



HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

HLPF 2020 Session: Bolstering local action to control the pandemic and accelerate implementation¹

[Most closely related SDGs: SDG 9, SDG 11, and SDG 17]

THURSDAY, 9 JULY 2020, 9:00 AM - 10:30 AM

Background Note

1. Executive summary

1. While SDG 11 on making cities and human settlements inclusive, safe, resilient and sustainable provides a specific set of targets and indicators for local and regional governments and communities, their active engagement and participation is critical in the realization of all the 17 SDGs.
2. Cities and metropolitan areas are powerhouses of economic growth—contributing about 60 per cent of global GDP. However, they consume 78 per cent of the world’s energy and produce more than 60 per cent of greenhouse gas emissions. Poorly planned and managed cities exacerbate enormous new demands for energy, infrastructure investment and land.
3. If current trends continue, by the year 2050 cities will host approximately 70% of the world’s population and produce 85% of global economic output. While rapid urbanization poses a number of challenges, cities also offer the opportunity to achieve multiple SDGs at scale and with efficiency.
4. While the proportion of the urban population living in slums worldwide declined by 20 per cent between 2000 and 2014, that positive trend recently reversed course. Today the absolute number of people living in slums or informal settlements has grown to over 1 billion, with a similar number living in inadequate housing or homelessness.
5. Globally, 2 billion people are without waste collection services, and 3 billion people lack access to controlled waste disposal facilities. The problem will only worsen as urbanization increases, income levels rise and economies become more consumer-oriented.
6. Urban policy decisions have extraordinarily far-reaching impacts in poverty alleviation and reduction of inequalities, and in ensuring access to housing, energy, multimodal transportation, waste management, food supply, water and sanitation, education, health care, culture and others, not just for urban populations but also for the surrounding peri-urban and rural areas.
7. Numerous cities and regions have already made considerable progress on SDG localization having incorporated the goals and targets in their planning processes and

¹ This background note has been drafted by UNDESA, UNECE, UNESCAP, UN-Habitat, and UNODC, and benefited from the knowledge and expertise of other UN agencies and experts as listed on the HLPF session website

budgeting and many are adopting sub-national reviews of SDG implementation, also known as Voluntary Local Reviews (VLRs).

8. The COVID-19 pandemic has added unprecedented challenges for cities and regions, including pressure on their health and social care, education, emergency management, transport, food and safety systems. The pandemic has further exacerbated existing vulnerabilities and inequalities, particularly of those lacking access to adequate housing and basic services, as well as those facing higher exposure to additional hazards, including climate hazards and higher levels of pollution.
9. The COVID-19 pandemic has also highlighted the important role of local and regional governments as the provider of services in closest proximity to people. As the world gradually moves to the recovery phase, the pandemic will represent an opportunity for all levels of government to 'build back better' in order to create inclusive, equal, safe, risk-informed, resilient and sustainable societies.
10. Urban planning and urban governance need to be built around sustainable, integrated strategies, based on the principles of equity, inclusion, transparency and the respect of human rights, involving all stakeholders and different levels of governance to enhance sustainable urban development.
11. Sustainable cities and regions will not arise organically – evidence-based, risk-informed, gender-responsive, participatory, strategic, transparent and efficient urban planning is at the heart of liveable, equal, sustainable and smart cities and regions.
12. There is a growing gap in urban local finances caused by population growth and growing needs for infrastructure and public services as well as growing transfers of competencies on the one hand, and declining incomes on the other. Development of a dynamic and buoyant local tax system, including environmental taxes, strengthened land management, equalization grants from the national governments and capacity building for development of “bankable project” are among some of the potential policy tools.
13. Other key elements required for a transition towards more sustainable cities and communities include; enhanced collaboration and coordination between national, regional and local governments and their communities; effective and responsible adoption of digital technologies for management of resources and delivery of basic services; and increased partnerships and peer-learning.

2. Stocktaking and challenges

When cities have effective, transparent, and accountable institutions and accessible and efficient infrastructure, they can be the locus of productivity and economic growth, providing employment opportunities, safe and adequate housing, and access to basic services. Cities and metropolitan areas are powerhouses of economic growth—contributing about 60 per cent of global GDP¹.

