

# **Covid-19 and India: An Economic Tsunami with Extraordinary Impacts**

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### ABSTRACT

Mankind, this time is being introduced with a deadliest disaster 'Covid-19' (called as Corona Epidemic) on its 100<sup>th</sup> anniversary in the history. The '1720–2020' cycle comprises of pandemics concurrently appeared around the world at an interval of 100 years. The same is causing an extraordinary impact with 2,215,105 infected cases and around 1,50,000 subsequent loss of lives as per recent estimate. (https://www.worldometers.info/coronavirus/, updated: April 17, 2020).

The brunt of this health crisis is viral and the challenge to cope with is also extraordinary. The present growth dynamics across the globe is evidently on halt. Albeit, a concrete remedy against the epidemic is yet to prove better than it was a century ago, medicinal initiative in this regard is getting a kick start limiting transmission of the disease and its consequent fatalities.

As such, the current study is a modest attempt to undertake a case review on the 'Corona Epidemic' which has entirely changed the face of the world. The study <u>aims</u> at assessing 'Covid-19' as a phenomenal economic standstill across the globe. An effort is made to bring to light a few apparent impacts on Indian economy in terms of its post-disaster era. The <u>methodology</u> here is based on the secondary sources of information along with a semi-structured primary observation carried out for the purpose. Special focus is bestowed upon to intensify the case through a multidimensional review of the state of affairs. <u>Observation</u> infers that there is absolute uncertainty on 'What Next' and 'How'. Experts are unanimous that Covid-19 would be an Economic Tsunami in days to come. Accordingly, the authors are in a position to <u>conclude</u> that any resurgence effort to counteract this crisis is likely to be prolonged and so its desired outcome too. The present study happens to be an endeavour at micro level to foresee this in said direction.

Index Terms: Covid-19, Heath Disaster, Global Standstill and Extraordinary Impacts.



# I. INTRODUCTION

At this moment the entire globe is with widespread disaster. The Novel Corona Virus Disease (abbreviated as Covid-19) originated in Wuhan, the capital city of Hubei Province in China in late December, 2019 currently outbursts in 210 nations and territories around the world. (https://www.worldometers.info/ coronavirus/countries-where-coronavirus-has-spread/, updated: April 17, 2020). The known sources identify some pertinent facts being linked with Covid-19. Covid-19 initially is from the same family of virus that outbroke as a Severe Acute Respiratory Syndrome (SARS) in the year 2003 and the Middle East Respiratory Syndrome (MERS) in 2012. Secondly, the fatality rate of Corona Virus falls between a range of 1% to 3.4%. It is considerably lesser than 34% for MERS and 10% for SARS as reflected in Table-1. On the other hand, the same is significantly more than the seasonal flu mortality rate which is less than 0.1%. Thirdly, the virus actually originates from animals and eventually passes through human being-to-human being transmission. Besides, the infectivity spreads of Covid-19 emerge as quite higher as compared with the other viruses. Table-1 herewith may be referred for a clear indication of the same.

Epidemics	Fatality Rates : Death/Case	Infection Rates	
	(%)	(Per Infected Person)	
Ebola	50	1.5-2.5	
MERS	34.30	0.42-0.92	
SARS	10	3	
Covid-19	0.1-3.4	1.5-3.5	
Seasonal Flu	0.05	1.3	

# Table-1Fatality and Infection Rates of Epidemics

**Source :** "The Economic Impact of the Covid-19 Outbreak on Developing Asia", ADB BRIEFS NO-128, 6<sup>th</sup> March, 2020, www.adb.org/publications/series/adb-briefs

The World Health Organization (WHO) has considered 'Covid-19' as a pandemic signifying a global eruption of a specific disease. It defines 'Pandemic' as : "The worldwide spread of a new disease." Pandemics occur when a new virus outbreaks and infect human beings with substantial impact in a sustainable manner. A recent post on social media claims that the significant pandemics strike at an interval of 100 years. 1720 — Plague; 1820 — Cholera Outbreak; 1920 — Spanish Flu; and 2020 — Chinese Corona which justifies this claim to a visible extent.

Pandemics are first considered as epidemics, which is the rapid spread of a syndrome across various geographic regions. For example, the Zika\_outbreak was an epidemic that initially began in Brazil in 2014 and extended across Latin America and the Caribbean. Similarly, the Ebola that arouse in the year 2014-2016 in West Africa became transversely viral in different nations.

