Policy Brief: COVID-19 in an Urban World

JULY 2020



Executive summary

The remarkable growth of cities in recent decades has intensified many of humanity's most pressing challenges. It has also presented many of our greatest opportunities to protect people, prosperity and planet. COVID-19 has laid bare – and indeed heightened – both these challenges and these opportunities.

With an estimated 90 percent of all reported COVID-19 cases,¹ urban areas have become the epicentre of the pandemic. The size of their populations and their high level of global and local interconnectivity make them particularly vulnerable to the spread of the virus. On the other hand, there is no evidence to suggest that density per se correlates to higher virus transmission. Cities can manage this crisis and emerge as the hubs of energy, resilience and innovation that make them such vibrant and appealing places for many to live. But this will take conscious policy choices, as this policy brief will show, particularly with respect to inequalities, local capacities and a green, inclusive recovery.

In the near term, for many cities, the COVID-19 health crisis has expanded to a crisis of urban access, urban equity, urban finance, safety,

joblessness, public services, infrastructure and transport, all of which are disproportionally affecting the most vulnerable in society.

COVID-19 highlights the critical role local governments play as front-line responders in crisis response, recovery and rebuilding. This is due to their leading role in service delivery, economic development and infrastructure investments. However, business closures, job losses, and other economic impacts have led to declining tax revenues during the crisis, placing significant financial strain on many local governments. Estimates from the World Bank and UN entities suggest that local governments may yield 15 per cent to 25 per cent lower revenues in 2021.2 Cities with less diversified economic bases have been hit especially hard. Cities with a revenue base reliant primarily on tourism, for example, may see acute economic shrinkage as earnings from international tourism are estimated to decline by as much as 80 per cent in 2020, accompanied by the loss of 120 million jobs.3 If not addressed, the financial crises that cities may bear could jeopardise crucial urban infrastructure investments, lead to cuts in public services, and undermine broader sustainable urban development efforts.

¹ United Nations Human Settlements Programme (UN-Habitat), "Opinion: COVID-19 demonstrates urgent need for cities to prepare for pandemics", 15 June 2020, available at https://unhabitat.org/opinion-covid-19-demonstrates-urgent-need-for-cities-to-prepare-for-pandemics.

² Semeh Wahba and others, "Cities are on the front lines of COVID-19", 12 May 2020, available at https://blogs.worldbank.org/sustainablecities/cities-are-front-lines-covid-19.

³ United Nations World Tourism Organization (UNWTO), "International Tourist Numbers could Fall 60–80% in 2020", 7 May 2020, available at https://www.unwto.org/news/covid-19-international-tourist-numbers-could-fall-60-80-in-2020.

COVID-19 shutdown measures in urban areas have had economic impacts far beyond their **boundaries** Urban economies account for approximately 80 per cent of global GDP.4 Hours worked across all countries and regions are estimated to have fallen by 14 percent in the second guarter of 2020 relative to the last guarter of 2019, which is equivalent to a loss of 400 million full-time jobs. 5 Globally, the effects have been especially severe in the informal sector, which represents 90 per cent and 67 per cent of total employment in low and middle-income countries respectively.6 In the first month of the crisis, on average informal workers worldwide lost as much as 60 per cent of their earnings. In Africa and Latin America this figure was nearly 80 per cent. This has had particularly devastating impacts for women. Globally women are overrepresented in the informal economy as well as in the hardest hit sectors, such as tourism, hospitality, and services.

Deep-rooted inequalities, including where in a city a person lives and works and a person's gender and age, can lead to the pandemic having a disproportional impact on groups that were already in a situation of greater vulnerability.8 Meanwhile, there is evidence that

tackling COVID-19 may be more challenging in urban areas with high levels of crime and violence, poor infrastructure and housing, and/ or weak local governance¹¹ with ill-equipped or under-resourced frontline workers. Limited access to healthcare, 12 basic services 13 and adequate housing and/or public space 14 can further undermine COVID-19 responses.

To safely adhere to coronavirus physical distancing and hygiene guidelines, everyone needs access to adequate housing.15 Yet the global urban housing crisis forces around 1 billion people or 24 percent of the world's urban population to reside in slums and informal settlements, 16 exacerbating the impact of the pandemic. With limited or no income during lockdowns, the urban poor in all countries face risk of eviction, while overcrowding in low-quality housing increases the risk of rapid transmission. Housing considerations may also be increasing the vulnerability of women to violence and abuse. Since the pandemic began, levels of gender-based violence have increased at alarming levels in all regions. With mobility restricted, unemployment and poverty rising, the ability of women to flee an abusive situation has become even more constrained.

⁴ World Bank, "Urban Development", 20 April 2002, available at https://www.worldbank.org/en/topic/urbandevelopment/overview.

⁵ International Labour Organization (ILO), ILO Monitor: COVID-19 and the World of Work, fifth edition, 30 June 2020.

⁶ ILO, "COVID-19 crisis and the informal economy: Immediate responses and policy challenges", available at https://www.ilo.org/wcmsp5/ groups/public/@ed_protect/@protrav/@travail/documents/briefingnote/wcms_743623.pdf.

⁷ United Nations, "Policy Brief: The World of Work and COVID-19", available at https://www.un.org/sites/un2.un.org/files/the_world_of_ work_and_covid-19.pdf.

Organization for Economic Cooperation (OECD), "OECD Policy Responses to Coronavirus (COVID-19)", 13 May 2020, available at http:// www.oecd.org/coronavirus/policy-responses/cities-policy-responses-fd1053ff; and Jillian Du, Robert King and Radha Chanchani, "Tackling Inequality in Cities is Essential for Fighting COVID-19", 14 April 2020, available at https://www.wri.org/blog/2020/04/ coronavirus-inequality-cities.

United Nations Office on Drugs and Crime (UNODC), "Research Brief: The impact of COVID-19 on Organized crime", avialbale at https:// www.unodc.org/documents/data-and-analysis/covid/RB_COVID_organized_crime_july13_web.pdf.

¹⁰ Gaurav Bhardwaj and others, Cities, Crowding, and the Coronavirus: Predicting Contagion Risk Hotspots, Washington, DC: World Bank, 2020, available at https://openknowledge.worldbank.org/handle/10986/33648.

¹¹ UN-Habitat, "UN-Habitat Guidance on COVID-19 and Public Space", June 2020, available at https://unhabitat.org/sites/default/ files/2020/06/un-habitat_guidance_on_covid-19_and_public_space.pdf.

¹² United Nations, "Policy Brief: The World of Work and COVID-19", available at https://www.un.org/sites/un2.un.org/files/the_world_of_ work_and_covid-19.pdf.

¹³ Gauray Bhardwai and others. Cities. 2020.

¹⁴ UN-Habitat, "COVID-19 and Public Space".

¹⁵ Office of the United Nations High Commissioner for Human Rights (OHCHR), "COVID-19 Guidance Note: Protecting residents of informal $settlements'', 23 \ April \ 2020, available \ at \ \underline{https://www.ohchr.org/Documents/Issues/Housing/SR_housing_COVID-19_Guidance_lines/Housing/SR_housing_COVID-19_Guidance_lines/Housing/SR_housing_COVID-19_Guidance_lines/Housing/SR_housing_COVID-19_Guidance_lines/Housing/SR_housing_COVID-19_Guidance_lines/Housing/SR_housing_COVID-19_Guidance_lines/Housing/SR_housing_COVID-19_Guidance_lines/Housing/SR_h$ informal_settlements.pdf.

¹⁶ Progress towards the Sustainable Development Goals: Report of the Secretary-General, available at https://sustainabledevelopment. un.org/content/documents/26158Final_SG_SDG_Progress_Report_14052020.pdf.

Public transport systems around the world have seen ridership and revenue plummet and have been forced to cut services. This is a worrisome trend considering that before the pandemic, only around half of the world's urban population had convenient access to public transport.¹⁷ Declining ridership due to COVID-19 – if not halted and reversed – could jeopardize the transition to safe and sustainable transport for all, and constrain efforts to tackle climate change and air pollution.

Several cities have encouraged biking and walking as safe alternatives to public transport during the COVID-19 outbreak, enabling new user groups to take advantage of the affordability and health benefits of these forms of transport. The success of these initiatives may encourage city governments to convert more roads for similar purposes, further improving mobility and safety. 18 There is also an opportunity in this moment to relook at public transport from a gender perspective, looking at protection considerations, and also at where main arteries and routes flow and how this impacts time spent moving between schools, care facilities, markets and other facilities that are often on the periphery rather than on main routes.

Several new scientific studies suggest that poor air quality is correlated with higher COVID-19 mortality rates. For example, a small increase in fine particulate matter has been associated with an 8 percent increase and up to 21.4 per cent increase in death rates in the US and the Netherlands, respectively. New evidence also points to impacts on pregnant women and newborn babies as well as maternal mortality,

particularly among populations already facing socio-economic stress due to marginalization.²⁰ While pollution and Greenhouse Gas Emissions have fallen sharply during the pandemic when countries halted their economies to contain the spread of the virus, these environmental gains are expected to be temporary if economies reopen without policies in place that prevent air pollution and promote decarbonization.

Meanwhile, the current pandemic is accelerating trends such as digitalization, shifts to remote work, and virtual delivery of essential services. This transition to digital life has created an uncertain future for city infrastructure and buildings, as demand for office space and housing could subsequently decline. Urban segregation and migration could also accelerate as people at higher income levels look for new ways of living and working outside the city in response to the pandemic. If associated with an increase in urban sprawl and income, racial and gender inequalities, migration away from cities could undermine vital efforts to achieve the SDGs, protect biodiversity and address the climate crisis.²¹

There is an urgent need to rethink and transform cities to respond to the reality of COVID-19 and potential future pandemics, and to recover better, by building more resilient, inclusive and sustainable cities. We know that this is possible. The rapid shifts in society due to COVID-19 present a powerful lesson that society is capable of near-overnight transformation that is needed to confront our most urgent threats, such as the climate and pollution crises that threaten the very viability of cities. Indeed, previous disease outbreaks – such as the flu pandemic (1918)

¹⁷ Progress towards the Sustainable Development Goals: Report of the Secretary-General, available at https://sustainabledevelopment.un.org/content/documents/26158Final_SG_SDG_Progress_Report_14052020.pdf.

¹⁸ UN-Women, COVID-19 and Ensuring Safe Cities and Safe Public Spaces for Women and Girls, 2020, p. 6.