Yet, uncontrolled urbanization and urban sprawl is a major challenge as are increasing inequalities in cities generally, creating adverse effects on the quality of life, including environmental impacts, as well as exacerbating vulnerability and exposure to disaster risk at the local, regional and global scales. According to UN-Habitat, cities consume 78 per cent of the

world's energy and produce more than 60 per cent of greenhouse gas emissions. Poorly planned and managed cities exacerbate enormous new demands for energy and infrastructure investment.

The proportion of the urban population living in slums worldwide declined by 20 per cent between 2000 and 2014 (from 28 per cent to 23 per cent). However, that positive trend recently reversed course, and the proportion grew to 23.5 per cent in 2018. The absolute number of people living in slums or informal settlements grew to over 1 billion². According to the Secretary-General's report on progress towards the SDGs, in 2016, 9 in 10 people living in urban areas still breathed air that did not meet the World Health Organization's air quality guidelines.³

Globally, 2 billion people are without waste collection services, and 3 billion people lack access to controlled waste disposal facilities. The problem will only worsen as urbanization increases, income levels rise and economies become more consumer-oriented. While the proportion of municipal solid waste collected has been increasing, many municipal solid waste disposal facilities in low- and middle-income countries are open dumpsites, which contribute to air, water and soil pollution, including by plastic waste, as well as emissions of greenhouse gases such as methane⁴.

Cities and human settlements can also exhibit extreme spatial inequalities with large numbers of people suffering from multiple and compounding deprivations, including overcrowded, poor quality housing in precarious and unsafe locations, lack of access to water, sanitation, food supply and basic services, limited or no connectivity to affordable public transport, and inadequate health and education facilities, aggravated by limited economic opportunities.

While SDG target 5.5. aims at ensuring women's full and effective participation and equal opportunities for leadership at all levels of decision-making, it is estimated that fewer than 5 per cent of the world's mayors are women and women make up an average of just 20% local councilors worldwide⁵.

Migration is also becoming increasingly urban. Most migrants, whether they move internally or internationally, settle in urban areas⁶ because that is where their human capital is most rewarded⁷. Migrants contribute to turning cities into hubs of diversity and innovation⁸. However, migrants as well as other marginalized groups - women, different minorities and people with disabilities - often find themselves in precarious, informal living and working conditions, at risk of eviction, exploitation, and disasters.

3. COVID-19 crisis: impacts and recovery

a) COVID-19 impacts: exacerbated vulnerabilities and stretched resources

The ongoing COVID-19 pandemic has added unprecedented challenges for cities and regions, including pressure on their health and social care, education, emergency management, transport, food and safety systems. The pandemic has further exacerbated existing vulnerabilities and inequalities, particularly of those lacking access to adequate housing and basic services, as well as those facing higher exposure to additional hazards, including higher levels of pollution.

For example, as COVID-19 spread around the world, billions of people were told to stay at home as a preventive measure. However, taking into account current levels of substandard and

informal housing, social distancing, as well as access to adequate, safe and clean water and toilets and proper health care remains a pipe dream for many communities and put them at higher risk to be affected by the virus. Work and shelter for informal communities also often overlap with daytime workspace in slums converted into sleeping space at night. Furthermore, many slum residents work outside the formal sector with unstable incomes, minimal savings and no social protection, and have lost their livelihoods as cities shut down.

The COVID-19 pandemic has also highlighted the importance of sanitation and hygiene practices. However, in low- and middle-income countries, women are over-represented in urban slums and carry the burden of water collection. For millions of women and girls, this reality increases time spent on unpaid care and domestic work, their health risks and the additional risk of sexual violence.

Occupations requiring frequent human contact, and which must be carried out even during a pandemic induced lockdown—for example, those providing services such as health care, public transit, and food and grocery supplies—are also associated with a higher risk of infection. Many (though not all) of these occupations are disproportionately carried out by poorer people. Those working in the informal sector do not have significant savings and must continue to work in order to feed their families. Often, this requires using overcrowded public transport. Smartphone location data show that people with lower incomes have remained more mobile under social distancing guidelines than those with higher incomes, who can more easily stay away from densely populated areas and crowded public transport services⁹.

School closures and distance learning due to the pandemic have undermined quality education in cities and territories - especially for the most vulnerable groups - and have posed new challenges to education systems, which will need to be addressed at local, regional, national and international scale through imaginative and creative solutions¹⁰.

