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**Regional Centre for Urban and Environmental Studies
All India Institute of Local Self-Government, Mumbai**



Regional Centre for Urban & Environmental Studies (RCUES), Mumbai (Fully supported by Ministry of Housing and Urban Affairs, Government of India)

Established in 1926, the All India Institute of Local Self Government (AIILSG), India is a premier autonomous research and training institution in India. The Institute was recognized as an Educational Institution by Government of Maharashtra in the year 1971. The Institute offers several regular training courses in urban development management and municipal administration, which are recognized by the Government of India and several State Governments in India.

In the year 1968, the Ministry of Housing and Urban Affairs (MoHUA), earlier Ministry of Urban Development), Government of India (GoI) established the Regional Centre for Urban & Environmental Studies (RCUES) at AIILSG, Mumbai to undertake urban policy research, technical advisory services, and building work capabilities of municipal officials and elected members from the States of Goa, Gujarat, Maharashtra, Rajasthan and UTs of Diu, Daman, Dadra & Nagar Haveli. The Ministry of Housing and Urban Affairs (MoHUA), Government of India added States of Assam and Tripura from February, 2012 and Lakshadweep from August 2017 to the domain of RCUES of AIILSG, Mumbai. The RCUES is supported by the MoHUA, Government of India. The MoHUA, Government of India has formed National Review and Monitoring Committee for RCUES under the chairmanship of the Secretary, MoHUA, Government of India. The Principal Secretary, Urban Development Department, Government of Maharashtra is the ex-officio Chairperson of the Advisory Committee of the RCUES, Mumbai, which is constituted by MoHUA, Government of India.

The RCUES was recognized by the Ministry of Urban Development, Government of India as a National Training Institute (NTI) to undertake capacity building of project functionary, municipal officials, and municipal elected members under the earlier urban poverty alleviation programme-UBSP. The RCUES was also recognized as a Nodal Resource Centre on SJSRY (NRCS) and Nodal Resource Centre (NRC) for RAY by Ministry of Housing and Urban Poverty Alleviation, Government of India.

The AIILSG, Mumbai houses the Solid Waste Management (SWM) Cell backed by the Government of Maharashtra for capacity building of municipal bodies and provide technical advisory services to ULBs in the State. The Water Supply & Sanitation Department (WSSD), Government of Maharashtra (GoM) established Change Management Unit (CMU) in AIILSG, Mumbai from 13th January, 2010 to 30th June, 2014 and also selected AIILSG, Mumbai as a Nodal Agency in preparation of City Sanitation Plans for 19 Municipal Corporations and 15 A Class Municipal Councils in Maharashtra State, under the assistance of Ministry of Urban Development, Government of India. The WSSD, GoM also established Waste Management & Research Centre in AIILSG, Mumbai, supported by Government of Maharashtra and MMRDA.

In August, 2013 Ministry of Urban Development, Government of India empanelled the AIILSG, Mumbai as Agency for providing technical support to the Cities / Towns of States / Urban Local Bodies (ULBs) in the field of Water Supply and Sanitation, Sewerage and Drainage systems.

In July 2015, Ministry of Urban Development, Government of India empanelled the RCUES & AIILSG, Mumbai an Agency for technical support in Municipal Solid Waste Management under Swachh Bharat Mission (SBM) programmes.

In February, 2016, Ministry of Housing and Urban Poverty Alleviation, Government of India empanelled the RCUES of AIILSG, Mumbai for conducting training and capacity building programme for experts of SMMU, CMMUs, COs, Key Officials and other stakeholders of the State and Urban Local Bodies (ULB) level under Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY – NULM).

In December, 2017, AIILSG has been empanelled as a training entity regarding implementation of new Integrated Capacity Building Programmes (ICBP) under Urban Missions, viz. Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Swachh Bharat Mission (SBM), Smart Cities Mission (SCM), National Urban Livelihoods Mission (NULM), Housing for All (HFA), Pradhan Mantri Awas Yojana (PMAY) and Heritage City Development and Augmentation Yojana (HRIDAY) for Elected Representatives and Municipal Functionaries.

At present, RCUES and AIILSG, Mumbai is involved in providing capacity building, research and technical support to number of State Governments and ULBs for implementing various urban development missions and programmes launched by the GoI.

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(April - June, 2020)

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Editorial

Urbanization in the Post COVID-19 World

Recent accounts of large numbers of migrant labourers making their way back from our cities to their villages and towns were prominent and became the topic of many writings and discussions nationally. Data showed India's Corona virus cases climbed to just under 2,00,000 as on 31st May along with details of affected states, cities, etc. Among states, Maharashtra had 35% of all cases at about 70,013. Tamil Nadu with 11.76%, Delhi (10.43%) and Gujarat (8.62%) were the other states with large numbers of positive cases. These are among the most urbanized states of India. Globally, the most badly affected countries are also those with high urbanisation rates. USA (82.7% urbanization), Brazil (87.1%), Russia (74.8%), Spain (80.8%), UK (83.9%) are among the top ten affected. India, though with much lower urbanization, is also in the list. While urbanization has delivered big benefits to nations and cities by virtue of economies of scale, compact settlements, lower per capita use of resources, and so on, the phenomenon has, it seems, also exposed their vulnerabilities. Urban centres in most of the developing world are marked by dense informal settlements, slums and sub-optimal living spaces while struggling to accommodate incoming populations with limited success.

Now, in the new post-COVID world which will be marked by high degree of personal and community hygiene, social distancing, and so on, it remains to be seen to what extent cities cope. There seems already doubt in the settlers' minds. So much so that many migrant labourers returning to their villages have stated that they may not come back to the city even if they had to sacrifice incomes and settle for a more modest living style back in their villages. They felt that it is more important for them to live safely with their families back home than struggle for the extra incomes they make in the city.

While the actual scene will only unfold over time, concerns are already being voiced in some quarters about the availability of labour. As phased relaxation of the lockdown progresses and economic activity starts rolling again, these concerns could be more evident.

The related big question is about the future trend of urbanization. In recent years, policymakers and the common man had started to realize the seeming inevitability of urbanization due to the economic benefits it bestows. It seemed prudent to welcome and encourage urbanization as an asset rather than shun it as an impending disaster. Success stories of highly urbanized countries were there to see. Is all this set to change? Will it now turn out that all that glitters is not gold? Will the glitz and glamour of city life seem too transient and superficial when compared with the difficult living conditions of the poor and risks to their health? Will policymakers craft new policies and programmes to make life in our villages and small towns more liveable and livelihoods more attractive? If urbanization does slow down, will it be sustained or a temporary blip?

The answers will unfold over time.

Rethinking Higher Education and Skilling in India Post-COVID 19 Pandemic

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Abstract

Paradigms and frameworks of higher education existing in any country in normal times may not seem adequate in times of disruption, such as the one which the world faces currently, with COVID 19, if foresight for global crisis was not applied earlier. COVID 19 and the challenges emerging by lockdown can affect the lives of millions of students and the future workforce worldwide, if not appropriately addressed. Globally, countries which actively and consistently designed and invested adequately in Higher Education, effected robust reforms matching with the times and the needs of a global economy and global markets, had to walk lesser mile in making shifts to meet the current situation, arising from the pandemic. The suspension of global transit networks and protective restrictions will affect the enrolment of students in global educational hubs. Higher Education systems with limited investment in quality of teaching learning, skill mapping for job market and lesser outcome mapping in research and innovations may find it difficult to find solution models to the challenges during disruption. This could push the country back in reviving the economy, post disruption. COVID 19 has posed a real challenge to the higher education in India where skilling and research have already been limited. In India, skilling is at 5 percent while 45 percent of students who come out of the institutions of skilling find placements. Indian colleges and

Universities have lagged behind other countries and have come under scanner for delayed response, limited ability to react, adapt and adopt new thinking, practices or models for imparting contextual, need based and massive digital education. This has exposed the fragmented education and research space in India. Indian education scenario sees a divide between the public and private institutions and investments, in branded, elite and ordinary education, in differential access in urban and rural India, mainstream and vocational, students with internet access and those without or even access to food security. Education is a highly contested space in India and inequity, lack of quality or adaptiveness raises concerns on digitisation of education without making certain structural changes. In the period of lock-down, online teaching learning method has been adopted by schools and colleges all over the world. Does COVID 19 crisis call for re-imagining educational space in India by breaking away from the limitations of time, place and money? Should access, variety and enrolment matrix be extended to digital space, outcomes in skilling be mapped to the job industry specifically and research be linked to innovation and application? Is knowledge economy and Industrial Revolution (IR) 4.0 the hope and the opportunity to make Higher Education inclusive and impactful? It is in times of disruption that the resilience and the approach of the students, faculty and institutions or policy framing bodies are on test.

Keywords: Paradigms, higher education, disruption, workforce, robust reforms, global transit networks, challenge, contextual, need based, digital education, contested space, access.

Introduction

Successful knowledge economies integrate the digital, intellectual and physical with business for innovative and sustainable development for better quality of living. Such knowledge societies and economies often factor in crisis and disruption of all kinds generally, as they believe in essentially growing consistently by means of innovation. By re-engineering solutions to existing problems by means of knowledge economy and IR 4.0 technologies, several economies have improved the quality of life for their people successfully across the globe. On the contrary, economies which have marginalised this approach or confined it to a few sectors have yet to see the beneficial impact of it in terms of enhancing inclusion.

In the western models, Higher Education being the basis of sustaining the liberal economic model, much was invested quite early in the sectors as the cost of neglect would have been high for the society and economy. In communist models, Higher Education was visualised as a tool to build community solidarity towards achieving an equitable society. But today, it is being realised that regardless of the ideological bent, to build a tolerant and just society, bring creative societal transformations and prepare quality human capital in a country, Higher Education plays a very crucial role in deciding where an economy stands internationally. Post-colonial nations such as India, which supplanted the colonial education with modern models were caught in the dilemma between aping the Western models of Higher Education Institutions (HEIs) and the process of constructing new identity as a nation, with commitment to secularism and inclusiveness. The HEIs have expanded in India in quantity and

quality in last several decades since independence in 1947. A variety of legacies, impulses, values and aspirations got intertwined with accommodating the idea of development or fostering constitutional values in it. But budget constraints and putting global benchmarks to a secondary place, in order to accommodate the diverse ideological and contextual elements, decided the course of development in institutions of higher learning in India.

In terms of numbers, Higher Education in India is one of the biggest after United States and China with 32.6 million students (52 percent male and 48 percent female) enrolled across 903 universities, 38,061 colleges and 10,011 stand-alone institutions in 2017-18 (AISHE, 2019). The budget allocation for education have been around 6 percent generally. While few benchmarked Institutions business schools like the Indian Institute of Management (IIM) and technical colleges like Indian Institute of Technology (IITs) and some Universities have produced world class graduates, millions of graduates in other universities and affiliated colleges have been, by and large, struggling for recognition and place in the job market. The XII Five Year Plan underlined the need for robust and comprehensive data for evidence-based designing of education policy. The Higher Education Ministry launched an All India Survey on Higher Education (AISHE) to collect data from all the institutions of higher learning in order to create a sound database. The 2019 Budget proposed a new National Education Policy (NEP) and a National Research Foundation to spur innovation and scholarship in India with Rs. 400 crore for “World Class Institutions” (The Week, 2020). In 2020, Rs. 99,300 crore has been allocated for the education sector and Rs. 3,000 crore for skill development in the Union budget (Economic Times).