¹⁹ Wu and others, "Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study", medRxiv 2020.04.05.20054502; and Cole and others, "Air Pollution Exposure and COVID-19", IZA DP No. 13367, available at http://ftp.iza.org/dp13367.pdf.

²⁰ Christopher Flavelle, "Climate Change Tied to Pregnancy Risks, Affecting Black Mothers Most", New York Times, 18 June 2020, available at https://www.nytimes.com/2020/06/18/climate-change-pregnancy-study.html.

^{21 &}lt;a href="https://unstats.un.org/sdgs/report/2016/goal-11">https://unstats.un.org/sdgs/report/2016/goal-11.

and localized epidemics of tuberculosis and cholera – have driven several positive urban transformations – such as the introduction of sewage systems, public parks, and housing regulations to improve sanitation and reduce overcrowding. Today, local and regional governments are already demonstrating an impressive array of innovative solutions that can address structural weaknesses exposed by the pandemic.

Addressing COVID-19 in an increasingly urbanized world requires a focus on how urbanization shapes impacts, responses and longer-term recovery. Responses that are siloed or shortsighted, focusing on quick fixes, could worsen and entrench impacts laid bare by the COVID-19 pandemic. Long-term policy choices by national, regional and local governments are needed to build our resilience against future pandemics, including climatic and economic hazards and shocks, while safeguarding human rights, sustaining peace and strengthening our ability to achieve the Sustainable Development Goals (SDGs). Meanwhile, many of the short-term measures to respond to COVID-19 will need to be maintained for some time, even when the initial outbreak appears to have been contained, given the risk of secondary waves of infections.

Realizing these potential gains will require intensified commitments and action in three key areas:

1) TACKLING INEQUALITIES AND DEVELOPMENT DEFICITS

Local government efforts to protect the most vulnerable groups during the immediate response phases are crucial, as are recovery measures that reduce urban inequalities, strengthen human rights and bolster the resilience of vulnerable groups to future shocks. Against this background, priority actions that policymakers could make – in consultation with relevant stakeholders – include:

- Understand inequalities and commit to disaggregated data gathering and utilisation:
 Spatial mapping and analysis of inequalities at urban and neighbourhood levels and disaggregated by gender and age could be conducted to assess health, wealth and wellbeing in order to reshape national and local development policies, in particular in deprived areas and slums and at the most local of levels.
- Provide safe shelter for all and call for a moratorium on all evictions: Temporary shelters could be provided to enable those living in overcrowded or unsafe conditions to physically distance or safely self-isolate, where needed. All residents, regardless of migration status or formality of dwelling, need to be protected from evictions during the COVID-19 crisis and from essential service disconnections. Domestic violence shelters should be declared as essential services and where they are full or have insufficient space owing to distancing measures, alternative accommodation should be made available.
- Make large-scale public investments in affordable and adequate housing and slum upgrading to ensure that marginalized groups have access to shelter that facilitates physical and mental health during the pandemic and beyond. Future-proof investments to ensure extension of adequate water and sanitation coverage are also needed.
- Ensure that public services are uninterrupted, equally accessible for the urban poor and other vulnerable groups and payments in default forgiven or deferred: This is particularly important for services that are crucial for effectively coping with the crisis – such as water, sanitation, waste collection and electricity. For individuals and communities that currently lack access to such services, it will be important to provide immediate access – for example in the form

of handwashing stations. Equally improved internet access in poor urban neighbourhoods will facilitate telecommuting and home education while schools are closed.

- Ensure equitable access to health supplies, facilities and resources and support the urban poor and vulnerable groups with free or low-cost access to face masks, testing, and treatment. Coordination and collaboration should be promoted amongst hospitals to ensure that the burden of COVID-19 treatment is distributed effectively to avoid hospitals in deprived affected areas from becoming overwhelmed when those in less hard-hit areas have spare capacity.
- Guarantee equitable distribution of vaccines: Cities are crucial distribution centres for vaccines, and as such could play a crucial role in ensuring that such distribution is equitable. Local governments can help to ensure that a COVID-19 vaccine, when developed, is available to poor and vulnerable groups free of charge or at a very low cost.²²
- Ensure the most marginalised communities and individuals play leadership roles in immediate response, design and planning efforts: The most vulnerable and marginalised communities, including slum dwellers, people suffering from homelessness, internally displaced persons, people with disabilities, women and girls, migrants and refugees, should be engaged as response leaders and partners to ensure that response measures are designed with their needs in mind.

2) STRENGTHENING THE CAPACITIES OF LOCAL ACTORS, PARTICULARLY LOCAL GOVERNMENTS

National governments could promote more inclusive, collaborative and responsive governance across jurisdictions and levels of government. National stimulus packages that maximize support for tailored subnational responses, and that boost local governments' budgetary capacity, can help to address some of the constraints that local governments face. Priority actions could include:

- Ensure collaboration across levels of government and subnational jurisdictions: Inclusive, participatory, multi-level governance are at the heart of local responses, and collaboration between all levels of government needs to be institutionalised, providing consistent engagement with all residents, particularly marginalised and vulnerable groups. Where there are low levels of women's formal representation in governance bodies, temporary structures, such as a city level COVID taskforce with gender balanced representation should be considered.
- Enhance local government budgetary capacity with policy measures and dedicated funds in stimulus packages: Stimulus packages and policy measures could be adopted that boost local and regional governments' ability to sustain critical public services and raise and control their own finances (for example, through local taxes, charges and fees), while also taking into account the need to prevent additional financial pressure on poor and vulnerable groups.
- Promote accountability and transparency:
 Evidence-based accountability mechanisms

²² World Health Organization (WHO), "COVID-19 Strategic Preparedness and Response Plan: operational planning guidelines to support country preparedness and response", 22 May 20202, available at https://www.who.int/docs/default-source/coronaviruse/covid-19-sprp-operational-planning-guidelines-to-support-country-preparedness-and-response-(22may20).pdf.

on the implementation of COVID-19 policies could be enacted for all levels of government, in a manner that allows for direct feedback from communities.

- Ensure communication campaigns reach all urban communities: Effective and coherent communication engagement strategies could be prioritised with a view to building public trust in COVID-19 response and recovery efforts at all levels of government, taking account of literacy, language and access to technology barriers.
- Support local governments in avoiding disruptions of essential public services: Sufficient financial resources and revenue-raising capacity need to be ensured to sustain critical public services (e.g. water, sanitation, transport, education). Essential services should also include domestic violence shelters and other protection services. Policies and strategies could be adopted that boost capacities for equitable public service delivery and gender-responsive public transport systems that take sustainability, safety, affordability, accessibility and attractiveness into account; and infrastructure could be provided that encourages safe walking and cycling. Local governments also play an important role in supporting effective contact tracing, provided that sufficient financial and human capacities are available.

3) PURSUING A RESILIENT, INCLUSIVE, GENDER-EQUAL AND GREEN ECONOMIC RECOVERY

Looking to the future, strengthening resilience of cities needs to be a global priority. Resilient cities address underlying socio-economic vulnerabilities, leverage data for urban planning and adopt climate investment measures. For instance, financial assistance programmes and direct stimulus funding for urban areas could help to mitigate the impacts of COVID-19 on local businesses and build new, more resilient supply chains. Social protection could be expanded to the informal sector, for migrant workers, and for paid and unpaid care workers.²³ COVID-19 economic recovery measures in cities could harness green and sustainable solutions that provide longer-term benefits, such as the introduction of new models of urban development and a transition from a linear to a circular economy that regenerates, reduces waste and reuses materials resulting in cost savings as well as environmental benefits. Priority actions could include:

 Bolster micro, small and medium enterprises (MSMEs) and support a safe restarting of businesses: Stimulus measures and social protection programmes could be adopted for MSMEs and workers in the informal economy (e.g. cash transfers, tax deferrals, wage subsidies, subsidised sick leave, subsidised social security contributions and unemployment insurance). Measures to digitize economies could be adopted or accelerated, including government-to-business transfers, providing safer and faster access to government support payments for MSMEs by digital means. Digital payments ecosystems could be expanded so MSMEs can more quickly pay for business inputs needed. Development of, and access to, digital financial products could be encouraged, including financing for business rebuilding and growth in the recovery phase, and insurance to protect against future shocks.24 Specific

²³ UN-Women, "COVID-19 and the care economy: Immediate action and structural transformation for a gender-responsive recovery", 2020; and ILO, "Social protection responses to the COVID-19 pandemic in developing countries: Strengthening resilience by building universal social protection", 2020, available at https://www.ilo.org/secsoc/information-resources/publications-and-tools/Brochures/WCMS_744612/lang--en/index.htm.

United Nations Capital Development Fund Better Than Cash Alliance, "Putting Digital Payments to Work in the Time of Covid-19", 31 March 2020, available at https://www.betterthancash.org/news/blogs-stories/putting-digital-payments-to-work-in-the-time-of-covid-19.

- measures for targeting women MSME owners should be developed, recognizing the greater obstacles to finance and the particular burdens of this crisis on women.
- Sustainable economic development strategies: Local governments and their associations could implement participatory, tailored strategies for local economic development, social cohesion and choose public investments with high job multipliers. Such strategies could recognise the urban informal economy and be embedded in national economic recovery strategies. Local economic development strategies can also help to foster productive and diversified and therefore more resilient city economies.
- It is important that social protection schemes also serve the most marginalised, regardless of formality of work or migration status, and not just those in the formal labour market.
- Build future-ready cities: Stimulus packages could future-proof cities by focusing on sectors with potential for high ecological transformation and job creation (e.g. retrofitting, sustainable buildings and construction, waste collection and management, decentralised renewable urban energy, local food systems, and climate resilient urban infrastructure).
- Urban compactness could be a goal while de-densification could be resisted: Policy measures and incentives could be pursued that discourage urban sprawl (e.g. implement carbon pricing, eliminate fossil fuel subsidies

- that reward suburbanisation, and promote well-designed urban density to generate economies of agglomeration). It is important to recognize that compact cities are healthier for planet and people, particularly when they are designed to ensure adequate housing and public green space²⁵ for all.
- Ensure resilience plans are based on disaggregated data: Disaggregated urban data gathering and use could be increased, as could local level resilience profiling and planning to build a more detailed understanding of crisis response, preparedness and recovery at the urban level. This could help ensure scarce resources are used with greatest efficiency and efficacy in response and resilience-building efforts.
- Develop and implement multi-hazard resilience plans: Preparedness plans could be developed for predictable risks and disasters (including hurricanes, heatwaves, and other impacts of climate change) which may be exacerbated by COVID-19 impacts, and investments could be made in multi-hazard resilience building.
- Invest significantly in the care economy: This pandemic has made clear that the formal economy is reliant on both unpaid and underpaid care work. Recovery will be more effective, rapid, and sustainable if financial investments target greater investment in the care economy, allowing those who may not otherwise be able to join the formal labor force to participate.

