GLOBAL SOLUTIONS
THE WORLD POLICY FORUM

Sustainable Responses
to the COVID-19 Pandemic

#fragmentation #generation #knowledge

INTERSECTING

VOLUME 04/2021

Nicolas J.A. BUCHOUD
Milindo CHAKRABARTI
Gunnar HARTMANN
Nella Sri HENDRIYETTY
Holger KUHLE
Riatu MARIATUL QIBTHIYYAH
(eds.)

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Iskandar **ABDULLAEV** | Pierre **ACHARD** | Aziza **AKHMOUCH** | Eisa Khan **AYOOB** Ayoobi | Harun **BADAKHSHI** | Oriol **BELLOT** | Svetlana **BODRUNOVA** Nicolas J.A. **BUCHOUD** | Milindo **CHAKRABARTI** | Henri **DE GROSSOUVRE** Gunnar **HARTMANN** | Gérard **HÉGRON** | Nella Sri **HENDRIYETTY** | Gary **HUANG** | Michael **KEITH** | Holger **KUHLE** | Riatu **MARIATUL QIBTHIYYAH** Stefano **MARTA** | Tadashi **MATSUMOTO** | Daniel **MILES** | Katharina **LIMA de MIRANDA** | Francisco **OBANDO** | Susan **PARNELL** | Lan-Phuong **PHAN** | Nicolas **PREGO** | Tetsushi **SONOBE** | Nicolaos **THEODOSSIOU**

Image Source: The temporary 'POC 21 innovation camp', Château de Millemont, Yvelines District, Ile de France, in the summer of 2015 before the Paris Climate COP21. Image by Nicolas J.A. Buchoud, all rights reserved ©.

Which of the Sustainable Development Goals (SDGs) have gained importance since the beginning of the pandemic?

Image Source: Ferry crossing Butterworth and Georgetown, Penang, Malaysia. Image by Nicolas J.A. Buchoud, all rights reserved ©.

preface

"Investment in physical capital and human capital in multiple directions at multiple scales, namely, medical and engineering, economic and social, urban and rural, central and local, and national, regional, and international efforts must be made and coordinated."

– Tetsushi SONOBE, Asian Development Bank Institute, Tokyo, Japan

Image Source: Overlooking Moscow from Kolomenskoye Park on a summer afternoon.
Image by Nicolas J.A. Buchoud, all rights reserved ©.

Tetsushi SONOBE
Dean and CEO,
Asian Development Bank
Institute (ADBI)
Tokyo, Japan

2021: Building forward better in developing economies

The COVID-19 pandemic is much more persistent than expected. Delayed by a year, the Tokyo Olympics was held in mid-2021, almost behind closed doors and under the state of emergency. During the Olympics, the daily number of newly confirmed infection cases hit a new high day after day in Japan, where vaccination rate was not very high. Daily infection rates, however, soared even in those countries with exceptionally fast vaccination progress, probably due to the spread of highly infectious variants. While such countries are planning vaccine booster shots, a large portion of world population remain unvaccinated, suffering from short supply.

While joblessness, poverty, and debt increase across the world as the pandemic lingers, there are people whose jobs have not been affected, and there are more privileged people with growing financial wealth. The pandemic has aggravated inequality. Turning to environmental issues, strict travel restrictions have reduced air pollution and greenhouse gas emissions, but such favorable impacts on the progression of global warming seem to be limited. On the contrary, too many severe disasters due to extreme heat or extremely heavy rainfall continue to happen. Economies, societies, and infrastructure across the world are suffering increasing stress caused by the health crisis, the worsening inequality, and the slowly but surely looming crisis of climate change.

INTERSECTING is a forum for people who wish to stop the recurrence of these compounding crises and to build forward better. This is because they wish recovery that is not just green, but it must also be healthy, inclusive, and resilient. Investment in physical capital and human capital in multiple directions at multiple scales, namely, medical and engineering, economic and social, urban and rural, central and local, and national, regional, and international efforts, must be made and coordinated. They must be coordinated not just because resources are limited, but also because efforts in different directions and at different scales can work as complements and generate synergy. INTERSECTING is needed to explore new synergy, to make synergy stronger, and to generate greater total impacts.

Efforts to reduce inequality, boost economic recovery, and increase climate and disaster resilience must be made in tandem with decarbonization and transition to the circular economy while strengthening each other's impact. Invest-

ments in solar panels and digital infrastructure can be undertaken together in those areas where they enable school children to fully participate in online class, and where they offer previously unbanked micro and small enterprises good access to digital payment, loan, and saving services. Some of these children and enterprises may design and produce circular products in future. In rural areas, the benefit from such investments will be strengthened if farmers are equipped with digital and financial literacy, appropriate farming technology, and management and marketing skills. These physical and human capital investments can improve the livelihood of low-income people, reducing their dependence on natural resource appropriation.

This kind of wishful-thinking arguments are prone to critical comments pointing out missing considerations for resource constraints, scalability, resultant increases in environmental footprint, and so on. But such comments may not necessarily be relevant. This is why INTERSECTING is useful. It recasts rambling arguments into those acceptable from different perspectives. More generally, public policy proposals tend to lack direct evidence for the effectiveness of the proposed policies. It cannot help because such evidence does not exist in many cases and hence the effectiveness must be inferred by means of reasoning and analogy with historical, circumstantial, anecdotal, fragmental, or suggestive evidence. How can the quality of inference be guaranteed? INTERSECTING is a potentially useful approach to evidence-informed policymaking.

To advance this approach, big data should be collected and analyzed so that current situations and interactions between sectors and areas are better understood. We also need an expanded forum for raising new ideas and checking their plausibility and validity rigorously. It would be difficult for a person or a small group of persons to check a multitude of new ideas and the relevance of each critical comment on them. Instead, each idea would be checked by a number of volunteers, and their votes would be aggregated. It may be a challenge to design a transparent and rigorous evaluation system that can lead to crowd consensus, but such a system of forum seems worth exploring.

"Intersecting is not just a book about cities or infrastructure. Built across months-long dialogues and ad hoc panels, Intersecting is also a visual reflection of a major crisis and its aftermath."

– Nicolas J.A. BUCHOUD, Global Solutions Initiative, Paris

Image Source: At the opening plenary of the 'Central and South Asia Connectivity' international summit in Tashkent, Uzbekistan, July 15-16 2021.
Image by Nicolas J.A. Buchoud, all rights reserved ©.

Nicolas J.A. BUCHOUD (ed.)
Global Solutions Fellow
Paris, France

INTERSECTING as a compass for recovery

The pandemic is over (isn't it?).

When in the spring of 2020, we first initiated the Solutions Dialogues which would then become INTERSECTING, the World Health Organization (WHO) reported 10 million COVID-19 cases and half a million dead across the globe. When we released INTERSECTING's first edition a year later, the Coronavirus Update Live reported 115 million cases and 2,5 million dead. Halfway to 2021, over 220 million cases have officially been reported and nearly 5 million dead.

Much has been said about the pandemic, and often as quickly forgotten. It is unclear what we have learned from the crisis and yet, the world has moved from research to large scale industrialization of vaccines -and so far, a very uneven distribution of them. The global lockdowns of the spring 2020 have allowed for an instant photography of our interconnected world. Following the SARS, MERS and Ebola pandemics, the COVID-19 has forced us to break all routines abruptly and at massive scale. Governments, together with Central Banks and International Financial Institutions have spent staggering amounts to mitigate the crisis' macroeconomic impacts, especially in developed countries.

INTERSECTING's exploration from the Amazonian to Central Asia to the Arctic, from neighborhoods to urbanization corridors, from health to inequalities, warns that painting in green and inclusive colors the same institutional and networking patterns as before the crisis will quickly fall short.

Few countries and institutions, including local governments and their advocacy networks, have admitted how little prepared they were to cope with the pandemic. The global community has consolidated knowledge from the management of previous pandemics in too scarce and random a way, a situation accurately described by the Center for International and Strategic Studies in 2019 as a 'cycle of complacency.

The New Urban Agenda celebrated at the Habitat III Summit in Quito in 2016 was silent about pandemic risks. In 2020, the final Declaration of the 10th World Urban Forum held in Abu Dhabi remained equally mute, whereas cities and billions of urban dwellers were hard hit by the pandemic's many impacts.

Infrastructure investments are widely thought to be a key to recover from the crisis, to reach out to a new sustainable

economy, especially if we favor a new paradigm of infrastructure for distribution. Yet a decade of rebuilding growth through connectivity after the 2008 global financial crisis has painstakingly exposed people to the pandemic, showing the limitations of existing investment models. Multiple pleas for cities to implement sustainable pandemic responses locally and play a new role globally could just add more complexity to clogged global decision mechanisms.

INTERSECTING is a call for knowledge generation and distribution to become the cornerstone of future good government but this will be done in a world that is, if not in disorder, in transformation. The race for post pandemic leadership has started for good but delivering on a global roadmap of sustainable recovery will require coherent and accountable institutional frameworks and implementation mechanisms.

Formidable change has occured already. In the United-States, the new presidential administration elected in 2020 has issued a bipartisan trillion dollars' infrastructure plan in the summer of 2021, with even more to come. The European Union also approved a large recovery plan of more than 750 billion euros. In the meantime, profound geopolitical shifts are happening and one could only think that the United-States could no longer continue fight a war in Afghanistan while massively investing at home.

INTERSECTING was built as a compass or even as an astrolabe, pointing out to multidimensional combined social,

political, infrastructural, geo-economical and scientific challenges and recovery options. It reflects over 18 months of debates, research, exchanges, dialogues, explorations and publications.

INTERSECTING is based upon multiple, interlinked entry points, from 'disease' to 'cooperation', looking into possible future world structures. We believe it is ours to decide how infrastructure can serve other purposes than trade development and resources consumption, ours to understand the social factors of global warming and other ecosystem alterations, ours to assess how cities can continue to be places of innovation while re-valuing rural geo-economics and while understanding that they are also the places where resentment and distrust are articulated.

One of INTERSECTING's main finding is that lethality of the SARS-Cov-2 virus is redoubled not only by its multiple variants, but also by a knowledge and even a cognitive crisis accelerated by the development of the digital space and media transformation. Therefore, solutions are to be found at the edges. At the intersections of disciplinary and policy borders. At the intersections of short and long term. At the intersections of community and global scales. At the intersections of systems, institutions and cultures. At the intersections of entrepreneurship and society. Otherwise, what lessons from biotechnologies and vaccine development could we ever learn to serve for better policy-making in the urban age?

INTERSECTING is a collective work, the result of the dedicated engagement of five co-editors, several supporting knowledge partners, ADBI and OECD, nearly a hundred co-authors, including strong voices and ones from future leaders, from all regions of the globe, with two dozen of some of the world's very best universities and research centers taking part. Incubated by the Global Solutions Initiative, supported by GIZ, it also marks the 10th anniversary of the Grand Paris Alliance for Sustainable Investments.

You can read INTERSECTING piece by piece, photography by photography, quote by quote and as a whole.

This very first volume of INTERSECTING 'On sustainable urbanization and infrastructure response to the Covid-19 pandemic crisis' is the cornerstone of several upcoming policy, research and advocacy global initiatives addressing resources and circular economy, the future of work and creative economy, and the delivery of the 2030 Agenda, in the context of the Troïka of G20 presidencies by Indonesia, India and Brazil from 2022 to 2024.

Welcome to INTERSECTING.

Intersecting
as a collective compass for recovery.