Countries, states are now with incessant efforts to cope with this pandemic and accordingly designing mechanism to deal with a forthcoming post-pandemic era. The present challenge is perhaps, the largest since World War II and distinctly placed itself as an extraordinary encounter.



# II. AN INSIGHT INTO SELECT LITERATURE

Referring to literature on corona epidemic, a few studies are being undergone to analyse the state of affairs and its impact on the economy in diverse perspectives. However, the same so far, have been of quite recent origin and still under progress. Considering this backdrop, an attempt has been made here for a brief review of select literature with a partial emphasis on Indian economy. To begin with, Medisetti<sup>1</sup> observes that the global economy has come to a complete halt due to ongoing corona pandemic with numerous sectors falling under severe impact of the lockdown. Abiad, Arao, Dagli, Ferrarini, Noy, Osewe, Pagaduan, Park, and Platitas in Asian Development Briefs (ADB)<sup>2</sup> foresee that the outbreak of Covid-19 is very dynamic and places itself under various situations (Table-2). These situations portrayed in Table-2 signify a global impact of \$76,693 million to \$346,975 million or 0.089 % to 0.404 % of global GDP, with a reasonable case estimate of \$155,948 million or 0.182 % of global GDP. Again, a United Nation (UN)<sup>3</sup> Release reveals that the world economy could shrivel by up to 1% in the year 2020 due to Covid-19, as against a previous forecast of 2.5 % growth. It alerts that the same may shrink even further if economic restrictions are extended without any fiscal back up. Baldwin and Mauro<sup>4</sup> perceive 'Covid-19' as an extraordinary phenomenon in an extraordinary situation. They meaningfully attempt to address a few key questions like "How, and how far and fast, will the economic damage spread? How bad will it get? How long will the damage last? What are the mechanisms of economic contagion? And, above all, what can governments do about it?" Segal and Gerstel<sup>5</sup> anticipate travel and tourism and its allied establishments to be the hardest hit as the regulatory bodies encourage 'Stay Home' and 'Social Distancing'. The International Air Transport Association (IATA) presage that the 'Covid-19' would price global air carriers between \$63 to \$113 billion revenue in months to come, and the share of major hotel business have also dipped in past few weeks. A United Nations Conference on Trade and Development (UNCTAD) Report<sup>6</sup> says, "Even so, the world economy will go into recession this year with a predicted loss of global income in trillions of dollars, this will spell serious trouble for developing countries, with the likely exception of China and the possible exception of India." The same, however, did not specify any reasons about the exception related to India and China.

Coming to Indian perspective, Asian Development Briefs (ADB)<sup>7</sup> in its Outlook: 2020-21 anticipate the economic growth of India to slow down to 4% this fiscal due to current pandemic across the globe. Muthukrishnan<sup>8</sup> in her publication points out that nearly 162 nations have been under lockdown, and global businesses are quite uncertain due to fear of an imminent financial collapse. With increasing unemployment and growing fiscal deficit, Indian economy has not experienced a good time. The 'Novel Corona' adds more fuel to this. She appends further. Anbumozhi<sup>9</sup> in his latest article brings in a few factors as determinants of the Covid-19 impact on Indian economy. The viral spread, the sudden shifts in demand-supply dynamics, and the efficacy of preventive measures are to name a few in this regard. Agarwal<sup>10</sup> examines that the impact of India's three-week lockdown is ringing, with severe stagnancy across all segments of the economy. The service-oriented industries namely travel and tourism, retailing, amusement and aviation have been sternly hit. Also is the manufacturing sector being interrupted due to phase-wise shutdown with acute logistics and work-flow disruption. Cox<sup>11</sup> eloquently concludes that "The memory of this interlude of isolation will serve as a powerful reminder of what we're capable of and how far we can push things if we have to or simply really want to. In that sense,



the forecasters have probably got it wrong. This virus can be a catalyst for positive change but it's wholly up to us to make sure we use it that way".