²⁵ For instance, for enhanced air purification, resilience to natural disasters, recreation and safe open-air commerce. See: Jon Kher Kaw, Hyunji Lee and Sameh Wahba, editors. *The Hidden Wealth of Cities: Creating, Financing, and Managing Public Spaces*, Washington, DC: World Bank, 2020.

I. Tackling inequalities and development deficits

A. IMPACTS

COVID-19 is widening existing spatial, 26 social, and economic inequalities in cities, making the virus more harmful in a self-perpetuating negative spiral. Deep-rooted inequalities in cities in both the global north and south have heavily influenced the degree and nature of COVID-19 impacts.²⁷ It has become clear that vulnerability to COVID-19 depends on several conditions: where in a city a person lives and works, gender, age, pre-existing health conditions, income level, type of home, and access to public services, such as health facilities, transportation and clean water.

For example, in London (UK), per-capita infection rates in poorer boroughs have been three times higher than in more affluent boroughs.28 In Singapore, clusters of new cases emerged in housing complexes for

low-income migrant workers.²⁹ In New York City (United States of America), data suggests that poorer neighbourhoods and those with the largest average household size were more likely to experience a high number of cases per capita, while neighbourhoods with high concentrations of black and Latino residents were also disproportionately affected.30

The world's one billion slum dwellers also face more acute risks, especially in Sub-Saharan Africa and Eastern and South-Eastern Asia, which account for 23 per cent and 36 per cent of the global urban population living in slums.31 Poverty and marginalisation intersect in slums and poor neighbourhoods, perpetuating other forms of socio-economic, political or cultural inequality, further increasing the level of risks facing residents in these areas.

The global urban housing crisis has worsened the pandemic and been worsened by it. At a time when universal access to adequate

²⁶ Spatial inequality is defined as the concentration of disadvantages in a specific location, and manifests in the different experiences and opportunities that people can have, and the rights that they can exercise, between regions, across the rural urban continuum and within the same city. Spatial inequalities in cities perpetuate other forms of social, economic, political and cultural inequalities. UN-Habitat, "Strategic Plan 2020–23", available at https://unhabitat.org/our-strategy.

²⁷ OECD, "Policy Responses to COVID-19", available at http://www.oecd.org/coronavirus/policy-responses/cities-policy-responses-fd1053ff; and Du, King and Chanchani, "Tackling Inequality", available at https://www.wri.org/blog/2020/04/ coronavirus-inequality-cities.

²⁸ The Conversation, "The coronavirus pandemic is already increasing inequality", 10 April 2020, available at https://theconversation.com/ the-coronavirus-pandemic-is-already-increasing-inequality-135992.

²⁹ UN-Habitat, "How Life in Our Cities Will Look After the Coronavirus Pandemic", 4 May 2020, available at https://unhabitat.org/ how-life-in-our-cities-will-look-after-the-coronavirus-pandemic.

³⁰ New York City, Department of Health, https://www1.nyc.gov/assets/doh/downloads/pdf/imm/covid-19-deaths-race-ethnicity-04082020-1.pdf; and New York Times, "New York City Coronavirus Map and Case Count", available at https://www.nytimes.com/ interactive/2020/nyregion/new-york-city-coronavirus-cases.html.

³¹ https://unstats.un.org/sdgs/report/2019/goal-11.

housing is a frontline defence against the coronavirus, ³² nearly 1.8 billion people live in overcrowded or inadequate housing, slums and slum-like conditions, or in a state of homelessness, with acute risks of exposure. Mainstream prevention measures, such as lockdowns and physical distancing, are more difficult to apply when people live in overcrowded conditions. ³³

Limited access to urban healthcare and basic services is undermining COVID-19 responses.

This is particularly apparent in deprived urban neighbourhoods and among the homeless. Many homes in informal settlements and slums lack access to water and sanitation facilities, making safe and regular handwashing extremely difficult. Typically lacking a direct household connection, those without access to adequate water supply must instead rely on standpipes, wells, boreholes, kiosks or water vendors which may be considerably more expensive.34 For example, slum dwellers in Nairobi (Kenya) pay up to 25 times more for water than is charged by the city's water utility.35 Homeless people often face a precarious choice between sleeping outdoors - where access to water and sanitation, healthcare, and other services is limited - or in a shelter, which may be overcrowded, making physical distancing difficult.36

Access to urban public space is unevenly distributed despite its importance in curtailing COVID-19. This is most prominent in poor and low-income neighbourhoods. Less than half of the global population can access open public spaces within 400 meters walking distance of their home.³⁷

Public space is key in reducing stress levels, improving mental health and wellbeing, contributing to children's development, and establishing temporary facilities. The pandemic has revealed substantial gaps in public space accessibility, flexibility, design, management, maintenance and connectivity.³⁸

The pandemic is exposing the inequalities underpinning the digital divide. Many households, schools and neighbourhoods in already deprived urban areas are not able to access remote education, telemedicine and teleworking due to weak, absent, or unaffordable internet connectivity or lack of computers. ^{39, 40} As a result, many are forced to leave their homes to access work and services. At the end of 2019, the International Telecommunication Union (ITU) estimated that around 3.6 billion people remain offline. Lack of access is much starker in Least Developed Countries (LDCs) where an average of just two out of every ten people is online. ⁴¹

³² OHCHR, "COVID-19 Guidance Note: Protecting residents of informal settlements", 23 April 2020, available at https://www.ohchr.org/Documents/Issues/Housing/SR_housing_COVID-19_Guidance_informal_settlements.pdf.

³³ OHCHR, "Protecting the right to housing in the context of the COVID-19 outbreak", available at https://www.ohchr.org/EN/Issues/Housing/Pages/COVID19RightToHousing.aspx.-

³⁴ UNESCO and UN-Water, *United Nations World Water Development Report 2019: Leaving No One Behind*, 2019, available at https://unes-doc.unesco.org/ark:/48223/pf0000367306/PDF/367306eng.pdf.multi.

³⁵ Ibid

³⁶ OHCHR, "COVID-19 Guidance Note: Protecting those living in homelessness", 28 April 2020, available at https://www.ohchr.org/Documents/Issues/Housing/SR_housing_COVID-19_guidance_homeless.pdf.

³⁷ Progress towards the Sustainable Development Goals: Report of the Secretary-General, available at https://sustainabledevelopment.un.org/content/documents/26158Final_SG_SDG_Progress_Report_14052020.pdf.

³⁸ UN-Women, "COVID-19 and ensuring safe cities and safe public spaces for women and girls", available at https://www.unwomen.org/en/digital-library/publications/2020/05/brief-covid-19-and-ensuring-safe-cities-and-safe-public-spaces-for-women-and-girls; and Kaw, Lee and Sameh editors. Hidden Wealth of Cities 2020

³⁹ Wamuyu, "Bridging the digital divide among low income urban communities. Leveraging use of Community Technology Centers", Telematics and Informatics, vol. 34, No. 8, December 2017, pp. 1709–1720; available at https://pubmed.ncbi.nlm.nih.gov/32343670.

⁴⁰ GSMA, *The Mobile Gender Gap Report 2020*, available at https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/05/GSMA-The-Mobile-Gender-Gap-Report-2020.pdf.

^{41 &}quot;New ITU data reveal growing Internet uptake but a widening digital gender divide", 5 November 2019, available at https://www.itu.int/en/mediacentre/Pages/2019-PR19.aspx.

ADDRESSING INEQUALITY OF ACCESS IN COVID-19 PREVENTION, RESPONSE, RECOVERY



of the urban population lives in slums and informal settlements

Approximately one billion people globally live in slums and informal settlements, often lacking reliable and affordable access to multiple public services and adequate housing.

Source: https://sustainabledevelopment.un.org/ content/documents/26158Final_SG_ SDG_Progress_Report_14052020.pdf.



COVID-19 outbreaks in informal settlements

In Mumbai, as of mid-April 2020 30% of designated containment zones

- which are areas with large outbreaks — were in slums, while 60 per cent were within 100 metres of an informal settlement.

Source: https://www.brookings.edu/ blog/up-front/2020/04/16/ are-slums-more-vulnerableto-the-covid-19-pandemicevidence-from-mumbai.



Water and sanitation

In 2017, 29% of the global population (2.2 billion people) lacked safely managed drinking water and 55 per cent (4.2 billion people) lacked safely managed sanitation services.* At the urban scale, in low income countries, only 27 per cent of the urban population use safely managed drinking water services,** and only 20 per cent of the urban population in Africa (excluding North Africa) use safely managed sanitation services.***

Sources:

- Progress towards the Sustainable Development Goals: Report of the Secretary-General, available at https://sustainabledevelopment.un.org/content/documents/26158Final_SG_SDG_ Progress_Report_14052020.pdf.
- https://data.worldbank.org/indicator/SH.H20.SMDW.UR.ZS.
- https://data.worldbank.org/indicator/SH.STA.SMSS.UR.ZS.

COVID-19's strong regional impact calls for differentiated governance and policy responses

In France, 37% of confirmed cases were concentrated in the Île-de-France region. To help distribute the healthcare burden, the French government transferred patients from the most to the least affected regions.

In Nigeria, 38% of the cases were concentrated in Lagos. The federal and state governments have issued complementary tax relief measures.

Source: https://covid19.ncdc.gov.ng/report.

B. SOLUTIONS AND POLICY RECOMMENDATIONS

Governments could tailor responses for highrisk neighbourhoods given the spatial disparities in COVID-19 impacts and resilience in cities. Engaging the most vulnerable and marginalised communities, including IDPs. migrants and refugees as response partners, can help ensure they can access assistance measures without fear of negative consequences. Disaggregated mapping of COVID-19 vulnerability and hotspots at sub-national level and within cities is critical. For instance. Gauteng Province (South Africa) has engaged academic experts to create maps of communities living in vulnerable areas and the informal sector, and those experiencing food insecurity and susceptibility to the virus. 42

Innovative short-term responses to inadequate and unaffordable housing, overcrowding, and homelessness could be a starting point for long-overdue policy shifts and structural solutions. In the short term, people experiencing homelessness need access to temporary shelter for physical distancing, self-quarantine, self-isolation and care. Governments at all levels need to give clear guidance prohibiting or postponing evictions from any principal residence or land for all residents, regardless of migrations status or formality of dwelling. To prevent people losing their place of residence, governments could consider creating emergency funds, including cash transfers, and working with the banking and finance sector to suspend mortgage repayments, as well as rent support measures.