The accreditation process, National Assessment and Accreditation Council (NAAC) exercise, Research Parks, Global Initiative of Academic

Networks (GIAN), Impacting Research, Innovation and Technology (IMPRINT), National Institute Ranking Framework (NIRF) Rankings all may be commendable in mapping the outcomes of various institutions on selected parameters. Featuring in the National Institute Ranking Framework (NIRF), which measures the teaching-learning resources, research, graduation outcomes, inclusiveness and public perception is considered commendable. But to secure Quacquarelli Symonds (QS) rankings, Indian Universities have struggled. In the eighth QS, World University Rankings (WUR) 2019, which ranks according to academics, research and development, teaching and pedagogy skills, employability and market skills, internationalism and global presence, forty percent weightage to institution's stature, 24 institutions featured in the top 100 list, majority of them being public institutions. Perhaps the idea of measuring outcomes has become the point of quality check at the institutional end. The IITs and IIMs have benchmarked themselves on various parameters but large number of colleges are still struggling despite various government interventions.

The Higher Educational scenario in India has shown that limited enrolments with regard to the rural-urban, female-male or between various categories of castes having access or certain communities being privileged as previous generation had the access. The Gross Enrolment Ratio (GER) in Higher Education during 2015-16 was 24.5 percent as compared to 10 percent in 2004-05 (PIB, 2017). The over reliance on the legacies of the British model of Education led to the neglect of vocational education and training, the funding constraints brought difference in the nature of central and the state universities, while increasing commercialisation, rise in private institutions and corruption has sharpened the disparities in Higher Education. The language barrier and the access and equity have been huge concerns.

The University Grants Commission (UGC), a prime regulatory body in India for Higher Education, in the wake of COVID 19, urged all institutions to support academic fraternity and the students and utilise the time creatively and constructively. Lack of adaptability, academic flexibility and limited use of technology to cater to the diverse student population, who could be enrolled successfully, has now come to a near halt in the situation of pandemic. One must realise that the inertia in academic field is not because talent is not there, but because courage is lacking in the higher educational institutions to tread on new paths or allow imaginations and innovations to flourish, breaking bureaucracy to take lead when the time demands to make a change fast. Employability was a concern for Indian youth and is still raging high on the minds of employable youth. Similarly, the approach to increase the industry-academia collaborations for better skilling ecosystem and support for entrepreneurship and start-ups, have met with limited success. The paper endeavours to identify the changes in approach and structure required and what kind of initiatives could bring greater success post COVID 19 scenario.

Higher Education can be very crucial. But with changing student profiles, diversity, dynamic teaching learning environment, need to prepare work ready graduates, need to adopt the tools and processes of knowledge economy and IR 4.0, the challenges that lie ahead have become enormous. The other pivotal concern has been about the design, quality and accountability of Higher Education, the regulatory framework and accreditation limitedness, academic flexibility, constrained innovativeness and partial digitisation, poor motivation of faculty, promotion and upgradation of teaching faculty and workload and research time or support. The issues of employability, skillsets matching to the industry, innovative curriculum, teaching learning

pedagogies all have been at the helm of Ministry of Education's vision in designing new policies but require more engagement.

Objective and Methodology

This paper looks at the challenges that exist in the Higher Education, the sluggish response of Higher Education sector in India to COVID 19 and changes that could be necessary or may be explored during and post the COVID 19 situation. This paper addresses the larger set of colleges at undergraduate level and few universities which have been out of pace in matching up to the COVID 19 situation and have stuck on to the old goals and frameworks to find solutions. This paper suggests critical shifts required in the Higher Education from the challenges already existing and those emerging specifically from COVID 19 situation. The research is based on Higher Education Reports of Government of India and secondary literature on the issues related to Higher Education in India and the world and to the COVID 19 situation.

Literature Review

Sharda Mishra, in *UGC & Higher Education System in India*, spoke of the dramatic growth of the Higher Education in India in the last six decades but lamented that the systemic reforms had failed (Mishra, 2006).

Tilak (2010) emphasized on treating education as a public good by the government and community at international level. He mentioned that 'quality, quantity and equity' in education were three inter-linked dimensions of education. Tilak's study spoke of the contributions of several committees and statutory bodies such as Kothari Commission, National Knowledge Commission, Central Advisory Board of Education (CABE) Committee on Autonomy in Higher Education and Yashpal Committee that reviewed the higher education scenario in the country and made recommendations for future course of action. (Tilak, 1994 cited in

Kaur and Shelly, 2016). He emphasized on treating education as a 'public good by the government and community at international level' (Tilak, 2010).

Chanana (2007) analyzed the influence of economic liberalization policies on women's access to higher education, women's choices of professional education and that the enrolment of women in higher education varied from state to state. Thirumen and Hemlata talk of need to usher in what Dr. Manmohan Singh spoke about the second wave of institution building to foster excellence in education, research and capability building. The paper suggested a differentiated University System, use of technology, learner centric and reforms in governance (Dr. Manmohan Singh cited in Singh, 2011). Chandrashekhar, Geeta Ravi and Sahu analysed the National Sample Survey Office (NSSO) data and explained that the average spend on Higher Education out of the total expenditure is 15.3 percent and 18.4 percent for rural-urban households in India. Chahal (2015) identifies the issues of girl enrolment in Higher Education, heterogeneity in types of institutions existent, leading to differences in quality.

J. D. Singh, in his study talks of the need to have Higher Education and skilling in such a way which can drive the economy forward highlighting that quantity has taken over quality. He cites UGC enunciation that University has to play a crucial role in social change. The paper urges that if skilled people from India are in demand abroad why they have not been involved to change internal scenario. It suggested more incentives to teachers for research, Public Private Partnership (PPP) model and less politicisation.

Chintam, Kebritchi and Ellias in their review of literature revealed that context, input, processes, product (CIPP) model is an appropriate performance evaluation model for HEIs. Quoting Podsa Koff et al (2000) it says 'what you measure is what you get' defines organisational behaviour (Chintam et al, 2016). The paper refers to the

analysis suggested by an author that Higher Education should assess their role in the society as 'effective knowledge transmission entities' (Astin, 2012 as cited in Chintam et al, 2016).

P. Arunachalam writes still only a meagre population has an access to Higher Education in India and talks about the findings of knowledge commission which highlighted that with 90 percent of the undergraduate students and 66 percent of the postgraduate students studying in large number of affiliated colleges little better than higher secondary schools. Affiliated colleges have nearly 84 percent of the total faculty in higher education, not pursuing any research while only the faculty members in the universities estimated at 16 percent of the total were expected to engage in research. He suggested the need for an Independent Regulatory Authority for Higher Education (IRAHE) as desirable. CIBE plays the role of coordination and cooperation between the Union and the States in the field of education. India exhibits a special problem at the top of its higher education hierarchy owing to the limited numbers (Arunachalam, 2010). In making a shift from elitist to mass education, Universities are under pressure to enhance access and equity. The author studies that how there has been an increase in enrolment ratio from 1 percent in 1950s to 10 percent compared to world level of 23 percent and in Europe and US about 40 percent. The paper speaks of highly subsidised Higher education under the Ministry of Human Resource Development (MHRD), Government of India schemes but there is a concern about quality and underfunding of the Indian universities. The affiliated colleges numbers are very high in India and they face funding crunch. A system which was designed under British masters to create clerks, has the advantage of more English-speaking population and need to focus on quality building.

Education being on the 'Concurrent list' - Entry 66 in the Union List of the Constitution. The Central Government hence is empowered to exercise

legislative power in co-ordination and determination of standards in HEIs. The Scheme for Reduction in Regional Imbalances, Social Gaps and Promotion of Inclusiveness in Higher Education has been introduced by the UGC in the XI Plan bridges social gaps. The study highlighted the fragmented regulatory structure with regard to Higher Education in India.

Human Resource Development Minister Arjun Singh had spoken on the rural-urban divide, stating that over three fifths of colleges engaged in general education and 80 percent of the technical and professional colleges were located in urban areas (Arunachalam, 2010).

Naseem AK and Arif R in their paper write that even though the structure and ethos of the HEIs in India were to copy the foreign universities under the colonial regime, they never imbibed the inner system of those universities as Oxford or Cambridge but only the outward structure. The paper talks of the disproportionate geographic spread of the universities and supplanting of older systems with new system, language, curricula and purpose after 1990s but left out large numbers of women outside the system.

The Annual Status of Higher Education of States and Union Territories, 2019 highlights these aspects and emphasises the need to transform Higher Education in India to meet the challenges of IR 4.0, meeting expectations of students and workplace requirements, greater need for creativity and lifelong learning (Deloitte, 2019). The visionary New Education Policy, 2019 talks of addressing the current constraints, digitisation and building workforce for the future and bringing Indian Higher Education system at par with the foreign universities.

The main challenges identified by the AISHE are divergence in curricula and market demands, quantity and quality of research, creating multi

skilled, quality faculty, balance between learning and job readiness, promoting interdisciplinary education and expanding online education (AISHE, 2019, p.12). With the New Education Policy, India hopes to reach the league of countries like China and US and come upto 50 percent in enrolments. Integrating Humanities with STEM (STEM is a curriculum based on the idea of educating students in four specific disciplines — science, technology, engineering and mathematics), providing flexible learning systems, institutional autonomy and student support are its other key driving objectives. National Research foundation and faculty capacity building are its adjunct objectives and having one regulatory system. Schemes like Education Quality Upgradation and Inclusion Programme (EQUIP), Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) 2.0, extending Free and Open Source Software for Education (FOSSEE), Social and Industry connect for every institution, Scheme for Trans-disciplinary Research for India's Developing Economy (STRIDE), Scheme for Transformational and Advanced Research in Sciences (STARS) are forward looking yet need to be supplemented with greater vision.

With 32.6 million students enrolled in 903 Universities and 38,061 colleges, AISHE highlights that an outcome-based approach will be a key initiative ahead. The budget allocation for Higher Education went up by 11 percent, of which research and innovation will be the key component (AISHE, 2019). Research funds available with various ministries may be assimilated to strengthen the research ecosystem. The New Education Policy's watchword is development for all. The AISHE says that work in future will source talent from fulltime, freelancers, gig workers and crowd sourcing to meet the needs of automation and how collaborations and digital technologies will redefine the scenario. It warns of the funding constraints, growing cost of education and changes in the learning models.

In comparative analysis, the US Higher Education is large and hugely diverse, it does not have a single Federal Ministry of Education but is highly decentralised. There is considerable autonomy, which is a defining feature of the US Higher Education system and enrolment in private institutions are considered more prestigious. In terms of nomenclature, while some Universities may not offer degrees beyond PG, some colleges provide doctorates and institutes could even be research institutes. They have four types of degrees - Associate degrees, Vocational, Bachelor degree which is followed up by masters which require original research paper and practical experience an doctoral degree based on professional intensive preparation [The American Council on Education (ACE), US Higher Education: A Brief guide, 2019]. Federal government however, is the major financier for student financial aid and funds for research. It lays down the civic policies in education and strongly monitors the federal funding utilisation, broad curriculum development and collects extensive data related to enrolments, students and faculty promotions. Accreditation is a very important aspect which avidly guards the quality. The American Council of Education works as coordinator. Private donations are critical source of funding in US in education. Nearly 60 percent of research funding comes from government and research universities are highly reputed, measured by research activity and per capita resources for research activity.