Geography	Best Case		Moderate Case		Worse Case	
Globe	GDP	Losses	GDP	Losses	GDP	Losses
	(%)	(\$ Millions)	(%)	(\$ Millions)	(%)	(\$ Millions)
World	-0.089	76,693	-0.182	155,948	-0.404	346,975
PRC	-0.323	43,890	-0.757	103,056	-1.740	236,793
Developing	-0.171	15,685	-0.244	22,284	-0.463	42,243
Asia						
excluding						
PRC						
Rest of the	-0.011	17,145	-0.020	30,608	-0.044	67,938
World						

 Table-2

 Estimated Global and Regional Impact of Covid-19, under Different Scenarios

**Source :** "The Economic Impact of the Covid-19 Outbreak on Developing Asia", ADB BRIEFS N0-128, 6<sup>th</sup> March, 2020, www.adb.org/publications/series/adb-briefs

# **III. OBJECTIVES OF THE STUDY**

The study encompasses the following primary objectives -

- (i) To objectively assess 'Covid-19' as a phenomenal economic standstill across the globe
- (ii) To bring to light a few extraordinary impacts of the said standstill on Indian economy
- (iii) To undertake a multidimensional review of the state of affairs
- (iv) To conclude the study at micro level with a suggestive approach

# **IV. METHODOLOGY**

Keeping in view of the kind of study, the methodology framed out here is fundamentally based upon the secondary information and consequent observation. The sources of information comprise of a few published literature, periodical, and more distinctively web database. The primary information seems to be diminutive, and hence the authors initiate the project with a brief review of limited documentary resources obtainable at disposal. The geographic extent of the study is confined to Indian economy as a whole with a semi-statistical focus on select global parameters. The research, as a whole is not carried out on the basis of any pre-determined hypothesis. Rather, an open mind to the possibilities of derived information and outlook of the subject is ensured for conceptualization and onward interpretation. As close participants-inpractice, the researchers during their primary observation interacted with a group of regulatory



officials through a semi-structured questionnaire. The same provided them with a partial insight into changing dynamics of the world due to Covid-19 impact on the economy. The entire approach adopted here is perceptual and being carried out as a case review to validate itself.

## V. 'COVID-19': A PHENOMENAL ECONOMIC STANDSTILL

The world economy at this time finds itself in standstill. This is one of the deadliest global phenomena and the ongoing Covid-19 pandemic is the only driver towards this. The economic slowdown backed up by periodic lockdowns seems to have entered into a recession. The prominent effects of this recession, few of which by now visible, are fiscal deficit, workforce redundancy, phase-wise bankruptcies across service sectors (like holiday rental, hotel and accommodation, eatery, bar and restaurant), deferred investment decisions, radical reduction in consumption habits and reduced multilateral trade due to re-imposition of trade restrictions. On the contrary, economic weightage is being seen to get assigned on select sectors running with digital platforms like e-commerce, music, movies, entertainment and also on the resources engaged with social networking services.

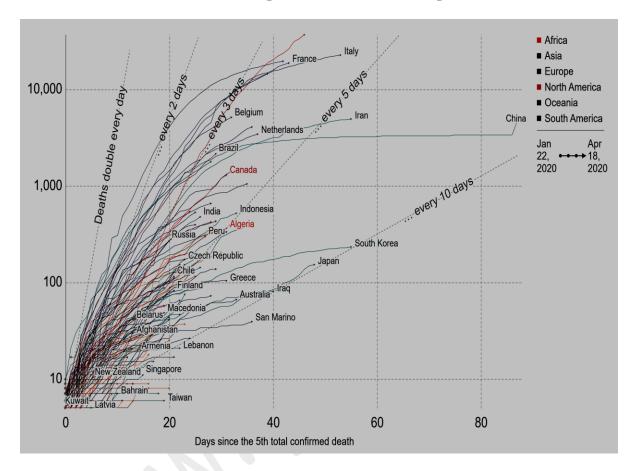
Covid-19 is of Chinese origin before spreading across the globe and that too only in few months or so. Figure-1 noticeably depicts the same. This pandemic has undeniably put every sphere of our lifestyle on absolute stop. The survival fear with inherent anxiety about 'What Next' is being observed in each nook and corner of the world. The unoccupied workplace, deserted highways, emptied roads, unpopulated shopping arcades, grounded aircrafts, vacant stations are a few live examples to cite in this interconnected global world.