The local governments of Bogotá (Colombia), Montreal (Canada), Vienna (Austria), and Barcelona and Valencia (Spain) have, for example, made emergency housing available to those without homes, with Valencia and Barcelona partnering with the private sector to mobilize vacant housing units. ⁴³ In the medium and long term, large-scale public investments in affordable and accessible housing and slum upgrading are essential to solve housing shortages. Such investments can also support a labour-intensive economic recovery, provide secure tenure and extend adequate water and sanitation coverage.

effective COVID-19 response, recovery and building resilience to future crises in cities.

Local government efforts are essential to ensure access to public services, especially for the urban poor, slum dwellers, the homeless, and other vulnerable groups. This is particular

Access to essential public services is key for

the urban poor, slum dwellers, the homeless, and other vulnerable groups. This is particularly important for services that are crucial for effectively coping with the crisis (such as water and electricity). For example, avoiding service disconnections for defaulting consumers, reducing water tariffs or providing free water can support effective handwashing and hygiene practices and slow the spread of the virus.

Some cities have provided hand-washing stations in public places and institutions for those that currently lack access to water and sanitation facilities. In Nakuru (Kenya), hand-washing stations in informal settlements, established with the support of UN-Habitat, are permanent and connected to municipal water mains, guaranteeing water flow for continuous hand-washing. 44 The costs for water trucking and refilling of the 1,000-litre reservoir tanks

⁴² https://www.gcro.ac.za.

⁴³ https://www.uclg.org/sites/default/files/eng_briefing_housing_lle1.pdf.

⁴⁴ UN-Habitat, "Youth lead the way in preventing COVID-19 spread in Kenya's informal settlements", 12 May 2020, available at https://unhabitat.org/youth-lead-the-way-in-preventing-covid-19-spread-in-kenya%E2%80%99s-informal-settlements.

have been eliminated. Youth from the municipality are engaged in maintenance of the stations, thereby creating employment opportunities.

Equitable access to health services helps to protect lives. Governments at all levels can implement measures to ensure the urban poor and vulnerable groups have free or low-cost access to protective products, testing, and treatments. For instance, the local governments of Abidjan (Côte d'Ivoire), Johannesburg (South Africa), and Lagos (Nigeria), have delivered sanitary and prevention supplies to communities, social workers and health centres, sometimes in a door-to-door manner. 45 Community groups in low-income neighbourhoods and informal settlements often have well-established networks and structures which can help to decentralise the distribution of key resources.

Governments at all levels as well as health officials can coordinate with hospitals to ensure the burden of COVID-19 treatment is distributed effectively, helping to prevent hospitals in poorer neighbourhoods from being overwhelmed. Construction of temporary emergency hospitals and conversion of existing structures can also boost bed capacity. In New York City (United States), temporary hospitals

helped to increase the state-wide hospital bed count, which rose from about 53,000 to 90,000.46 Many other cities – such as Jakarta (Indonesia), Sao Paulo (Brazil), Wuhan (China), and London (UK) - have constructed emergency hospitals and converted existing facilities to boost capacity during the outbreak.47

Targeted interventions for vulnerable groups.

Recognising the differentiated exposure to risks and impacts, some governments have designed tailored measures for vulnerable groups. For instance, In Pune (India), a collective of waste-pickers has been distributing gloves and masks to informal waste-pickers. 48 In many cities, informal waste-pickers make an important contribution to waste management but are at heighted risk during the pandemic without adequate protection. In Gaziantep (Turkey), coordination with civil society organizations (CSOs) has been critical to overcoming literacy and language barriers in implementing COVID support measures for refugees. Meanwhile, in Quito (Ecuador) the city has collaborated with local migrant associations in ensuring that COVID-19 response efforts account for their needs, while the city has also cooperated with local businesses to expand social assistance initiatives to migrant residents.49

⁴⁵ UN-Habitat, UNCDF, UCLG-Africa, UNECA, COVID-19 in African Cities: Impacts, Responses and Policies, 2020, available at https://unhabitat.org/sites/default/files/2020/06/covid-19_in_african_cities_impacts_responses_and_policies_2.pdf.

⁴⁶ Paul Sonne and Missy Ryan, The Washington Post, "As beds go unfilled, states scale back Army Corps makeshift hospitals", 25 April 2002, available at https://www.washingtonpost.com/national-security/as-beds-go-unfilled-states-scale-back-army-corps-makeshifthospitals/2020/04/24/4570fb5c-8404-11ea-9728-c74380d9d410_story.html.

⁴⁷ The Jakarta Post, "Jakarta's emergency hospital for COVID-19 open for business", available at https://www.thejakartapost.com/ news/2020/03/23/jakartas-emergency-hospital-for-covid-19-open-for-business.html; Ryan Pickerell, Business Insider, "Wuhan is scrambling to fill 11 sports centers, exhibition halls, and other local venues with over 10,000 beds to create makeshift coronavirus hospitals". 4 February 2020, available at https://www.businessinsider.de/international/wuhan-sports-stadiums-makeshift-coronavirus-hospitals-2020-2/?r=US&IR=T; BBC News, "Coronavirus: Field hospitals treating patients around world", 30 March 2020, available at https:// www.bbc.com/news/world-52089337.

⁴⁸ Silpa Kaza, "Waste workers are protecting our communities during COVID-19", 9 April 2020, available at https://blogs.worldbank.org/ sustainablecities/waste-workers-are-protecting-our-communities-during-covid-19.

https://www.uclg.org/sites/default/files/eng_briefing_lle_migration_0.pdf.

INNOVATIVE POLICIES AND SOLUTIONS FOR EQUITABLE PROTECTION AGAINST AND RECOVERY FROM COVID-19 IN URBAN SETTINGS

Measures to support access to housing

Support for the payment of rents

Yokohama (Japan), Vila Nova de Famalicao (Portugal)

Reduction in public housing rent

Addis Ababa (Ethiopia)

Prohibition of housing evictions during the crisis

Mexico, Addis Ababa (Ethiopia)

Postponement of rental payments

Chicago and San Francisco (United States of America), Paris (France), Lisbon and Sintra (Portugal)

Provision of temporary shelter for victims of domestic violence

Namur (Belgium)

Provision of temporary shelter for homeless and fragile groups

 New York and Los Angeles (United States of America), Toronto (Canada), Bilbao (Spain), Paris (France), London (United Kingdom), Bratislava (Slovakia)

Allocation of emergency housing in vacant housing units for people at social risk

Barcelona and Valencia (Spain)

Sources: Most examples are based on an analysis by UN-Habitat of a survey by OECD of tracking COVID-19 city responses from over 40 cities, available at https://www.oecd.org/coronavirus/policy-responses/cities-policy-responses-fd1053ff; https://www.uclg.org/sites/default/files/eng_briefing_housing_lle1.pdf.

Measures currently implemented to support the access and delivery of basic services

Water provision in deprived neighbourhoods

 Mexico City (Mexico), Buenos Aires (Argentina), Lima (Peru), Freetown (Jamaica), Nairobi and Nakuru (Kenya), Dakar (Senegal), Costa Rica

Water service restoration

Chicago and New Jersey (United States of America)

Elimination of water charges

Alora (Spain)

Partial exemption on water, sanitation and urban waste tariffs

Oakland (United States of America), Porto and Braga (Portugal), Machakos (Kenya)

Solid waste collection

Kingston (Jamaica), Lima (Peru)

Source: ILO, "COVID-19 crisis and the informal economy Immediate responses and policy challenges", 2020, available at https://www.ilo.org/wcmsp5/groups/public/@ed_protect/@protrav/@travail/documents/briefingnote/wcms_743623.pdf.

II. Strengthening the capacities of local actors, particularly local governments

A. IMPACTS

COVID-19 has highlighted the critical role of local governments as front-line responders in crisis response, recovery and rebuilding. This is due to their leading role in service delivery, infrastructure investments and mobilization of urban residents. The actions taken by local governments have been essential in addressing immediate health risks and putting in place life-saving measures. These include monitoring and tracing of contacts, establishing additional health, and quarantine and isolation facilities, and delivering supplies and food to vulnerable communities and households. They have also played a key role in supporting local enterprises and businesses through service fee and tax relief.

The COVID-19 pandemic has substantially reduced local and subnational governments' revenues and constrained budgets, as tax-paying local businesses shut and transfers from national governments become unpredictable and insufficient. Local and regional governments that depend mostly on taxes, user charges, fees and income from assets

may experience a more significant impact on their budgets than those that (also) receive transfers from the national government.50

In many cases, these impacts are expected to last beyond the initial stages of the pandemic. For example, the total shortfall in state budgets in the United States is estimated at 10 per cent in the current fiscal year, and about 25 per cent in the 2021 fiscal year. 51 Meanwhile, in Africa, local governments face losses of up to 60 per cent of their revenues. 52 While local governments around the world will feel the impact of COVID-19 on their budgets, crucial differences also exist with regard to their financial situation and capacities. Financial constraints are exacerbated by the cost of responding to the crisis and the need to divert previously allocated funds. Falling urban enterprise productivity, consumption and incomes will also impact national tax revenues.

The crisis has also demonstrated the power of community, and the importance of solidarity and social safety nets in mitigating the impact of such shocks. For example, the municipality of Sfax (Tunisia), together with the Land of Asylum Tunisia Association, has called for solidarity with the local migrant and refugee

⁵⁰ OECD, "The territorial impact of COVID-19: Managing the crisis across levels of government", 16 June 2020, available at https://read.oecdilibrary.org/view/?ref=128_128287-5agkkojaaa&title=The-territorial-impact-of-covid-19-managing-the-crisis-across-levels-of-government.

⁵¹ Center on Budget and Policy Priorities, "States Grappling With Hit to Tax Collections", available at https://www.cbpp.org/research/ state-budget-and-tax/states-grappling-with-hit-to-tax-collections.

