

# COVID-19: The Missing Insights



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## ABOUT THIS ISSUE

The COVID-19 pandemic has morphed from a public health disaster into a crisis that affects the entirety of our social and economic systems. While the adverse impacts of this crisis have permeated into every aspect of human endeavour and experience, there is still a greater focus on the health and mortality related with the pandemic. This in turn leads to a blind spot in formulating effective response strategies against the pandemic. We need to consider the larger impacts of the COVID-19 pandemic beyond the spheres of public health and economic slowdown.

This issue of *Southasiadisasters.net* is titled 'Covid-19: The Missing Insights' and highlights the lesser articulated impacts and consequences of the pandemic.

Some of the themes highlighted include the devastating impact of the pandemic on vulnerable communities with little access to social protection; the need for decentralized governance in times of top-down lockdowns; the urgency to design buildings and human settlements in a more sustainable way to withstand the onslaught of the pandemic etc. Sectors such as public transport, heritage and museums, urban infrastructure and ambient air quality which are often ignored while discussing the pandemic, also find mention in this issue.

Perhaps the most interesting facet of this issue is that it provides new ways to address the systemic risk of the pandemic. The missing insights on COVID-19 articulated in this publication call for long-term re-thinking to come up with sustainable and lasting solutions to this crisis. ■

- *Kshitij Gupta, AIDMI*

## INTRODUCTION

# The Missing Insights

By *Mihir R. Bhatt, All India Disaster Mitigation Institute*

Sometimes, insights about a particular crisis or phenomenon that are conspicuous by their absence assume greater importance than the insights that become apparent and articulated. And as a result, we have this issue no. 193 on "COVID-19: The Missing Insights".

In addition to the excellent articles on a wide range of themes inside, let me share some more insights that have emerged from AIDMI's work in South Asia.

What is the future of protection of pandemic victims? Who will protect them, and will they be better protected next time when the pandemic strikes?

Does impartiality work in the pandemic context? And how best can we even start to understand impartiality when the super-spreaders are national leaders, election rallies, and uncaring individuals?

And when the next wave of the pandemic hits us again, will those whom we call pandemic refugees not face xenophobia and discrimination? How can we make sure that all future pandemic aid is localised, and decentralised? And how can allocations be made bottom up?

Is the pandemic migration over now or we will continue to face

such human migration in the future pandemics?

To what degree, and at what stage will we add local and national actors in making the pandemic data open? Will open data lend to transparency? And improve the performance?

What is exactly killing the pandemic workers? Doctors? Nurses? Frontline workers?

How do we rethink the urban pandemic resilience? And is it time to reset resilience actions?

Is accountability the best route out of the pandemic in the absence of vaccines and oxygen concentrators?

What is the role of new technology in the pandemic response? What can solar drone do to make response more effective?

How do you deal with citizen who are on the move across state or national borders?

What has been the impact of localization of the pandemic response?

How do we move from single story to many stories narrative of the pandemic? And why does it help?

As mentioned earlier, these aforementioned missing insights into the pandemic offer a new perspective on how to plan for resilience against another wave of this contagion. ■

# Democratic Decentralised Governance in the Pandemic Times

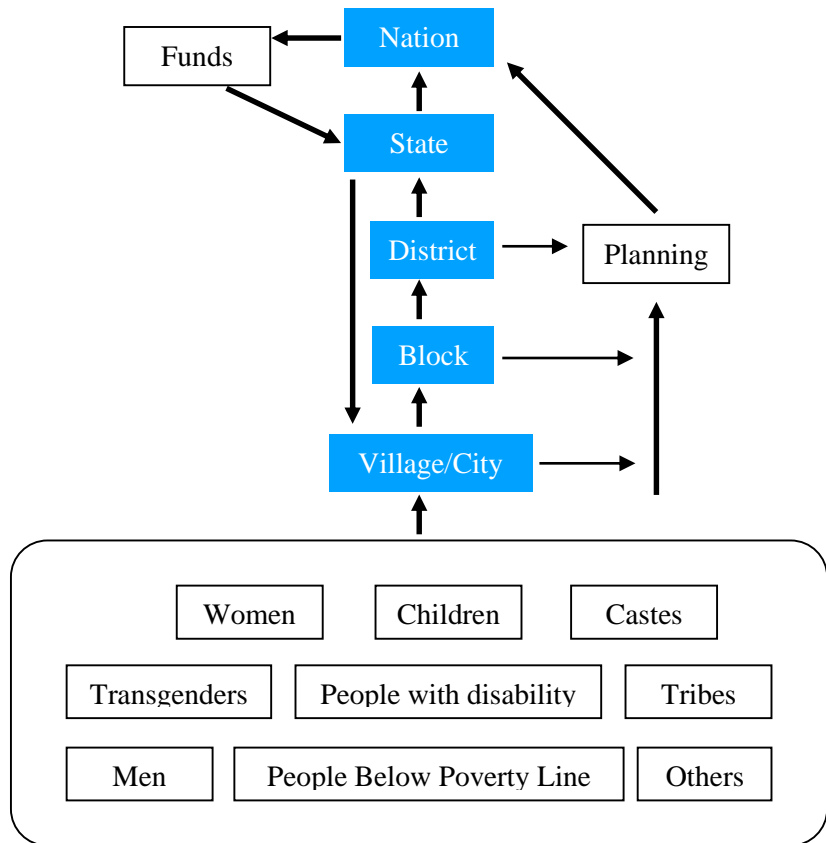
By Ghanshyam Jethwa, Independent Consultant, Gujarat, India

I am grateful to AIDMI for inviting my perspective based on my experience on decentralised governance in pandemic times working in diverse states and countries with INGOs, NGOs, UNICEF and government departments. I would like to share my perspective on what is Democratic Decentralised Governance (DDG) in the Indian context, how it dealt with the Covid-19 pandemic, key lessons, and way forward.

The purpose of the DDG is to ensure that the voice of the poorest of the poor and most marginalised is heard in the decentralised planning process, and the planned funds are used to fulfil their human rights. To achieve the purpose, the DDG has many functions and elements, but let us club them into four components: structure, legal framework, funds and people. The structure of the DDG in the Indian context is given in the following figure.

The legal framework provides for bottom-up planning process (from the marginalised people to the national level). Then the funds flow from the national level to the state and then to the village. The people component includes the Elected Representatives (political leaders), bureaucrats and the citizens from the national to the local levels. If all these components function effectively, DDG should be effective.

However, it varies in India from state to state, depending upon local



culture and other factors. The state of Kerala is often cited as the most effective in this context, and it is noteworthy that its control of the pandemic (at least in the first wave) was praised both by national and international organisations.

In India, some of the governance heads of the village (called Sarpanch, Pradhan or President) and city mayors played significant roles in controlling the pandemic. For example, they mobilise local volunteers to help, distribution of responsibilities to Elected Representatives, monitoring the situation in the streets by use of CCTV camera and drones,

disinfection of public places through fogging, and coordination with local police, NGOs, health workers, schools and Anganwadi (child care centre) workers. Democratic decentralisation worked effectively in those cities and villages.