Image Source: A sea and aerial landscape over the North Sea between Amsterdam and Leeds. Image by Nicolas J.A. Buchoud, all rights reserved ©.

CT imaging of rapid progression COVID-19 stage. A fifty-year-old female patient. Imaging examination showed multiple patchy and light consolidation in both lungs and grid-like thickness of interlobular septa.

Image Source: Wikimedia Commons. April 4, 2020. Uploaded a work by Jin, Y., Cai, L., Cheng, Z. et al. from https://mmrjournal.biomedcentral.com/articles/10.1186/s40779-020-0233-6 with UploadWizard

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"To forge workable alternatives that will transform individual cities and the interconnected settlements where the majority of the world now live, deep knowledge of how the constituent parts of the local, national, regional and global city system work is a non-negotiable point of departure for remaking cities."

– Susan PARNELL, University of Bristol

Image Source: The award winning smart house for Solar Décathlon Europe competition with hydrogen and solar energy experiment 'Living Lab' installation on the campus of TU Delft, South Holland Province, the Netherlands. Courtesy of prof. Arjan van Timmeren, faculty of architecture. Image by Nicolas J.A. Buchoud, all rights reserved ©.

Susan PARNELL
University of Bristol
the United Kingdom

Complexity: Solutions beyond fascination

Finding solutions to the complex urban challenges of our time, not least of which are climate change, biodiversity loss, inequity and COVID-19, demands more than good ideas or political will. We need powerful evidence and analytical capacity to make sure that we claim the opportunities for urban change afforded by the recent crisis. To forge workable alternatives that will transform individual cities and the interconnected settlements where the majority of the world now live, deep knowledge of how the constituent parts of the local, national, regional and global city system work is a non-negotiable point of departure for remaking cities.

Informing practical pathways to transform post COVID cities through translational research (knowledge designed and executed with the intention of change and impact), cannot continue to be done in the traditional narrow disciplinary ways or in the usual over researched places. Translational urban research demands broadening the global evidence base (African and Asian cities and towns are key sites), sharpening our analytical grasp of the priorities that will trigger lasting and meaningful change in cities (through deepening specialist knowledge and grasping the interconnections of processes) and acknowledging what is likely to stay the same in the functioning of cities because of the fixed physical, natural and political forces.

The post COVID urban research agenda has to hold complexity at its core. Policy relevant urban research at this moment of crisis needs to be 1) global as well as local, 2) abstract (or theoretical) as well as practical and applied and 3) strongly grounded in the past as much as it is oriented to the future city.

1. A global as well as a local research vision for urban risk reduction

The nature of infectious diseases is such that there is a common and connected future that rests on all cities being able to combat the virus. The same common future is true for cities given the global impacts of climate change, biodiversity and inequality. COVID-19, like the other global challenges, underscores what researchers of the last decade have been saying is a global priority for a more resilient urban future – that to 'leave no city behind' we need a more inclusive remit of urban research. Reconfiguring the urban

knowledge machine by strengthening research on poor cities as well as cities located in regions including weak research that applies inappropriate theory to local cases, is the critical pathway to living safely into the urban future. For the post COVID urban research community, addressing the global – local scaling of knowledge more systematically and sensitively must be a priority for the next decade.

2. Post pandemic urban research that is simultaneously theoretically innovative and practically grounded

There is a once in a generation opportunity in the wake of COVID for urban specialists to come together to engage the issue of 'the urban future'. The rupture of the pandemic, even more than the pending crisis of climate change, social upheaval or ecosystem collapse, seems to have galvanized a common call to rethink the city; a cry that places urban intellectuals in the unusual position of being able to present new ideas about the way the planetary processes might be re-imagined through cities. To have traction, any credible new urban vision has to be crafted on a city-by-city basis, but it cannot succeed until all cities find the evidence driven pathways that will guide alternative modes of urban functioning that do not compromise the integrity of the global urban system. The conceptual challenge is to explain urban dynamics in ways that are credible across scales, time and context and in relation to the ever evolving pressures of demographic change, economic transition and ecological precariarity. The sort of sophisticated research agenda

that illuminates and where necessary points to effective entry points of transformative change demands big ideas, detailed verification capacity and of necessity some large teams with significant resources.

3. Post-COVID and the urban palimpsest

The problem in reimagining 'the urban future' is that we do not have a blank slate. New pandemic resistant cities will not be built from scratch, old cities must be reconfigured to reduce risk. The urban palimpsest, that inter-connected and layered emergence of urban form and function, is something what we must work with and not ignore. To this end research can inform and even catalyze the things that will ultimately change cities: ideas about the urban, technologies that will allow innovation, new regulation planning and development priorities, fresh investment incentives and patterns and even alternative modes of urban living. Knowing the past and understanding how to insert and manage change processes is complex - demanding local political insights, relevant technical capacity and some inspiration. Navigating the past, present and future of the city to enhance human and natural system well-being can never be achieved through a single specialist form of knowledge or without the active involvement of citizens and the state – making collaborative and interdisciplinary urban research the desired format of the post pandemic world.

The shortcomings of existing urban intelligence must be

confronted even as we begin the post pandemic tasks of building cities back better and an invigorated urban science must be nurtured. The mandate for urban research then is for both an art and a science, a specialist and generalist endeavor, an abstract and concrete practice, and with a local and a global mandate. [1]

4. Additional note from the editors: the next frontiers within us

We are facing the COVID-19 pandemic at a time when humanity has started building an arsenal of techniques, technologies and methods to understand the effects of man-made transformations in climate, biodiversity, social living conditions and health, but the pandemic has increased the pressure in a unique way, redoubled by weeks long lock-downs and months long limitations of travels and contacts. Instead of rushing to conventions, symposiums and other forums, humanity is confronted with itself. When we ask ourselves what is going on with Earth and what the future of our health might look like, one has to ask what is going on with us, with 'our' science, 'our' expansion of urban life, 'our' industry and consumption, 'our 'division of wealth and poverty and the changing balance between North and South, East and West...

How we draw conclusions from how knowledge is formed and applied in and among cities during the COVID-19 pandemic could pay off in the future. We need to elevate the discussion from applying an addition of technical or engineering solutions to question how we generate and apply knowledge in addressing the crisis of increased social inequalities, environmental injustice, digital imbalances, along mega-issues of global warming and biodiversity conservation. The pandemic strikes us severely because humanity finds itself in a tense scientific and political conversation about the possibility of knowledge on changing planetary systems due to previous human trajectories on the one hand and the resulting rational, urgent conclusions on the other. On the one hand, it is about is the characterizing what the 2020 Human Development Report of the United Nations Development Program (UNDP) quoted as 'The Next Frontier: Human Development and the Anthropocene.' [2] This is about realizing we might be at a turning point in history. Then nothing short of a great transformation, in how we live, work and cooperate would be needed to change the path we are on. On the other hand, a rescue and resilience powerful narrative is being developed. It tells that more rapid and wider spread technological innovations will allow humanity to thrive while also respecting the planetary boundaries in order to maintain its own livelihoods.

1. Acuto, M., Parnell, S. and Seto, K.C., 2018. Building a global urban science. Nature Sustainability, 1(1), pp.2-4; Duminy, J. and Parnell, S., 2020. City Science: A Chaotic Concept–And an Enduring Imperative. Planning Theory & Practice, 21(4), pp.648-655.

2. The Next Frontier: Human Development and the Anthropocene, Human Development Report 2020, United Nations Development Program (UNDP) http://hdr.undp.org/sites/default/files/hdr2020.pdf

“Earlier, the trend was that a university was a product of its professors, and the administration was there to organize and arrange work. However, bureaucracy tends to become the university and there is no longer the sentiment that university is created by its professors.”

– Svetlana BODRUNOVA, Saint Petersburg State University, Russian Federation

Image Source: The temporary ‘POC 21 innovation camp’, Château de Millemont, Yvelines District, Ile de France, in the summer of 2015 before the Paris Climate COP21. Image by Nicolas J.A. Buchoud, all rights reserved ©.

Svetlana BODRUNOVA
Saint Petersburg
State University
Russian Federation

Society, Academia and Governance: A missing link?

Is professorship still valued? Addressing the growing pressures on academics and their declining recognition

The COVID-19 crisis is not only a major health crisis. It highlights another crisis, one of knowledge production and distribution affecting universities and their operations, with multiplying failures in engaging academic expertise in the space of policy formulation and analysis. Earlier, the trend was that a university was a product of its professors, and the administration was there to organize and arrange work. However, bureaucracy tends to become the university and there is no longer the sentiment that university is created by its professors. Instead, professors are engaged with temporary contracts and are replaceable, which further discourages people to think in ways which are more socially-conscious. Engagement in expert work is rarely a part of recognized academic achievement; even when this is the case, in non-democracies, it may be used by the authorities against their opponents, which undermines the status of independent expertise in various societies.

The devaluation of the role of academics' expertise is nothing new but imbalances have further worsened since the pandemic outbreak. A lot of the burden which has come through because of the crisis has fallen on the shoulders of the professors and academicians. Most part of the adaptation to the demands of the situation went in the form of distant learning and has brought along new types of tasks for students, additional assessment procedures, and quicker burnouts for professorship due to the lack of in-aula feedback while teaching to 'black boxes' in Zoom-like applications. As people on the frontline of these changes, the multitasking professors' growing value is neither recognized nor valued enough by universities and outer social surrounding. It should be stressed that the same is not so because of the lack of respect for professorship in societies but due to the lack of co-work among the professor communities and administrations, as well as due to the understanding of 'who makes the university.' If these two obstacles are dealt with, it will make involving academic expertise in spaces of policy analysis possible.

What is equally important however is the structure of political power in a given country. In any country, a 'natural' obstacle to demand for independent expertise is that it may reveal misdoings or ineffective management – and is, thus, non-demanded directly by those in power. A layer of civic

institutions that would demand expert opinions to press the authorities is still needed to be developed in many newer democracies and non-democracies. E.g. in countries like Russia, the system in the form of local government, police and state, remains relatively distant from people as measured by international institutions, and the position of academic experts, in this regard, changes entirely. In political systems where political competition is weak, due to electoral or inherent structural arrangements, there is no incentive to compete for the people's approval, and the elites have no intention to work for people; this makes the work and expertise of academicians unasked for. In comparison to Western Europe, where outputs of research better reach the policy- and decision-makers, in countries like Russia and Belarus, there is a glass wall that needs to come down in order to put academic expertise to work.

Assessing the role and structure of media in conveying expert opinions

We also need to note that another missing link is today between expert knowledge and public communication at large. When it comes to media-based discussions and deliberation processes in the larger public sphere, the pandemic has brought to light how media abuse the commercial nature of public information, a trend which remains mostly uniform across democracies and non-democracies, abusing the situation of the pandemic and leading us to a situation of an 'infodemic.'

During the pandemic, news flow intensified in an outburst manner, and the underlying reasons for that varied from a wish by media to fulfil their normative roles of informing citizens to abuse of people interests with purely commercial purpose of getting more clicks and views. In the first case, media got into a normative trap: they did what they had to do (urgently informed people), but the information, split in multiple bits, did not create a bigger (and safer!) picture in a comparative perspective. In the second case, the pandemic was simply a cash cow. What we lacked was addressing social fears, which was made to be much less important than it had to be; digging deeper into causal relations of events; and – again – academic and health expertise that would provide a clearer prospect for future, let it be immediate future. Despite the rapid growth of media attention to medical experts, their small individual opinions often contributed more to panic rather than to rational public debate.