⁵² UN-Habitat, "COVID-19 in African Cities", available at https://unhabitat.org/sites/default/files/2020/06/covid-19_in_african_cities_ impacts_responses_and_policies2.pdf.

community.⁵³ Containment measures have hit migrants and refugees particularly hard, with many losing their sources of income.⁵⁴

Local government capacity to deliver essential services and infrastructure are critically con**strained.** The shrinkage of local government revenues could jeopardise crucial urban infrastructure investments, leading to cuts in public services and undermining broader efforts on sustainable urban development. The critical planning and investments needed to prepare for future shocks related to climate change and public health will be severely impacted. This is especially challenging for underserved neighbourhoods and for segments of the population who are highly dependent on public services. There is also a significant risk that the pandemic will compromise - for years to come - local governments' ability to deliver basic services and invest in social infrastructure and essential infrastructure upgrades.

COVID-19 has already had multiple knock-on effects on municipal services. For instance, many cities are struggling with waste collection and management, in light of reduced operations and reallocation of available assets, increased volume of medical waste and single-use plastics from food delivery and takeaways. Against this background, some municipal governments – such as Albuquerque and Bellingham (both United States)⁵⁵ have suspended plastic bag bans or other restrictions on single-use plastics. Meanwhile, disruptions in public transport services are particularly problematic for workers who cannot work from home and, due to spatial segregation, spend more time and money on commuting.

The pandemic has also resulted in innovative local government solutions for COVID-19 response and provision of services. Digital tools have been applied in many countries for tracking and containing the virus, for information and awareness campaigns, and providing essential services to citizens. For instance, Dubai (UAE) introduced a paperless strategy to create a digital national identity for citizens, residents and visitors to access 5,000 government and private services.⁵⁶

⁵³ https://www.citiesforglobalhealth.org/initiatives/gov/187.

⁵⁴ United Nations, "Policy Brief: COVID-19 and People on the Move", available at https://www.un.org/sites/un2.un.org/files/sg_policy_brief_on_people_on_the_move.pdf.

⁵⁵ Gillian Flaccus, AP, "Pandemic deals blow to plastic bag bans, plastic reduction", 8 April 2020, available at https://apnews.com/b58cd897fb1275d8a4bdcb29528b4cce.

Mohammed Soliman, "COVID-19 and the digital landscape in the Gulf", 13 May 2020, available at https://www.mei.edu/publications/covid-19-and-digital-landscape-gulf.

IMPACT OF COVID-19 ON LOCAL GOVERNMENTS AND PUBLIC SERVICES



It is estimated that local government revenue will be

15-25%

lower in 2021 due to COVID-19 undermining public service delivery, infrastructure investments, and sustainable urban development.

Source: https://blogs.worldbank. org/sustainablecities/ cities-are-front-lines-covid-19



Increase in waste

In China's Hubei Province, the COVID-19 response created a

600% increase in medical waste (from 40 to 240 tons per day).

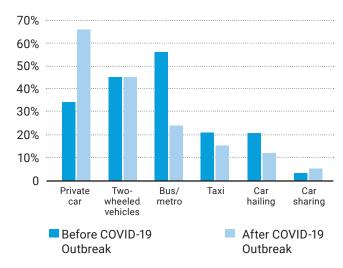
Meanwhile, increases in other Asian cities have also been notable, including an additional 1317 tons per day produced in April in Bangkok, an additional 280 tons per day produced in Manila, an additional 212 tons per day in Jakarta, an additional 154 tons per day in Kuala Lumpur, and an additional 160 tons per day in Hanoi.

Source: ADB, 2020. https://www.adb.org/publications/ managing-medical-waste-covid19





In China, use of public transport declined during and after the COVID-19 outbreak, while private car usage increased.



Source: 13 IPSOS, 'Impact of Coronavirus, Survey of 1,620 consumers in China' (March 2020)



In Thailand, the COVID-19 pandemic and the resulting lockdown has led to a huge rise in the country's plastic waste. According to the Thailand Environment Institute (TEI), the average amount of plastic waste increased from 2,120 tons per day in 2019 to approximately 3,440 tons per day between January and April 2020. The rise in the month of April alone was nearly 62%

Source: http://www.tei.or.th/en/index.php

B. SOLUTIONS AND POLICY RECOMMENDATIONS

National governments could promote more inclusive, collaborative and responsive governance across jurisdictions and levels of government to effectively address COVID-19.

Coordination across all levels of government would ensure coherent policy responses, support local front-line health systems, and ensure timely delivery of assistance packages to vulnerable, marginalised and poor communities. Decisive actions are needed from local, regional and especially national government leaders to confront and overcome the pandemic, and then put cities on a better long-term pathway.

By adopting stimulus packages that maximise support for tailored subnational responses and boost local governments' budgetary capacity, national governments can help ensure that response and recovery measures fit the local context. This will help sustain crucial local government services, strengthen resilience and preparedness, and support local recovery strategies that advance the SDGs and prevent any backsliding on climate and human rights commitments, including on gender equality.

Supporting local governments could lessen the health and socio-economic impacts of the pandemic in cities. There is a clear need to focus on decentralized approaches to COVID-19 responses and ensure sufficient local fiscal capacity to sustain critical public services that are accessible and affordable to all, and to invest in more resilient systems. In Germany, the national government's fiscal stimulus package of EUR 130 billion includes

EUR 25 billion allocated in support of municipalities, including EUR 8 billion to compensate for declining local business tax revenue.⁵⁷

Working with civil society, local governments can improve transparency, and enable effective community engagement in their responses to the pandemic. Collaboration with residents, neighbourhood organisations, community leaders, health and policy experts, and the private sector have proved vital to building the trust needed to implement health measures and to develop innovative responses to COVID-19. Likewise, governments could invest in transparency and effective communication strategies to strengthen accountability and public trust in COVID-19 response.

Communication strategies need to counteract misinformation and disinformation, which continue to spread primarily through social media and encrypted messaging services.58 Strategies should ensure correct information reaches vulnerable and at-risk populations, including people with disabilities, indigenous peoples, migrants and refugees, with information in accessible formats. To ensure that policies are effective and relevant for all urban residents, it is essential to include women, older people, people of diverse sexual orientations and gender identities, and people with disabilities in response planning and decision-making. Emergency responses and measures such as stimulus packages also require higher levels accountability in public organisations as they procure and allocate public resources. Loss of trust due to malfeasance in distributing public funds can also harm public trust in key health measures to slow the spread of the virus.

 ⁵⁷ OECD, "The territorial impact of COVID-19: Managing the crisis across levels of government", 16 June 2020, available at http://www.oecd.org/coronavirus/policy-responses/the-territorial-impact-of-covid-19-managing-the-crisis-across-levels-of-government-d3e314e1.
 58 Link to UN Verified campaign.

Local governments' continued provision of essential public services should be a priority in cities. This is especially critical in healthcare and services of immediate importance for COVID-19 prevention and management. Avoiding disruptions in waste management services will help to avoid additional risks to public health caused by improper waste management.

Public transport remains vital, especially for the urban poor and vulnerable groups that need to continue commuting to work and accessing essential services. Even before the pandemic, only about half of the world's urban population had convenient access to public transport. 59 Declining ridership and continued stigmatisation of public transport due to perceived health risks during the pandemic – if not reversed – could jeopardise the global transition to sustainable and accessible transport, and impede progress against the climate and air pollution crises, and lead to debilitating levels of track and flow-on economic harms in cities.

Measures to digitize payments to health workers, instead of cash payments which are frequently slow, inaccurate and susceptible to

graft, fraud and violent theft after payment, have proved highly effective in previous health crises (notably Ebola). Such measures can strengthen health workforces, discourage absenteeism and support health workers undertaking extremely dangerous work during the pandemic for the benefit of their communities. Such measures can also provide efficiencies and cost-savings to highly stretched health services budgets. 60 Paying workers digitally can also support economic empowerment of women, including in household spending decisions, compared to cash payments.

In the longer term, urgent attention is needed to address the inadequate state of public services in many cities, which has been compounded by years of disinvestment and poorly managed privatisation of public services in many cases. The digitisation of service provision can enhance both access and efficiency, though further exclusion of the poor and vulnerable groups needs to be avoided by ensuring equitable and safe access to digital technology and the internet.

⁵⁹ Progress towards the Sustainable Development Goals: Report of the Secretary-General, available at https://sustainabledevelopment. un.org/content/documents/26158Final_SG_SDG_Progress_Report_14052020.pdf.

⁶⁰ Better Than Cash Alliance, "Saving Money, Saving Lives: A Case Study on the Benefits of Digitizing Payments to Ebola Response Workers in Sierra Leone", 18 May 2016, available at, https://www.betterthancash.org/tools-research/case-studies/ saving-money-saving-lives-a-case-study-on-the-benefits-of-digitizing-payments-to-ebola-response-workers-in-sierra-leone.

INNOVATIVE POLICIES AND SOLUTIONS FOR LOCAL GOVERNMENTS AND PUBLIC SERVICES



Grants and intergovernmental transfers

As of March 2020, in China, 83% of confirmed cases were concentrated in Hubei province. The central government allocated Hubei Province CNY 35 billion in general grants to be used at the discretion of the provincial government, following national general policy guidance. Also as of March 2020, in South Korea, 71% of confirmed cases were concentrated in Daegu City. South Korea adopted a supplementary budget in March 2020 that includes support for Daegu City and North Kyeongsang Province, two of its hardest hit areas.

Sources: https://www.reuters.com/article/us-health-coronavirus-chinafunding/china-to-step-up-funding-support-for-virus-hit-regionsidUSKBN20S0JK; http://www.oecd.org/coronavirus/policy-responses/theterritorial-impact-of-covid-19-managing-the-crisis-across-levels-ofgovernment-d3e314e1;

"Tackling COVID-19: Health, Quarantine and Economic Measures of South Korea" by Development Finance Bureau at Ministry of Economy and Finance (MOEF), Korea Center for Diseases Control (KCDC) and Ministry of Health and Welfare (MOHW). https://eena.org/wp-content/uploads/Tackling-COVID-19.pdf

Cultural access and participation



To provide city inhabitants with regular access to cultural services as well

as to strengthen social ties and foster cooperation between communities during the COVID-19 outbreak, the Ministry of Culture of Mexico City launched a dedicated and innovative website *Cultural Capital in Your Home*. The website allows inhabitants to participate in scheduled cultural events and activities virtually, thereby supporting artists and cultural workers.

Source: https://en.unesco.org/news/ digital-concerts-unite-citizensmexico-city.



Digital communication and services

The Provincial Government of Jakarta (Indonesia) has created a dedicated COVID-19 website, available in Bahasa and English, which provides inhabitants with key statistics on the outbreak in the region, timely updates, a COVID-19 hotline service, and an online 'self-assessment check' from the Jakarta Department of Health.