At the same time, it is important to note that the National Disaster Management Act (legal framework) provides a clear scope for centralisation of governance in case of a disaster. Use of nation-wide lockdown in March 2020 is an example, though the central government decentralised that power after about two months or so.

A majority of the local leaders felt challenges of lack of guidelines from the top. For example, the increased fund allocation by central government for rural employment generation could not be used for specific skilled work, which was a demand by the migrant workers returning from the cities due to the lockdown.

A few leaders, however, had different perspective and approach. One leader said that he faced no challenge because everyone supported him. Other leaders mentioned few challenges, but also added that they were able to overcome them by people's support.

It speaks of their collaborative leadership approach, the concept of Distributed Leadership (or shared leadership), as they mobilised volunteers and activated local committee members. Therefore, as we draw lessons in terms of policy strengthening for DDG, I propose to shift the focus on people part that includes both the leaders and the followers at the different levels of the DDG structure.

Such leadership is characterised less by the leaders' knowledge of the legal frameworks, structures and funds (as the leaders did lots of no-cost activities such as coordination with stakeholders and mobilisation

of volunteers). Such leadership is characterised more by their compassion, will power to go extra miles, collaborative approach, team work and so on - all of which can be put together as a competency framework for leadership training. A sound research on what worked and what did not in the Democratic Decentralised Governance in the pandemic times may help to design a leadership training framework, which is different from the current training modules that just deliver information. Academic institutions, NGOs, CSR Foundation and Government Departments may take this call. ■

## BUILDING BACK BETTER

# Post Pandemic Resilient Buildings from Architectural Perception

By *Dr. Navneet Munoth*, Honorary Director, CoA-TRC, Bhopal;  
Assistant Professor, Department of Architecture and Planning, MANIT, Bhopal, India

It's been ten months since the outbreak of the pandemic has ravaged lives regardless of geography, social status, age, and gender. Our past passivity with regard to the social spaces is now under question. The 2020 pandemic made the entire world realize that the changes need to happen at a very simplistic level which will alter our behaviours as well as we modify our urban spaces. The pandemic has provided the problem-solving experts with whole new challenges which are needed to be resolved even at the cost of some additional expenses to cope with the recurrence of such pandemics. Architects will need to play a greater role by bringing to everyone's attention the risks of creating an unsanitary

environment in our lives. In order to prepare ourselves for such outbreaks in future, the following architectural design practises need to be considered.

### Design Contemplations in Public/Private Buildings

#### Reduction in Air-Conditioned Hours

- Lower temperatures can facilitate the spread and longer lifespan of the virus as per studies. Implementation of passive cooling strategies in buildings can minimise air-conditioning hours preventing infection from spreading within the enclosed area, optimise daylight access and preserve

levels of meteorological parameters within buildings.

#### Natural Ventilation and Access to Daylight

- Sun's UV rays assist your body to make vitamin D essential for your immune system. When people are restricted to cramped homes for long, more attention should also be paid both to resident's mental and physical well-being. Having Aangans (central open space), balconies, terraces in houses gives good air circulation, direct sunlight and a sense of openness inside houses, comply with the criteria set out above and also fights depression particularly in situations such as

complete lockdown. Such spaces are also vastu preferred.

### Organic Farming

- Organic produce strengthens human immune response and are also good for environment. Architects can provide rooftop gardens/ green terraces/verandas in the structure design to enable clients to have their own home farm. Planners can design community organic gardens for residential entities or apartments. Manual labour in farming would also increase the immunity of locals.

### Washrooms/Toilets

- Providing separate visitors washroom in the house attached to the living room.

### Isolation Zone

- An additional room with linked toilet and separate drainage shall be planned within homes that is convertible into an isolation zone in the event of a home emergency to treat contagious patients and keeping the rest of the households safe.

### Work from Home Spaces

- Sound proof work cubicles can be arranged at homes.
- Small meeting rooms inside homes for online conferences, speeches etc.

### Economic Solutions

- Solar Light Harvesting using solar cells on rooftop using 3D-city models.
- Use of local building materials to save expenses in transportation.

- Use of practices of vernacular architecture.

### Contactless Working Measures through Architecture

- Automated sensor doors, thermal scanner and automated sanitizer dispenser mounted at the entrance of public facilities.
- Use of voice-activated lifts which helps users to not press the elevator buttons.
- Use of Motion Sensor Light Switches.
- Phone/voice/sensor activated electronics such as AC, coffee machine, etc.
- Phone/voice-enabled door locks.
- Contactless fixtures in public toilets.

### Waste Disposal

- Waste Disposal and Door-to-door contactless collection in sealed and sanitized packets.
- No throwing of waste in open areas.
- Community dustbins to be sanitized daily.
- Complete ban on spitting in public areas.

### Education System and Awareness

Architecture curriculums will have to be modified and revised in order to integrate these technological capabilities and educate prospective practitioners in epidemic circumstances. Exposure to real projects while learning itself gives practical experience and quality learnings which lacks in present curriculums. Required officials and the public must also be fully informed of these challenges. ■



Fig. 1 Use of Computer Aided Design in Architecture to improve the space utilization as well as the available resources. Picture Credit: Designed by Freepik [www.freepik.com](http://www.freepik.com)

# The Impact of Pandemic on Architectural Studies: A View

By *Amrita Singh*, Architect- Environmental Planner, Assistant Professor (Faculty of Architecture), Sri Sri University, Cuttack, India

Everything bears some positivity and some negativity with themselves. Just as the Feng-Shui symbol "Yin-Yang", which signifies the concept of dualism, describing how seemingly opposite or contrary forces may actually be complementary. In simple words, the black portion having the white dot and the vice-versa, concludes that even a bad thing might have something good in it and vice-versa.

**The pandemic brought some bad things with it as well as something good.** While it has led to the increased depression and unemployment, loss of money and lives, it has also led to increased family time, cautiousness for betterment of health etc. Decrease in pollution and hence betterment of nature as well, in this rebooting phase of earth.

Listing down the **impacts of the pandemic on studies of Architectural Course faced by the students as well as the faculties.**

- The lockdown due to the pandemic has increased the efforts to be done by the faculties in preparing alternative methods of teaching, because use of practical samples have been difficult to present and respective site visits have been prohibited in accordance with COVID norms. (The first year students need more of guidance through conventional methods including manual drafting and

physical models to understand architecture fundamentally.

- Long-term fixed position during the online classes has increased the chances of Musculoskeletal disorders for the students as well as the faculties, demanding proper exercise during intervals. Increased focus on blue light of the digital screen for longer duration makes both the faculty and the students vulnerable to eye irritation and headaches.
- The students on their training period losses the opportunity to understand the work atmosphere in architectural offices when they are bound to choose the "work from home", where trainees get least chances to interact with the other employees, know and understand works handled as a whole by an architectural firm, but only get to understand the part they have been given work-on.
- The final year students find is even difficult to access the necessary data for their thesis project as case studies and site visit are not possible virtually to well analyze.
- The pandemic has opened gate of number of opportunities based on virtual and manual platform for teaching and learning. And for architectural field the prospects are as follows:

- The online mode of conducting classes has made easy for the faculty and the students to interact being at a single place. Through online submissions the digital works need not be printed for presentations saving a lot of papers, time and money.
- The Jam boards are proving to be a user-friendly gadget compatible for online collaboration through cross-platform support through the free Google Docs suite, helping the faculties and students to interact efficiently.
- Frequent possibilities of conducting seminars through web, that is, "Webinars" conducted by companies and firms or experts themselves have brought students as well faculties to platforms of gaining knowledge much easily, when the book of knowledge have themselves walked all the way through video conference meeting to the learners across the world.