Other notable impacts of the pandemic include: uses of disproportionate force to ensure lockdowns; non-transparent distribution of humanitarian equipment and aid; stranded internal migrants in large cities; rapid increases in incidents of domestic violence; and violations of human rights of people in situations of vulnerability.

Simultaneously, local and regional governments, and in many cases their public utility companies, face huge shortfalls in revenue due to reduction of taxes and user fees, the collapse in business activity and general economic slowdown, as well closure of public facilities (e.g. cultural, recreational, educational and sport venues like swimming pools, golfs, etc.), and reduced demand for local public services, such as public transport. For example, according to a study prepared for the American Association of Public Transport, US transit agencies are facing an overall funding shortfall of USD 48.8 billion between the start of the pandemic and the end of 2021¹¹.

In general, the pandemic has highlighted the central role of resilient and sustainable transport in modern societies, where massive disruptions in transport services, supply chain, travel and tourism, have translated into impacts across multiple SDGs. Impacts of the pandemic and its prevention policies will have far reaching impacts on public transport which are not yet clearly understood and there is a risk of backsliding towards private transport. However, the projected growth of the urban population most likely will generate still more travel demand necessitating increased transport infrastructure and facilities across all modes of transport through road, rail, air and water. Unfortunately, the transport landscape in urban agglomerations has already previously been highly inequitable, with poor and disabled people left with inadequate means to

access the economic and social centres of the cities¹². On the delivery of goods, the efficiency of the global supply chain still depends on ‘last (and first) mile’ deliveries at the local level, which could be facilitated through more sustainable, and safe, options such as the growing use of cargo bicycles and new technologies such as drone deliveries¹³.

b) COVID-19 recovery: the need for local action

The COVID-19 pandemic has highlighted the important role of local and regional governments as the provider of services in closest proximity to people. As the world gradually moves to the recovery phase, the pandemic will represent an opportunity for all levels of government to ‘build back better’ in order to create inclusive, equal, safe, risk-informed, resilient and sustainable societies, as laid out in the 2030 Agenda, the Paris Agreement on Climate Change, and the Sendai Framework for Disaster Risk Reduction 2015-2030, and the New Urban Agenda. Local and regional response plans should consider how actions can have a positive multiplier effect for all dimensions of urban disaster risk prevention, reduction, and resilience.

Economic aid packages should be planned so that they contribute to preserving jobs, specially across social and economic sectors that have been experiencing greater impact during the pandemic, such as health services, education, food retail, automotive, tourism, civil aviation, agriculture, maritime shipping.¹⁴ Fiscal stimulus should be directed to local governments in order to compensate them for the loss of revenues, keep public services running, and support construction of planned infrastructure. These packages should equally enable increase of productivity and thus economic growth, reduce urban inequalities and disaster risk,¹⁵ mainstream a gender perspective, diversify the economies and provide incentives for sustainable and green growth solutions. Investments in health care should ensure that no one is being left behind and all types of inequalities are reduced, and engagement with communities should build trust and confidence and provide a platform for new innovations, all while guaranteeing the safety of inhabitants.

Potential economic green stimulus packages with the adequate policy orientation can provide a boost for sustainable affordable and adequate housing², better and risk-informed urban infrastructure, more efficient buildings, clean energy, and green and resilient multimodal transport systems¹⁶. Peer learning and city-to-city and region-to-region cooperation can be an essential tool for finding the best policy options.

The COVID-19 crisis and the sudden and unplanned growth of telework has demonstrated that much of the knowledge economy is not bound to a place. This holds the potential to allow people to live where they want and not where they have to due to their jobs, resulting in environmental gains such as improved air and water quality, lowering CO² emissions from transport, and more affordable housing options while also helping a better work-life balance and increasing women’s labour market participation. In addition to teleworking, the pandemic has demonstrated just how important access to IT can be from tele-education to telemedicine, e-banking and e-governance, but it has also shown how unequally this access is still distributed.

These STI solutions tend to favor those who have more access options and a higher ability to adapt to change. Blue collar and service workers – as well as the vast numbers who work in the informal sector - cannot work from home. There is an overall need to shift to access-based planning which goes beyond access to mobility infrastructure. Instead, overall access across the

² The Geneva UN Charter on Sustainable Housing

https://www.unece.org/fileadmin/DAM/hlm/documents/Publications/UNECE_Charter_EN.pdf

three modes: mobility, proximity, and digital technology (transport, land use, and the internet) should be central, and the equity of that distribution at the core of planning.