UK's HEIs are not government managed with each being legally autonomous with a governing body to determine the academic scope in the institution. Majority of HEIs receive Quality Code and Research Excellence Framework and strong externality along with building faculty professional standards are some important aspects.

Many of the China Universities and institutions have featured in top 500 rankings. While India strengthened its University system and tried to

guard its best institutions against politicisation, before 1990s, China has overtaken since the 1990s with massive investments in higher education. Reddy in his study pointed out that the Chinese universities outperform Indian universities, in research aspect such as citations and publications, in international collaboration on research projects and in university rankings (Reddy, 2015).

Speaking about Singapore's *Higher Education Systems in the era of Fourth Industrial Revolution*, Gleason spoke that as the global society changes with technology, there is need to make changes in Higher Education and Singapore leads in this innovation. She sees Singapore as a model how to prepare workforce for Fourth Industrial Revolution and its economic success is very much linked to this success in its Higher Education as the redundancy of traditional undergraduate ways of knowledge transfer seem inadequate. She says with three schemes - *Smart Nation Singapore*, *SkillsFuture Singapore* and *newer HEIs*, Singapore is instilling an approach of lifelong learning and the need for more intense collaboration of HEIs with the industry and government. She writes about Accenture's Report on 4th Industrial Revolution (4IR) that a major trend of the 4IR is the 'liquid workforce' which will replace earlier siloed models of work suited to specific work to more adaptive workforces with more "embedded training". SkillsFuture is a unique Singapore scheme which helps people develop their potential irrespective of their starting point and is a way to help people meet the needs of automation in the economy. It has provisions of skilling, upskilling, integration with nations job bank and is for student, junior, middle and senior level management and even provides option for career switch. Smart Nation Singapore, on the other hand helps build digitally abled and sensitive citizens adjust to social and economic changes co appearing with automation, involving learning about smart cities, handling sensors, Internet of Things and digital literacy covering transport, home, environment, health and enabled

aging and public sector services which were developed in collaboration with research at HEIs (Gleason, 2018).

One work that actually talks about the problems in developing world class institutions compiled by Dr. Rajiv Dharaskar while underlining that the future of Indian economy depends upon growth of higher education sector has spoken about 113 challenges in creating World Class Universities. It talks of problems in Higher Education being related more to the 'education culture'.

The literature review shows the strengths and limitation of HEIs in India as – the constraints in equity and access, gender disparities, socio-economic context as factor for high dropout, miniscule skilling compared to developed economies, outcomes mapping uneven, accreditation and ranking pressures, competition for enrolment of students, job market relevance, limited faculty capacity building or motivation, constrained digital integration in education, lack of funding, fragmented regulatory structure, bureaucracy and ideologization, less focus on research confined mainly in universities, outdated curriculum, lesser higher education opportunities, lack of engagement in campuses, commercialisation, rigidities, lack of data on diverse students and lack of awareness with regard to preparing for 4th IR and crisis management models in education, lack of global talent pool or certifications, limited industry-academia collaborations and lack of global market adequate internationalisation and inadequate investments and funding.

Issues of capability building for job market with 4th IR knocking at the door, need to prepare socially and economically a viable global workforce, design and secure a financially viable system of HEIs, enhance quality by internationalisation and funding international accreditation or certification, enhancing faculty capacity building, strong integration of technology in education, supporting

an ecosystem that promotes innovations, research and entrepreneurship, education, skilling, economic development, supporting diversity, social economic and digital adaptability, all need to be focussed on.

In times of COVID 19, Higher Education is in crisis and disruption has brought several challenges across the globe. Robust and well-structured HEIs immediately switched to their online mode, utilised Statistical Analysis System (SAS) to ensure a level of outcomes and Learning Management System (proctored or unproctored assessments) methods to continue learning and function nearly as normal. But it was clear that that even though any university or institute was branded, in times of pandemic it was their earlier brand presence, visionary structure, digital preparedness and dedication of teams or ability to innovate which sustained these learning institutes. Eminent ones immediately created a COVID 19 action plan and switched to flexible and sympathetic norms. Already global US open courses and some Indian names became even more popular in countries. Others carried out some hurried measures but could not sustain much as the switch to online learning or virtual courses added a large plethora of choice. Learners community was not just confined to students but even to working professionals at all levels. World Bank highlighted that as witnessed in earlier pandemics, education suffers most in countries with 'low learning outcomes, high dropout rates and low resilience to shocks' (World Bank, 2020). In India too, Universities and large number of affiliated colleges across the cities, towns and sub urban areas found it difficult to come up with any immediate solution, as such a crisis was never factored in or visualised nor technology or digital learning had been prioritised earlier so much. Competition, mutual patting and politics had created a complacency which has got shaken up completely. Change was not expected to be so imminent ever, as during the COVID 19 pandemic for Higher Education.

Learning Trends, Problems Identified and Lessons for Higher Education Institutions during COVID 19

As the pandemic situation reveals, it has been an unprecedented time of learning through online sessions, webinars, workshops and courses. According to a study by Velocity Market Research, nearly 72 percent Indian prefer online mode to classroom teaching (The i4cp Productivity Blog). It has questioned the digital readiness in all countries and the number of learners' community and diversity profiles have gone up. Students at the same time found their own space, making decisions about what courses or sessions they want to attend and which ones to leave out, meaning have got increased power of choice and decision making. All courses are not being attended only for sake of the certificates while some have become so popular that there are wait lists. The emotional sensitiveness of students may have gone up and students are getting connected to real problems around them in terms of safety, health precautions, supply of essentials, getting to care about elderly in family or neighbourhood and community, local initiatives from home, learning about fairness and social responsibilities. This has been a unique time for younger students to especially connect with their homes, family and social relations by virtual connect. Sugrue noted noticeable rise in shelf content, increase in course completions and curated content (The i4cp Productivity Blog).

Majority of Institutions of higher learning in India faced the effects of limited vision for future, lack of pandemic or disruption visualisation, revenue concerns that could arise in times of limited mobility, limitations of tech investments and capacity building of and staff, completing assessments. How to design care policies for future in educational institutes, problems that could arise in reduced ability to pay fees by the students due to economic setbacks and loss of jobs in families and social displacement, concerns about completing

assessments and academic calendar, campus recruitments, choosing the right edutech platforms, providing access to all students uniformly, utilising limited funds and redefining goals in terms of building substantial student outcomes, making the right shifts in teaching learning and pedagogies, providing salaries to staff and to stay viable in a competitive market have been questions that have dominated institutional concerns primarily.

1000 universities and 4000 colleges closing during the lockdown and Cash flow crunch, research and consulting were getting affected in India (KPMG Report, 2020). About nearly 200 projects are contributing to Research Project ISAAC initiated by IIT, Gandhinagar has called for open start-ups, or acquire new skills in areas such as writing, art and music and even includes contests and awards for coding, innovation and research to which about 60 percent of the institution's students have participated (TOI). Some colleges and universities went into announcing Faculty Development programmes but a large number of colleges could not show quick response. Companies like Olive Board and Vedantu are giving free online coaching for banking exams and Joint Entrance Exam (JEE) exams. Even companies and banks by allowing remote working have given space to employees to upskill. Indian online education market is estimated at 2 billion USD in 2021 with over 50 percent growth rate.

At the time of the pandemic, knowledge dissemination and learning seems to have become an integrated market as virtual access has further added to the power of choice in the hands of the learners. Learning and self-development in quarantine is not going to disappear soon studies indicate. This has emphasised that there was greater need of digital readiness and knowledge based approach, global standardized quality content to be upped in the market, replacing the traditional and the irrelevant content. Technology integrated learning environment can help in mapping one's

understanding and competencies and this could create new pathways of learning. The pandemic situation has also demanded certain level of emotional intelligence, critical thinking, health sensitivity, community cooperation and civil society engagement, concern for needy and local support systems, imagination along with the need to channelize one's own creativity and one's own mental health. Education institutions need to take a notice of this and incorporate these aspects.

Future of Higher Education and Skilling

Higher Education being very critical sector and important to achieve a place in the world, the new normal in Higher Education will necessitate some shifts to be adopted by the institutions of higher learning in India. The pandemic situation has ushered in a new dedication by faculty and students and merging technology with clear values and goals may just change a lot of weaknesses in HEIs in India, especially the larger lot of affiliated colleges and autonomous colleges. Blended and virtual learning and hybrid learning and work systems may be the new normal. For India, it may be a welcome opportunity to invest in technology platforms to foster quality Higher Education, lifelong learning, skilling and certifications, increase greater women and rural enrolments and to add employment. Few changes that seem as standing at the door and could be integrated seamlessly irrespective of physical location are listed below -

Imbibing Agility, Innovation and Setting-up Data Driven New Systems

Higher education set up in India must have agility to respond to crisis and changing trends. As the decision making is divided and fragmented in India between the regulatory bodies, universities, affiliated colleges and several institutes, this is not an easily achievable target but the pandemic situation has put this aspect in spotlight. Seen in the

COVID-19 situation, MHRD and the UGC issue the direction for action to be taken by the universities and the colleges. However, because of wide disparities in the infrastructure and resources, the initiatives and measures taken by individual entities associated with higher education in India were disconcerted and sporadic. As very few institutions had envisioned Information and Communications Technology (ICT) integration as much as required, only few were quick enough to adapt to setting up e-learning infrastructure. This shows that there is an immense need for higher education sector to imbibe agility, dynamism and contextualization, but in keeping with the global benchmarks. Investment decisions need to be more risk cordoned and this can be done by using analytics, SAS and feedback systems. Data would be required by institutions to keep record of faculty and students mobility and make contact tracing possible for any future pandemic situation. Institutions would need to have a safety and care policy for staff and students for normal times and especially for the crisis situations, thereby creating crisis management teams in institutions. Ilvento, from Commvault and Gretczko from Mastercard stressed how Learning & Development (L&D) has focussed on agility and curated digital learning experience (The i4cp Productivity Blog).

Realigning Higher Education to Sustainable Development Goals (SDGs)

Higher education needs to be standardized, disseminated qualitatively across the world, in order to achieve better quality of life for all, as visualised in the SDGs. In achieving SDGs related to economic and social inclusion, reducing poverty, gender parity mental sustainability, if higher education is not standardized as an important global good, our commitment and sincerity towards achieving these goals may be doubtful. Just as much as for the human rights, the United Nations Universal Declaration of Human Rights was envisioned, Higher Education too needs to

define its parameters in terms of fostering Universal human values, competency skills, life skills and crisis management skills as a reckoner for all HEIs across the globe. It is important to define the pre conditions in any HEI in order to foster mindset of innovation and research. it is equally important develop a tool for mapping outcomes in these with regard to the students as well as the faculty in HEIs.

In order to achieve a peaceful and globally prosperous world, it is important to see education as much interlinked as the economy and information. An ideal sustainable development goal scenario with regard to inclusion in education, would be to provide higher education in such a way so that Global Human Development Index is pushed up. HEIs should play the role of constructing positive civil society and quality human resource in order to face the situation arising out of pandemic or disruption. Crisis management needs to be critically incorporated in the HEIs capacity building for the faculty and the students and through them in the larger society. It is only apolitical higher education values and infrastructure sans vested ideologies which can be a real tool in constructing positive values in the civil society. There seems to be a much greater need to have convergence of economic, social, sustainability and higher education goals.