In conclusion, there have been various impacts of the pandemic on architecture institutions. These include negative shortcomings in the new curriculum; a greater possibility of knowledge transfer between experts and learners; better engagement through online webinars; and improved accessibility to knowledge for many students. ■

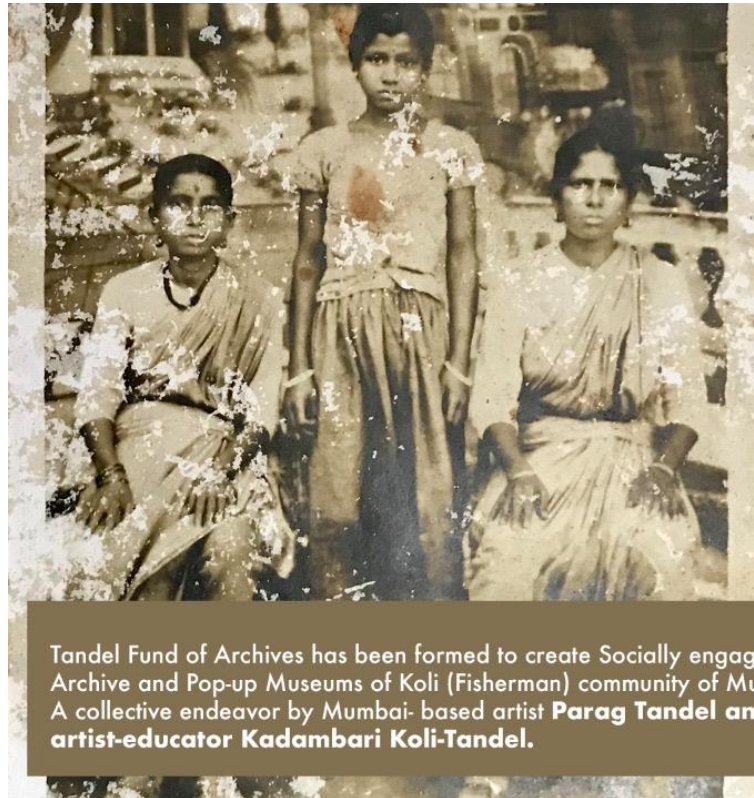


## Museums in Response to the Pandemic: Questions to be Asked

By *Poornima Sardana*, Founder, Museums Of Hope, New Delhi, India

The year 2020 has brought unprecedented chaos, loss, pain and uncertainty into our lives. As cultural institutions around the world attempt to collectively imagine their role amidst the spread and scare of COVID-19, an immediate effort in the museums sector has been of reaching out to experts and peers. From the International Council Of Museums (ICOM) to local regional groups on museums and heritage, communication surpassed geographical boundaries, time zones and institutional structures. The issues range across safety guidelines, ticketing and re-opening preparations to technical aspects like digitization of collections, conservation and precautions, exhibition design, digital marketing and outreach. There is global concern regarding funding and continuity of museums, future of collections and storage, salary cuts and loss of employment, re-skilling and training of employees, accessibility and lack of it, therapy through cultural resources and the daunting climate change.

While webinars offer a sense of professional solidarity in India and globally, the existing gaps also continue to survive. These are reflected in the voices that are being heard the least- employees who have lost their jobs, consultants and freelancers, artists and performers, volunteers, and most of all, the public. This highlights the need for an alliance of India's museums that is representative and listens beyond hierarchies, defines policies for employment and contracts, a clear



Tandel Fund of Archives has been formed to create Socially engaged Archive and Pop-up Museums of Koli (Fisherman) community of Mumbai. A collective endeavor by Mumbai-based artist **Parag Tandel** and artist-educator **Kadambari Koli-Tandel**.

code of ethics and responsibilities. Responsibilities not only towards the collection and employees, but also towards people and planet. Museums do not exist in isolation and for them to be relevant to the country and the world, their perspective of what they are and why they exist needs to widen.

In India, Rereeti as a mediator organization has facilitated dialogue among museum stakeholders in this period and their effort is indeed commendable but museums are yet to acknowledge biases in who they consider as stakeholders. While we ponder over what we should offer, which skills are needed and how we prepare the physical or virtual site, we are forgetting to ask, who is it that

we are welcoming, who would benefit from these offerings? These questions are not specific to the pandemic, their origins lie in the historical context of museums and their politics of representation, and the answer is closely intertwined with the solutions for museums to continue beyond the pandemic-relevance, newer models of independent revenue generation and accountability for impact.

While private institutions are offering creative formats of engagement online such as workshops, competitions and storytelling events, the bureaucratic institutions are offering virtual exhibitions or lectures online. These are currently mostly accessible in

English or Hindi. If museums ask the above question and expand their idea of public, then museums might need to cater to people in local dialects, and contribute to regional and localised learning using more accessible platforms. If they consider impact as a responsibility, then museums might want to work in tandem with educational institutions and organizations to ensure that children who are currently having least exposure to the benefits of cultural resources are not left out. This is when they can hope to receive funding based on their socio-economic impact. Institutions often complain that culture is not a priority, if in these drastic times cultural institutions are not being considered a priority and are not on the minds of people, then clearly they are lacking in relevance. And this is a time to open to and facilitate dialogue with the people they intend to serve. To listen, rather than presume and add to information excess in a world where google already exists. To listen, and then strategize, this could be the simplest yet most realistic response to our shared vulnerabilities.

This would require museums and other institutions to learn from alternative community-based models. To let go of control, to be open to co-ownership, collaborations, co-curation with communities and a demand for more autonomy in case of state run museums. Demand for autonomy would threaten their survival with loss of funding, but it could also be the catalyst of much needed change. To have revenue generating models or to work in partnerships is often missing in the museum sector, but that might be what is needed to resolve their existential crisis. The pandemic has enabled the experimental and entrepreneurial side of museum professionals who earlier were not able to implement ideas with ease due to hierarchical processes. It has allowed fresh collaborations. People's reliance on arts for solace and hope has reflected their role in emotional well-being. The pandemic has thus exposed the potential for cultural resources to be interpreted for purposes that were not being considered earlier in multiple formats.

It would only make sense for museums to thus respond to the

greatest crisis facing all of us, ensuring environmental well-being and a healthy planet. Could our resources not be interpreted for this purpose? Communities whose artworks speak of ecosystems, should their narratives and well-being not be of concern to the institutions? Are we ready as institutions to engage in difficult conversations? Are we prepared to be self-reliant through relevance, revenue and deeper impact in order to define and stay aligned with our values? While many quote this to be the dawn of the digital era for museums, are we overestimating the power of digital platforms sans the introspection needed to utilize it well?