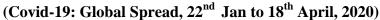
"The world has entered a recession as bad as or worse than in 2009", says the International Monetary Fund (IMF) Managing Director, Kristalina Georgieva. The IMF head further points out that they have received around 80 vital funding requests (50 from low-income nations) and the overall financial support requirement as per current estimate stands at \$2.5 trillion. Thus, one may easily assume the degree of impact as much higher than its anticipation.

As a result, the issue today happens to be very intense and reflective. The entire supply chain becomes motion-less now. These mobility restrictions have paralysed the world to a considerable extent. Contribution of "Work from Home" practices towards supporting this immobility is also very marginal. That's why; it becomes imperative to visualize the impact of this crisis on world economy. Experts foresee that the global economy would not be able to align with its projected growth rate of 2.9 %. It is expected to grow up leisurely at 1.5 % in the current\_fiscal. With this deep fallout in growth rate, the projection further reveals that the economic slowdown from Covid-19 pandemic will be long term and apparent beyond its immediate impact in coming future.



Figure-1



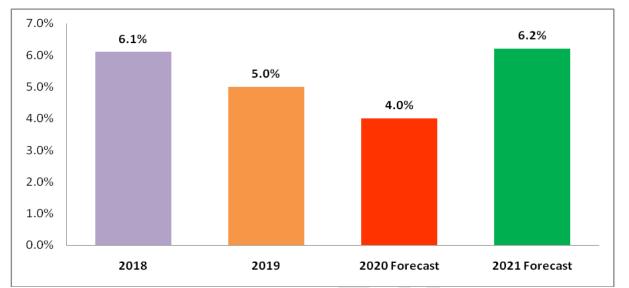


Source: Coronavirus Disease (Covid-19) – Statistics and Research, Max Roser, Hannah Ritchie,<br/>Esteban Ortiz-Ospina and Joe Hasell, Updated: 18th<br/>April,2020,https://ourworldindata.org/coronavirus

# VI. A GLANCE ON SOME VIRAL IMPACTS ON INDIAN ECONOMY

Economists in India are greatly concerned about what would be the probable impacts of Covid-19 (currently called, the SARS-CoV-2) on the economy. Hospitality and trading sector would be the first victim of this impact. As economic slowdown furthers, there would be butterfly effect which in turn involve things around, and eventually resulting in a challenged economy. The GDP in the coming fiscal is supposed to fall by 1% from the previous year as being anticipated in Figure-2. According to Reuter's poll, Indian economy presently has declined to an eight-year low and further slowing down itself is not unlikely. Now, this impact may be considered viral as it is being felt multi-fold across various industries. A few significant highlights are appended hereunder one by one.





Figure–2 (Covid-19 and GDP Growth in India)

**Source :** "What Drives Innovation in Asia?", Asian Development Outlook (ADO) 2020 : Asian Development Bank, 17<sup>th</sup> April, 2020, https://www.adb.org/publications/asian-development-outlook-2020-innovation-asia

### **REAL ESTATE SECTOR**

The real estate industry in India is running with serious liquidity crunch with increasing empty blocks in the apartments. The Chinese corona outbreak and the dearth of raw materials have worsened it further. The construction activities have come to a complete halt, site visits have stopped and the new launches are being on hold. For, the allied requirements like machineries and steel are heavily dependent on the Chinese supplies.

### **AUTOMOTIVE INDUSTRY**

The automobile sector, which is already under stiff completion, would experience added slowdown in near future. "The Indian automotive supply is heavily contingent on our Chinese partners. And we don't say that lightly. An estimated USD 4.5 billion worth of auto-component imports was seen from China in 2018-19. A whopping 27 % of the automotive parts are manufactured in China and imported to the Indian companies valued at, as we said, 4.5 billion. Even a minor blow to this relationship can lead to us paying a very heavy price as far as the growth of the industry is concerned". Says Divyanshi Bhardwaj, Editor, Cars24. (https://www.cars24.com/blog/impact-of-coronavirus-on-indian-auto-industry/). It is now alarming for Indian automotive sector to engage multiple vendors on a worldwide scale, where China happens to be the only major player. Eventually, a phase-wise action plan may also be designed to domesticate the production process.