This could be due to two reasons. First, the more you have to broadcast, the more traffic is there. Small information bits bring more views than long-reads and analysis. And this cannot be regulated, as one may say that the media were just providing news doing what they were expected to do by the society. However, this did not work, and the role of news reporting in crises has to be rethought within the media system itself, as well as within institutional and social-networked public deliberation.

Another aspect of inefficiency of the infodemia is toothlessness of persuasion efforts in the atmosphere of low trust to institutions, including authorities and media. The aforementioned glass wall between the political actors and the people, though felt throughout the world, remains much more explicit in non-democracies and has played a crucially bad role in behavior of ordinary people. E.g. when political actors (traditionally perceived as a distant and non-transparent evil) tried to pursue what was good, such as urging people to go out and vaccinate, there was greater mistrust among the people, as compared to democracies. For example, in Russia, according to independent polls, over 25% of people, after several months of the pandemic, didn't believe the pandemic was there at all. It's not that they were suspicious to the vaccines; they just didn't believe the pandemic was a reality and thought that it was a creation of some domestic or international powers. The 'conspiracy mind' was there everywhere in the world, but, in non-democracies, even very rational people didn't trust vaccines, as they do not trust governments to be on the side of good, and that has impacted the vaccination levels despite the vaccines were available. The level of trust in both the media and the public institutions cumulated and caused latent and more open disobedience to anti-COVID-19 measures during the first pandemic, upon people's attachment to rational practices of health protection. Indeed, what should one expect from people, if elites had spoken to them all the time irrationally, playing with fears, traumas, and resentment? Why would one expect the people to trust the authorities who have suddenly started to speak rationally? Social inertia of distrust has vastly contributed to rocketing death and infection tolls.

Thus, the issue of trust building within a transparent and expert-oriented public sphere, particularly dependent upon the elites being oriented to change and not to preserving their place in the society, remains a major problem for non-democracies.

Nicolaos THEODOSSIOU
Aristotle University of
Thessaloniki, Greece

Why waste a “good” crisis?

2020 will remain in our memories, and in history, for the tragic effects of the global COVID-19 pandemic. Hundreds of thousands of lives lost, huge impact on global economy, unpredictable recession, millions of lost jobs, unprecedented impacts on social everyday life and so many other changes marked the lives of every living person in the planet.

But were all the impacts of the pandemic, completely negative? Perhaps not. During the lockdown, some environmental aspects were actually improved. Air pollution, especially in urban and industrial areas, showed significant signs of recovery. Restrictions in traffic, suspension of operation of industries and changes in so many other air pollution activities, resulted to significant, in many cases, reduction of the recorded air pollution parameters.

Similar observations were recorded regarding other environmental indices as well. Water pollution, both in inland and seawaters, especially originating from industrial sources, showed trends of reduction. At the same time, pollutants from energy sources showed also signs of stabilization and even minimization, due again to the suspension of operation of energy-consuming industries.

This, observed reduction of environmental stresses, is not expected to have measurable impacts on climate change, due to the limited time of implementation of the restriction measures that caused it. Climate change is a long-term process that is not affected by seasonal changes.

The intergovernmental Panel for Climate Change (IPCC) stated in their latest report that we are only a decade left, before climate change becomes irreversible. Something similar is also stated by the Climate Paris Agreement, the Agenda 2030 and the Sustainable Development Goals. The European Green Deal, and other similar agreements that have been or are in the process of being implemented, demand the de-carbonization process to be completed before the originally agreed 2050.

If one combines the remarks presented above, that is, the signs of environmental recovery due to the restriction measures imposed to control the pandemic and the efforts of international organizations to control and reverse the climate change process, significant convergence can be observed. This means that if we decide to implement, and not necessarily impose, the measures needed to control

environmental degradation and climate change, we still have time to do it. It is late, but not too late.

And we have seen this through one of the most severe global disasters mankind observed, the COVID-19 pandemic. Through the ashes of distraction, hope arises that if we all act in the same direction, we still have the opportunity to save the planet and the future generations.

So, why waste the hopeful signs of the global pandemic? Why waste a “good” crisis?

"As urbanization continues to generate commercial opportunities, ethical dilemmas and ecological challenges, the future configuration of cities is of paramount importance to human flourishing across the globe."

– Francisco OBANDO and Michael KEITH, Oxford University

Image Source: In the southwest outskirts of Nairobi, near Karen district, Kenya.
Image by Nicolas J.A. Buchoud, all rights reserved ©.

Francisco OBANDO
Oxford University
PEAK program
the United Kingdom

Michael KEITH
Oxford University
PEAK program
the United Kingdom

The PEAK urban lens for seeing cities' futures

PEAK Urban is an evolving manifesto (see Keith et al. Cities journal article[1]) of how to examine and investigate the existing and future dynamics and challenges of life in cities, that accounts for complexity. The rigorous and interdisciplinary approach applies a framework to generate knowledge, useful for addressing urban challenges of the 21st century. More than providing solutions, PEAK Urban gives a corrective lens to seeing the interaction of systems in cities more clearly, a critical starting point for practitioners aiming to test interventions from local and national governments or civil society organisations.

We see the city as a 'system of systems' and acknowledge cities as open rather than closed systems. An open system, or the parts of a whole, interacts with its environment by exchanging energy, materials and information, changing the structure of the constitutive parts of the system itself. The city assembled has properties that its parts do not have on their own. Cities are always in construction and their mutations exemplify what in systems theory is described as emergence.

PEAK Urban and partner Oxford Martin Programme on Informal Cities (see PEAK website[2]) are comprised of more than 37 research projects conceptualized locally in Oxford, Beijing, Bangalore, Cape Town, Medellin, Addis Ababa, and Delhi by researchers from varying epistemological dispositions with expertise in a range of disciplines from anthropology, medicine and mathematics to econometrics. Each project answers pressing questions in the areas of health, sustainability, growth, migration, informality and others. The projects employ the PEAK Urban framing. They value the power of (P)rediction and leverage opportunities of new data and tools. New datasets and novel tools are used to interrogate existing paradigms and theories concerning how cities function. At the same time, the limitations of prediction in systems that are open and unstable is recognised.

(E)mergence is another key component of PEAK research projects, that are premised on city systems rarely being in equilibrium. As result, novelty comes into the world

through cities. This phenomenon has been described as the propensity of things – infrastructures and objects combine, mutate and generate new urban forms and ways of life.

Attaining an understanding of how new technologies land in place and are (A)dopted also shapes our projects. We recognise that the uptake, value and capture of technologies is vastly different between and even within cities. Exporting technologies from high-income countries to low-and middle-income countries and vice versa can result in varied, uneven and unintended consequences.

The configurations and pathways of (K)nowledge and power into and within the city are important to understand the city. The range of ways of knowing the city and the multiplicity of potential solutions to urban dilemmas must be valorised adequately. Alongside the input of elected officials and appointed professionals, participatory processes have demonstrated the value of including civil society in decision-making processes. Trade-offs existing between the knowledge regimes within a city can result in sub-optimal interventions that focus on affecting parts of the city rather than the city as a whole. Balancing these trade-offs demands both an ability to see the city through different perspectves and scales and to mediate, evaluate and understand such trade-offs.

The PEAK framing does not address a specific urban theme, dynamic or dilemma, rather it provides a way to interrogate any urban issue productively. For example, the liveability of urban places worldwide has been a matter of public interest for as long as they have existed. The extent to which a city promotes or endangers population health is an important aspect of its liveability and one that the PEAK Urban research programme is working to understand better. There is consensus that certain aspects of cities, including basic services such as sewerage systems, waste collection, provision of potable water, directly contribute to population health. While the known characteristics of cities that contribute to health are growing, they are also increasingly becoming more nuanced.

In 2020 the eyes of the world turned to cities as they have became particularly dangerous places to be, given high densities of people who live and move in close proximity to one another, while physical distancing remained our only effective public health measure against COVID-19. Because PEAK Urban recognizes city systems as complex and open, public health is understood in terms of the interfaces between public health interventions and related systems of urban metabolism, economic dynamics, transport networks and demographic change. The following considerations illustrate how the PEAK framing can be applied to health in cities, expanded upon in a recent book (see Urban Transformations and Public Health in Emergent City book[3]).

Experiments in public health advances are constrained by legal consequences and ethical considerations reflecting

diverse urban regimes globally. (P)redictions informed by 'big data', powerful at the scale of the individual, are destabilised at the scale of city populations. Behavioural change is structured by interaction with economic, transport and residential preference systems. Complexity of interacting systems in cities make it possible to know much more in real time about behavioural trends but limits powers of predictions in the long-run.

Urban systems, including culture, nature, infrastructure, behaviour and many more,interact with one another, changing the environment in which health systems operate, in the process of (E)mergence. Changing urban systems are disrupted by technological innovation and scientific advances. For example, cardiac arrest demands swift action and rapid access to defibrillators, now widely distributed and (A)dopted in many high income cities. This changes interfaces between hospital care and community access to new technologies. The optimal distribution of health services in hospital real estate changes as medical technology evolves but real estate moves slower than key medical technologies, destabilising geographies of city health systems.

The organisation of health systems require trade-offs which are evaluated differently by varying types of (K)nowledges – social, medical and natural sciences or by domain – law, politics, economics. Public health makes claims in the name of the city as a whole, liberal democratic societies traditionally privilege the rights of individuals. Throughout the COVID pandemic the desire to reduce infection rates by restricting the liberties of individuals to move across the city was balanced against the needs of the health of citywide populations. Economic imperatives were at times claimed to be at odds with public health logics, although data over time may demonstrate this assumed trade-off to be illusory.

As urbanization continues to generate commercial opportunities, ethical dilemmas and ecological challenges, the future configuration of cities is of paramount importance to human flourishing across the globe. The term 'peak oil' was coined to communicate that the supply of crude would eventually run out. PEAK urban presents a paradigm to effectively interrogate the future of cities.

Find out more: https://www.peak-urban.org

1. https://www.sciencedirect.com/science/article/pii/S0264275119323716?via%3Dihub

2. https://www.peak-urban.org/

3. https://www.manchesteropenhive.com/view/9781526150943/9781526150943.xml

4. https://www.oxfordmartin.ox.ac.uk/informal-cities/

“Urbanization and globalization have induced changing social demand for more balanced livelihood and for more inclusion, which cannot be achieved only by cities.”

– Henri DE GROSSOUVRE, Nicolas PREGO, Pierre ACHARD, and Oriol BELLOT, SUEZ, Paris

Image Source: The central food market of Chorsu, Uzbekistan, has remained operational during the pandemic. Image by Nicolas J.A. Buchoud, all rights reserved ©.

Henri DE GROSSOUVRE
Nicolas PREGO
Pierre ACHARD
Oriol BELLOT
SUEZ, Paris, France
(English version
by Nicolas J.A. Buchoud)

Interdependent systems and organizations learning from the crisis: Towards a green recovery in Europe

The interdependence of critical infrastructure, systems and organizations has been accelerated and highlighted by the Covid-19 crisis, in particular due to increasing digitization. This is not only true for the development of 'Smart Cities' but also for transformations at work in agriculture and ecosystem services be it about air quality, land or water management.

The heath crisis has had little if no impact on smart city projects across the globe, on the contrary. Governments in developed and in emerging countries are even calling in for more digitalization to mitigate risks and ensure continuity of critical infrastructure and supply chains. Private sector players providing infrastructure and IT services, from large multinational companies to MSMEs and startups, are looking for enhanced market opportunities through digital services. Yet meanwhile citizens and urban dwellers are showing an increasing appetite for environment and health solutions, especially in large metropolitan regions. As they also demonstrate higher reluctance and even resistance to large scale development projects with perceived detrimental consequences on the environment, data management could help reconcile people and technology.