Singapore has set up an online chatbot (called 'COVID-19 Chat for Biz') to address business questions related to COVID-19, as well as a 'COVID-19 GoBusiness Portal' that supports businesses in obtaining essential worker permits.

In Uganda, Jumia Food Uganda, a leading e-commerce company, has entered into a partnership with several informal markets on an experimental basis for sustaining supply chains for micro, small and medium enterprises (MSMEs) and connecting informal vendors with consumers online.

Sources: https://corona.jakarta.go.id/en;

https://www.tech.gov.sg/products-and-services/responding-to-covid-19-with-tech; https://www.ug.undp.org/content/uganda/en/home/blog/2020/connecting-informal-market-vendors-to-e-commerce-to-reach-consum.html

Community development



The city of Helsinki offered quick financial support to young people to enhance community participation through innovative means, during the pandemic. A maximum of €5,000 per applicant was provided to encourage the use of new innovative and digital ways to engage the city residents in sports, culture, and other community activities.

Source: https://www.hel.fi/uutiset/en/kaupunginkanslia/ corona-crisischallenged-city-into-quickness-flexibility-and-new-solutions

Support provision and rapid response from local government networks

Local government networks ramped up their support to local and regional governments even as the pandemic unfolded in different parts of the world. UCLG and Metropolis launched a live learning series and the Cities for Global Health platform. ICLEI-Local Governments for Sustainability, the Commonwealth Local Government Forum, the Global Cities Resilience Network and Mayors Migration Council also facilitated multiple learning events, networks and trackers, and curated guidance and tools. C40 repurposed their climate networks to deliver support on COVID response and developing a Mayors COVID-19 Task Force. The Global Task Force for Local and Regional Governments provides a key platform to galvanize efforts in support of local and regional governments.

III. Pursuing a resilient, inclusive and green economic recovery

A. IMPACTS

COVID-19 has interrupted global value chains (GVCs), devastated the hospitality, travel and tourism industries, and disrupted the global economy, likely causing the deepest recession since the Second World War. The supply of business inputs has been impacted by lockdowns and transportation disruptions, severely impacting manufacturers and retailers. The World Bank has found that all countries and almost all sectors will suffer a decline in exports in the coming years, with worse outcomes in regions more dependent on international trade, particularly through GVCs and tourism.⁶¹ Cities with less diversified economies may be hit especially hard. For example, cities with a revenue base reliant largely on tourism may see acute economic shrinkage and job losses as earnings from international tourism may decline by as much as 80 per cent in 2020, accompanied by the loss of 120 million jobs.62

Local economies have been hit hard by the COVID-19 crisis. Cities drive national economies and account for 80 per cent of global GDP, with significant flow-on effects across national economies.63 During lockdowns,

most sectors of the urban economy have contracted, and many enterprises have reduced their operations or closed permanently. Small local businesses and enterprises in particular often lack a financial buffer to withstand the impacts. They are also typically more reliant on physical stores than e-commerce, making them particularly vulnerable to income losses during lockdown.64 This has led to substantial falls in productivity of enterprises, further depressing economic growth, and reduced tax revenues for local and national governments. In many instances, particularly in lower-income countries and cities with limited capacity to borrow on international financial markets, this can constrain governments' capacity to provide essential response measures at the speed and scale needed to slow the virus' spread.

Major job losses have occurred in cities, especially informal and low paying jobs. Urban areas employ 38 per cent of the global workforce and account for most participants in sectors classified as "high risk" by the International Labour Organization (ILO) in the context of COVID, namely food and accommodation, retail and wholesale, business services and administration, manufacturing, tourism and hospitality.65 Hours worked across all countries and regions

⁶¹ World Bank, Global Economic Prospects, June 2020, Washington, DC; World Bank,

⁶² UNWTO, "Tourist Numbers", available at https://www.unwto.org/news/covid-19-international-tourist-numbers-could-fall-60-80-in-2020.

⁶³ World Bank, "Urban Development", available at https://www.worldbank.org/en/topic/urbandevelopment/overview.

⁶⁴ University of Pennsylvania, Wharton, "How COVID-19 Will Change the Way We Shop", 8 May 2020, available at https://knowledge.wharton.upenn.edu/article/covid-19-will-change-way-shop.

⁶⁵ United Nations, "Work and COVID-19", available at https://www.un.org/sites/un2.un.org/files/the_world_of_work_and_covid-19.pdf.

are estimated to have fallen dramatically, by
14 per cent in the second quarter of 2020 relative
to the last quarter of 2019. This decrease in
hours worked is equivalent to a loss of 400 million full-time jobs. Globally, the effects have been
especially severe in the informal sector, which
represents 90 per cent and 67 per cent of total
employment in low and middle-income countries
respectively, and encompasses eight out of every
ten enterprises in the world. In the first month of
the crisis, globally informal workers lost as much
as 60 per cent of their earnings. In Africa and
Latin America this figure was nearly 80 per cent.

Informal workers and people in low-paying jobs often face greater occupational health and safety hazards compared to formally employed workers, and also often lack job security, benefits, social protection or means of collective bargaining. For example, 72 per cent of Brazil's 13.6 million favela residents have no savings. ⁶⁹ Income relief measures from local and national governments often did not reach informal workers because they are not included in national registrations. This has added to distress, hunger, economic insecurity, and has made it much harder – if not impossible – to stay at home and quarantine during shutdowns. Lockdowns are rarely

enforceable among these groups whose top priority remains access to wages for basic sustenance, notwithstanding the potentially fatal risks of exposure. Vulnerable workers, including migrants and indigenous people, also face catastrophic effects from economic disruptions from COVID-19, with up to 420–580 million people likely to be pushed into poverty due to the pandemic in the case of a 20 per cent contraction of household income or consumption.⁷⁰

Lockdowns and dramatically lower economic

activity have seen some positive short-term environmental impacts, such as clean air in cities known for toxic air quality. COVID-19 has shown that a green urban future is possible. The reduction in motorised transport in many cities has led to lower pollution and greater use of non-motorised transport modes such as walking and cycling.⁷¹ At the same time, studies indicate that wherever landscape fragmentation is low and native biodiversity is high, infections rates for zoonotic diseases can be reduced.72 Beyond this direct health benefit, nature-based solutions that promote biodiversity in and around cities can provide additional ecosystem services such as reduced urban heat island effects. 73 flood control and air purification.

⁶⁶ International Labour Organization (ILO), ILO Monitor: COVID-19 and the World of Work, fifth edition, 30 June 2020.

⁶⁷ ILO, "COVID-19 and the informal economy", available at https://www.ilo.org/wcmsp5/groups/public/@ed_protect/@protrav/@travail/documents/briefingnote/wcms_743623.pdf.

⁶⁸ United Nations, "Work and COVID-19".

⁶⁹ L. Richmond, Brazil urban inequalities will exacerbate the impacts of COVID-19, LSE, Latin America and Caribbean Centre, 2020.

⁷⁰ A. Sumner, C. Hoy and E. Ortiz-Juarez, "Estimates of the Impact of COVID-19 on Global Poverty", Helsinki: UNU-WIDER, available at https://doi.org/10.35188/UNU-WIDER/2020/800-9.

TEA, "Changes in transport behaviour during the Covid-19 crisis", 27 May 2020, available at https://www.iea.org/articles/changes-in-trans-port-behaviour-during-the-covid-19-crisis; Transformative Urban Mobility Initiative, COVID-19 and Sustainable Mobility, 26 May 2020, available at https://www.transformative-mobility.org/assets/publications/2020_05_TUMI_COVID-19-and-Sustainable-Mobility.pdf; European Environment Agency, "Air quality and COVID-19", available at https://www.eea.europa.eu/themes/air/air-quality-and-covid19; Shardul Agrawala and others, "Call for comments: climate and clean air responses to COVID-19", International Journal of Public Health, 3 May 2020, available at <a href="https://www.nasa.gu/feature-in-o3r_u800FbROSkh2p65_e4RwlQNchNByi7w-bcMAY7tzlVGLFMlfMxAKFYkKDdd01cUYYvQvcA4cVPojugmmsHjuSg4-Nj7tmszxT6-TY8LyKe0F84wzWKFMEu630CZ3PjDwlnQ5hVMX-7Pysx6X-S9UeYHRyhw25BMKLeekX1c%3D; National Aeronautics and Space Administration, "NASA Monitors Environmental Signals From-global-response to COVID-19", 29 April 2020, available at https://www.nasa.gov/feature/nasa-monitors-environmental-signals-from-global-response-to-covid-19; Guojun He, Yuhang Pan and Takanao Tanaka, "The short-term impacts of COVID-19 lockdown on urban air pollution in China", Nature Sustainability, 7 July 2020, available at https://www.nature.com/articles/s41893-020-0581-y.

⁷² Parviez R. Hosseini and others, "Does the impact of biodiversity differ between emerging and endemic pathogens? The need to separate the concepts of hazard and risk", *The Royal Society Publishing*, 24 April 2017, available at https://royalsocietypublishing.org/doi/10.1098/rstb.2016.0129; David A. Wilkinson and others, "Habitat fragmentation, biodiversity loss and the risk of novel infectious disease emergence", *Journal of The Royal Society Interface*, December 2018, available at https://www.researchgate.net/publication/329438436_Habitat_fragmentation_biodiversity_loss_and_the_risk_of_novel_infectious_disease_emergence.

[&]quot;Urban heat island effect" is a phenomenon where urban areas are significantly warmer than surrounding rural areas. Reasons for this include the warmth produced by the concentration of vehicles such as buses and cars, and building construction that makes it harder for warm air to escape.

Meanwhile, many large corporations have expressed their intention to promote work from home indefinitely, drastically reducing their real estate costs, energy usage and carbon footprint in cities. Some major global technology companies have said workers should plan to work remotely until 2021, while others have indicated that a return to office remains optional for the foreseeable future. One has indicated that most employees can permanently switch to working from home. These major companies' policies are expected to set a similar agenda for smaller technology firms, as well as firms in many other sectors and countries.74

COVID-19 has shown the immense possibilities for a climate resilient urban future.

Communities and cities already vulnerable to other climate and natural disasters have been severely impacted by COVID-19. For instance, East African countries are faced with the impacts of COVID-19, locusts and flooding simultaneously.75 Climate change mitigation and adaptation thus remain of primary importance for building resilient cities and communities.

The correlation that is often implied between COVID-19 and compact urban development is misleading and can encourage de-densification and sprawl. While concerns have been expressed that density may accelerate the spread of COVID-19, there is no evidence to suggest that density per se correlates to higher transmission. The perceived effects of density on COVID-19 are in fact the result of corollary factors such as overcrowding, income, access to services.