# E-COMMERCE

Presently, the E-Com business is restricted with grocery, pharmaceuticals, and select essential deliveries. According to the revised guidelines, the Ministry of Home Affairs (MHA), Govt. of India deems 'E-Commerce' an essential service during the extended lockdown. As an alternative model, the government, of late has urged the business firms on e-commerce platforms to collaborate with local retailers to ensure uninterrupted supply of indispensable merchandise as door step deliveries. Due to this encouragement, the products or services with a digital platform may see some sort of escalation in their demands. It is also observed that India's major e-grocers and retailers have restored operations in few cities. But they are still stuck with huge backlogs and the shortage of ground handling personnel triggered by the ongoing nationwide shutdown.

### MIGRANT WAGE EARNERS

The world's prevalent shutdown to counteract coronavirus pandemic has largely stalled the work keeping aside the migrant wage earners with too little to fall back. More than 100 million Indians earn their lively-hood in an informal economy. These include contractual labourers, daily workers and self-employed clusters. Meanwhile, they have seen their earnings erode in recent times. How they would maintain social distancing where their survival is fully based on a connected work-life does not carry any meaning.

#### CONSUMERS' SPENDING PATTERN

Yet again, consumers' spending pattern is sure to get largely affected. Any business venture entailing close circle interactions may see a huge vacuum prevailing for quite a long time. In connection with this, the sectors like cinema, fashion, cafeteria, eateries, retail establishments, fitness house, sport clubs, and convention centre would be highly impacted. The hospitality industry comprising of home stays, escorted sight-seeings, luxury transport, massage parlours, grooming cabins, spa clinics, and ayurvedic therapies are also not an exception to this turndown effect. None of these economic activities can be shifted from physical platform to online platform if few others could be. But the same invites re-skilling on part of the required professional if a full-fledged digitalization effect is to be ensured for the selected few.

### **CAPITAL MARKET**

"It is difficult to predict how the stock market will move. When there is panic, investors tend to make their decisions emotionally, rather than rationally. This is a Black Swan event, whose impact may be deeper and longer than what was estimated a few weeks ago". Says Yagnesh Kansara. (https://www.outlookindia. com/magazine/story/ business-news-down-down-why-coronavirus-will-lockdown-indian-stock-market- indefinitely/302995).

Recent research reports anticipate that the world economic turndown would continue for some more time resulting in reduced appetite for non-essentials; means a phenomenon with less participants in stock markets, dearth of venture capitalists, lack of start-up entrepreneurs, and fewer investors in capital market. As Covid-19 evolved in no time as a health disaster, it has





equally proved itself as a financial disaster. The pandemic fear is greatly thriving in anticipation of an impending collapse of the global capital market. India too, is not exclusion to this with Sensex distinctly flooring out to three years low.

# **IMPORT-EXPORT LOGISTICS**

As far as import-export logistics is concerned, India will be the 10th most affected economy since the import dependency of India on China is significant. China holds a major stake in export towards India with textiles, apparel, organic chemicals, automotive and pharma being the noteworthy ones. 45% of India's total electronic inputs are being supplied by China. Around 70% of active pharmaceutical ingredients are imported from China. China supplies around 1/3<sup>rd</sup> and 2/5<sup>th</sup> of the machinery and organic chemicals to India. In terms of export too, India comes out to be the 3rd largest export partner for China. Accordingly, as we live in an emerging economy, the Covid-19 would certainly hamper these beleaguered businesses to a visible level. According to Arun Singh, Chief Economist, Dun & Bradstreet India, "As lockdowns are imposed in other global manufacturing hubs, besides China, the extent of impairment to global supply chain and global growth is likely to increase".

### TOURISM AND AVIATION

The Corona pandemic has become a big threat towards global tourism and aviation. It is wise again to state that what has outspread around the world in recent past is unusual. While every segment being on halt, it is the tourism and aviation industry that has been massively hit. Grounded aircrafts, stranded cruises, emptied resorts, vacant hotels, deserted cafeterias have experienced an instant effect of this disaster.

Same is the state of affairs in India. With all border closures, suspension of visas, aviation restrictions and indefinite closure of tourism attractions, the entire value chain, comprising of aviation, hotels, eateries, tour operators along with allied services are unquestionably expected to face with a terrible outcome. It won't be wrong if we anticipate that Indian tourism and aviation may slow up for a foreseeable future.