For many of us, this pandemic is our first shared experience of such magnitude. It calls for long term rethinking and compassion at an individual and institutional level, as a society and as co-inhabitants of this planet. Perhaps understanding museums as part of this network of change, we might co-create sustainable solutions for these institutions. ■

## Do Poor Families Pay more for Food after a Disaster?

By AIDMI Team

Do the poor among the flood affected families of Bihar and Assam; cyclones affected families of West Bengal and Maharashtra pay more money for basic daily food than other affected persons?

This question has come up again and again from AIDMI's ongoing work in the above-mentioned regions. Through discussions with various disaster affected communities especially with female headed farmer households, it was found that the poor end up paying more for food in post disaster scenarios. The flow of food to the disaster affected family needs review in terms of time, quantity, and quality. And most importantly, cost. Credible and transparent information about the flow and cost of food will help in improving the outreach to those affected families that are poor and paying more money for food after a disaster.

Do formal and informal social safety nets work? Are they offering the benefits to families affected by the health and economic crisis? What is the impact of recent cash transfer to millions in the short term, as well as in the long term? Has it helped in improving their access to affordable food?

The above two set of questions are coming up in discussions with individuals and institutions in AIDMI's work in India. Time has come to find out if the poor families among the victims pay more for food after a disaster. ■



# Key Impacts of the Pandemic on India's Transport Sector and Way Forward

By *Mitali Chaudhuri, Independent Consultant-Transport Economics*

## Introduction

India's 68-day nationwide lockdown, imposed to contain the spread of the virus, brought the economy to a grinding halt. GDP witnessed its worst-ever contraction of 23.9% in Q1FY2021, with key sectors severely affected. The entire transport spectrum - from rickshaw pullers to aviation - is facing the COVID brunt in different degrees. The impacts on transportation during lockdown, unlock, and post-vaccine phases are discussed briefly.

## Short and Medium Term Impacts: Pre-Vaccine

### Urban Mobility

Lockdown saw behavioural changes in urban mobility patterns. Heightened online activities (work/classes/entertainment/shopping) led to reduction in passenger travel demand along with a sharp increase in e-commerce delivery vehicles. Pandemic transmission concerns found preference for walking, cycling, and personal vehicles (new/second-hand). With majority of public transport (PT) users being

captive, the demand for PT is largely unaffected. This shift in transport demand will persist in the short/medium term - till a vaccine is found and fear perceptions reduce. A spurt in private modes would worsen the congestion and pollution in Indian cities and be counter-productive. Concerted effort to ensure travel in buses/metros is safe would reclaim lost PT trips and prevent spike in private vehicles.

Governments, hitherto concerned with the supply side of mobility (flyovers, wider roads) would, in the short/medium term, need to proactively address the demand side of mobility by moderating and managing travel demand, as under.

- Nudge short trips into walking/cycling by providing appropriate infrastructure (pedestrian paths/cycle tracks/rent-a-bike).
- Enforce physical distancing and safety protocols in crowded PT modes to instil confidence in passengers - mandatory masks/spaced-out seating/screening

and queuing at stations/digital payments to minimise contact/additional bus fleets with greater frequency to accommodate the restricted number of commuters.

- Cross-subsidise PT operators to counter financial risks of reduced ridership - congestion pricing and steep parking charges in CBD/commercial areas to discourage private vehicle usage and generate revenues.
- Support shared-mobility and micro-mobility service providers (aggregators/taxis/auto rickshaws/e-rickshaws/rickshaw pullers) who had neither the means to sustain themselves during lockdown, nor insurance coverage for times of crisis. Restriction on number of passengers in cabs/partitions in ride-sharing vehicles/tariff guidelines incorporating reduced earnings due to restricted ridership/social security solutions for drivers and single owner-operators - can help mitigate risks.



### Freight and Logistics

The decline in road freight movement, following sluggish economic activity in Q4FY2019, was exacerbated by the lockdowns in India and abroad. The logistics industry was thrown into a crisis as demand for freight/warehousing dropped sharply, truck movements fell by 90-95%, and export-import movements were minimal. Challenges faced were dearth of manpower (due to massive labour

migration from cities), refusal by drivers to do trips without adequate health security and protection, restrictions on cross-border movements, lack of return load, disruptions in supply chains, and cash flow issues of small transporters. Consequently, the revenues of freight operators and logistics companies declined in Q1FY2020. The outlook for this sector continues to remain bleak in FY2020, given the huge contraction in the economy owing to the pandemic.

### **Railways and Aviation**

The railways suffered a loss of Rs. 6500cr in revenue, from ticket sales alone, during the first two phases of lockdown. Behavioural fallout of the COVID crisis has been a shift in focus to essentials from leisure. Curtailing of holiday plans lowered demand for rail and air travel even after unlock. Revival strategies include:

- safety protocols and physical distancing on-board and at stations/airports
- changing seat alignment in rail coaches
- withdrawal of blankets in AC coaches
- filters in AC ducts

Aviation is the worst affected segment. Passenger flights were suspended, cargo flights carried only essentials - pharma & medical equipment, and staff shortages led to delays in cargo clearance. Revenues dropped by 85% in April-June 2020. Significant cut backs in jobs and salaries by airlines and related sectors. Load factor on domestic flights only 50-60% due to lack of appetite for travel. Airlines face financial strain with surplus capacity and grounded aircrafts. The sector is going through turbulent times and only a few strong players may



ultimately survive the storm unless a revival plan is in place.

Regular international flights remain suspended. To tide over this crisis, MoCA has set up Air Bubbles with 19 countries. These temporary bilateral travel agreements, allow flights to operate between the countries subject to regulations related to quarantine centres, testing numbers and facilities. India should enter into more such Air Travel Bubble Agreements to revive the cash-strapped aviation sector.

### **Post-Vaccine Scenario: Way Forward**

Visions of a post C-19 world are riding on the expectations of an effective vaccine against the virus. The timeline for the earliest rollout of the vaccine and widespread availability in India is around Q2/Q3FY2021. Till then the transportation sector will be in a state of flux.

India must use this crisis to give a fillip to sustainable transport. For passenger travel, the new normal will be "accessibility" rather than "mobility", where people can obtain the same goods, services and activities without having to move as much.

- Offices will resume with lower staff presence. But WFH,

staggered working hours, webinars, e-meetings are here to stay

- Enduring popularity of walking/cycling/micro-mobility modes - a welcome move towards sustainability - needing suitable policy intervention
- Schools & colleges will resume normal functioning
- No long term effect on PT, as safety protocols will have become the norm
- Road travel will replace train/air travel, where feasible
- Leisure travel amongst millennials will pick up to de-stress from WFH/online activities. For the elderly, regional/local travel will replace foreign travel.
- Small businesses must embrace digitalisation/e-commerce or perish.
- E-commerce delivery service should move towards a sustainable solution, the electric vehicle (EV) platform

The pandemic has sounded the clarion call for adapting to the new order through reform and growth.

- China's global position weakened in the aftermath of the US trade war, pandemic and

India's border issues. Foreign companies are looking to diversify global supply chains beyond China. This is India's moment of opportunity to evolve into a supply chain major and manufacturing hub for the world.