In order to achieve this, there is the need to transcend both the capitalist and the communist models of education. There is a need to envision global democratic and participatory model of teaching learning in HEIs beyond branding and commercialization, this would imply standardized content along with contextualized knowledge to be integrated with in demand global competencies. The pricing and pedagogical parities would be required in order to achieve the above goals in a qualitative manner. Dr. Radhakrishnan Committee, 1948 had emphasised about connecting education to the economy and society. This requires a

paradigm shift and moral commitment from all the stakeholders in an economy for building sensitive and globally sustainable Higher Education models that work inclusively.

Greater Collaboration in Knowledge Sharing, Skilling and Research

As the pandemic demands greater collaboration between research institutes, private sector and the government with greater cooperation from civil society, so likewise HEIs should make this a regular feature instead of being only a periodic or crisis effect. Institutions must promote teamwork as a continuous effort and nurture teams along functional lines.

To uphold a value integrated and IR 4.0 model, sharing will be imminent in the areas of creating infrastructure, cutting costs, supporting faculty in teaching learning and research, skilling of youth, expanding enrolments, creating knowledge and research hubs and achieving relevant outcomes. Shared infrastructure for teaching-learning, research and innovation will allow institutions to stay in business. Every institution may require to choose its own set of unique courses based on its talent pool and commitment to certain best practices achieved by globally successful higher education institutions and would require to collaborate with complementary institutions and platforms.

Skilling has been a major weakness of Indian economy and education system. It is important that Indian HEIs engage in these concerns of the students. Students skilling must be integrated with global skilling standards, facilitating certifications from best of the universities to create work readiness matching with India inc and global companies' expectations. The pandemic situation which demanded certain awareness, digital skills and imagination by learners should be taken note by the educational institutions and need to incorporate these aspects such as Project

Management, Crisis Management, Lifeskills. Leadership and Communication, Public Policy, Data Analysis, Managerial Skills, Advanced Digital Skills, Entrepreneurial Knowledge, Mental Health and Self-motivation across streams. Some of these skills should be made open access for all and equally, even in different languages, regardless of age, gender or region. Skilling education for students to link with jobs and improving faculty skills and capacity building to meet the challenges demand shifts. A news analysis says there should be no casualisation and the distraction from core functions, which has suffered for decades owing to the regulatory framework, management culture and research and teaching income to be in lead (The Guardian, 2020). 'With campuses standing empty, those "wins" seem hollow.' (The Guardian, 2020)

In teaching learning, faculty, trainers and companies may need to team up to launch relevant courses or share modules as per expertise may be required. A perceptive analysis of market being catered to could help in curating faster, but quality content. Online learning-surveys, digital infrastructure, regular communication, mix of synchronous and asynchronous modes, enabling credits, right ratio of course administration, flexibility and collaborative learning, breakout rooms, feedback, casual conversations, career talk, stress management and dealing with anxieties could create sensitive virtual teaching learning environment.

In India, universities get 10 percent research funding while other institutions of Higher Education gets only 4 percent. In this scenario, greater international research and teaching learning collaborations will be much required. Multidisciplinary research teams may be the need of the hour and while foundational research centres could be shared. Research hubs, incubators, start up labs, centres of excellence if collaboratively nurtured could sustain a greater fraternity of faculty and students.

Changes required in Higher Education in bringing a knowledge economy and IR 4.0 would require to create an ecosystem of innovation, continuous research, training, data integration and agility to adapt. It will be the only guarantee to a quality human workforce and civil society and better quality of life and some measure of consistency. Knowledge economies thrive on greater investment and engagement in collaboration, innovation and communication.

Learner Centric Approach beyond Digital Divide

In regular times, the concerns of the students are fixed curriculum, uneven pedagogies, very less time to pursue passion, demands to meet co-curricular and extracurricular for entry into higher institutes, pressure of assessments and uncertainty of the job market. Very few education systems have done any mapping of changing social requirements of the diverse students in the situation of COVID 19. But the pandemic and the spurt in webinars, master class sessions, and online workshops, virtual meet exhibited also the learning requirements and aspirations of a wide cross section of people in any given geographical region. Knowledge dissemination and learning seems to have become an integrated market as virtual access as further added to the power of choice making neither learners. this has emphasised greater need of global standardized quality content to be upped in the market replacing the traditional and the redundant content. COVID 19 situation has made it emergent that education be more learner centric, friendly and flexible else may not be chosen. Taking care of needs of students with disability or special students through bridge, mentoring and counselling sessions.

It is important to define the pre-conditions in any higher education institute in order to foster mindset of innovation and research. It is equally important to develop a tool for mapping outcomes in these with regard to the students as well as the faculty in

HEIs. While explaining education as a theorist, Grundy (1987), spoke of curriculum as a way to organise the educational policies around reproducing knowledge for a desired outcome, practise emphasising understanding, praxis focusing on ability to reflect critically with outcomes as set by learners while three things - changing student profiles, the pervasive influence of technologies and the pressure to produce work-ready graduates with right knowledge than discipline knowledge were spoken about as the new curriculum models in the twenty-first century (Gosper & Ifenthaler, 2014). Measurement will be an increasingly important aspect ahead in HEIs.

Shift from transmission model to more flexible model and change from recall based assessments to analytical and application- based learning in order to solve problems and ability to apply knowledge to new context could be an effective way to teach. The need of the hour is to engage with students in continuous learning and benchmarking, teach students to learn how to learn, address any misunderstandings directly, backed by support and care approach.

Enlarging Virtual Campus and Learning Community to Sustain New Learners

For many working professionals, COVID 19 was an opportunity to go back to learning, for college students it was an opportunity to catch up with skills and knowledge as part of syllabus and even beyond, exploring skills for job markets, for housewives and even elderly, persons with disability, learning access was available at a touch. Social media supported the networks by sharing stories or talking of new activities undertaken or reviving old memories-all connected us as a community of people. It is true that misinformation was equally rampant, but gradually all age groups developed their own sources for trusted information. This highlights the need to have an ecosystem that provides continuous learning

opportunities, upskilling, reskilling or a career switch opportunity given the layoffs or uncertainties.

But the time of the pandemic, knowledge dissemination and learning seems to have become an integrated market as virtual access as further added to the power of choice making neither learners. This has emphasised greater need of global standardized quality content to be upped in the market replacing the traditional and the redundant content. Technology integrated learning environment however does not provide as easily testing tools for competencies acquired, application testing in real time industrial scenarios and enough virtual platforms to showcase or bring out innovative thinking. Women and girls who either are not part of the higher education enrolments or drop out for socio-economic reasons could be provided the opportunity to resume learning.

Singapore's *SkillsFuture and Smart Nation Singapore models* are required to be conceptualised in the Indian context. There is need to bring in level certifications in skills aligned to industry, provision for upskilling, reskilling and career switch.

Enlarging audience or learners could be a source of alternate financing for institutions and for needy and vulnerable students, courses could be subsidised.

Using Technology to Innovate, Improve Equity and Facilitate Continuous Education

Technology integrated learning environment that extends equity in access requires innovative thinking. Companies like Oracle, Google, Computer Discount Warehouse (CDW), Cisco, and Microsoft, Zoom, Tata are seeing business opportunities in HEIs campuses. World bank has remarked that COVID 19 situation could be best used for testing 'education technology interventions' in virtual learning. Education

interventions can allow recovery and health while continuing education and learning. But best of the institutions need to blend in equity, irrespective of the socio-cultural background (Asia Society, 2012).

Michael Trucano spoke of sociologist Robert Merton's 'Matthew Effect', which roughly translates as 'the rich get richer' and in determining outcomes and equitability, this would be required to be observed with regard to the students and the faculty. Keith Stanovich referred this kind of differential in the context of education too (Trucano, 2020). Researchers at the The Organisation for Economic Co-operation and Development (OECD) have warned of a second digital divide - that "the digital divide in education goes beyond the issue of access to technology which means that those already privileged could do better than those who are starting afresh or even in urban-rural context". This needs to be kept in perspective while bringing digital education and e-learning. Democratic access, internet connectivity, devices to access online education will need to be reflected upon with regard to equity.

Technology could enable choosing right faculty and experts to teach, will make physical space a secondary determinant to quality of content delivered and how effectively handled. Adoption of digital infrastructure by any institute should be able to match expectations of students in terms of speed, quality of delivery and in making building desired competency for jobs in economy in an uninterrupted way. Active Industry-Academia collaboration networks, with government acting as mediators to bring the colleges in contact with tech companies, internet providers will need to be robust and sustainable. Virtual networks with industry mentors, regular interactions by students and support groups of alumni and faculty could deliver a more creative learning space. Directories of skilled students and competencies acquired could be created by HEIs at institutional level and could be integrated at national level portal.

Valuing Educators and Investments in Leadership and Education

The pandemic has demonstrated the need to invest in training the recruited staff and existing talent pool for remote working. With greater need for multitasking, HEIs like companies need to design training programmes and competencies levels in existing and newly recruited staff. Strong, caring and collaborative organisational culture will replace the hierarchy-based competition. Cutting across hierarchies, all faculty and their capabilities should be a concern of any institution. Creating a growth mindset, providing upskilling options, academic freedom to design and innovate in their spaces aligned to institutional goals, allowing flexible teaching schedules acceptable to paying authority and stakeholders will be important. Handholding and mentoring within the same city or from city to village cooperation could lay the ground for healthy collaborations. Ernst and Young practises badging for employees to indicate proficiencies in skills such as data analytics, Artificial Intelligence (AI), blockchain, security by various levels such as bronze, silver, gold or platinum but backed by strong faith in governance

to build confidence and values (The i4cp Productivity Blog).

Changes in Governance of higher learning institutions would require greater transparency to be able to face the reality and make necessary changes. Strong values, building confidence in employees and giving value to the educators would require to be matched with a vision that connects education to economic needs, inclusive societal goals and prepares India for digitised India.

Conclusion

The COVID 19 situation is a unique opportunity for the institutions of Higher Education, the organizations associated with it and for the various stakeholders in Teaching-Learning, to change the structure and the effectiveness, as well as the vision and purpose of Higher Education, linking the same with society and economy, thereby creating a knowledge economy based on informed and smart citizenry. This opportunity, therefore, is not to be missed. The onus for the same lies squarely on us, for success in creating new technology integrated pathways can open the doors to a more sustainable ecosystem founded on inclusiveness.

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Impact of COVID-19 on the Most Affected States in India

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Introduction

The outbreak of the COVID-19 Pandemic has affected all the global economies including India in the last few months. In a federal structure like that of India, the states have to follow the directions of the central government however; the implementation is largely the responsibility of the state. Against this background, this paper makes an attempt to examine the impact of COVID-19 on the most affected states in India. We analyze its impact on selected states in India and discuss how challenging and complex the task is for policymakers to devise a suitable macroeconomic policy response to this unprecedented situation.

Impact on Indian Economy

Currently, the Indian economy is witnessing three kinds of shocks which are triggering a dip in economic activity and are posing to be a huge challenge.

1. Supply shock: Due to the shutdown of factories of Global Value Chains (GVCs) and logistics there is huge supply shock. This boils down to supply chain disruptions of nearly all kinds.
2. Demand shock: The demand for certain services like travel, tourism, and hospitality has reduced drastically. The demand for non-essential goods is hugely affected. Consumers are becoming more and more risk averse,

hence, they cut down on all discretionary demand. Consumption expenditure and spending patterns are getting altered in the face of the outbreak of COVID-19.

3. Financial shock: Financial shock comprises shock waves to all financial markets including the stock market, real estate and other asset markets.