### VII. DIFFERENT DIMENSIONS OF THE STATE OF AFFAIRS

In one sense, it becomes a tricky challenge to forecast the growth of an economy in this dynamic environment. The crisis today is no longer unilateral or multilateral. It is global and has largely affected all economic endeavours around the world. Besides, the ongoing turndown has disconnected all interdependencies in the economy. As such, it is vital to point out a few dimensions, consequential to the lockdown, which are likely determinants of the state of affairs in days to come.

Firstly, the disrupted logistics and supply chain system. Manufacturing and distribution channels have been entirely blocked on account of the work stoppage and mobility limitations. As the lockdown continues, this disruption accelerates further. The longer the disruption, deeper is the



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fracture in the supply chain resulting in longer time for the country to bounce back. Hence, the list of segments affected due to today's unusual crisis is quite exhaustive to indicate upon.

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Secondly, abridged employment and job retrenchment. The immediate impact is seen on the most thriving service sector in India, 'Travel and Tourism'. Hotels and aviation are also to get enlisted in this. The fear of job loss would be evident on production sector too if there happens a huge decline in demand due to widespread shutdown across diverse sectors of the country.

Thirdly, the apparent closure of economic activities could severely affect the small scale sector and weaken the ailing units further. On account of this, the funding bodies which support these segments will experience an instant hike in its NPAs resulting in serious liquidity crunch in near future. This financial bankruptcy is certainly to deter Indian appetite towards new investment initiative for an unknown time.

To conquer this crunch, major central banks across the world have made arrangement for rate reduction to infuse liquidity. But how far these policy measures would work is too early to comment. Current available evidence does not infer anything on this front. The report by ASSOCHAM says "Indian economy needs minimum infusion of \$200 billion to survive Corona Virus Outbreak". However, any approach towards liquidity enrichment through external means is always welcome when our internal dynamics are highly upsetting.

# VIII. CONCLUSION AND SUGGESTIVE APPROACH

'Covid-19' is unquestionably a unique phenomenon for civilization, at least once in a cycle of 100 years. Any economic alignment in this regard must be pro-active rather than indulging in reactive responses.

Dun & Bradstreet's latest Economy Forecast reflects that there is an enhanced probability of entering into corporate bankruptcy with global meltdown. India is also unlikely to remain isolated from this possibility. In order to re-capture the lost market shares, business houses are to be incredibly cautious in terms of their strategy formulation and its ground execution.

Notwithstanding, the demand-supply dynamics in India remain almost same, the ongoing disaster and its pace of enhancement give birth to a reduced buoyancy amongst all stake-holders in the economy. Recent studies recommend a healthy investment on medical and allied sectors in order to counteract this incremental crisis. The same needs to focus not just on a preventive vaccine development, but also on a well-built health infrastructure comprising of laboratories and testing centres. This would certainly help early detection of the infected cases and its immediate remedial action. That's why; a confidence building approach is a burning need of the hour. A well-thought-out medical facilitation could indeed be a confidence booster while the economy is apparently stagnant.

Besides, an ingenious fiscal stimulus package emphasising on health spending to restrain virusspread may be promptly designed. The same should consist of financial supports to needy and affected households in the country.



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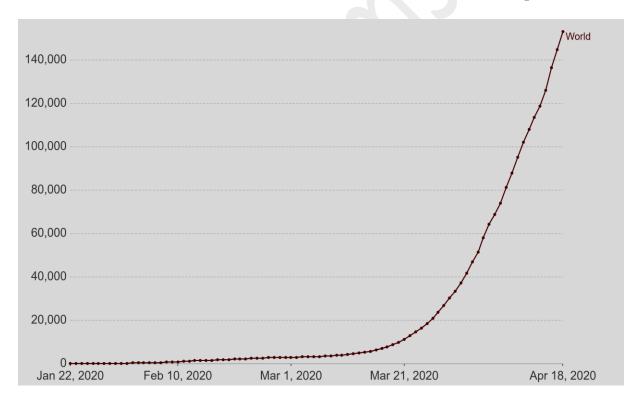
Meanwhile, a restoration of the disrupted supply chain, in a phased manner, should be planned for. In support of this, India may attempt to limit the imports through indigenous production of goods-a step towards furthering 'Make in India' campaign of the country.

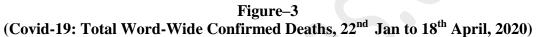
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Nevertheless, shall 'Covid-19' remain as a global health disaster for long? Just months before, we were in a world with no clue of a pandemic; no threat to humanity; economic and political issues were moderate; growth dynamics were acceptable if not promising; and the markets were deeply inter-connected. At this moment, as if, all are wiped off with incremental threats to mankind as reflected in Figure-3. Seriously, the world is now in a position to de-link itself.