- Initiatives like "Make in India", "Skill India", "Atma Nirbhar Bharat" and impetus to the MSME sector can create a favourable environment for global manufacturing.
- Vigorous industrial activities would give a boost to the transport sector via growth in freight, logistics and warehousing
- Vaccine distribution for India's 1.3 billion population would generate massive, though temporary demand for

transport, logistics and specialised cold chains, needing innovative supply side solutions in the short/medium term.

- Opening up of agricultural markets will mean increased inter-state movement of agricultural produce, containers and cold chains.
- Railway must increase its efficiency and capacity to carry passengers and freight - else road transport will fill the gap in demand.

All of these indicate a positive outlook for India. Government must take timely actions to turn the threats into opportunities and pull itself out of the doldrums. ■

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## BOLSTERING PUBLIC TRANSPORT SYSTEMS

# Public Transport in the Age of COVID

By Ranjit Gadgil, Program Director, Parisar<sup>1</sup>, Maharashtra, India

Even before the COVID-19 pandemic, public transport in Indian cities was a matter of great concern. Rising incomes, greater demand for mobility and the inadequacy of public transport was leading to a rapid increase in private vehicles and with it congestion, pollution and road crash fatalities and injuries. Cities were reacting to the increase in vehicles by spending more money on widening roads, building flyovers and multi-level parking lots, starving public transport of funds as well as squeezing them off the roads.

### The Impact of the Pandemic

During the lockdown two key factors emerged. Cities witnessed first-hand the dramatic reduction in pollution.

While vehicle exhaust was a known major contributor to air pollution, this provided people a chance to experience cities without the fumes and the noise and to envisage a healthier and cleaner environment. Secondly, evidence emerged that there was a definite correlation between COVID and the pollution levels to which that population had been exposed, thus making air pollution a factor in the post-COVID scenario.

### Post-COVID

As the lockdown eased, it became clear to many cities around the world, that there was an opportunity to avoid a return to business as usual and instead think about an urban transformation that embraced

sustainable modes of transport - walking, cycling and public transport. This would not only help reduce air pollution, but also be a robust transport system that would be more resilient in the face of any future shocks to the city - be they natural disasters, pandemics or man-made events such as terrorist attacks.

### Public Transport Challenges

The primary challenge for public transport was the need for social distancing. Inadequate public transport has meant overcrowded buses, trains and shared autos/taxis. Not only is this a challenge for the government and the service providers but also a fear amongst the public that will have to be overcome. To reduce crowding, buses and

<sup>1</sup> Parisar is currently running a "Lakh ko 50" campaign advocating better bus-based public transport in Maharashtra as part of the Sustainable Urban Mobility Network (SUM Net) <https://www.sumnet.in/>



trains will have to run at less capacity, thus reducing fare box collections. Longer waiting times would also mean that people, needing to get to work on time, might resort to other modes, such as shared private vehicles or buying a vehicle. Both these however only increases the COVID risk. A catch 22 situation indeed!

### The Future

The way to unravel this apparent dilemma is simple. The State needs to recognize the enormous benefits of having a high quality and adequate public transport system and invest in this. The traditional view of public transport being “loss making”, based simply on the expenditure vs revenue, requires to be abandoned in favour of treating it as an essential service – one that will not only boost economic activity but also help to reduce congestion, pollution and crash related fatalities and injuries, all of which have a high economic burden. The total “cost to society” by investing in public transport systems – which includes complementary high-quality pedestrian and cycling infrastructure

– has to be recognized as being a net positive.

### Steps Ahead

Urban transport is a state subject and hence any policy decision on this must be taken by state governments. The first step would be to make urban public transport an essential service, just like water supply or sewage treatment, making it obligatory for the state to provide it. This can be achieved through a State Transport subsidiary or by requiring urban local bodies to run services. The most economical and effective way to provide public transport is by using buses. This is a flexible way to provide services at the appropriate frequency to all parts of a city. Buses can be large or small, AC or not, running express services, etc., to cater to the travel demand in a city. Ensuring high quality, safe and reliable services will also require the State to set service-level benchmarks and have robust regulatory oversight.

### PPP with VGF a Possible Way Forward

While there is debate over whether public transport services should be

owned and operated by the State, considering that most cities have either no public transport at all or have an informal bus service run typically by a private operator, there is a strong case to get organized public transport in a city leveraging public-private partnerships. To bridge the revenue gap – no public transport is expected to be fully financially self-reliant – a viability gap funding (VGF) mechanism should be considered by the State. The Central government too must play a role in developing a scheme to support the States in this effort.

Bus-based Public Transport can be a quick, effective and cost-efficient solution to make cities resilient and States would do well to consider policies and schemes to make this a reality. Adequate services that reduce crowding, coupled with other measures such as e-payments and sanitization can provide people, especially the urban poor who are already badly affected by the pandemic, an affordable mobility option and help get our economy back and better. ■



## The Pandemic and Lakh ko 50: New Public Bus

By Dr. Avinash Madhale (CEE), Campaign Coordinator, Lakh ko 50 by SUM Net<sup>2</sup>, Maharashtra, India

Thanks to 49% urban (poor) dwellers for not using motorized transport for daily commute. Nearly 20% male workers and 33% female workers do not travel the proportion of workers who travel but not more than 5 kilometers is about 70% as per Census data analysis led by Prof. Geetam Tiwari, IIT Delhi. 20% urban residents use motorized two wheelers and 5% use cars. Promoting personalized mode of transport as safe COVID-19 mode would worsen the already abysmal air quality in India with catastrophic consequences. At present, India has 110 non-attainment cities that have motorization led pollutants way above acceptable limits set in ambient air quality norms and standards. With already a war like situation on roads, the way ahead lies in adaptability. Global cities have used this pandemic for promotion of walking, cycling and strengthening city bus infrastructure systems.

City buses systems were lifeline during COVID-19. Physical distancing norms and limited access to city bus services made it clear that

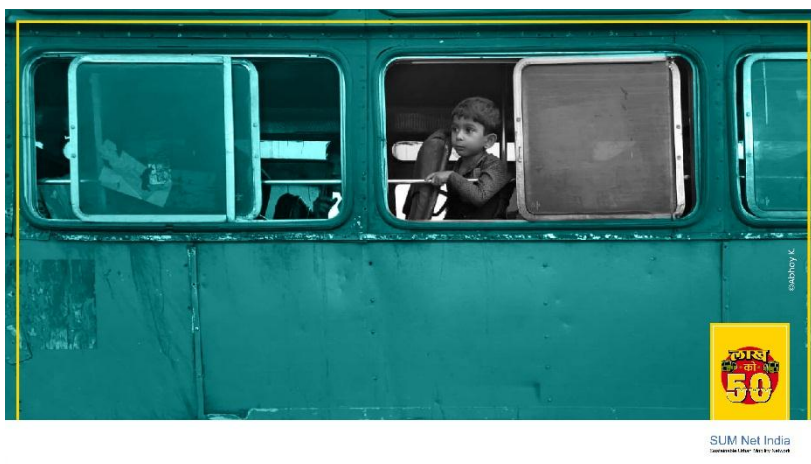


SUM Net India  
Sustainable Urban Mobility Network

India has not invested enough in bus based public transport systems. There is a gradual shift in bus market. In year 2006, about 26 states had city bus operations and in the year 2014 about 31 states had bus operations in 177 cities. Before lockdown around 198 cities had bus based public transport. Out of total 45,000 city buses in India, 30,000 city buses were run by state transport units and Urban Local Bodies. Around 15,000 buses were run by private operators. Current status of operational city buses is unclear and uncertain. There is no authentic city

bus portal to get updated information. Before COVID-19 there were only 8 buses per lakh city dwellers. Central Government has themselves set up a benchmark of 50 to 60 buses per lakh population. Only city of Bangalore meets this benchmark in the country. Mumbai has 28 buses per lakh population.