The availability of digital solutions and services such as control centers, secure programming and predictive maintenance, connected objects, has been of strategic importance to ensure continuous service operation of critical infrastructure and services during lockdowns throughout 2020. In the future, major infrastructure operators will be required to provide even more specific technological skills and economic and management know-how for working remotely and strengthen urban resilience. In France, the example of 'On Dijon' has demonstrated the effectiveness of an integrated system of supervision of urban flows (water, waste, energy…) allowing for widespread information and data sharing with communities, especially during lockdowns and peaks of the pandemic. The process has provided quality decision support and concrete monitoring and follow up of actions. As opposed to techno- or security- centric models, smart city projects that reinforce public leverage and response to crisis and therefore, public trust and citizen participation, offer to draw promising lessons from the Covid-19 crisis. As data protection, data mining, data management, have become a major global economic and geopolitical issue,

also reinforced by the Covid-19 crisis context, the European know-how in providing data regulation is critical to support digital inclusion and the protection of common goods.

Digitization might be high on the urban agenda, but as the Covid-19 crisis also calls for a green recovery and low or zero carbon development pathways, rural areas and agriculture should become commonplace in the global digital picture. We view the concept of 'smart rural' not as a copy-paste of urban services in rural, less densely populated and comparatively less accessible and interconnected areas, but as a series of solutions for improving the management of interdependencies between rural and urban spaces and promoting a more systemic and sustainable vision of territorial development. Transformations in the water or air sectors, in the field of food and agriculture or regarding climate or biodiversity issues, cannot be achieved in urban contexts only. 'Transitions' and 'interdependencies' are two driving forces in achieving more balanced development.

Shortening food supply chains is a typical concern that is high on urbanites' agendas across the global middle classes. Yet, calls for immediate transformation are usually disconnected from the management of rural areas. Agriculture can provide a wide array of ecosystem services beyond food production and have significant impacts on water cycles and other ecosystem services. It is not only about 'feeding the planet' but also about preserving water, soil, biodiversity and air resources and sequestering carbon to offset CO2 emissions. Scaling-up nature based solutions has to build on understanding how much rural environments can help provide localized ecosystem services with a regional/ global impact. Therefore, it is critical to review the interdependencies between urban and rural environments, starting by setting up an solid economic system of remuneration for environmental services provided by rural environments.

Technological progress can serve environmental priorities through the quantification and certification of services, by enhancing the connection between suppliers and buyers, valuing and certifying the proof of origin of food and other natural products, securing transactions, ensuring their traceability and transparency, etc. Inspired by the complexity and interdependence of natural systems, private sector leaders in the field of water, energy or waste management, often engaged at a global level, should develop new skills in support of sustainable territorial development. One way would be to move from managing and improving the efficiency and resilience of sectoral infrastructure and services to become designer/ producer/ operator of complex territorial digital systems. Achieving such an ambitious transformation would start by connecting already existing digital bricks, in particular the link between marketplaces (including biosecurity and products' traceability), the management of big data, the support to MSMEs to contribute to regional or global value chains. It is

a process than can only be achieved through cooperation and we argue that digital and environmental transitions can build on one another, and help rebalance value creation among urban and rural environments.

Rural environments might show more complexity than urban ones, due to the typical wide number of small and even individual or family enterprises and the fragmentation of territorial governance. Urbanization and globalization have induced changing social demand for more balanced livelihoods and for more inclusion, which cannot be achieved only by cities. We believe that enhancing the value of environmental services in rural contexts could leverage significant revenue and help reinforce shortened food supply chains as reservoirs of jobs and livelihoods. In Europe, the Green Deal should help rethink the role of agriculture and rural areas in line with new economic and environmental expectations priorities. Concretely, building on the example of the European Union Emissions Trading System (ETS) and corresponding carbon market, we could think about the development of a voluntary 'water market', even extending the concept of a 'water footprint 'to that of a blue, gray and green' footprint. As a consequence, farmers would no longer be targeted as the only consumers of water. Instead, all stakeholders across the value and supply chains would be concerned, including the food processing industry (food & beverage) and downstream distribution through food chains of hyper or supermarkets. Smart rural is not just about infusing more technology and services in the agriculture and rural life. It would have a triple benefit in terms of 1) public health and local development (quality affordable food...) 2) environment (sequestration of carbon in the soil and through biomass, reduction of the use of phytosanitary products...) 3) technology development and implementation through satellite imaging, drop irrigation, IoT etc.

The interdependence of infrastructure, systems and organizations should not be feared because it would add new layers of complexity to challenged decision making processes in times of rapid and longer term crisis responses. On the contrary, it is an asset for a deeper ecological transition in a 'federal' and 'subsidiary' way, maximizing the role, recognition and autonomy of its constituents. This is how smart cities and systems like OnDijon have proven resilient, by being integrated but not centralized. As in a human brain, when one network is degraded, another neighboring network usually can take over by creating new connections and ensuring continuous consciousness. The image of a resilient and responsive organicist model would well apply to smart rural. Under these conditions, technological progress used for ecosystem services will contribute to the ecological transition and value creation in a much more comprehensive way.

“The institute’s main area of work was delivering capacity building workshops to senior CAREC government officials in different CAREC cities and suddenly travelling was no longer possible (...).”

– Gary Huang, Iskandar Abdullaev and Eisa Khan Ayoob Ayoobi, CAREC Institute

Gary HUANG
E-Learning Specialist
CAREC Institute
Urumqi, Xinjiang
People's Republic of China

Eisa Khan AYOOB Ayoobi
Chief of Capacity Building
CAREC Institute
Urumqi, Xinjiang
People's Republic of China

Iskandar ABDULLAEV
Deputy Director Two
CAREC Institute
Urumqi, Xinjiang
People's Republic of China

Turning COVID-19 challenges into opportunities: case of CAREC Institute

The COVID-19 has posed various socio-economic and public health challenges, ranging from lockdowns to loss of lives in every corners of the world. Hence, most of the discourse surrounding it has been mainly focused on the negative consequences. Despite of the challenges, there are some positive lessons and takeaways from the emergence of this dangerous virus. At its initial stage of global spread that was met with strict lockdown measures worldwide, there were positive environmental prospects. The air pollution was reducing even in some of the most polluting industrial cities since polluting vehicles were off the roads and carbon-driven factories were shut. While that promising environmental restoration maybe be short lived due to the reopening and easing of lockdowns, the pandemic seemingly has left a long-lasting positive global impacts – digitalization and the expansion of the virtual world.

Expansion of Virtual World

The pandemic has shrunken the physical world significantly in terms of reach and freedom of movement. We are no longer able to travel as freely as we could and conduct our daily businesses in the face-to-face modes as we were used to in the pre-pandemic times. Such limitations in the physical world have led to the virtual world expansion. Since the outbreak of the ongoing pandemic at the end of 2019, the discussion and efforts surrounding digitalization has increased unprecedently. Almost every entity, whether affiliated to state, society, or economy, has been working tirelessly to establish virtual basis "thanks" to the pan-

demic. The intergovernmental institutions have not been an exception and in some cases, they are leading the way.

CAREC Institute Virtual Evolution

The Central Asia Regional Economic Cooperation (CAREC) Institute, as an intergovernmental knowledge institution governed by all member countries along the Ancient Silk Road, has been working and evolving in the virtual world for sometimes now. The Institute had just planned an ambitious annual portfolio at the end of 2019 when the pandemic reached its headquarters in the People's Republic of China. The Institute found itself in a situation that it could not deliver any of its capacity building activities since they all entailed travels and face-to-face interactions with various kinds of stakeholders and target participants. In other words, the Institute's main area of work was delivering capacity building workshops to senior CAREC government officials in different CAREC cities and suddenly traveling was neither possible for the Institute professional staff nor for the participants to gather in a given city.

Henceforth, the Institute immediately addressed the situation by transforming itself from a completely physical entity to establishing a basis in the virtual world. With the financial support of the Asian Development Bank (ADB), the Institute undertook the development of an E-Learning Platform. Obviously, creating an E-Learning platform for an intergovernmental knowledge institution is different from universities and other conventional knowledge institutes. The CAREC Institute had to establish a platform that serves its mandate – offering thematic or programmatic knowledge support to senior CAREC government officials whose work has direct impact on regional economic cooperation and integration in the CAREC region.

CAREC Institute E-Learning Platform

The Institute developed a platform that is very simple, user friendly and perhaps one of its kind. It is customized to serve the purpose of an intergovernmental knowledge institution that has different target audience compared to universities and national vocational training centers. Offering E-Learning knowledge services to high-level government officials are different from doing the same for the university students or entry-level civil servants who are obliged to go through a fixed long-term degree or certification programs. For CAREC Institute the target audience are med- to high-level government officials who are already established professionals or experts. They are with different time schedule, career goals and aptitude to acquire new knowledge and skills.

Therefore, the CAREC Institute E-Learning platform has features and functionalities to serve multi-purposes. It is straightforward platform for target audience or users to go

through the same process as they would attend a capacity building workshop in physical mode. The platform has huge cloud capacity to host hours of video recordings and large-sized PowerPoint presentations and other digital learning modules (DLMs) or educational materials. It has designated tabs for capacity building workshops, research forum and conference, views, and interviews. Similarly, each activity has its own space and tabs for users to optimize all learning materials categorically and systematically. In addition, after thorough attendance of all the posted materials in a particular workshop, virtual participants could apply for e-certification.

Hybrid Capacity Building Delivery Approach

The platform has enabled the CAREC Institute to transform its knowledge service delivery approach from traditional face-to-face to hybrid learning programs – leveraging both worlds to offer blended activities, comprised of both virtual and face-to-face engagements. This is an impact that goes beyond the ongoing pandemic and presents the Institute with a new opportunity to utilize both virtual and physical spaces. Although almost all knowledge services of the Institute are organized and delivered through its E-Learning platform virtually, face-to-face experiential learning workshops will be organized once the pandemic is contained and travel restrictions are removed. Currently, traveling is almost a mission to the moon, specially from the People's Republic of China (PRC) – where the CAREC Institute headquarters is located – to other countries and vice versa. The picture below is reflective of Chinese ordinary travelers preparing themselves for traveling abroad during the pandemic.

Leveraging Virtual and Real Worlds

In conclusion, despite all the challenges, the pandemic has presented opportunities for knowledge institutions to leverage both real and virtual worlds to increase reach, capacity, and impacts. By creating a simple E-Learning platform, the CAREC Institute has turned the limitations of the pandemic into opportunities for expansion. The Institute was targeting 22 participants (two from each member country) in pre-pandemic times in its face-to-face events. The Institute used to offer on average 12 activities each year. In total, there were just over 260 participants covered annually.