Yet again, will India's probable economic fall-down be actually in response to Corona pandemic? Or will Corona be seen as a temporary phenomenon as the instances with a few other pandemics earlier? While there is paramount uncertainty on 'Who and What Next'; time will say. Research agencies are unanimous that Covid-19 will become an Economic Tsunami for India. In this context, any revival blue print is likely to be long-drawn and its probable outcome will perhaps be inconclusive. Up till then, the case, so far, is worth reviewing.





**Source:** Coronavirus Disease (Covid-19) – Statistics and Research, Max Roser, Hannah Ritchie, Esteban Ortiz-Ospina and Joe Hasell, Updated:18<sup>th</sup> April,2020, https://ourworldindata.org/coronavirus



#### **RELEVANT REFERENCES**

- i. Medisetti Maruthi, 2020, *The Impact of Coronavirus Pandemic on the Economy*, The Digital Edition of DATAQUEST, 9<sup>th</sup> April, 2020.
- ii. Abiad Abdul, Arao Mia, Dagli Suzette, Ferrarini Benno, Noy Ilan, Osewe Patrick, Pagaduan Jesson, Park Donghyun, and Platitas Reizle, 2020, *The Economic Impact of the Covid-19 Outbreak on Developing Asia*, ADB BRIEFS NO-128, 6<sup>th</sup> March, 2020, (www.adb.org/publications/series/adb-briefs).
- iii. UN-The Hindu Business Line, 2020, *Covid-19 Impact : Global Economy could shrink by almost 1 per cent in 2020*, 2<sup>nd</sup> April, 2020, (https://www.thehindubusinessline.com/economy/covid-19-impact-global-economycould-shrink-by-almost-1-per-cent-in-2020-say-un/article31233688.e).
- *iv.* Baldwin Richard and Mauro Beatrice Weder di, 2020, *Economics in the Time of Covid-19*, A CEPR Press VoxEU.org eBook, Centre for Economic Policy Research, 33 Great Sutton Street, London, EC1V 0DX, UK,(www.cepr.org).
- v. Stephanie Segal and Dylan Gerstel, 2020, *The Global Economic Impacts of Covid-19*, Center for Strategic and International Studies, 15<sup>th</sup> April, 2020,(https://www.csis.org/analysis/global-economic-impacts-covid-19).
- vi. UNCTAD-The Economic Times, 2020, *World economy will go into recession with likely exception of India, China,* (https://economictimes.indiatimes.com/news/economy/indicators/world-economy-willgo-into-recession-with-likely-exception-of-india-china-united-nations/ articleshow /74905696. cms), 2<sup>nd</sup> April, 2020.
- The Hindu Business Line, 2020, Covid-19 impact: ADB expects India's economic growth vii.  $3^{rd}$ slow down to per cent in *FY21*. April, 2020, to 4 (https://www.thehindubusinessline.com/economy/covid-19-impact-adb-expects-indiaseconomic-growth-to-slow-down-to-4-per-cent-in-fy21 /article3124).
- viii. Muthukrishnan Manjula, 2020, *Covid-19 and its impact on Indian economy*, 3<sup>rd</sup> April, 2020, (https://bfsi.eletsonline.com/covid-19-and-its-impact-on-indian-economy/).
  - Anbumozhi Venkatachalam, 2020, Will Covid-19 Devastate the Indian Economy?, Brink –News and Insights on Global Risk, Economic Research Institute for ASEAN and East Asia,15<sup>th</sup> April, 2020, (https://www.brinknews.com/will-covid-19-devastate-the-indianeconomy-recession-modi-coronavirus/).
  - x. Aggarwal Manish, 2020, *Navigating the CoviD-19 crisis*: KPMG, (https://home.kpmg/xx/en/home.html).
  - xi. Cox Josie, 2020, *Life And Work After Covid-19:The Problem With Forecasting A Brighter Future*, 14<sup>th</sup> April, 2020, (https://www.forbes.com/sites/josiecox/2020/04/14/life-work-after-covid-19-coronavirusforecast-accuracy-brighter-future/#24f9aa4c765b).