Sustainable Urban Mobility Network (SUM Net) is a network of individual and civil society groups in India. SUM Net's 'Lakh ko Pachaas' campaign aspired to highlight need of investment in city infrastructure by providing minimum 50 buses per lakh (100,000) population. This campaign mobilized around 50,000 supporters for online petition demanding urgent attention and investment in city buses as method of green economic recovery. Over 10 lakh Facebook engagements in commuter stories. City dialogues (online) were held in Chennai, Jaipur, Lucknow, Ahmadabad, Dehradun, Visakhapatnam and Hyderabad. States campaigns also got good response in Maharashtra and Delhi.



SUM Net India  
Sustainable Urban Mobility Network

<sup>2</sup> Sustainable Urban Mobility Network India a network of civil society groups, seeking to improve the quality of life for all by securing deeply democratic processes of decision-making to ensure that urban transport systems are universally accessible, socially just, safe and secure, economically viable, and environmentally sound. ([www.sumnet.in](http://www.sumnet.in))

National Campaign demands are:

1. **Urban Bus Policy** to systemically strengthen public transport as Transport Policy being prepared by Ministry of Road Transport and Highway must integrate National Urban Transport Policy 2006 and accord top priority and institutional mechanism for urban bus systems.
2. **Central Bus System Fund** for long-term financial viability of operations.
3. **Comprehensive Set of Standards** for bus services in all types of cities.
4. **Comprehensive Urban Bus Plans** to be prepared by state governments mandatorily
5. **Bus-based Public Transport Centers of Excellence** to provide technical assistance to set-up and strengthen city public bus systems in the country.

The campaign team has so far reached Chairman of Parliamentary

Standing Committee on Urban Development having a balance of regional and political representation. As next steps SUM Net is reaching out to Hon'ble Minister of Housing and Urban Development with these demands. If Hon'ble Minister decides to drive city dwellers in safe buses then with investment of 45,000 Crore rupees, India can provide 50 buses per lakh population in the cities having more than 3 lakh population. ■

## IMMINENT DISASTER

# Toxic Air Quality – Not a Seasonal Issue

By *Vinay Iyer, Freelance DRR, Humanitarian and CCA Consultant*

With the onset of winter in our country, we are suddenly jolted to come out of our hibernation to bring the attention of policy makers and general public on a burning issue over the last couple of decades that poses a serious health risk to our country. Yes, you guessed it right - Toxic air quality. The discussion and debates on toxic air quality begins in October and ends by February and then the business continue as usual. Unfortunately, during this period of the year the air toxicity is at its extreme, during other months we breathe air that is anywhere 3-4 times more polluted than the prescribed limits. The sad truth is that we breathe polluted air throughout the year.

As per the World Air Quality Report 2019, compiled by IQAir Air Visual 21 out of the 30 most polluted cities were in India. The report also stated that India is the 5<sup>th</sup> most polluted country in the world. The dangerous concoction of toxic air includes the deadly PM 2.5 that is direct linked to causing lung ailments and heart diseases. India boasts about its demographics dividend, where

62.5% of its population is between the age group of 15 – 59 years. This is expected to peak by 2036 at 65%. However, going by the recent trends in air pollution, this population is also exposed to an environment which is not conducive to a healthy future. The gains will be temporary and the long term damage caused due to the exposure of children and youth to toxic air will be negating the growth. The analysis of Global burden of Disease 2019 states that air pollution was the leading cause of death in the country (contributing to an estimated 1.67 million deaths), followed by high blood pressure (1.47 million), tobacco use (1.23 million), poor diet (1.18 million), and high blood sugar (1.12 million).

According to a report by World Health Organization, around 93% of the children below the age of 15 across the globe breathe polluted air that seriously risks their health and development. The State of Global Air 2020 report found that air pollution killed about 116,000 infants in India (highest in the world) within the first 30 days of being born. As on date, India has lost over 12 million lives to

COVID 19 and there is growing evidence that people with weak lungs and pre-existing respiratory diseases have higher mortality rates.

Despite of having plethora of data pertaining to the impact of toxic air on people's health and its impact on the resources (economic and human resource), very less has been done to tackle this serious crisis of toxic air quality. By not addressing the issue, millions of citizens are being denied their fundamental Right to Life as guaranteed under Article 21 of the Indian constitution.

Toxic Air Quality affects everyone and unfortunately it is the poor who are the biggest victims. For them the air around them can really affect their lives and they have no choice but to endure it. Their lives are dominated by the need for survival and basic necessities for sustenance. The political class across the isles must set aside their differences at least on this particular issue that affects all (including them) and come up with comprehensive solutions to provide a breathable future for this country. ■



# The Pandemic in Nepal: Gender and Climate Change Perspective

By Geeta Bhattraai Bastakoti, Gender, Social and Climate Change Adaptation Specialist, Community of Evaluators, Nepal

The environmental shocks resulting from climate change have been devastating due to the disruptions caused to lives, livelihoods, assets and habitations. ] These devastating impacts had never been gender neutral. The scale and intensity of these impacts depends upon several factors such as age, location, ethnicity, remoteness, occupation and other factors. Furthermore, it has been repeatedly seen after every crisis that women bear a disproportionate burden of the adverse impacts of that crisis as compared to men of the same socio-economic category. But with sudden occurrence of the health crisis, COVID 19, the cost and impacts is even worse and far lasting considering its impacts in terms of economic and social and political domains.

Nepal a mountainous country in South Asia, the impacts of climate change is differentiated by regions and diverse landscapes. Most importantly the livelihood and sustenance of mass population revolves and is dependent on natural resources and the ecosystem services. Agriculture remains a major source of employment and food security until now. Similarly, Nepal is transitioning towards the commercialization of agriculture though still the practices on subsistence basis persist. Women form a greater part of the agriculture workforce than men and most of the farmers are smallholders. Migration is mostly undertaken by men alongside fewer women to earn income in city areas and overseas.

With the pandemic situation the impacts of climate change have exacerbated across genders significantly. Then the question arises how and in what forms. With lockdown implementation most of



the industries and offices shut down. Consequently, women and men relying on these jobs for earning lost their livelihoods options and food security and other necessities. On the agriculture side, the lockdown led to reduced sale of the agricultural produce with the reduced demand and imposition of vehicle transportation. With the cut off of income and decreased income from agriculture and non-farm job implies less purchasing power of food and other operating expenses by women at household level mainly responsible for managing household food and other requirements. Further, with the men member presence in the household the positive assumption of decrease in agriculture labor remains but there has been rise in the stress, disputes and violence incidences at household level. In the absence of men in the household, it was the women who had been diligently managing the

household finances. But this financial agency of women has been disrupted due to the pandemic wherein they have been forced to borrow money from relatives and friends due to cash crisis and decreased remittances.