The impact on agriculture is diverse as it has affected supply chain of agricultural output due to limited movement of marketable surplus. The farm producers are incurring huge losses and hence the distress of small and marginal and medium farmers needs to be addressed. Such a loss of output and loss of income for large sections of the farming community will have implications on their own consumption and investment during intermediate and long terms. There is impact on the manufacturing sector in the form of a postponement of both demand and supply, the services sector faces idled capacity and lost revenues. The economy is facing a steep decline in output, per capita income levels and employment, visible across all states. A majority of rural and urban workers in India are either self-employed or casual workers. These sections of the population are especially vulnerable to unemployment and pay cuts due to the nation-wide lockdown. Majority of the cities in India have nearly two-thirds of migrant population. Shutdown of economic activity and consequent decline in wages due to the lockdown

has compelled half of these migrant workers to flee the cities to their home towns, thereby, aggravating the risk of viral infections. The other half feels stuck due to lockdown in the metros and is keen on going back to their villages. The condition of these migrant workers is precarious and is a story of human misery.

The Impact on the Most Affected States in India -

The total number of positive COVID-19 cases in India on April 23, 2020 has reached at 21545 of which 16464 are active cases. Eight states and NCT of Delhi, covering the majority of the COVID-19 cases (and likely to prolong social distancing measures), account for 55% of GDP, making it imperative to conduct a state-wise analysis of the impact of COVID-19 on the economy. The state wise data on confirmed cases, deaths and recovered cases in these states is given in the Table 1.

Kerala has the highest recovery rate, whereas, Gujarat has the lowest recovery rate as per the data on the given date (Graph 1). NCT of Delhi, Rajasthan and Tamil Nadu are also doing well in combating the virus which is indicated by their higher recovery rate. Maharashtra reported the first case on March 10, and is currently struggling with the highest number of confirmed cases in the country. The major impact has been on the financial capital of the country which has more than two thirds of the cases in Maharashtra. The recovery rate in Maharashtra is around 75 percent as seen in the graph.

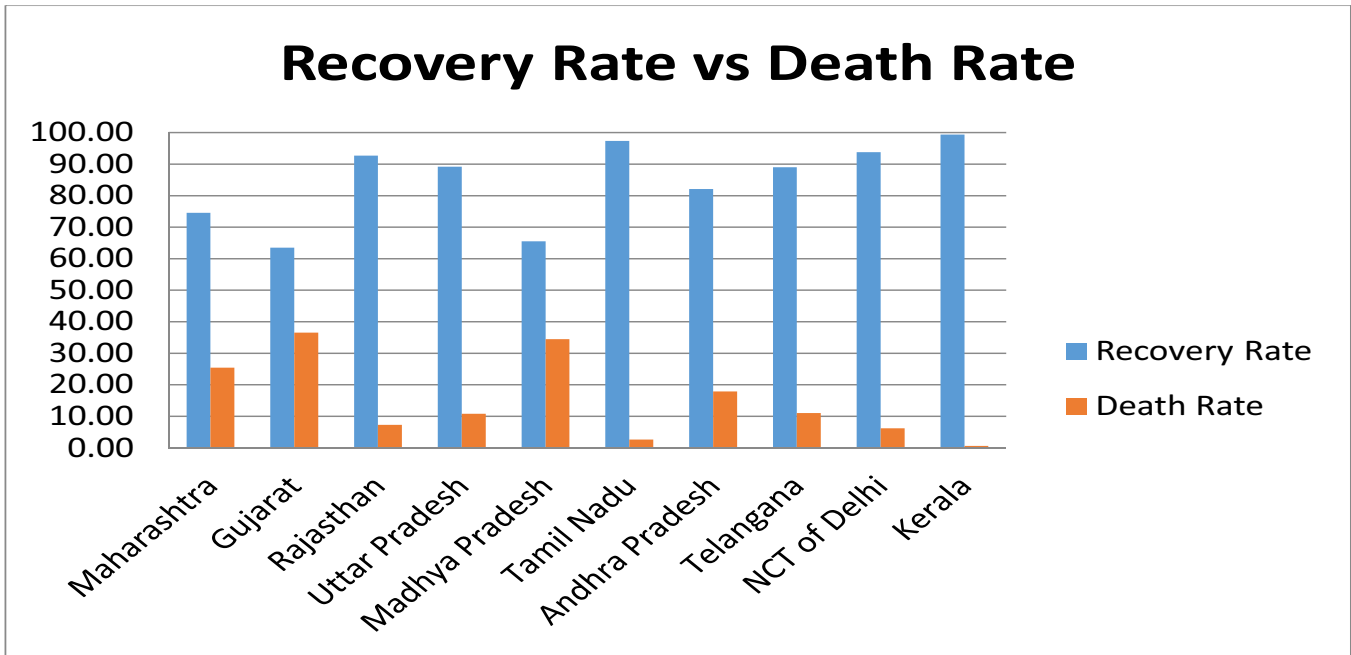
The **economic impact on the most affected states** has been massive and will have long term implications for all the sectors of the economy. The decline in output, labor force participation rates (LFPRs) and hence employment and per capita incomes is visible across all states. The resultant

Table 1: The Spread of COVID-19 in the Most Affected States in India (as per 23-4-2020)

State	Confirmed	Active	Deaths	Recovered	Deaths (%)	Recovered (%)
Maharashtra	5652	4594	269	789	4.76	13.96
Gujarat	2407	2125	103	179	4.28	7.44
Rajasthan	1935	1564	27	344	1.40	17.78
Uttar Pradesh	1449	1255	21	173	1.45	11.94
Madhya Pradesh	1592	1360	80	152	5.03	9.55
Tamil Nadu	1629	949	18	662	1.10	40.64
Andhra Pradesh	893	742	27	124	3.02	13.89
Telangana	945	727	24	194	2.54	20.53
NCT of Delhi	2248	1476	48	724	2.14	32.21
Kerala	437	112	2	323	0.46	73.91

Source: <https://www.thehindu.com/data/covid-19-states-tracker-for-coronavirus-cases-deaths-and-testing->

Graph 1: Recovery Rate vs Death Rate based on Closed Cases in the States as on 23-4-2020



Source: <https://www.thehindu.com/data/covid-19-states-tracker-for-coronavirus-cases-deaths-and-testing->

change in consumption expenditure and spending patterns is an expected response to these unpredictable income changes and thus require robust study and analysis. The lockdown has severely affected supply chain in agriculture as well as the manufacturing sector and these disturbances in the supply chain have resulted in a decreased supply of intermediate goods to the sectors having forward and backward linkages with it. States will have to take immediate and appropriate policy measures to bring the economy back on track. Apart from monetary policy, fiscal policy interventions such as tax exemptions, loans with lower interest rates, increased moratorium and easy installments for credit are some immediate steps that are required to cushion these sectors.

The impact on the vulnerable will be reflected mainly in following forms:

A) Impact on Poverty and Nutritional Security:

There will be serious implications on poverty scenario in the most affected states and measuring poverty ratios would give a fair

picture of the number of people that have fallen below poverty line post- COVID-19 across the most affected states in India due to rising unemployment, loss of livelihoods and erosion of assets. In India, poverty is also in terms of lack of food and nutritional security for a large number of poor. The incidence of poverty is higher among socially deprived groups such as SCs and STs. COVID-19 has severely affected the food and nutritional security of poor people. The central government has introduced a relief package titled as Pradhan Mantri Garib Kalyan Yojana which aims at providing safety nets for poor people affected by COVID-19 lockdown. The provision made is 0.85% of GDP but is considered to be very inadequate compared to the current need of funds. The government needs to take bold steps as far as social transfer is concerned even if it comes at the cost of fiscal slippage.

B) Impact on Contractual and Migrant Labour:

Most of the state economies function on the basis of temporary and migrant workers who

form more than 70 percent of the work force for the states. With the sudden announcement of lockdown, many who worked as daily wage laborers in construction, agriculture, transport and other informal sectors had no job, no food and no shelter. A large number of the labor started migrating to their native places. With no public transport facilities, they travelled on foot and some of them managed to cover a distance of a few hundred kilometers to reach their hometowns. The state governments started measures like distribution of dry ration, provision of shelter and also community kitchens to give cooked food. Still, many were left with no wages, loss of livelihoods and uncertainties and anxieties, hence they migrated back to their villages. In fact, even if the lockdown is lifted many sectors will face severe shortage of labour and these laborers will have to be given incentives in the form of higher wages and other incentives to induce them to migrate back to the state. Otherwise, they will be reluctant to migrate due to COVID-19 fear.

Finally, the sector which is under tremendous pressure is the health sector. India's total health care spending (out-of-pocket and public), at 3.6% of GDP, as per Organisation for Economic Cooperation and Development (OECD), is way lower than that of other countries. Due to low public spending on health, out-of-pocket expenditure on health care services in India is 62.4% in 2014 (Geneva: World Health Organization; 2019 and this is much more than many developing and developed countries of the world. Health being a state subject much depends on the capability of the State governments to allocate higher budgetary support to the health sector. State finances are under tremendous stress. However, now due to COVID-19, the importance of investing in the healthcare sector for a country like India is underlined.

Policy Recommendations and Conclusion

First and foremost, for agriculture sector, government should ensure free movement of farm

output, livestock feed and veterinary medicines. Effective logistics and distribution channels should be put in place to avoid supply glitches even in future. The government has already taken some steps to support agriculture and livestock sectors in the interest of both producers and consumers. Various initiatives to ensure the direct sale of farm produce to the consumers have been taken. In states like Maharashtra, the Maharashtra State Agricultural Marketing Board (MSAMB) has started publishing lists of farmers' groups which can sell their produce directly to housing societies in urban areas. Such initiatives will help in the short run. In the long run, reducing interest rates on farm loans, easy availability of fresh loans to small and marginal farmers, subsidized inputs, public investments in micro irrigation, encouraging agro-processing units at the taluka levels, public investments in building more warehouses and cold storage facilities and facilitating the movement of labor for agriculture will help the agriculture sector to come out of the crisis in the next season.

For migrant labour that is currently either stuck or on the move, provision of dry ration using universal coverage, provision of other essential items and shelter is essential. For *landless labour* in the agriculture sector steps such as direct cash transfers, initiating Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and making advance wage payments under it could be useful. No pay cuts for people in the informal sectors for no work days are made mandatory by labor commissioner which is a good step. The informal sector like agriculture, household services, hospitality, travel and tourism, micro, small and medium enterprises (MSME), transport and the logistics sector absorbs a large number of migrant workers who are mainly contractual laborers, the most important measure would be to protect employment and income of such workers during lockdown and for which these small undertakings would need support from the government and the government must give it even

if it may be at the cost of increasing the fiscal deficit for the state.

The cap of 3% on state's fiscal deficit has to be temporarily waived. Larger amendments may be needed in the Fiscal Responsibility and Budget Management (FRBM) Act. The Central government has to execute the payment of GST Compensation Cess to the state governments. Also states may need greater compensation and greater transfers, given their distorted fiscal deficits. There has to be a more efficient and smooth devolution of spending. In other words, money has to flow down to avoid interruptions in the revival process across states. Unprecedented times such as this sometimes may require unconventional policy options. An unconventional fiscal policy could be directly providing fiscal stimulus to private companies. Unconventional monetary stimulus such as 'helicopter drop' and central bank purchases of assets or its direct subscription to COVID bonds (Quantitative Easing, or QE) can be considered as policy recommendations.