For example, one analysis of Chinese cities76 and another of New York City77 neighbourhoods showed no correlation between density and incidence of COVID-19. The New York study did, however, show an inverse correlation between income and incidence which warrants further study of overcrowding, access to health care, and the impact of exposure to pollution. 78 Efforts to de-densify cities will risk backsliding on achieving the SDGs, climate and biodiversity-related goals.

Systematic, reliable and robust urban data and statistics played a central role in the capacity of local and national governments to respond to COVID-19. Globally, the availability of sub-national and city scale data remains limited compared to national level data. Improving such data collection and analysis will be all the more critical in an era where the majority of the world's population resides in cities and where sustainable development priorities will increasingly become urban in nature.

Countries such as South Korea, Singapore, and Israel benefited from robust and digital data systems and platforms for effective COVID-19 prevention and management. COVID-19 also led to some improvements in the scope, scale and innovation in sub-national and local data. 79 Weaknesses and gaps in subnational and city level data, especially in informal settlements among the most vulnerable, constrained response measures and effective targeting and monitoring in some contexts and exacerbated violence.

⁷⁴ Rachel Lerman and Jay Greene, "Big Tech was first to send workers home. Now it's in no rush to bring them back", Washington Post, 18 May 2020, available at https://www.washingtonpost.com/technology/2020/05/18/facebook-google-work-from-home.

⁷⁵ World Health Organization, "COVID-19, locusts, flooding: WHO and triple threat in Somalia", available at https://www.who.int/news-room/ feature-stories/detail/covid-19-locusts-flooding-who-and-triple-threat-in-somalia.

⁷⁶ Wanli Fang and Sameh Wahba, "Urban Density Is Not an Enemy in the Coronavirus Fight: Evidence from China", 20 April 2020, available at https://blogs.worldbank.org/sustainablecities/urban-density-not-enemy-coronavirus-fight-evidence-china

⁷⁷ Robert Kehew, "New York City: Population Density and Income Levels Versus Incidence of Coronavirus", UN-Habitat, April 2020.

⁷⁸ Ibid.

⁷⁹ Subnational innovation?

DECLINING URBAN CONSUMPTION AND PRODUCTIVITY DUE TO COVID-19 AND THE IMPACT ON NATIONAL ECONOMIES



The contribution of cities to national GDP is as high as 70 per cent in countries such as Botswana, Uganda, Tunisia and Kenya. On average, nearly a third of national GDP (31 per cent) comes from the largest city in African countries.

Source: https://www.un.org/ africarenewal/news/ coronavirus/eca-economicimpact-covid-19-african-citieslikely-be-acute-through-sharpdecline-productivity.



Bikeshare system

Use of New York City's public bikeshare system increased by

67% in early March and bike traffic on its main bridges rose by 52 per cent.

Source: https://nyc.streetsblog. org/2020/03/12/boom-new-citibike-stats-show-cycling-surgeis-real-but-mayor-is-not-acting.



A survey of five informal settlements in Nairobi (Kenya) during COVID-19 lockdown showed that

of residents reported partial or complete loss of income,

and 87 per cent had skipped meals or eaten less.

Source: https://www.popcouncil.org/ uploads/pdfs/2020PGY_CovidKenya KAPStudyPresentationRound2.pdf.



Air pollution

Levels of nitrogen dioxide fell by more than 70 per cent during the lockdown in New Delhi (India), 40 per cent in urban areas in China, 20 per cent in Belgium and Germany, and 19–40 per cent in different areas of the US. At the same time, air pollution may contribute to the morbidity of COVID-19 as one study shows that increased levels of PM2.5 are associated with an increase in the COVID-19 death rate.

Source: https://www.medicalnewstoday.com/ articles/the-dual-effects-of-covid-19lockdowns-on-air-quality#The-firstpaper:-Nitrogen-dioxide;https://projects. ig.harvard.edu/covid-pm.



Overcrowded living conditions

Informal workers face an increased risk of contracting COVID-19 because of inadequate and overcrowded living conditions and a lack of access to health services, PPE, and social protection. Meanwhile, COVID-19 containment measures impact their ability to earn an income. With many relying on daily wages and having limited savings, the economic impact is severe.

Sources: WIEGO (2020). https://www.wiego.org/covid19crisis;
WIEGO, "COVID-19, Informal Workers and WIEGO's Work during this Crisis", 15 May 2020, available at https://www.wiego.org/covid19crisis.

B. SOLUTIONS AND POLICY RECOMMENDATIONS

Financial assistance programmes are needed to support and mitigate the impact of COVID on local firms and businesses. This may mean direct financial support and social protection programmes (e.g. cash transfers, tax deferrals, wage subsidies, subsidised sick leave, subsidised social security contributions and unemployment insurance) for SMEs and informal businesses or indirect assistance in shifting their business activities to other sectors that are in demand, such as medical and protective equipment. The authorities of Moscow city have adopted a suite of measures to support businesses and companies including delayed payment of sales and other taxes and expanded loan support, thereby benefiting 35,000 companies.80

Local economic development strategies are critical for recovery as they can reduce disparities between cities and communities, foster social cohesion, generate local business opportunities and jobs, and bring women and excluded groups into productive employment. The concept of the social and solidarity economy (SSE) and other community-based economies are particularly suited to people-centred and planet-sensitive development trajectories.

Local economic development strategies can also help to foster productive and diversified and therefore more resilient - city economies. Beyond the immediate economic stimulus and support for firms, households and individuals, the underlying structural vulnerabilities of city economies and institutions need to be addressed. The distribution of employment

and firms across economic sectors in cities is a determining factor in the vulnerability and recovery capacity of local economies in the face of shocks like COVID-19. Cities with a narrow economic base face considerable risk, especially where the dominant sector on which they depend is directly affected.

In the US, for instance, economically specialised cities such as Las Vegas, Nevada (tourism), Bakersfield, California, (energy) and Beaumont, Texas (also energy) faced challenges from COVID-19 impacts on those sectors.81 On the other hand, cities dominated by the informal sector without a strong productive manufacturing and tradable services also faced acute challenges in the face of COVID-19, underscoring the urgency of gradual formalisation in national policies.82 While diversification is not necessary for all cities and some thrive through specialisation, the implication of the structure of local economies for future is a critical consideration for both local and national governments.

Social protection is urgently needed with a focus on the most vulnerable and marginalized urban groups, including indigenous peoples, women and children, older persons, homeless, prisoners, drug users, and persons with disabilities, regardless of formality of work or migration status. The expansion of social protection to the informal sector and unpaid care workers - many of whom are women - is urgent. Ensuring that socioeconomic recovery efforts trigger a long-overdue transformation for these groups is of utmost importance.

Social protection should be a necessary investment in people instead of a burden and thus mainstreaming it in domestic resource frameworks is advisable.83 Many national and local

⁸⁰ Moscow Mayor official website, "Anti-crisis measures: Giving companies a helping hand during the pandemic", 20 May 2020, available at https://www.mos.ru/en/news/item/74202073.

⁸¹ Alan Berube, "Which city economies did COVID-19 damage first?", Brookings, 29 April 2020, available at https://www.brookings.edu/ blog/the-avenue/2020/04/29/which-city-economies-did-covid-19-damage-first.

⁸² United Nations, "Work and COVID-19", available at https://www.un.org/sites/un2.un.org/files/the_world_of_work_and_covid-19.pdf.

⁸³ Ibid.

INNOVATIVE POLICIES AND SOLUTIONS FOR URBAN GREEN RECOVERY AND ECONOMIC SUPPORT

Barter systems

Fiji has lost 5 per cent of its jobs due to the decline in tourism, its economic mainstay, and in response more than 10 per cent of its citizens have joined the online group Barter for Better Fiji to revive a historical exchange of goods such as fresh produce for construction, legal and medical services in Suva, Nadi and other cities and towns across the country.

Source: https://www.theguardian.com/world/2020/may/08/two-pigletsfor-a-kayak-fiji-returns-to-barter-system-as-covid-19-hits-economy.

Sustainable and safe mobility

Cities are creating new bike lanes or widening existing ones - Berlin (Germany), Bogota (Colombia), Brussels (Belgium), Paris (France), Milan (Italy); introducing short-term street closures and temporary bike lanes – Vancouver (Canada), Denver and New York (United States of America), Budapest (Hungary), Mexico City (Mexico); converting streets into pedestrian zones – Tel Aviv (Israel), New York (United States of America), Toronto (Canada); offering health workers temporary free access to electric bikes – London (United Kingdom); implementing hygiene and safety measures in public transport, such as cleaning and disinfection – Mexico City (Mexico), San Francisco (United States of America), Venice and Naples (Italy), Bratislava (Slovakia); and installing handwashing devices – Bogota (Colombia), Cape Town (South Africa), Kigali (Rwanda).

Source: DW (2020) Coronavirus inspires cities to push climate-friendly mobility, available at https://www.dw.com/en/coronavirus-inspires-cities-to-push-climate-friendly-mobility/a-53390186; C. Armario, "Bogotá fomenta uso de bicicletas para prevenir COVID-19", AP News, 2020, available at https://apnews.com/8c0e0770a0e5438d8b7b3c23ad18301a.

Support to SMEs and workers



City governments around the world are supporting local business and economic recovery, including through tax incentives – Paris (France); tax breaks – Madrid (Spain), or tax exemptions – Braga (Portugal); financial incentives to companies – Mexico

City (mexico); emergency financial support – Montreal (Canada); direct transfers, particularly to the informal sector and vulnerable groups – Chihuahua (Mexico); discounts in payroll tax in medium size companies, microcredits and emerging credits for individuals and SMEs – New York (United States of America), Tokyo (Japan), Buenos Aires (Argentina), Mexico City (Mexico) Cape Town (South Africa); additional paid sick leave – San Jose, San Francisco (United States of America); and productive project programs and mutual aid funds – Milan (Italy).

Reforming social protection programmes

Several Arab governments had already invested in reforming their social protection systems before the crisis by establishing extended social registries to expand social assistance to parts of the informal sector and poor population. During the current pandemic, this policy infrastructure was used to rapidly expand assistance. Governments opened additional support programmes to which informal workers could apply (Jordan, Tunisia), and extended health insurance to people who lost their jobs (Morocco).

Source: Based on an analysis by UN-Habitat of a survey by OECD of tracking COVID-19 city responses from over 40 cities, available at https://www.oecd.org/coronavirus/policy-responses/cities-policy-responses-fd1053ff.