Further, in year 2020 and 2021 with flood events there has been heavy displacement of population in the with loss of assets and loss of livestock and agriculture produce. The delayed relief responses in the lockdown situation further aggravated the hardship situations faced by the displaced communities. Women particularly aged, single, lactating, pregnant, infants, kids and marginalized population face challenges more due in this kind situations particularly because of the differentiated needs, support, and feeding requirements, environment and safety needed by these group of population.

"During this pandemic, the most vulnerable have been the hardest hit ... We must increase our resilience. We must work together and take an integrated approach to health, hunger, climate, and equity crisis — no one is safe from COVID-19 until everyone is safe."  
- Volkan Bozok, President of the United Nations General Assembly.

All the above-mentioned gender differentiated remains at one hand, but it is important that the gender differentiated impacts of COVID 19 and climate change needs to be documented with research and support programs needs to formulated in a way that are highly gender responsive and will enhance the resilience of women to such shocks in the future. ■

# How Cities Survive the Pandemic: Benefits of Resilience Investment

By Mutarika Pruksapong, Ph.D., Programme Management Officer, United Nations Office for Disaster Risk Reduction (UNDRR), Thailand

It has been nearly one year now that we are living in the world of COVID-19, a pandemic that has cast an enormous impact on countries and cities around the world. We can see clearly from this pandemic that disaster risk is indeed transboundary and requires the whole of society's efforts to address it.

Disaster risk reduction and resilience is an investment. Cities that have invested in resilience are in a better position to understand the complexity of risks and able to respond quickly to the situation. The benefits of such investment become very visible especially at this time.

## 1. Plan well and continue to improve

Since 2010, the Making Cities Resilient (MCR) Campaign has

provided a set of knowledge products and toolkits useful for cities to initiate the engagement in disaster risk reduction and resilience. *The Ten Essentials for Making Cities Resilient* is a fundamental guidance or a check-list that cities can use to ensure they are looking beyond emergency response and recovery into also setting up disaster risk governance and mechanisms, understanding risks, ensuring budgets, integrating disaster risk reduction with urban development, building resilient infrastructure, and engaging a broad range of stakeholders.

*The Disaster Resilience Scorecard for Cities*, building around the Ten Essentials, provides a set of indicators helping cities self-assess

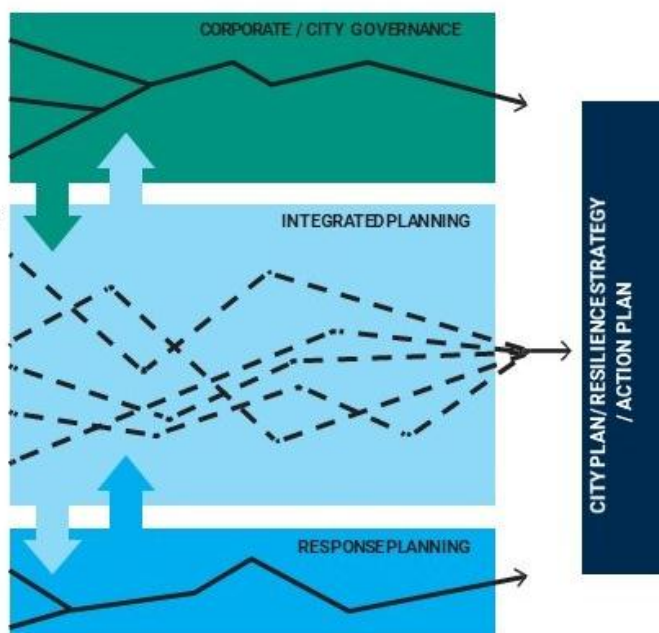
their progress and strive for improvements.

Sioux Campbell, Disaster Management Resilience Officer, Cairns, Australia, shared at the MCR Campaign steering committee meeting in July 2020, "... what we need to do will become more challenging not only because of current circumstances but because the challenges have become harder and more complex. The findings from the Disaster Resilience Scorecard we ran a few years ago are starting to see results in terms of research and planning around major issues. I look forward to rerunning the Scorecard process and using the baseline measurement to build a future for us... and moving into a very uncertain future for the region due to the impacts of COVID."



## The Ten Essentials for Making Cities Resilient

- 01: ORGANISE FOR DISASTER RESILIENCE
- 02: IDENTIFY, UNDERSTAND AND USE CURRENT AND FUTURE RISK SCENARIOS
- 03: STRENGTHEN FINANCIAL CAPABILITY FOR RESILIENCE
- 04: PURSUE RESILIENT URBAN DEVELOPMENT AND DESIGN
- 05: SAFEGUARD NATURAL BUFFERS TO ENHANCE THE PROTECTIVE FUNCTIONS OFFERED BY NATURAL CAPITAL
- 06: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE
- 07: UNDERSTAND AND STRENGTHEN SOCIETAL CAPACITY FOR RESILIENCE
- 08: INCREASE INFRASTRUCTURE RESILIENCE
- 09: ENSURE EFFECTIVE DISASTER RESPONSE
- 10: EXPEDITE RECOVERY AND BUILD BACK BETTER



## 2. Set resilience as a city priority and broaden collaboration with different stakeholders

COVID-19 clearly highlights the interconnectedness of different sectors of a society from health sector to transportation, trades, tourism, education, and many more. Cities must understand the system approach to disaster risk reduction and break the silos for all-sector collaboration. The Scorecard can help cities open a dialogue with various groups of stakeholders on the issues around resilience.

*"... We completed the Disaster Resilience Scorecard which led us to improve our governance mechanisms, broadened the range of stakeholders engaged in resilience and so further*

*enhanced the recognition of DRR as a city priority. We have therefore been able to use the Making Cities Resilient Campaign as a springboard to enable systems to join together in thinking and planning around disaster resilience. When COVID struck, this meant that we were able to quickly bring together the whole city system to develop a cross-sector response to this disaster," Kathryn Oldham, Chief Resilience Officer, Greater Manchester Combined Authority (GMCA), United Kingdom, said at the Launch of the Making Cities Resilient 2030 on 28 October 2020.*

## 3. Learn from others

*"[The Pandemic] shows us that it is impossible to act by ourselves. In the age of collaboration, it is essential to work*

*with others. Participating in global networks is of the utmost importance to learn about how others have faced similar problems, with which tools and results. This inspires us to improve," stated Emilio Jatón, Mayor of Santa Fe, Argentina, at the Launch of the MCR2030.*

Cities learn best from other cities facing similar challenges. The MCR Campaign is ending in 2020 and will be succeeded by the new initiative Making Cities Resilient 2030. Join other cities and partners and continue the journey of resilience together.

Visit [www.mcr2030.undrr.org](http://www.mcr2030.undrr.org)

## RISK GOVERNANCE DURING THE PANDEMIC

# Policy Challenges Associated with the COVID-19 Pandemic Governance

By Professor Dilanthi Amarantunga, Head of Disaster Risk Reduction and Management, Global Disaster Resilience Centre, University of Huddersfield, UK

In a society faced with increasing risks and uncertainty, risk governance stands fundamental. The COVID-19 pandemic, that has largely impaired the world system, raises pressing policy challenges, posing important implications for governance of pandemics and other risks.