India spends a meagre proportion of its national income on health and education. Social sector expenditure in such crisis time can play very important role. Hence, one of the inevitable and lasting legacies of the crisis is the bringing back of the '*Welfare State*'.

On the international trade and geo-politics front, India can capitalize on US-China trade wars and the now prevailing sentiment towards de-globalization, by attracting value chains away from China and into the country, especially, in sectors such as chemicals, pharmaceuticals, electronic value chains, assembly of mobile phones, and textiles.

To conclude, as the number of confirmed coronavirus cases is exponentially rising across all states and more specifically in these states, a comprehensive and regulatory policy framework both at the central and the state level along with the highest degree of coordination between the two is the crucial need of the hour.

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Politics of Urban Infrastructure in times of Pandemic

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Introduction

The recent outbreak of new COVID-19 disease has resulted in the use of new health infrastructure (both public and private) in urban cities. There is an acute dearth of health care services in cities for the past three months. The World Health Organization (WHO) declared Coronavirus as a global pandemic disease, which forced the Union Health Ministry of India to bring in new policy measures to improve the health care facilities, immediately sought to be contained. In this aspect, an inclusive urban infrastructure policy needs to be focused in order to deal with such a global epidemic. This article addresses the aftermath of an outbreak affecting the lives of millions of migrant workers for its poor urban infrastructures.

An inclusive policy on better urban infrastructure for the working-class communities, such as migrant workers, seasonal workers, and daily wage labourers, who are currently the worst hit by the outbreak, would have contained the virus. Better public infrastructures may have fewer chances of mobility-driven risks in urban neighbourhoods. Some of these neighbourhoods, which are turned into containment zones now, shelter to working-class people. Lakhs of them who are stranded without basic health care facilities were forced to move back to their hometown. These migrant groups, who are more susceptible to this contamination and infection, are more vulnerable economically and socially in these

neighbourhoods. Of the crucial phase of the pandemic, the paper reveals the situation of Bengali-speaking workers in Mumbai. It is an attempt to discuss how the redevelopment of urban infrastructure has not gained much attention to its urban poor.

Implementing the guidelines of WHO — to maintain 'social distancing' in urban areas — regarded to be effective to counter the virus, one cannot, however, possibly maintain distance, especially among the urban poor communities who share 'common' spaces like toilets, washrooms, and drinking facilities. The concept of social distancing is a barrier among slum dwellers in cities like Mumbai. Half of the population lives in chawls; the transmission of the virus through the community was inevitable. Members of the households, who live in densely populated slums with minimum spaces of usually 10 by 12-inch feet rooms, cannot maintain social distance. The municipal corporation had carried out contract tracing in the areas where there are confirmed cases. Social distance also means spatial and physical distance, and after the nationwide 'lockdown' in India for twenty-one days and so on, the new orders by the government has brought more confusion and difficulties in the everyday life of migrant workers and daily wage labourers. In the everyday life of slum dwellers, two or three members of the household always go to work, which allows the other members to have some space to live inside house. During the lockdown, it was merely easy for

any members to stay indoors and maintain a 'spatial' social distance. In order to combat and contain the virus, the government used public infrastructures, where the concerns of the municipal corporation have factored to disinfect and sanitize not only public infrastructures but also communities. While, maintaining proper hygiene, testing, and quarantining, but there was a limitation of space and health workers.

Apart from social distancing, there is also a severe disruption of human mobility and supply of food. Half of the country was on the move, but a sudden lockdown over 1.3 billion population had limited access to basic food supply and ration their supplies. Lakhs of migrant workers were also laid off by their employers, which led to massive unemployment growth rate and subsequently to starvation. A lockdown was necessitated to contain the virus. But such an immediate, albeit miscalculated lockdown, has impacted Mumbai's slum dwellers, with other concomitant problems such as loss of income and means of livelihood, as many of the factories and other workplaces were shut down due to the virus, limited food supply. The planning for providing proper public infrastructure with basic amenities for quarantining of coronavirus cases, many centers were set up but was only durable for only a short span of time. The lockdown, however, has worsened the scenario in public infrastructures; the number of cases increased and there is a dearth of transit housing and habitation. Re-mobility of people on the streets or their social and physical movements is the determinant of a lack of public infrastructure. In the time of the lockdown, the use of public infrastructures such as government schools, government guest houses, and other religious institutions should have been availed for the use of aiding migrant workers.

This paper questions the ambiguity of urban infrastructure — a market-driven policy of urbanization — in which the construction of these

public infrastructure eliminates the concerns of urban poor even before the lockdown. The use of public infrastructure, which shows who the government is making these policies for, is only to a certain class of people. It is the migrant workers who are devoid of these basic facilities and public infrastructures in the cities without any food supply, no jobs, no wages, and unemployment. Any policy enforced by the central government has immediate repercussions to the vulnerable and marginalized working-class community. The next sections provide anthropological narratives of Bengali-migrant workers facing hardships in accessing urban infrastructures.

Mumbai before the Lockdown

In the past decade, Mumbai's transformation has been a drastic change not only economically but also politically and culturally. The city, which held the promise of stirring novelty and many possibilities to live, has never failed to create a certain kind of desires and imaginations (Prakash, 2010). As the transformation of the city took place, culturally from being modern to native, and economically, it was rising into a modern metropolis that redevelops land and resources (Kidambi, 2007; Kosambi, 1994). From these land and resources, new infrastructure has sprawled in (Appadurai, 2000). After the closure of cotton mills, older neighbourhoods were given to the real estate or to the market by the government to relocate and rehabilitate those areas and construct new luxurious townships or shopping malls (Banerjee-Guha, 2002). The largest cotton textile mills' village in Mumbai known as 'Girangaon' was redeveloped into a big corporate zone. The landscape of Mumbai changed enormously with the recurrent construction of new buildings, demolition of older neighbourhoods, and redevelopment of the city (Chandavarkar, 1992). The process of urban redevelopment of the city — construction of buildings and infrastructure is continuous even till today so much so that Mumbai

is now spreading across the peripheral areas of its neighbouring districts and towns. Mumbai's real estate market is akin to London or Dubai, and the aim of Maharashtra's state government is to transform Mumbai into a global city like Singapore, in which the market played the maximum role (Mehta, 2004).

This process of urbanization has always been there, but, after the outbreak of the virus, a structural fallout took place due to rhetoric planning and urban restructuring of infrastructures. The practice of social distancing for COVID-19, however, caused severe disruption as there is no place for urban poor to maintain physical and social distance. With this community transmission of the virus, the process of urbanization magnificently changed, as land and resources are used to construct public infrastructure. The government's immediate action to tackle the pandemic was to impose a lockdown that has devastated the gig economy of the country.

There was a need for pandemic preparedness and resilience with prior knowledge on the virus before the announcement of the lockdown. Certain policies, which were implemented by the government, have only curtailed the basic facilities for urban poor and migrant workers. It is only because of them that the upper-middle class could afford a comfortable everyday life. One has to acknowledge that migrant workers, gig workers, small-scale vendors, daily wage labourers are service providers to the upper-class neighbourhoods, and in return, the State should provide them welfare schemes with better public infrastructure.

New institutions, like markets, have already entered the policymakers, as a contribution to the growth of the economy in terms of redeveloping the city. The informal sector contributes to economic growth as it employs a large number of

workers who are part of a small-scale enterprise, industrial units, and restaurants. A new private-public enterprise was set off in the planning of the policymaking. The private sector such as Reliance, Godrej, Adani, etc, played a great role in constructing new public infrastructures. The dazzling new urban infrastructure brought an exodus of workers, who were part of either white-collared or blue-collared jobs, have sprawled in various neighbourhoods, which were constructed especially for low-income households too. These new low-income neighbourhoods have all the facilities of infrastructures, but with limited resources, and this brings new hierarchical differences of equity of resources, where neighbourhoods were based on the proper functioning of infrastructures. But after the virus, the primary market is dependent on the marketing condition persisting in the secondary market, which is a link between labour and urban consumption. Due to the outbreak of the infection, the return migration of workers and daily wage labourers created a huge shortage of labour in the market. Moreover, the gap between the primary and secondary market have led to the breakdown of public infrastructures, and one of them being transportation. Maharashtra alone has 3.5 lakhs stranded migrant labourers, who are waiting to return back home, and the government has limited facilities to ensure basic hygiene, food, and sanitized public infrastructure to those who remained back.

Moreover, Mumbai's infrastructure has a spatial hierarchy due to its conjunction with private capitalist mega projects. The mega housing infrastructure projects were built mainly for capitalist or upper-middle class, whereas the working-class neighbourhood had made ways to gentrify colonies for the urban aspirers. However, amid these larger plans of redevelopment and renovation of infrastructure, there has always been a huge crisis of basic infrastructure facilities like housing, electricity, public sanitation, public

health, and safe drinking water. The water crisis and its breakdown of water infrastructure have not been carefully studied by the policymakers (Bjoerkman, 2015). On one hand, Mumbai has transformed into first world-class, but on the other hand, the infrastructure for the working-class community has gradually degraded over these two decades.

Basic facilities like urban sanitation, electricity, and safe drinking water, which were promised to be given by every ruling government, are still the biggest challenge in Mumbai. From an anthropological discourse, I draw attention to a few case studies of a Bengali-origin Muslim working-class migrant community before the lockdown, and therefore, this paper looks at the problem of urban infrastructures in relation to state's limitation tied to its red tape. Methodologically, the paper uses ethnographical data from the field conducted in Southern Mumbai to explore how migrant communities deal with public sanitation in their everyday life.

City and Urban Infrastructures

The Lefebvrian approach to the city brings out a relation between the process of urbanization and the movement of capitalism (Lefebvre, 2003). The capitalist was gaining from the global process of urbanization and production of space was becoming the primary means for their society (Banerjee-Guha, 2002). While a lot of new sectors are moving in the urban centers, which are primarily the producer services to the urban centers — such as the real estate, finance or education, wherein the production of space continued. According to Marvin and Graham (2001), infrastructures are made of an assembly of socio-technics, and cities are the assemblies. Urban geographers argue that the structural inequality and inequitable distribution of resources in infrastructure is a result of the capitalist market (Harvey, 2001; Swyngedouw, 2004).

Ferguson (1999) draws attention to the access to infrastructure that is differentiated between the capitalist class and the public, determined by class, gender, and race, as who gets to use water and electricity and for whom it is available. Neil Smith (1996) highlights how gentrification also creates an uneven development in the country. Sassen (2006:315) argues that global cities have become a strategic terrain where the dominant sector of global capital and a disadvantaged or disenfranchised community creates a series of conflicts and contradictions based on the outcome of the unequal distribution of cities. Therefore, to avoid such inequitable and unfair distribution of resources of infrastructure, certain planning is carried out at the local level within the community. The governments' partnerships with private vendors — the public-private enterprises and its governance with Municipal Corporation — to build new infrastructures is meant for only a certain class of the community, its aim was to beautify and glorify the city for the upper-middle class. This aspect of private-public governance affects the ordinary working-class citizens, who are the service providers to these upper-middle class, and in particular, a vulnerable class to deal with the repercussions of state's actions such as corruptions and violence within infrastructures (Gupta, 2012; Corbridge et.al. 2005).