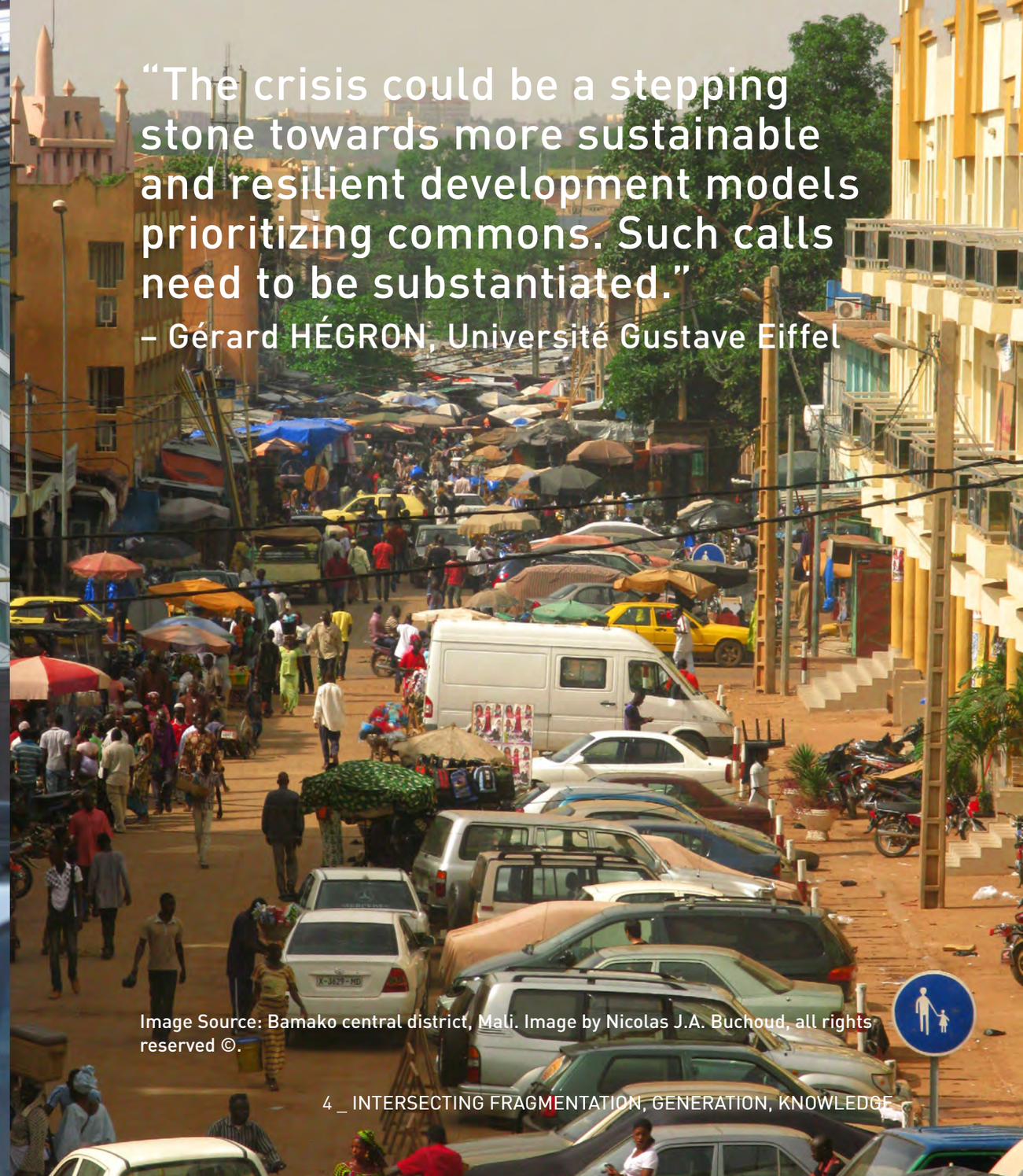
Now, the Institute has almost unlimited virtual capacity to cover thousands of target audience through its livestreaming events and featured workshops in its virtual base – E-Learning platform – that is accessible to all users from anywhere at any time. The chart indicates the exponential increase in terms of participation in a given workshop when it is livestreamed compared to face-to-face mode.

Moreover, each livestreamed or delivered workshop or

activity is recorded, uploaded, and sustainably ran on the E-Learning platform around the clock, facilitating new kinds of participation in the form of wide-range of distance learning beneficiaries or E-Learning users. For instance, since the creation and launch of the platform, there has been increasing traffic to the Institute's virtual base. The number of visits and visitors to the platform is increasing by thousands. For the period of 11 months (July 2020 – June 2021), there are nearly 40,000 visits and 6,000 visitors – statistics reflected in the chart.

Overall, there is significant increase in reach, capacity, and impact in the knowledge services activities of the CAREC Institute during the pandemic times. It would be fair to conclude that the CAREC Institute has turned Covid19 limitation into opportunities – a successful case study that could be replicated by peers.

Image Source: Makati City, Manilla. Image by Nicolas J.A. Buchoud, all rights reserved ©.



"The crisis could be a stepping stone towards more sustainable and resilient development models prioritizing commons. Such calls need to be substantiated."

– Gérard HÉGRON, Université Gustave Eiffel

Image Source: Bamako central district, Mali. Image by Nicolas J.A. Buchoud, all rights reserved ©.

Gérard HÉGRON
Université Gustave Eiffel
Paris Marne la Vallée, France
(with Nicolas J.A. Buchoud)

New research strategies towards resilient urban mobility and logistics systems

The Covid-19 pandemic visibly impacts livelihoods and lifestyles but as the disease continues to unfold and vaccines are slowly delivered, it is the right time to review what we have actually learned so far towards a low carbon, human centered economy.

Travel restrictions and travel bans have restricted individual mobility but meanwhile, the e-commerce is thriving and goods are being delivered all over the place along with meals and food. Teleworking has been expanded (though not in all sectors), but more people have used individual cars instead of public transportation. Many cities across the globe have seen significant drops of public transit systems passenger numbers. Quite soon after the pandemic outbreak in 2020, there has been voices asserting the crisis could be a stepping stone towards more sustainable and resilient development models prioritizing commons but such calls would need to be substantiated. As the crisis creates opportunities to rethink urban and regional planning and accelerate the implementation of carbon neutral mobility systems, it is also bringing in new challenges, starting with declining fiscal revenues and therefore, sources of public financing of new projects. We argue that the future depends not only on good ideas but also on our collective ability to invent and implement synergistic combinations of policies across different scales, different economic and industrial sectors and through public-private cooperation.

At national and regional levels, this is the right moment to enforce new limitations of urban sprawl and accelerate brownfields redevelopment. Such sets of policies could be supported by the production of more affordable green vehicles, in particular in suburban peripheries and in less densely populated rural regions.

At the local level, the development of bicycle uses for short distances should be supported by the development of integrated active mobility infrastructure, including comfortable and easy to use multimodal platforms, and systematized Transit Oriented Development. In suburban areas and small and medium size cities, historic urban centers could be revived through the development of local services. On demand and shared mobility services could be expanded in remote and rural areas where mass rapid transit is not viable. The concept of Mobility as a service (Maas) which

has been experienced only in a small number of cities, should become a new normal, enhancing the compatibility between different transportation systems and relying on digital possibilities.

Sustainable mobility is not just about engineering systems but also about how mobility can help tackle territorial and social divides. The lockdowns and confinements implemented since the beginning of 2020 have highlighted deep inequalities between households who could telework while relocating in quiet rural settlements, often benefiting from good social safety nets and unemployment benefits, and those who had no other choice than continue to go to work. In the future, the role of mobility systems in reducing such inequalities will have to be carefully reviewed

Logistics is another major driver of sustainable territorial development. The disruptions of many global supply chains have raised a new interest for relocating high added value activities ensuring regional self-sufficiency such as for health or food. As a consequence, the role and organization of existing logistic platforms might have to be reviewed, a transition towards low or zero carbon business models that has to be carried out by governments but also by private sector stakeholders as part of reinforced corporate social responsibility. Change should happen on both ends of supply chains that is within the organization of multimodal distribution hubs connecting global and national/ regional scales and at a local level, cognizant that the optimization of last mile distribution circuits can leverage significant levels of CO2 reduction

The transportation sector bears many innovations for a more efficient and more economical mobility such as connected and autonomous navigation systems, geolocation, data processing systems etc. Huge amounts of data and information related to mobility and logistics have been issued since the outbreak of the pandemic. It is therefore urgent that resources are allocated to analyze those data and evaluate the short term and long term impacts of designated innovative solutions. Mobility and logistics observatories and new collaborative applied research managed by higher education and research institutions together with leading public and private stakeholders could provide further evidence supporting new sustainable mobility and territorial development models, as illustrated by the innovative Smart Lab Paris Region.

Box. LABILITY – The Smart Lab Paris Region experience

Organisation
The Smart Lab LABILITY is an ephemeral research laboratory set up for the years 2021-2022. Led by Université Gustave Eiffel, the consortium has won a call for proposal launched by the Île de France regional council. Subsidies amount to one million euros, a significant leverage to support innovative and collaborative research aiming at creating new mechanisms of territorial resilience and post-crisis

response.

The Smartlab is a multidisciplinary team of young researchers associated to eight laboratories on economy, management, sociology, land development, applied mathematics and operational research. The socio-economic valuation of the innovations by means of hackathon, experimentations for the proof of concepts, etc., in connection with over a dozen public and private partners is also part of the Smartlab agenda. During the last months of the project in 2022, a strategy for innovations transfer will be set up, including patents, support for start-up development, etc.

Background
With the health crisis, public and private regional players must reconcile a rapid and resilient economic recovery with the protection of people's health. To meet these pressing challenges, new ways of managing spatial and social distance need to be implemented within companies and across transport networks. Companies are also encouraged to rethink the spatial and temporal organization of their activities and review their needs for office space in light of telework opportunities.

Goals
Ongoing transformations triggered by the pandemic crisis could have multiple and long-term impacts at a regional level, including a reduction in the size of the premises, a disaffection for certain territories (including central ones), increased needs in terms of telecentres (especially in the outer suburbs) etc. As for transport networks, priority areas are the definition and the implementation of solutions to 1) reduce the risks of contagion, in particular during rush hours, 2) respond to the increase in congestion of the road networks, due in particular to the return of the private car use, and to the growth of the flow of goods generated by e-commerce.

Two research axes will be investigated

(1) The risks and opportunities associated with the development of teleworking;
(2) The modalities of a resilient management of transport networks

Project impacts
The findings aim at providing technological and digital solutions, levers of action and recommendations to support or influence the transitions towards more resilience to face health crisis and to achieve the sustainable development objectives. Support for public policies will focus in particular on:
• Dynamic load management of transport networks;
• Territorial development, through the management of digital infrastructure, transport and logistics, and land use;
• City planning policies: recommendations to support public decision makers in their telecentre development project, commercial city planning;
• Supervision of teleworking.

The possible applications are also based on recommendations for companies and managers, to strengthen organizational resilience and prevent of psychosocial risks. In terms of technological developments, the project aims at fostering:

• Tactical and operational decision-making tools to monitor pandemics;

• Mass public transit systems that respects health constraints to avoid massive use of private cars, attract passengers to encourage active mobility

Image Source: National university examinations taken outdoor in a public square in Tashkent, during the spring of 2020. Image by Ms Madina Nurmanova, courtesy of the Embassy of the Republic of Uzbekistan in Paris, all rights reserved ©.

> “The pandemic has underscored the importance for cities to collaborate not only with the private sector, but also with the academia, in times where the digital divide intensifies.”
>
> – Daniel MILES, ESI ThoughtLab, Philadelphia

Daniel MILES
ESI ThoughtLab
Philadelphia
the United States

Disruptions, decline and data: learning from cities in the crisis

In the pandemic era, ensuring a healthy, safe, and prosperous future for citizens is a burning imperative for city leaders. But with city budgets already depleted, it is also their biggest challenge. COVID-19 has served as a stress test for cities as businesses and services were shut down and medical facilities stretched to their limit. It also served as a stress test for cities exposing weaknesses in digital infrastructure, risk management, and continuity planning in cities where risks can cascade suddenly and unexpectedly with far-reaching aftershocks. To understand the top disruptors facing cities today, the impacts that the pandemic has had on cities, and the lessons that cities have learned from the crisis, we surveyed 167 cities across the globe with diverse populations, incomes and level of economic development. The cities cover 82 countries and range in size from 95,000 to over 27 million and are home to over 568 million residents.