One of the main policy challenges of governing pandemics spring from the fact that a pandemic like COVID-19 constitutes a systemic risk, in the sense that, it not only poses adverse effects on certain parts, components or aspects of a system but disrupts the functioning of the entire system. For instance, the COVID-19 pandemic has caused unprecedented cascading effects that transcend sectors and nations and levels [1]. The primary adverse effects on

health accompanied by the lock down measures imposed to curtail the spread of the virus, have cascaded into considerable economic losses and deterioration of social wellbeing. This widened inequalities in access to education and fuelled



social unrest as some population groups, specifically those residing in rural areas, did not have access to the facilities and infrastructure necessary for online learning [2].

Pandemics such as COVID-19 lead to a set of unexpected, interwoven risks that are characterised by complex, non-linear cause and effect relationships. Current policies that are designed to address conventional risks are unable to capture and deal with the complexity and interconnectedness of systemic risks. Hence, a policy mechanism that facilitates 'systemic risk governance' is much called for. Systemic risk governance requires that a network approach or systems approach is emulated to gain a more comprehensive understanding of the system and its interconnections so



that measures to stop, or at least minimize the cascade of effects can be arrived at. This hints at a broader and a more comprehensive approach to risk management and impact identification. Similarly, systematic risk governance demands the use of “appropriate monitoring measures to detect failures immediately” [E.g.: developing Early Warning indicators] and harps on building social and economic resilience in order to tackle the unprecedented nature of systemic risks [3]. Most importantly, given the capacity of systemic risks to transcend sectorial and national boundaries, an inclusive approach that supports collaboration among diverse stakeholders including the state, private sector, academic institutions, the civil society and even international organizations has been recommended to be followed in addressing systemic risks.

Further, although pandemics like COVID-19 are global risks and

guidelines for pandemic governance are available at a global level [E.g.: The International Health Regulations of the World Health Organization], actions taken against such infections should be localized to address the issues and needs which are endemic to national and subnational contexts. To be faced with the need of localizing prevention, preparedness, response and recovery mechanisms could be challenging on the policy front.

Pandemic threat calls for changes in preparedness and response mechanisms for other hazards that occur concurrently with a pandemic. This represents a significant policy challenge that needs to be addressed in governing pandemics.

Another challenging aspect to be taken into consideration in governing pandemics is the fact that the effects of a pandemic like COVID-19 are disproportionately experienced by different social groups. That is, some groups like the

elderly and the poor are subject to a greater degree of vulnerability than others in the face of a pandemic [6]. The need to address these specific vulnerabilities in responding to pandemics and to reduce these vulnerabilities in the long run provides important policy implications for pandemic governance. ■

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#### SAVE THE DATE

## 2021 Conference on Humanitarian Studies

*New realities of politics and humanitarianism: between solidarity and abandonment*

The 6<sup>th</sup> International Humanitarian Studies Conference will be organized in Paris, from 3-5 November 2021, by the International Humanitarian Studies Association in collaboration with Sciences Po, with a significant scientific implication of the Center for International Studies (CERI) at Sciences Po.

This conference will be a hybrid event, meaning we will host live panels in Paris and include online participation as well. ■

For more information, [click here](#)



# Indian Role in Global Response: The Pandemic Response

By *Ambassador (Dr.) Amarendra Khatua, Former Secretary, Government of India, Ministry Of External Affairs, New Delhi, India*

**C** OVID 19 is a Chinese curse which has wrecked more material, financial, economic, psychological and mortal havoc globally than the past two World wars combined. It has brought both the developing and developed world to their knees. Any planned, nurtured and evolved solution to ensure that this menacing pandemic turns endemic and a planned counter to it by way of vaccines, preparatory preventive medical treatments and cure seem presently to be many months or few years away.

India, a nation of unity in diversity, is similarly affected by COVID 19. Corona Virus has devastated India's economy, shrunk its GDP, annihilated its traditionally strong MSME sector, created huge migration of labour and students across vast distances of its territory, reduced foreign exchange repatriation from abroad and has become a headache for policymakers at centre and state levels. Despite this, India has admirably laid out a national plan for mass vaccination based on the National Inoculation Programme model, has incorporated private sector and all kinds of teams of COVID Warriors to battle the pandemic and has developed two vaccines as the vaccine incubator of the world and is developing four more which should be available for domestic use and exports in next 60 days.

While India, like all the community of nations, is struggling to contain the spread and vaccinate its populace, its global response to the pandemic has been heroic and historical. criticism will come over the way our containing the spread and waves is suffering due to diverse age, population, regional and

comorbidity related differences, however, our global response (briefly presented due to space constraint) as an independent, responsible, helpful and cooperative global partner of all nations must be highlighted. These Include:

## **A) Scientific Contribution to development of Vaccines**

Unlike profitmaking pharma multinationals and export-revenue expecting developed producer countries, India, as the pharmaceuticals innovator and pharmacy of the world, has supported its private and public sector laboratories and pharma companies in India and their collaboration with outside research institutes, universities and patent holders and succeeded in bringing out Covaxin and Covi Shield, in qualifying and final testing of Sputnik for Indian and global market and on the way to produce ZyCoV-D and other vaccines by Panacea Biotec, Indian Immunologicals etc. Such quick and efficient response has made the multinationals aware and rethink on availability of their products in the market as well on price front, both on medium and long term.

## **B) India's COVID 19 Diplomacy**

As always, as in the past during global struggle against AIDS and other pandemics, India, despite its own huge domestic demand, has supported global preparation to counter the battle against COVID 19 under Prime Minister Modi's Vaccine Maitri initiative. Till date India has supplied 62.3 million doses to 85 countries. These include exports and sales, free aid and grants, humanitarian supplies and gifts and exports and aid under specific emergency requests received from various countries and heads

of governments and states. India has also pledged 200 million doses under World Health Organisation's COVID 19 Vaccine Global Access(COVAX) initiative earmarked for the low and middle-income group of countries numbering 92. As a neighbours-first initiative, India has donated doses to Sri Lanka, Bangladesh, Maldives, Nepal, Bhutan and Myanmar and even made humanitarian offers to Pakistan. Public statements and proclamations made globally by presidents and prime ministers of various countries including that of Brazil, Canada, Antigua and Barbuda and Bangladesh are noteworthy on India's efforts.

## **C) Long Term Gain**

Domestic vaccination process is furthering slowly. However, with strengthened strategic planning, free and commercial availability of vaccines and public-private initiative rising, it is believed, the process will move rapidly soon to encompass larger numbers and most areas. Both PMO and Dr. Paul of Niti Ayog confirm this. But as fares as India's global response is concerned, our efforts to stand next to all suffering developing countries and LDCs will be seen in contrast to developed countries'(e.g. USA, EU, UK, etc.) who are completely occupied on vaccinating only their citizens. This response by India will be seen over long term as generous, respectful to solving any emerging global crisis in a unified manner and in line with UN Charter and hugely beneficial to the needy and poor nations. Besides, this may bring support to India's principled stand against China's belligerent and aggressive stance and sovereignty violation acts against India over long term. ■

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