Measures to reactivate food systems and support local production and distribution include:

E-commerce of agricultural products – Nanjing (China)

Organization of community collective food purchasing – Wuhan (China)

Access to food in slums - Nairobi (Kenya)

Access to food in poor neighbourhoods – New York (United States)

Food aid systems targeting the elderly and vulnerable and linking farmers with consumers – Milan (Italy), Ljubljana (Slovenia), Dakar (Senegal)

Free meal dispensation – New York (United States), Zaragoza (Spain)

Food hub mobile units – Quito (Ecuador)

Mobile wholesale market services – Lima (Peru)

Home deliveries of food – Montevideo (Uruguay)

Community restaurants - Brasilia (Brazil)

Community food distribution models – Ottawa (Canada)

governments have introduced social protection measure in response to COVID-19, which could be sustained in the longer-term. For example, in China, local governments were required to increase benefit amount of the national social assistance scheme for all beneficiaries or those infected. In Vietnam, cash transfers were provided to those who lost their jobs but were not eligible for unemployment insurance, including many in the informal sector.84

COVID-19 recovery and rebuilding in cities could prioritise green, gender-responsive and sustainable pathways. The fiscal stimulus packages planned in 2020 and 2021 could either help to steer economic development towards a lower-carbon, more resilient pathway – or lock in devastating climate risk and vulnerability for generations to come. In the medium term, national, regional, and local governments can tackle climate change by ensuring that stimulus packages focus on sectors with potential for ecological transition and employment creation for men and women. Evidence suggests that investments in low-carbon urban development has the potential to directly support 87 million more jobs in 2030 than business-as-usual' development.85

A green recovery will also mean incorporating models based on local economic development, proximity production and consumption patterns, connecting cities with rural communities and shortening supply chains. Stimulus measures could also target sustainable infrastructure and elements of renewable energy and

green buildings and construction integrated into urban planning and design, as well as nature-based solutions. With respect to green buildings and construction, for example, the UK is planning a £3 billion retrofit programme to improve energy efficiency in homes as well as public buildings such as schools, several of which are located in urban areas.86

A deliberate effort is needed to sustain, adapt and expand integrated, multi-modal transport systems in cities and metropolitan areas to rethink and transform public transportation, ensuring the shift away from private car use to more sustainable, inclusive, healthy and safe forms of mobility for women and men. For example, in the US, several cities such as Austin (Texas), are exploring congestion reduction measures that can be used to help maintain some of the air quality improvements and emissions reductions that have occurred during the COVID-19 lockdown, while yielding desperately needed cost and productivity savings.87

Cities are uniquely positioned to drive a transition from a linear to a circular economy, effectively integrating systems of energy, food, waste and transport among producers and consumers. They agglomerate resources, capital, data, and talent in ways that shorten distances and consolidate infrastructure, which in turn reduces per capita rates of resource use. Application of circular economy principles can help to create jobs during the recovery and simultaneously reduce waste and costly consumption patterns.88

⁸⁴ International Labour Organization, "Social protection responses to the COVID-19 pandemic in developing countries: Strengthening resilience by building universal social protection", May 2020, available at https://www.ilo.org/wcmsp5/groups/public/---ed_protect/--soc_sec/documents/publication/wcms_744612.pdf.

⁸⁵ Coalition for Urban Transitions, Climate Emergency, Urban Opportunity, London and Washington, DC: World Resources Institute (WRI), Ross Center for Sustainable Cities and C40 Cities Climate Leadership Group, 2019, available at https://urbantransitions.global/ urban-opportunity.

⁸⁶ Will Ing, "Chancellor to unveil £3 billion retrofit funding", Architects' Journal, 7 July 2020, available at https://www.architectsjournal. <u>co.uk/news/chancellor-to-unveil-3-billion-retrofit-funding/10047507.article.</u>

⁸⁷ Cailin Crowe, "4 cities win smart intersection challenge to reduce congestion", Smart Cities Dive, 29 June 2020, available at https://www. smartcitiesdive.com/news/4-cities-win-smart-intersection-challenge-to-reduce-congestion/580698.

⁸⁸ United Nations Environment Programme, "Statement from the Partnership for Action on Green Economy: The Choices We $Make\ Now\ Will\ Shape\ the\ Future",\ 14\ April\ 2020,\ available\ at\ \underline{https://www.unenvironment.org/news-and-stories/statement/property.}$ statement-partnership-action-green-economy-choices-we-make-now-will.

It is important to prevent urban de-densification in response to COVID-19. Instead, strategic density should be promoted to ensure that infrastructure and urban services work efficiently while reducing resource use and greenhouse gas emissions. Well-designed, adequate levels of urban compactness sustain higher economic productivity and environmental efficiency, critical for overcoming the impact of COVID-19. They also create enabling environments for the prevention of disease and promotion of health.⁸⁹

Urban and regional planning need to concertedly promote compact, integrated, mixed-use cities that reduce the distance between place of work and place of residence, while ensuring an adequate supply of public and open green space (particularly in overcrowded neighbourhoods) and public and non-motorised transport. For example, Paris (France) has pledged to become a '15-minute city' in which every resident can meet their essential needs within a short walk or bike ride.

Stimulus packages could support local climate resilience and climate resilient infrastructure projects with high job creation potential, while

reducing both resource use and greenhouse gas emissions and bringing nature to the city. At the same time, it is advisable to put in place and strengthen adapted preparedness plans for predictable risks and disasters (e.g. hurricanes, heatwaves, and climate emergency) which may be exacerbated by COVID-19 impacts.

Data-driven approaches are needed to build urban resilience. As COVID-19 is exposing acute gaps in sub-national and urban disaggregated data, now is the time to put in place measures to address this through their statistical systems, ensuring data is disaggregated at the most local of levels and disaggregated by sex and age. In an urban world, the availability of highly localized data and statistics across all dimensions of sustainable development is central to monitoring progress and designing effective and targeted location-specific policies. This is important in the context of the SDGs more broadly but also specifically for resilience profiling and planning, to build a more granular and in-depth understanding at the urban level, make efficient use of scarce resources for immediate response, identify hotspots, and prioritise targeted resilience interventions for communities and individuals.91

INNOVATIVE POLICIES AND SOLUTIONS FOR ENHANCING URBAN RESILIENCE



Harnessing experiences from previous disasters

Cape Town (South Africa) is benefiting from 'crisis muscle memory' — many of the same planners who worked on the drought response are now dealing with COVID-19 and using similar tools, such as building an index to show who is most vulnerable and developing a dashboard of metrics to track the situation. Cape Town's Director of Resilience noted that 'it is not uncommon for our city team members to regularly say in our planning meetings that we learned something during the drought, and we should be cognizant of it now'.

Source: Quote from Gareth Morgan, Cape Town's Director of Resilience, available at https://www.weforum.org/agenda/2020/05/cities-pandemic-coronavirus-covid19-health-response-response-rebuild.

⁸⁹ The Lancet, "Urban design, transport, and health" series, available at https://www.thelancet.com/series/urban-design.

⁹⁰ United Nations Environment Programme, "Climate leadership for inspiration on Women's Day and every day", 6 March 2020, available at https://www.unenvironment.org/news-and-stories/story/climate-leadership-inspiration-womens-day-and-every-day.

⁹¹ www.urbanresiliencehub.org

Conclusion: The future of cities

The current pandemic has shown that society is capable of rapid transformation and adaptation. Avoiding a return to the pre-pandemic status quo and instead transforming cities globally for future resilience, inclusion, green and economic sustainability has never been more urgent. We also know that this is possible.

An inclusive urban future is necessary for resilience. Deep-rooted spatial inequalities in cities pose considerable risk as clearly shown by COVID-19. The pandemic has exacerbated existing inequalities, with the sharpest fault lines evident in our cities. Without inclusive cities and urban development, the impacts of future shocks and stress may be as acute as - or greater than - they have been during the current outbreak. If cities continue to be divided starkly along lines of income, service access, race, and migration status, leaving no one behind will be progressively more difficult. Investing in inclusive cities means investing in inclusive nations. Reducing urban inequalities is a cornerstone to ensure we are all better prepared for future shocks and crises and are able to thrive.

Ensuring that innovation is integral to the design, planning and management of cities has multiple benefits. The current pandemic has accelerated digitalisation in service delivery, including telemedicine, shifts to remote work, and the application of technology to various aspects of crisis prevention and management. Promoting behavioural shifts and applying

technology-based solutions applied to managing the effects of COVID-19 are of continued importance even beyond the crisis. The possibilities for digitisation in governance, commerce, work, and key economic sectors, including manufacturing, are immense. COVID-19 has had the impact of accelerating progress in these areas and has made the application of digital solutions and innovation to plan, manage and govern cities and urban infrastructure imperative. Address digital inequality within and between cities, while ensuring that fundamental and digital rights are safeguarded, will be key in this endeavour.

Economic recovery can drive a profound green transformation. The short-term environmental impacts seen during COVID-19 have demonstrated what is possible if we take collective and decisive action. Well-designed stimulus measures that support a green economic recovery can yield long-term economic benefits, prevent stranded assets and avoid locking in high emission and high polluting infrastructure and transport systems that may last for decades. Aligning urban planning and development with human and planetary health is essential to avoid ecological imbalances, increased risk of exposure to new pathogens, and the emergence of new diseases. Only by seizing this moment to expand investments in an equitable green transformation will we create lasting solutions and reduce the risks of future crisis and adequately mitigate the impacts of climate change.

As this brief has shown, many policy options are available for local governments and more broadly to set cities on a course towards sustainability, accessibility, innovation, equality and respect for human rights. The policy recommendations can be adapted to local contexts – not just to acknowledge the unique strengths and challenges of different cities and even neighbourhoods within cities, but also to ensure that their unique character and culture are respected. Measures have also been proposed for national governments to support cities in this endeavour. And the United Nations stands ready to work with countries on this process.

If sustained and scaled, policy choices made today could determine our resilience against future pandemics, life-altering climate and economic hazards and shocks, and our ability to achieve the SDGs. We can rebuild our cities by taking the vital steps of 1. First, tackling inequalities and development deficits; 2. Second, strengthening the capacities of local actors, particularly local governments, and 3. Third, pursuing a green resilient and inclusive economic recovery.

If done right, the response to this urban crisis can lead to a revolution and collective reprioritisation of the world's cities: towards diversity, inclusion, sustainable work, innovation, environmental sustainability, gender-responsive systems and cohesive community building in the urban spaces we all share.