The top two disruptors currently facing cities is the pandemic and its repercussions and the associated decline in economic growth and jobs. While it is not surprising that these were the top two disruptors citied by cities, the fact that they were cited by more than twice as many cities as the next closest disruptors – climate change, lack of natural resources, shifting demographics, social unrest, and geopolitical risks and conflict – was.

Our research found that the pandemic has, and will continue to, reshape the urban environment in fundamental ways. Nearly three out of the four cities surveyed believe that the pandemic will cause them to reconsider traditional approaches to urban, planning, use of space, and population density. More than half of the cities believe that the pandemic will permanently change the way that their citizens live, work, socialize, and travel and will cause the city to reconsider mobility and transportation approaches to accommodate the changing behaviors of their citizens. The pandemic has also made clear to cities need to become more agile and resilient and the importance of smart city programs and digital transformation to the future of their city. It also laid bare the need for timely access to data and advanced analytics for running their city, but at the same time many cities lack the access to the necessary data. The economic and social disruption resulting from the pandemic exposed the need for cities to invest more in both digital as well as core infrastructure.

“Because it has always been possible to embrace cybernetics, to build better computers, to invest more in literacy, does not mean that we have been collectively ready for the change.”

– Harun BADAKHSHI, Ernst von Bergmann Medical Center, Potsdam

Image Source: Wikimedia Commons. March 19, 2020. Francesca Palumbo, intensive care nurse, after a twelve hour shift without a break at the San Salvatore Hospital in Pesaro, Italy. Image by Alberto Giuliani.
https://commons.wikimedia.org/wiki/File:Covid-19_San_Salvatore_08.jpg

Harun BADAKHSHI
Ernst von Bergmann
Medical Center
Potsdam, Germany
New Dialogues
Berlin, Germany

The boring metaphor and multiple realities of digital transformation

“The real,” so Jacque Lacan, “contains an essential multitude of our expectations and introspections that rarely are congruent to the factual objectivity of the one outside reality.” If all those expectations and introspections might be, at some stage, determinants of change or, more likely, obstacles of transformation is here the question. We cannot rely on JL for an answer. What we could do, is to see how deep our love for digital transformation appears. On the level of appearance, there is an option to comprehend the phenomenon we tend to call digital transformation. Those “Bedingungen der Möglichkeit” (GFW Hegel, conditions of possibility) for an all-encompassing change toward a digital culture, infrastructurally solidified by information and communication media technologies * (ICMT), seem to be present for at least three decades. The presence of a giving technology might not always mean the utilitarian usage on a broad surface of social interactions with all their consecutive dynamics in mental spaces of humans and in the superficial tensions of the quotidian life. Nevertheless, the „machine“ of US innovation and their incubators of technological thinking prepare the soil of civilization, at least in the West, for fundamental transformation and trans-substantiation of almost all spheres of life for at least six decades. Because it has always been possible to embrace cybernetics, to build better computers, to invest more in literacy, and to accept real circumstances of possible technology, does not mean that we have been ready for the change.

It exists two formats of obstacles in hindering us to open our think spheres and our body spaces, or vice versa, to the merits of technology, especially to those merits of communication media technology, that evidently improves not only our quotidian life but also our cognitive operations and operationality in the same instance. A first type of an obstacle is referring to an epistemic obstacle that seems to represent a primary degree of a problem. Epistemic obstacle reflects the condition of an assemblage of multiple knowledge-related subelements of a highly complex system, as digital information and communication media technology evidently is, that does not seem to fit each other well in the eyes of the potential recipient that we all are supposed to be, and is, in most cases, inducing confusions and misperception in the recipient‘s head. No computer represents itself to a technology user in a way that we could, seen anthropologically, call easy going.

The second type of obstacle seems to be independent of the object and subject relationship, even less interdependent than affections and drives. It is a subtle format of intra-subjective bricolage of procedures that begin at the moment of priming. The moment of priming (by the hypermedium) is determined by the degree of juxtaposition to the monster, that monster of calculus that emerges at the mental and cognitive horizon of humans in the very moment of becoming integrated into the confusing web of integrated circuits of the hypermedium, taken it in its very core electrical/electronic materiality. Both formats of anxiety, that is the immediate consequence of those obstacles, the epistemic one and the affective one, produce a dynamic state of all-day emergency within the subjectivities. The dynamic state of emergency is stemming from the uncertainty of not being able to cope with the most relevant determinant of our daily life and work spheres, thus computer-derived communication and information technology. The modern man had been conditioned to act competitive and rational and not to be weak toward challenges of science and technology. The most utter effect is the figure of complexity.

Complexity induces fears. Fears evoke more fear.
The computer, the hypermedium of communication, serves as a template of fear. The take-off of the computer from the "local" (site/location), when it became an (metaphorical) agglomerate of connected machines beyond the traditional territorial boundaries of "space." We may recall those far times, in the first six months of 1994, the number of participants (thus humans & computers) to the "global" network of InterNIC rose to 3.217.000 hosts/guests. The conventional response of traditional (analog) media to this event was the allocation of new metaphors that, in the long run, did not help much to comprehend the infrastructure of a new type of technology: cyberspace and information highway. The intertwined matrix of semantic of the digital spheres lies, anyhow, beyond all traditional logic.

In this entanglement of confusing metaphors: space, net, web, local, global, and media-induced terminology of the superhighway and the cyberspace; the ordinary citizen S, S for static, got confused but never became citizen M, M for mobile. Instead, once we observe the slow convergence of digital media technology between 1995 and 2005 and then, out of a sudden, the hyper-acceleration of all phenomena surrounding us after 2005, incl. the previously unimaginable growth rate of velocity in calculation machines, the previously unthinkable ability of these machines to produce virtual images, artificial sounds, and other sensations, it may make fear. The confusing metaphors determine the comprehension of most humans, in the West and now and then in the global South also. Folks have got difficulties with understanding the technology beneath the screen, the other side of the moon (a metaphor?), and their difficulties increase in volume and intensity when the metaphors created mostly by journalists destabilize their weltanschauung, a world that begins to vanish beneath their feet. At the point of no return, multiple realities emerge.

"Schools should not be made to compete with Twitter, Snapchat or Tiktok. They should be a safe physical and virtual space where adults share their knowledge and experience to train younger citizens."

– Lan-Phuong PHAN, Grand Paris Alliance for Sustainable Investment, Paris

Image Source: 'Going to school' (before the pandemic common scenery) in Poblacion district, Makati, Metro Manilla, in the Philippines.
Image by Nicolas J.A. Buchoud, all rights reserved ©.

Lan-Phuong PHAN
Grand Paris Alliance for
Sustainable Investment
Paris, France

Schools, how developed countries cope with the COVID-19 crisis and what it tells about them

Where are we standing after a year in the pandemic era

Almost a year into the crisis, after different stages of lockdown and in the midst of the second/third/fourth wave, depending which part of the planet you are living in, with schools and Universities closing for weeks, when not months, faculty members all over the world find themselves DIYing solutions to teach remotely while teens are learning how to actually send an email (picture yourself learning how to use a quill). They all experience massive crashes of official platforms that were meant to offer a safe space within the oh so threatening world wide web, but that were so poorly designed, they could be likened to the 2020 version of a torture instrument. Out of frustration, classes relaunched good old Skype, teachers paid out of their own pocket for a Zoom subscription or accepted to venture into the mysterious world of gamers and registered their students on Discord (R.I.P digital privacy and data protection).

Digital millennials, but really?

In the meantime, it appears that too many students cannot attend online courses because they cannot access high speed internet. How did so many supposedly developed countries go analog overnight? What happened to the Digital Natives? What happened to the Start Up Nation ? What happened to the Teen Entrepreneurs who were about to take over just a couple of years ago? Back then, in the pre-COVID era, faculty members were routinely summoned to upgrade their practices and adapt to a world globally ruled by the social media. Twitter was praised as the go to medium to improve our student's spelling. Youtube had become the best way to learn anything, from sciences to history and math. Why spend money on trained and experienced teachers, when there are apps that could allegedly turn anyone into a proficient speaker of multiple foreign languages? Moocs were celebrated as being the answer to the need for knowledge shared by hundreds of thousands of people all across the world. Who even remembers Moocs?

Artificial intelligence, real budget cuts

More seriously, it seems that the promises of self-appointed, tech-cladded experts offered debt ridden governments a perfect excuse to defund education and let school buildings rot to a state of depredation that is hard to fathom. The same encouraged the trend that pushed teachers down

the social ladder and turned a vital public service into yet another constantly disrupted sector, poised to fail. With the COVID, schools suddenly became central and a country like France prides itself in keeping schools open while the country is on severe lockdown.[2] Does this mean governments are realizing how deluded they were to trust it was possible to bet on A.I and electronic devices in order to save on education or does this simply mean that in a time of economic crisis, kids need to be monitored on schoolgrounds while their parents go to work?

An education for the future: rethinking 'public', for good

If anything good should come out of this overwhelming crisis, it should be a real upheaval on education, starting with the very basics: access to clean and safe restrooms for all, windows that can be opened to ventilate rooms properly (please let us seriously reflect on the fact that schools in France are, whenever possible, equipped with anti-suicide windows that you can barely crack open). Depriving children from an education is certainly wrong. Making them spend entire days in cramped, filthy classrooms with little to no access to water, soap or toilet paper is hardly better.

Schools should not be made to compete with Snapchat or Tiktok, they should be a space where adults share their knowledge and experience with younger citizens. How could teachers ever achieve this in an inspiring manner if their own love for knowledge, their own experience of working hard to earn the degrees that allowed them to apply for a teaching position, put them in a situation where they can hardly afford a decent life and must face unjustified and repeated criticism from the very people and institutions that now call schools essential and require classes to be taught in person, by teachers, not robots.

For this to happen, we must, as responsible citizens, urge our governments to reconsider our priorities and invest in the essential domains that robustly structure our societies and secure the future: healthcare and education. Younger generations are already resenting us of leaving them with a planet that is not quite as green and blue as it should be. Are we ready to face their befitting anger when they find out that we, as a society, accepted that our governments keep cutting credits and sacrificing their education while spending millions of good taxpayer's money on yet another food delivery app?

1. French President Emmanuel Macron coined the term on many occasions in the first months of his term.

2. A curfew is currently in place, but students and faculty members are allowed to maintain their usual routine. During a severe lockdown back in November 2020, schools remained open. In the meantime, universities have remained mostly closed for months.

“Some cities are already looking beyond the crisis to the recovery efforts that will be required following the COVID-19 outbreak. Cities have always been places of creativity and innovation, and local leaders are ensuring this will be the case once again.”

– Aziza AKHMOUCH, Tadashi MATSUMOTO and Stefano MARTA, OECD, Paris

Image Source: The Strait of Malacca, connecting the South China Sea and the Andaman Sea. Image by Nicolas J.A. Buchoud, all rights reserved ©.