Anthropologists draw attention to the maintenance of public infrastructures (electricity grid, water pipes, public sanitation) when it fails to deliver to people, and then there are alternative or provisional ways in which social networks function to claim on infrastructures, which are beyond state control (Simon, 2004). In urban slums, there are parameters of infrastructures, which are fixed by the local brokers, leaders, and even corporations, followed by corruption or *jugaad* by these social networks. During the lockdown, the abrupt return migrants who are moving back to their source ends, have to bear the brunt of their social networks in villages. Rural areas are still struggling with

disrupted supply of food and essential stock, while the decline of crops in the peripheral areas of urban cities affected the demand and supply of market goods. Infrastructure is fundamentally a social assembly (Schwenkel, 2003). In her anthropological work on Mumbai's water pipes and hydraulic system, Bjoerkman (2015) claims that the hydraulic departments are embedded infrastructure, which is brokered by leaders of the slum. In other words, she argues that much of the planning and governing of water infrastructures not necessarily depends on the neighbourhood, but has always been as it is, i.e. illegally getting water connection by cutting off from other lines of water pipes. This is an embedded corruption in Mumbai. Infrastructures in the city are similar to technology, which is symbolic as well as material (Anand et.al. 2018). Urban infrastructures reveal the tensions between the corporation and the people (ibid). According to Simone (2012), public infrastructures, which bring people close as a community, have drawn attention to their lives as it coalesces them in one place, i.e. people living arrangements are based on the location of the public toilets and drinking water facilities. In urban cities like Mumbai, urban squatters form their habitation around public infrastructures as they share the same commons of the city. So the concept of social distance within the ambit of the lockdown, where there is a scarcity of resources in public infrastructures, is not likely possible without prior policy strategies. Such an infrastructural failure is contrary to the promise of tackling COVID-19.

Public infrastructures are the urban commons for urban poor, who need to use and share the same common and public space. Alongside this, there is always a cultural notion attached to any infrastructures, where the public associates it with a Hindu Avatar or deity. Such a common attachment is also celebrated among the public to worship infrastructure and technology as a gift of god's creation. This cultural attachment to infrastructures coalesces the public together as to what Simone

(2012) has argued. But this practice of worshipping infrastructures was common among the Hindu communities. Urban Muslim poor is dependent on Muslim welfare society and services, however, apart from Municipal Corporation of Greater Mumbai (MCGM) services. Through charity and donation, which also known as zakat, in which Muslim foundations take responsibility to build public infrastructures such as safe drinking water tanks and toilets, which allows the poor Muslim workers to use infrastructures. Religion and the market contribute to constricting basic facilities for urban poor, therefore, the question arises what is the role of infrastructure and what do they promise to the public?

A Case of Bengali-speaking Migrant Muslim Workers

Fatima Khatun, a Bengali-speaking Muslim migrant worker, is a domestic help, migrated from the state of origin, Assam to the city of Mumbai, who lives under the J.J. flyover, near Crawford Market. She has migrated to Mumbai in search of better livelihood opportunities, infrastructure, and wellbeing. At home, the condition of Bengali speaking migrant workers, who are assigned as "outsiders", is harsh. As she is Bengali-origin Muslim from Assam, who does not hold a ration card, she has a very difficult life in the city too. For their aforementioned status, the distribution of resources and allocation of entitlements are determined by religion, class, and gender. Lakhs of migrant workers, who have migrated to the cities in the hope of accessing better entitlements, infrastructures, livelihood opportunities, etc. have inadequate access to urban infrastructure such as housing, public sanitation and proper drinking facilities in their destination ends. Safe drinking facilities and urban sanitation are two utmost determinants of better public health and life.

For migrant women workers like Fatima, who needs to use the municipal corporation's public

toilet more than other citizens, are exposed to different types of vulnerabilities and risks in the streets of Mumbai. Fatima said how there is no other option but to stand in the long queue to use the public toilets. Her health is deteriorating for not being able to defecate on time. The toilet is used by 100 people every morning. Overall, 1200 people use the same toilet throughout the day. Along with that, she also discussed how hygiene and cleanliness are absent. Before going to work, she fills up drinking water from the MCGM water tank. She said, at night some of the migrants' children (girls) urinate near the drinking water tank since the public toilet is a little far away from them. For many young women and girls, finding their way to the public toilet is difficult in the dark, especially in the middle of the night, however, urinating near the tank is also not safe. A lot of young girls, who have to wait until the darkness, are exposed to sexual and physical abuse. Gender norms also play a crucial factor in public sanitation, as women's health is a major concern. If 1200 people use one toilet, then there is no way out to disinfect and sanitize public toilets. Instead of constructing more toilets, the number of coronavirus cases will increase rapidly in such a scenario.

The Municipal Corporation's drinking water was already disinfected by heavy chemicals and lead as the location of the place was right in the middle of the road, wherein it is easily contaminated and polluted with the emission of gas from the motor vehicles. Not only that but also the colour of the water is not transparent, people who drink that water may be susceptible to water-borne diseases, diarrhoea, dysentery, or typhoid. The treatment of the water tank has been negligent, and there has been leftover food and garbage, which gathers flies and other insects near the tank. Fatima said how children who open defecate on the streets, are exposed to a lot of faecal matter, which may get transferred to their food and water as they live on the streets, it will only help to spread more contagious diseases.

However, the politics of infrastructure in Mumbai is intertwined with a patronage system. The location of the infrastructure has an inverse relation with the distribution of resources to the public. Among the Muslim communities, public infrastructures like drinking water or toilets are constructed on a charitable basis from their religious foundations, groups, and organizations, however, it is meant accessible to use for only certain sects of Muslim community, but not to Bengali-speaking Muslim migrant workers, as their identity and religion play a big factor. Fatima cannot use the public toilet, she also cannot have access to religious infrastructures due to her identity. This lies the problem of inequitable distribution of infrastructure, especially, when gender is concerned here. For women, accessing basic health facilities should be their right, and there should not be any political alignment to use religious or charitable infrastructures.

As the confirmed cases of Coronavirus in Mumbai is at high numbers, the risks of contamination of people have also risen, as many migrant workers like Fatima are stranded in Mumbai without any protection. Instead of providing immediate shelters to many homeless single mothers like her, the Prime Minister extends his solidarity to health workers, para-health workers and those who are at the disposal for the public, through a televised speech aired in the National Doordarshan Channel, he urged the public to clang utensils to show respect and solidarity to them, but in order to protect migrant workers through safety nets, there are limited measures taken for those who were stranded in Mumbai. The plight of the migrant workers in urban cities has an inverse relation to the failure of infrastructural policies, which is market-driven for the upper-middle class. Hygiene toilets and sanitized bathrooms along with shelter homes for migrant workers should have been the main focus in policy planning.

Muzir-ul Haque works at the construction site, is also a Bengali speaking Muslim migrant worker, who avoids bathing in the public toilet. He said that one bathroom, which is in a bad condition, is for 100 more people. He has no chance to bathe. People are used to not bathing. His children, who are used to open defecation in the corner of the streets, have chronic stomach problems. But all of them are in need of the MCGM drinking water for their survival. Like many other Muslim migrant workers living on the streets of Masjid Bundar and Crawford Road, Fatima or Haque, who are dependent on public infrastructure, deliberately have to share these institutional and social commons. A vulnerable Bengali-speaking Muslim community has been driven by the promise of resources, as these promises of constructions of new urban infrastructures by the government are meant for other working-class communities or groups. In Assam, the everyday condition of Bengali speaking migrant Muslim workers is worse than any other migrant worker, as they are also considered as 'illegal' migrants or 'Bangladeshis'. Therefore this highlights the differentiated (abstract) infrastructural gap between Bengali-speaking Muslim migrant workers and the city.

Khatun said, "It is a pity that I have to hold myself from defecating; I stand in the long queue to use the public toilet as there are only two baths and one toilet in that area". She said, "By evening, there is no water available in the public toilets". The supply water runs only once in the morning, and that is when everyone lines up to access toilets. Khatun works for five Muslim households at Mohammad Ali Road for very less wage; despite working for long hours, she said, she cannot even afford a room at the chawls. She is waiting for her husband to get a new job for which they can arrange for a make-shift toilet in his working sites. Her daily life, thus, begins with negotiating with public sanitation and safe drinking water in Mumbai. Further, the question of neo-liberal infrastructures and its policies, which have not effectively been able to be

inclusive, concerns the issue of public health and proper sanitation.

Urban Policies and its Infrastructural Failure

Mumbai caters to many ethnic-linguistic migrant workers, to respond to their public health challenges, this paper addresses the gap between corporations and urban squatters like Bengali speaking migrant workers, who have limited access to proper and urban sanitation and safe drinking facilities. Migrant workers seek dependent relations with Municipal Corporation and urban infrastructure. Universal access to safe drinking water and public toilets, with proper hygiene and excreta treatment, has been the main agenda of the government policies of India. Many countries are in the struggle to provide adequate sanitation to the entire population and water, sanitation and hygiene (WASH) related diseases.

According to the United Nations' (UN) Millennium Development Goal (MDG) sanitation target was to provide sustainable access to basic sanitation by 2015 to a certain population. This target, however, was not met by the world. The recent UN Sustainable Development Goal (SDG) is to promote "adequate and equitable" sanitation by 2030 for everyone. In other words, social activists, civil rights movements, and non-governmental organizations are fighting not only for safe drinking water and sanitation in slum areas but also for proper urban housing, slum rehabilitation. MCGM should focus on the wellbeing of the urban poor. Urban infrastructure is a relation between state and subject on one hand, and capitalist private agents and corporations, on the other hand (Appel, Anand and Gupta, 2018). BJP launched the new programme on sanitation -- Swachh Bharat Mission (SBM), which focused primarily on the "cleanliness" of environment and sanitation. With large public campaigns, the mission gained a lot of attention on the construction of new toilets in rural and urban India. In 2015, BJP's campaigns gained

huge attention on their flagship programmes such as the launching of smart cities, Pradhan Mantri Awas Yojna (PMAY) for a housing loan, Saubhagya Yojna for electricity, Jan Dhan Yojna, etc. These campaigns and schemes may have improved the wellbeing of migrant workers, however, the ratio of the population of workers and the government resources are never equal.

The policy-driven welfare state government creates disposition among migrant workers, who move out of their traditional rural life and move to the cities for their wellbeing and livelihood opportunities. The concept of smart cities was to boost the economy, which also means to invite more informal labour to the economy. Mumbai has 17.2 lakh migrant workers who use public infrastructure, like Muzirul Haque, there are many other Muslim construction workers who do not have proper toilet facilities in the construction sites. Even after the SBM, there is a constraint of safe drinking facilities and proper functioning toilets.

Many of these policies are now redundant when it comes to pandemic diseases like COVID-19. Haque said he cannot wait for the government's welfare schemes as his children are also looming in hunger. Urban areas are prone to be affected as there are mobility risks factors, and migrant workers like Haque are in dire need of cash, who cannot even ask for money from his contractor. In such a crisis, even public banks cannot immediately provide loans to migrant workers.

Conclusion

In these unprecedented times, the Government of India has announced a 1.7 lakhs crore relief package for the poor and migrant workers that includes free food grains and direct cash transfers, but it may not increase the fiscal deficit. A consistent policy planning effort of increasing the demand may improve the government's relief package but this has been largely inadequate due to

the proportion of the package. For migrant workers who are vulnerable are not only suffering from an inadequate supply of food or basic infrastructure, but also from this policy impasse. The government announced a few safety nets -- to provide direct cash transfer of Rs. 500 to the account holders, under the Jan Dhan Yojna, Rs.1000 in cash to the poor migrant workers, free food grains for ration card holders under the National Food Security Act, but workers like Fatima and Muzirul Haque who are not ration card or Jan Dhan account holders, will not receive the benefits of the government safety nets during the lockdown. No Municipal Corporation official has appealed to them for providing any help or subsistence. Earlier the hotels would provide them the leftover meals, but now even those restaurants, eateries are shut down.

