152 countries using contact surveys and demographic data," PLoS Comp. Bio 13, e1005697 (2017).

- viii. Lev SemenovichPontryagin, Mathematical theory of optimal processes (Gordon and Breach, New York, 1986).
- ix. M. J. Keeling and P. Rohani, Modeling infectious diseases in humans and animals (Princeton University Press, 2011).
- Martin C. J. Bootsma and Neil M. Ferguson, "The effect of public health measures on the 1918 influenza pandemic in u.s. cities," Proc. Natl. Acad. Sci. 104, 7588–7593 (2007).
- N. M. Ferguson et al., "Impact of nonpharmaceutical interventions (npis) to reduce covid-19 mortality and healthcare demand," London: Imperial College COVID-19 Response Team, March 16 (2020), 10.25561/77482.

- xii. N. M. Ferguson et al., "Strategies for mitigating an in-fluenza pandemic," Nature 442, 448–452(2006).
- xiii. O. Diekmann, J. A. P. Heesterbeek, and M.
 G. Roberts, "Theconstructionofnextgenerationmatricesforcompartmentalepid emicmodels,"J.RoyalSoc.Int.7,873– 885(2010).
- xiv. R. M. Anderson, B. Anderson, and R. M. May, Infectious diseases of humans: dynamics and control (Oxford university press, 1992).
- xv. Richard J. Hatchett, Carter E. Mecher, and Marc Lip- sitch, "Public health interventions and epidemic intensity
- xvi. S. Towers and Z. Feng, "Social contact patterns and con- trol strategies for influenza in the elderly," Math. Biosci.240, 241–249(2012).



Watchout ! More Publications to come soon !!!