Aziza AKHMOUCH
Organization for Economic Cooperation and Development (OECD)

Tadashi MATSUMOTO
Organization for Economic Cooperation and Development (OECD)

Stefano MARTA
Organization for Economic Cooperation and Development (OECD)

Life after COVID-19: A ten points framework

The COVID-19 pandemic continues to exert a substantial toll on economies and societies. Prospects for an eventual path out of the crisis have improved, with encouraging news about progress in developing an effective vaccine, but the near-term outlook remains very uncertain. On the assumption that renewed virus outbreaks remain controlled, and that the prospect of a widely available vaccine towards the end of 2021 helps increase market confidence, a gradual recovery in the global economy should occur in the next two years. After a strong decline this year, global GDP is projected to rise by around 4¼ per cent in 2021, and a further 3¾ per cent in 2022 (OECD, 2020).

Cities are on the frontline of responses to the COVID-19 crisis. They play a key role to implement nation-wide measures, but also provide laboratories for bottom-up and innovative recovery strategies. Moreover, cities' responses to the COVID-19 crisis accelerates the shift towards a new urban paradigm towards inclusive, green and smart cities. By collecting policy responses of 100+ cities, the OECD identifies 10 key lessons from the crisis to build back better cities.

COVID-19 had asymmetrical impacts across territories but many policy responses were place-blind and uniform, highlighting the need for place-based and people-centred approaches. The health crisis turned into a major economic and social shock; and cities' exposure and recovery depends on industrial composition, labour market breakdown and trade openness. The rediscovery of proximity provides a window to shift faster from a target of increasing mobility to one of enhancing accessibility by revisiting public space,

urban design & planning.

The crisis strikingly exposed inequality across people and places, especially in large cities, where vulnerable groups such as migrants, the poor, women and the elderly were hit hard. The health problem is not related to urban density but rather to structural inequalities and the quality of urbanisation; and the urban premium will likely not turn into an urban penalty as agglomeration benefits continue to prevail. Digitalisation, a major game changer during the crisis, will remain a key component of a "new normal", although teleworking ability varies both across and within countries. The "Zoom effect" and "Greta effect" accelerated environmental awareness, making the transition towards clean mobility and circular economy more politically and socially acceptable.

COVID-19 bears implications for governance, with citizens' trust in governments increasing in some countries, especially for local politicians, and decreasing in others. The COVID-19 shock calls for a stronger focus on resilience; preparedness to future shocks requires managing WHO does WHAT at WHICH scale and HOW for more resilient cities. Global agendas such as the SDGs, the New Urban Agenda, and the Sendai Framework are both timely and relevant to reshape planning, policy, strategy and budget from the ground up.

Going Forward

Life after COVID-19 will likely be a life with COVID-19. Beyond the public health emergency to reduce the spread of the virus and protect citizens' health, the pandemic and its aftermath are prompting cities to rethink how they deliver services, how they plan their space and how they can resume economic growth. Some cities are already looking beyond the crisis to the recovery efforts that will be required following the COVID-19 outbreak. Cities have always been places of creativity and innovation, and local leaders are ensuring this will be the case once again.

The COVID-19 crisis and the responses to it underline the importance and potential of long-term strategies for cities to be more inclusive, greener and smarter in their recovery efforts and the underlying governance and financing needs to enable transformation.

For more information, download our report on COVID-19 and Cities: Impact, Lessons learned and Recovery Strategies available in English, French, Spanish, Portuguese and Japanese

“The next priority is to move towards the implementation of policy-frameworks and solutions that reinforce effectively the social infrastructure of cities, and to do that at all levels, at all scales.”

– Katharina LIMA de MIRANDA, Kiel Institute for the World Economy

Image Source: The ‘Summer Fruit Festival’ co-organized by ‘Love my Salad’ community movement in Tumbalong Park, Darling Harbour, Sydney, Australia. Image by Nicolas J.A. Buchoud, all rights reserved ©.

Katharina LIMA de MIRANDA
Kiel Institute
for the World Economy
Kiel, Germany

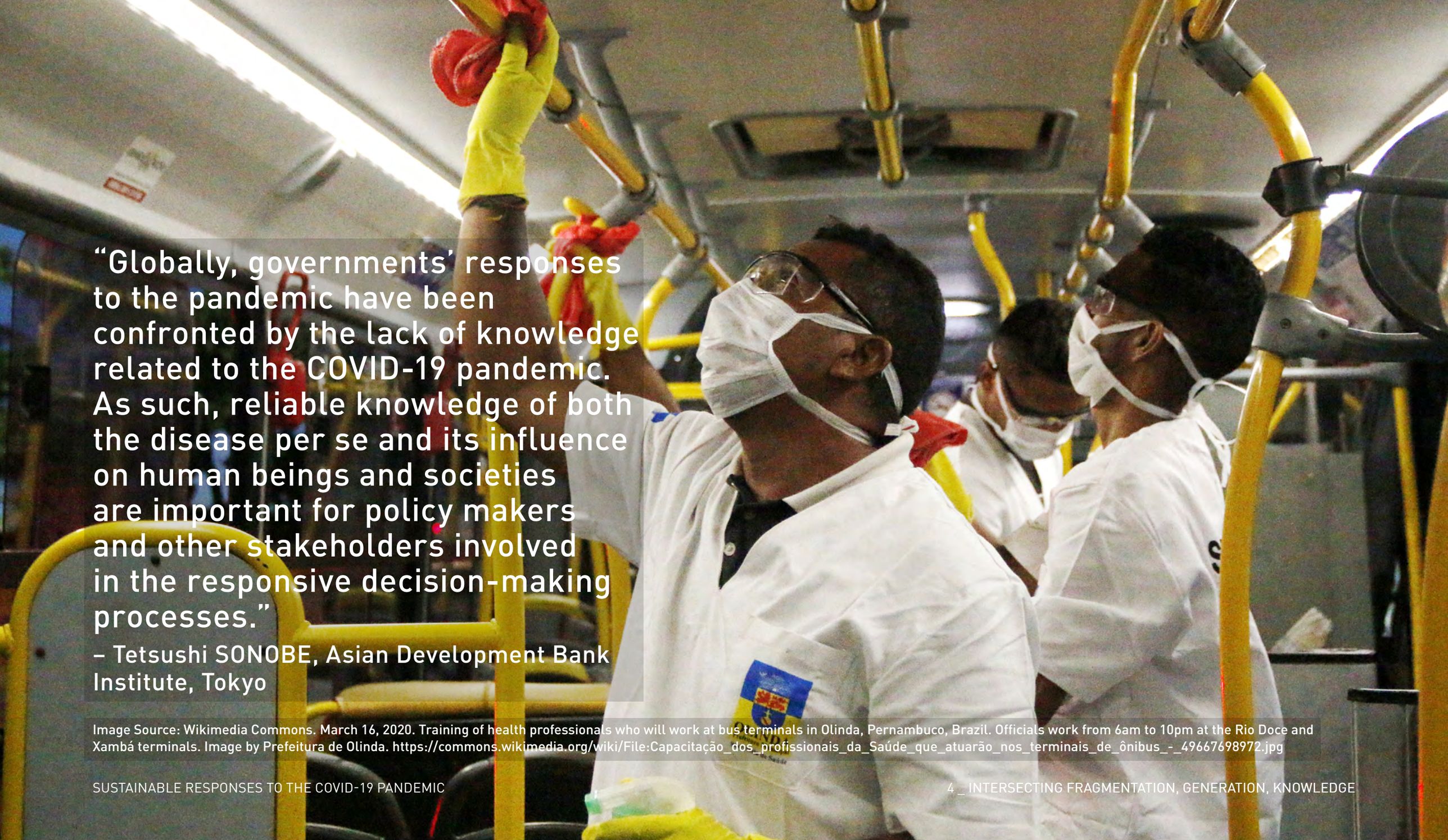
Towards an economy of well-being supported by new measurements: Update on the SAGE framework

The Covid-19 crisis is a highly asymmetric one where cities are the epicenter of the crisis but not the main decision-makers. Different social groups are hit very unequally and there is a high risk of further fragmentation of the society. As the G20 Italian presidency is putting social issues and inclusiveness among its priorities, this is the right time to pay more attention to community resilience as a global question. Tackling the pre-crisis and the new inequalities altogether will require an unconventional combination of theoretical and empirical research. Cities are pivots of the global system and the right places to develop and consolidate common indicators of solidarity and agency. In that context, renewed macro-economics of well-being could also strengthen the implementation and delivery of the global environmental and development goals in lieu of the deadly Covid-19 narrative.

Without a new understanding of how we define prosperity and economic growth, we will neither effectively combat pandemics, climate change nor global poverty. The UN, the OECD, scientists, artists and civil movements have proposed measurements in which the impact on the environment, society and the individual play a significant role and challenge the system of GDP as an indicator of societal wellbeing. Examples of these initiatives include the OECD Better Life Index, the recent formation of an OECD center on Well-Being, Inclusion, Sustainability and Equal Opportunity, the Social Progress Index, which measures the social and environmental health of societies and intends to accelerate social progress, or the Social Impact Index, which measures the social impact of concrete development projects. The Global Solutions Initiative is advancing the Recoupling Dashboard as a tool to measure the wellbeing of societies beyond GDP which illustrates the interrelation between economic prosperity, social prosperity and environmental sustainability.

The underlying SAGE framework challenges the still too common perspective to use GDP as a normative guide for policymaking and endorses a more holistic picture of human wellbeing rooted in a modern, empirical, interdisciplinary understanding of human well-being. Following this new approach the next priority is to move towards the implementation of policy-frameworks and solutions that reinforce the social structure and the social infrastructure of cities, and to do that at all levels. This is important because

human well-being depends on the pursuit and satisfaction of fundamental human needs and value-driven purposes. Humans have evolved motives to socialize (particularly in groups of limited size) and to use their capacities to shape their environment. Consequently, social solidarity and personal agency are fundamental sources of human wellbeing, which need to be taken seriously by policy makers at all levels. In order for a society to thrive its' members need to be able to satisfy their aim for social embeddedness (S), their desire to influence their destiny through their own efforts (A), their basic material needs and wants (G), and their need to remain within planetary boundaries (E). This insight is synthesized in the SAGE framework where the four indexes—SAGE—form a balanced dashboard for evaluating well-being. The recoupling dashboard could be strengthened and enriched with multiple successful examples of community resilience, which remain too often ignored by national and furthermore by global policy-making arenas. This could provide a way-forward in overcoming the COVID-19 pandemic and preparing for future global challenges. To achieve this local governments need to implement measures that strengthen solidarity and agency, for example projects that increase trust and neighborhood support.



"Globally, governments' responses to the pandemic have been confronted by the lack of knowledge related to the COVID-19 pandemic. As such, reliable knowledge of both the disease per se and its influence on human beings and societies are important for policy makers and other stakeholders involved in the responsive decision-making processes."

– Tetsushi SONOBE, Asian Development Bank Institute, Tokyo

Image Source: Wikimedia Commons. March 16, 2020. Training of health professionals who will work at bus terminals in Olinda, Pernambuco, Brazil. Officials work from 6am to 10pm at the Rio Doce and Xambá terminals. Image by Prefeitura de Olinda. https://commons.wikimedia.org/wiki/File:Capacitação_dos_profissionais_da_Saúde_que_atuarão_nos_terminais_de_ônibus_-_49667698972.jpg

Tetsushi SONOBE
Asian Development Bank Institute (ADBI)
Tokyo, Japan

Three practical considerations for renewing knowledge generation

Globally, governments' responses to the pandemic have been confronted by the lack of knowledge related to the Covid-19 pandemic. As such, reliable knowledge of both the disease per se and its influence on human beings and societies are important for policy makers and other stakeholders involved in the responsive decision-making processes. However, "reliable" knowledge, in a scientific and evidence-based sense, requires time and effort. Meanwhile, COVID-19 put pressures on governments for agile solutions. The question is, then, how policy proposals in response to the pandemic can be drafted and delivered in a timely yet substantiated manner?