In this coronavirus outbreak, there is also an urgent need for slum development authority to provide adequate housing infrastructural facilities to those workers, who cannot return back to their source of origin. Mumbai's onslaught of the virus has worsened the condition of the slum dwellers and homeless people. Moreover, the policy of social distancing is viable to those who live under the roof, but when half the city's 12 million population live in an unhygienic state and shanty cramped space of seven to ten members in a room, then it is a challenge for anyone to follow the norms of WHO and fight against the disease. There is no point to blame and allege Mumbai's slum dwellers to have spread the diseases, instead of criticizing the policies of the government and its inadequate urban infrastructure, the slum dwellers are posing challenges more than the upper-middle class. On one hand, there is a lack of space to follow the norms of WHO and the guidelines of the Union Ministry of Health Affairs, and on another hand, they are devoid of food supply, no wages, no jobs to have bare subsistence for their survival. The outbreak of the virus in Mumbai's slums has come as a double-edged sword for the urban poor.

Despite the Maharashtra government appealing people to stay home and taking measures to contain the spread of the diseases, however, with sharing common water taps, rooms with 100 sq.feet, sharing common public toilets, the cases of the virus will rise up. Therefore, there is an immediate need for better urban infrastructure in Mumbai. As the process of urbanization is increasing at a great speed, the public infrastructure has not met the needs of the urban dwellers and the poor. Not to forget, that migrant workers are the contributors to

the urban economy and they have the right to access safe and hygiene public toilets and urban infrastructures. It is more important to look at the circumstances that have created acute poverty and hunger, the government could have taken precautions and measures before announcing the lockdown. To conclude, urban infrastructure will be imagination and dream for the working-class community, as the process of urbanization in Mumbai still continues without considering their needs and concerns.

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ROUND & ABOUT

[As the month of March, 2020 came to pass, our country or for that matter the whole world has plunged into a situation unprecedented in history. We came to know of a new term lockdown in the face of a new pandemic Covid-19 since the second week of March. Normal life and all the activities of life came to a near halt and people remained closed in their houses. The Government, the municipal authorities, health authorities, doctors, nurses and paramedic and support staff are doing their best to stop the onslaught of this pandemic and save lives. At present there is no certainty when the things would be normal. The month of June 2020 is about to end and the situation is still insecure. Fact is that for the present we will have to live with this calamity with all the precautions that we can take and proceed with activities of life so far safe and feasible. Human spirit is indomitable and we are facing the pandemic with all the care, and economic life is moving, albeit slowly. This period was also not devoid of important events in urban sector. Here are brief reports of a few such happenings].

Review of the Progress of National Urban Missions

The Urban Missions, namely (i) Atal Mission for Rejuvenation and Urban Transformation (AMRUT), (ii) Smart Cities Mission (SCM), and (iii) Pradhan Mantri Awas Yojana – Urban (PMAY-U) launched in June 2015, these mega schemes are described as the most comprehensive planned urbanization programmes in the history of the world. A Webinar was organized on the occasion of the 5th anniversary of these Missions on 25 June, 2020 in which review of the progress of these Missions was taken and many announcements were made. A few highlights and announcements are as under:

1. E-Book of the Ministry of Housing & Urban Affairs (MoHUA), Government of India showing the progress and achievements of all Missions of the Ministry was launched.
2. National Institute of Urban Affairs (NIUA) Website is revamped to strengthen it as a knowledge bank for emerging topics on urban development, while continuing to be a source of everyday resources for urban development functionaries and practitioners.
3. NIUA Climate Center for Cities (C3) has been set up to consolidate and institutionalize and mainstream the learnings from experiences in our cities on climate change.
4. NIUA Center for Digital Governance (CDG) is an initiative to take forward the digital efforts of MoHUA, Government of India and become the anchor to accelerate digital transformation of urban governance across all States and Cities.

Highlights of the Progress under AMRUT -

- State Annual Action Plans (SAAPs) worth ₹ 77,640 crore approved and projects worth ₹ 75,829 crore grounded so far. Projects worth ₹ 10,654 crores completed and ₹ 65,175 crore in advanced stages of implementation.
- ₹ 39,011 crore allocated for drinking water supply projects, and ₹ 32,546 crore for sewerage and septage projects.

- Concerted effort made at national level to provide water to about 1.39 crore households and sewerage/septage services to about 1.45 crore households.
- In order to promote energy efficiency across the Indian cities, 76 lakh streetlights replaced with energy efficient LED streetlights.
- Online Building Permission System (OBPS), implemented as a digital transformation-based reform is aimed at reducing the overall time taken for approvals of building plans, while ensuring a seamless process. Owing to the implementation of the reform across 2,057 cities, including 444 AMRUT cities, India's ranking rose to 27th position in the World Bank Doing Business Report (DBR) 2020, in the Ease of Doing Business in Construction Permits, moving up from 181 rank in DBR 2018, showing remarkable improvement since the implementation of the reform.

Highlights of the Progress under SCM -

The review shows that during the last five years the value of tendered smart city projects is over ₹ 1,66,000 crores, the value of work orders issued is about ₹ 1,25,000 crores and the value of all completed projects is more than ₹ 27,000 crores.

- An additional 1000 projects amounting to ₹ 32,500 crore have been tendered and 1000 projects amounting to ₹ 36,000 crore grounded during last one year.
- 180% growth in the completed project in the last one year, amounting to ₹ 12,100 Crore.
- The Integrated Command and Control Centres (ICCC) developed under the Smart Cities Mission have helped cities in their fight against COVID. The 47 operational ICCCs became war-rooms and have played an effective role in COVID response.
- 33 ICCCs are at various stages of implementation. Smart Roads / Complete Streets, Smart Solar, Smart Water, PPPs and Vibrant Public Spaces projects are heading towards progressive paths in the Mission.

Highlights of the Progress under PMAY (U) -

Against the target of 1.12 crore houses in urban areas by 2022 under PMAY – “Housing for All”, thirty-five lakh houses have so far been delivered to beneficiaries under the scheme while 65 lakh houses are currently under construction. It is estimated that 3.65 crore jobs would be generated in the construction of all sanctioned houses under the mission and of these, about 1.65 crore jobs would have already been generated.

(Source : Press Information Bureau (PIB), Press Release, 25 June, 2020).

World Earth Day Observed on 22 April, 2020

The World Earth Day 2020 is celebrated globally since 1970 for encouraging worldwide awareness and action to protect our environment. This year the theme of World Earth Day 2020 is 'climate action'. Because of lockdown all over the country, its celebrations were subdued. However, all the concerned Ministries, departments, institutions observed the day on 22 April 2020.

In his message on the occasion of the Earth Day Prime Minister Shri Narendra Modi said that “Today on Earth Day, we bow in reverence to Mother Earth. For years, this great planet has been home to phenomenal diversity. Today we also reiterate our commitment to work towards the well-being of our planet, focus on sustainable development and mitigating climate change.”

Vice President, Shri M. Venkaiah Naidu in his message said that -

“We are marking the 50th anniversary of the World Earth Day at a time when the entire mankind is reeling under an unprecedented health crisis caused by COVID-19 pandemic. It has also brought to the fore some startling revelations on the ecology of the world. The sweeping lockdowns have brought the world to a near halt, reduced the pollution levels and improved the air quality, making us realize the extent to which man has disrupted the ecological balance.

(Source: PIB, Delhi, 21 April, 2020).

National Technology Day Observed on 11 May, 2020

National Technology Day was celebrated on 11 May, 2020 by all the institutions and organizations engaged in scientific works in India. A high-level digital conference on 'Rebooting the Economy through Science, Technology and Research Translations titled RESTART' was organized by Technology Development Board (TDB), a statutory body of the Department of Science & Technology (DST) and Confederation of Indian Industry (CII) on 11 May, 2020, to celebrate the **National Technology Day**. The Conference brought together scientists, technocrats, Government officials, diplomats, WHO officials and dignitaries from national and international industry, research institutions and academic institutions.

While applauding the Ministry of Science & Technology's response to epidemics like COVID in the country, Dr. Harsh Vardhan emphasized that the S&T response reflects the collaborative spirit of the entire S&T ecosystem. “Indian Government, academia, scientists, startups, entrepreneurs and industry have been working relentlessly to find solutions to combat this pandemic. Within a short period of time, the nation has been able to mobilize a number of researchers to develop new testing kits, protective equipment, respiratory devices, etc, he added.

(Source : PIB, Delhi, Press Release, 4 May, 2020)

World Environment Day Celebrated on 5 June, 2020

World Environment Day (WED) is celebrated on 5th June every year, focusing on the theme declared by UNEP and organizes several events. This year's theme is 'Biodiversity'. In view of the prevalent situation due to COVID-19 pandemic the Ministry of Environment, Forests and Climate Change organized virtual celebrations of World Environment Day on this year's theme with focus on Nagar Van (Urban Forests). Shri Prakash Javadekar, Union Minister for Environment, Forest and Climate Change, will grace the occasion as Chief Guest. The programme was available live on YouTube.

India, though having less land mass and more human and cattle population has nearly 8 percent of biodiversity. The country is endowed with rich biodiversity having several species of animals and plants and hosts 4 of the 35 global bio-diversity hotspots containing several endemic species. Biodiversity conservation has traditionally been considered confined to remote forest areas but with increasing urbanization a need has arisen to safeguard and save biodiversity in urban areas also. The Ministry of Environment, Forest and Climate Change re-launched a scheme for creating urban forest in 200 corporations and cities because all these cities have gardens but not forest. The urban forest will help in creating and enhancing the lung capacities of these cities.

(Source : Ministry website posted through PIB).

Government's Assistance to Urban Street Vendors

Street vendors in urban areas also called hawkers play an important role in urban life. They are small level entrepreneurs who do not take any help, subsidy. They come from villages, remote places and are mostly uneducated. Through their own efforts and with small money they eke out a living for themselves and urban the people in many ways by selling vegetables, fruits and a range of daily used things. They form a vulnerable section of society. They face many odds by themselves. As a part of national policy the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014 been passed. They were among the most affected people due to lockdown on account of Covid-19. Government has launched the Pradhan Mantri Street Vendors' AtmaNirbhar Nidhi (PMSVANidhi) scheme which is a part of the economic package for sectors affected by the lockdown. Under this scheme a small loan will be sanctioned to them so that they can restart their businesses.

(Source : Portal of the MoHUA, Government of India - pmsvanidhi.mohua.gov.in)

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Call for Research Papers!

The **Regional Centre for Urban & Environmental Studies** is pleased to invite contributions for **Urban World** in the form of articles and research papers from researchers, authors, publishers, academicians, administrative and executive officers, readers and well-wishers on any one the following topics:

- **Impact of COVID-19 on Urban Development.**
- **Rethinking City Planning in a Post Pandemic World.**
- **How Smart Cities are Adapting to a Post Pandemic India.**
- **WASH Response to COVID-19.**
- **Socio-Economic Impact of the Pandemic.**

Articles could be between 2000 to 4000 words. They may contain compatible tables, charts, graphs, etc. We reserve the right to edit for sense, style and space.

Contributions may be e-mailed in digital form as a Word file to the Director, RCUES, Mumbai.

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