Medical researchers have quickly developed a variety of hypotheses, tested them with randomized controlled experiments, checked the validity and reproducibility of experiments, and generated a huge quantity of scientific knowledge that has benefitted hospitals, clinics, and the whole society in the struggle against COVID-19. Peer-reviewed academic journals, including Lancet, Cell, Science, Nature, JAMA, have played the important role of forum of discussions, cross checking, and dissemination of new knowledge.

More and more social research has been published recently, showing a clear effort from social scientists to catch up with the pandemic. That said, social scientists and social sciences journals have been challenged with both empirical and theoretical difficulties. Empirically, social distancing and other human interaction restrictions have been detrimental to social scientists' capacity to observe and generate knowledge. Theoretically, since COVID-19 as a socio-political phenomenon is somewhat unanticipated and multifaceted, to study it as such requires time for researchers to either adapt existing frameworks or build new framework from ethnographic and grounded theory approaches. That is not to mention to the lengthy process of peer-reviewed publishing.

Medical researchers have quickly developed a variety of hypotheses, tested them with randomized controlled experiments, checked the validity and reproducibility of experiments, and generated a huge quantity of scientific knowledge that has provided hospitals, clinics, and the whole society with increasingly better position in fighting COVID-19 => Can't social science researchers and TTs repli-

cate medial counterparts' success?

Peer-reviewed academic journals, including Lancet, Cell, Science, Nature, JAMA, have played the important role of forum of discussions, cross checking, and dissemination of new knowledge. In comparison, social science journals have been very slow, though becoming better gradually.

To this end, think tanks have the potential to fill in this gap of knowledge generation, with fora such as the Global Solutions Dialogue, T20, Global Think Tank Town Hall, etc. can be great complements to academic journals and institutions. The more flexible nature of think tanks allowed more frequent knowledge generation activities and involvement of more players. Both larger and smaller think tanks can collaborate with their own expertise and networks. Such diversity is important for gathering and cross-checking novel ideas. Each think tank participating in such large forum or fora should have its forum or platform connecting researchers, policy makers, public administrators, civil society groups to exchange ideas, opinions and latest information unsocial changes and the progress of research.

With new trends of domestic and global economies emerging from the pandemic, think tanks focusing on infrastructure development and urbanization are taking on a more challenging task than ever. Developing economies are still increasingly urbanized, yet cities in Asia are already too congested and too large [Presenter's Diagram as source].

Urban population in developing Asia was around just 0.4 billion in 1970, while in 2017 this has increased to 1.8 billion. By 2050, 3 billion people will live in cities in the area, according to the Asian Development Outlook 2019 Update of the Asian Development Bank (ADB). Leading this trend is India, followed by, in descending order, China, other Asian developing economies, other developing economies in the world, and developed economies.

The challenge of such urbanization rate can be observed through increasing congestion and unaffordability of housing, measured by the ratio of the median house price in a city to the median income in the city (PIR) [Presentation Diagram as source]. According to the ADB's estimate based on data of 211 cities in 27 developing countries in Asia, this ratio is 10 to 17, depending on population size: more precisely, 13.6, in small cities with population less than 1 million, 10.9 in medium cities with 1 to 5 million, and 17.2 in large cities with more than 1 million. Compared to the average PIR in developed economies, which is around 4, one can safely deduce how unaffordable housing has been in congested cities in developing Asia. In addition, cities are expanding beyond administrative boundaries [Presentation Diagram as source]. In addition, population density is high, and distribution is unequal among a city. Thus, less advantaged part of the population tends to have poor access to artery roads. They have to spend a large amount of time to commute to the center. Their sanitary condition and their access to the internet are also poor. These issues are ex-

acerbated by COVID019, and pushing think tanks to rethink urban infrastructure in a more inclusive way.

On Geographical diversification

Another important trend is geographical diversification of economic activities and efforts to mitigate urban congestion, as well as of global and regional supply chain. The former results from economic or market forces because of increased cost of agglomeration (impacted by social distancing) and lowered cost of working remotely (enhanced by digitalization of working and living styles) after the outbreak of the pandemic. Such forces will make sure this trend gains enough political momentum to be materialized. Thus, the demand for digital infrastructure investment, addressing digital inequalities, and infrastructure investment improving access to clean water and artery road, is going to increase sharply. That said, infrastructure investment is not enough. It must be associated with investment in human capital. The targets of human capital investment, as opposed to popular perception, are not just children, but also adults. Without capacity building, the constructed infrastructure will fail to showcase its real worth, and hence investment in it will have low social returns.

The latter trend stems from that having learned lessons from supply chain disruptions, firms are departing from the conventional supply chain management, which sought just-in-time deliveries and procuring from the best source, and going to the second and third best as appropriate redundancies. In theory, this trend gives developing countries more chance for industrial development. The realization of this expectation will require infrastructure investment in transportation, communication, and industrial zones and parks, together with human capital investment in both children and adults.

On capacity building

Finally, when it comes to the developing world, making effective policy proposals regarding infrastructure and urbanization requires shedding lights on capacity building, not only its importance but also how to secure the sufficient supply of trainers and instructors. This is probably the only approach to realizing Quality Infrastructure Investment.

“With new trends of domestic and global economies emerging from the pandemic, think tanks focusing on infrastructure development and urbanization are taking on a more challenging task than ever.”

– Tetsushi SONOBE, Asian Development Bank Institute, Tokyo

Image Source: Wikimedia Commons. March 21, 2020. Thousands of aid packages donated by the People’s Republic of China are unloaded at the Villamor Air Base in Pasay City on March 21, 2020. The donation includes assorted medical supplies, personal protective equipment, and testing kits for coronavirus. TOTO LOZANO/PRESIDENTIAL PHOTO. https://en.wikipedia.org/wiki/File:China_COVID19_test_kit_PH_donation_8.jpg

authors

Iskandar ABDULLAEV
Deputy Director 2,
Central Asia Regional Economic Cooperation (CAREC) Institute

Pierre ACHARD
Food and Beverage Market Director,
Suez Environment,
Paris, France

Aziza AKHMOUCH
Head of Division, Cities, Urban Policies and Sustainable Development,
Organization for Economic Cooperation and Development (OECD), Paris, France

Eisa Khan AYOOB AYOOBI
Chief of Capacity Building
CAREC Institute

Harun BADAKHSHI
Chief Physician, Department Director of Clinical Oncology at the Ernst von Bergmann Medical Center Potsdam, Co-founder of New Dialogues, Berlin, Germany

Oriol BELLOT
Projects Director, Suez Agriculture, Barcelona, Catalonia, Spain

Svetlana BODRUNOVA
Professor, Chair of the Department of Media Design and IT for Media, School of Journalism and Mass Communications, Saint Petersburg State University, Russian Federation

Nicolas J.A. BUCHOUD
Fellow of the Global Solutions Initiative, co-chair of T20 Italy Infrastructure Investment and Financing taskforce; President at Grand Paris Alliance for Sustainable Investments, Paris, France

Milindo CHAKRABARTI
Visiting Fellow, RIS, New Delhi, and Professor, O.P. Jindal School of Government and Public Policy, O.P. Jindal Global University, Sonipat, India

Henri DE GROSSOUVRE
Head of foresight and relations with think-tanks for Face and Europe, Suez, Member of the board, Cercle Colbert for territorial governance and decentralization, Paris France

Gunnar HARTMANN
Architect, urban researcher, publisher, Co-founder of New Dialogues, Berlin, Germany

Gérard HÉGRON
Senior researcher, Université Gustave Eiffel, Paris Marne la Vallée, France

Nella Sri HENDRIYETTY
Former deputy director for the G20 at the Fiscal Policy Agency, Ministry of Finance, Indonesia, Senior Economist, Capacity Building and Training, Asian Development Bank Institute (ADBI), Tokyo, Japan

Gary HUANG
E-Learning Specialist
CAREC Institute

Michael KEITH
Principal investigator (PI), PEAK Urban research program, Co-director, Oxford program for the Future of Cities, Oxford University, the United Kingdom

Holger KUHLE
Policy Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Strategic Knowledge Partnerships, cooperation with the Global Solutions Initiative,
Berlin, Germany

Riatu MARIATUL QIBTHIYYAH
Director, Institute for Economic and Social research, faculty of Economics and Business, University of Indonesia (LPEM-UI),
Jakarta, Indonesia

Stefano MARTA
Coordinator, Territorial approaches to the SDGs, Organization for Economic Cooperation and Development (OECD),
Paris, France

Tadashi MATSUMOTO
Head of Unit, Sustainable Development and Global Relations, Cities, Urban Policies and Sustainable Development Division, Centre for Entrepreneurship, SMEs, Regions and Cities, OECD,
Paris, France

Daniel MILES
COO, ESI ThoughtLab,
Philadelphia, the United States

Katharina LIMA de MIRANDA
Postdoctoral researcher, Kiel Institute for the World Economy, expert on Social and Behavioral Approaches to Global Problems,
Kiel, Germany

Francisco OBANDO
Manager, Oxford Martin Programme on Informal Cities, Oxford University, the United Kingdom

Susan PARNELL
Global Challenges Professor in Urban Development, Emeritus Professor at the African Center for Cities (ACC), Member of the Board of the International Institute for Environment and Development (IIED), University of Bristol, the United Kingdom

Lan-Phuong PHAN
Secretary general, Grand Paris Alliance for Sustainable Investment, Paris, France and Ho Chi Minh City, Vietnam

Nicolas PREGO
Vice-president, Global business unit smart & environmental solutions, Suez, Paris, France

Tetsushi SONOBE
Dean and CEO, Asian Development Bank Institute (ADBI), former vice president, National Graduate Institute for Policy Studies (GRIPS),
Tokyo, Japan

Nicolaos THEODOSSIOU
Prof. Department of Civil Engineering, Aristotle University of Thessaloniki, Greece, and Chair of United Nations' Sustainable Development Solutions Network – SDSN Black Sea

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credits

"Experts are used to converting people on the ground into numbers to feed them into their economic equations. Now, they must listen to the people in the many voices which the people speak."

– Arun MAIRA, Help Age International, India

Image Source: Wikimedia Commons. June 19, 2020. Black Lives Matter - Sit In - Occupy Bay Street - College Street - Toronto Police Headquarters, Toronto, Canada. Image by Jason Hargrove. https://commons.wikimedia.org/wiki/File:Black_Lives_Matter_-_Sit_In_-_Occupy_Bay_Street_-_College_Street_-_Toronto_Police_Headquarters_-_June_19,_2020_-_Creative_Commons_(50025876838).jpg

Large-scale protest demonstrations against COVID-19 restrictions in Berlin.

Image Source: Wikimedia Commons. August 29, 2020. “Querdenken” against Corona restrictions at Friedrichstrasse in Berlin, Germany.
https://de.wikipedia.org/wiki/Datei:29.08.2020_Berlin-Friedrichstrasse.JPG

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“From 1929 to 1932, the Great Depression was not only economic. It triggered regime changes in countries all over the globe. In colonial Africa, the authority of traditional chiefs came apart with the arrival of colonial administration, before revealing new arenas of conflict and creating new political opportunities.”

– From Chinua Achebe, Things Fall Apart, William Heinemann ed., London, 1958

Image Source: Plenary round table at the first edition of the Global Solutions Summit in Berlin, during the G20 Germany in 2017. Photo: Tobias Koch for the GSI.

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