National, regional and local governments also need to ensure that there is specific focus in their disaster risk reduction strategies and plans to reduce the risk of, prepare to build back better from, and respond to disease outbreaks, especially in informal settlements and slums. Communities must be active partners in reducing disaster risk, including through gathering information and facts about the illness and its transmission, and they should be empowered to identify their needs, self-organize and innovate new low-cost solutions. Disaster risk reduction strategies and plans must also consider the situation of migrants, who are often not included in support measures, such as cash transfer programs, as well as other vulnerable groups.

In general, powerfully amplifying the voices of those who are least heard across the urban landscape is a priority now more than ever. In this spirit, culture can provide a resource for enhanced solidarity, mutual understanding, and resilience, including bringing the voice of vulnerable communities into the public realm through diverse forms of expression and sharing¹⁷.

4. Policies and actions to maximize synergies, mitigate trade-offs and drive transformation

Urban policy decisions have extraordinarily far-reaching impacts in poverty alleviation and reduction of inequalities, and in ensuring access to energy, multimodal transportation, waste management, food supply, water and sanitation, education, health care, culture and others, not just for urban populations but also for the surrounding peri-urban and rural areas¹⁸. At the same time, while urban policies and infrastructure investments provide opportunities for reaping the benefits of integrated policymaking, poorly made decisions can keep populations locked into unsustainable development.

Examples of synergies and trade-offs in urban policies are numerous. For instance, achieving SDG 13 on climate action will require changes in the way cities are planned and managed, since urban areas are responsible for up to 70 per cent of worldwide greenhouse gas emissions. Well-planned densification of cities with adequate, affordable housing and mixed zoning to facilitate short commutes has been a fundamental approach to efficient and low-emission city design. Increasing public transportation while shortening the commuting distances and supporting renewable energy solutions, can simultaneously contribute to reduced air pollution levels and hence public health, while minimizing cities' carbon footprints¹⁹, thus contributing not only to SDG 13, but also SDG 11 on cities but also SDG 3 on health. Some cities have also sought to expand access to culture in transportation facilities through initiatives such as public libraries in bus stops or exhibitions, directly supporting the more vulnerable or isolated communities.²⁰

In cities around the world, satisfying demand for housing will require building upgrades and new developments which can be carbon and resource intense, and can help kickstart post-COVID-19 economic recovery²¹, and thus contributing to SDG 11 as well as SDG 9 on resilient infrastructure. Zero emission, efficient, risk-informed and resilient buildings and construction are an imperative, and regenerative building materials and designing buildings as material banks can spur circularity and local job opportunities, supporting the achievements of SDGs 8 (decent jobs and economic growth), 11 (cities and human settlements), 12 (sustainable consumption and production) and 13 (climate).

Designing cities based on existing blue-green networks can reduce infrastructure installation costs, and reduce vulnerability and exposure to disasters. In general, awareness needs to be

created about the benefits the urban and peri-urban dwellers derive from ecosystem services provided by neighboring rural areas. For example, the water supply of Vienna is 95% dependent on forest protected areas in a neighboring province. Forest management in the catchment area has been adjusted to provide the best possible protection for the water source, and part of the related costs are covered through the water tariff.

With increasing urbanization, greater mobility and connectivity, the linkages between urban, peri-urban and rural areas intensify. Food systems, particularly, provide an interesting case for urban and peri-urban solutions linked to a higher percentage of green and blue space in and around cities as well as re-establishing a balance between cities and their regions. In cities, urban gardens, community gardens as well as parks can help clean the air, reduce the instance of urban heat islands and thus disaster risk, provide much needed public space, as well as bring food production within cities²². As COVID-19 has disrupted global value chains, the importance of shorter supply chains and proximate production, especially for food, has come to the fore.

It is important to also see how urban food systems intersect with other urban systems as this offers opportunities for significant systemic change. Recognizing that food systems represent a significant contributor to urban fossil fuel use, air pollution, waste generation and road transportation, allows for addressing a wide variety of SDGs: from hunger to health, from economy to equity, from water and sanitation to life below water and land. The COVID-19 crisis also shown the importance of green spaces in other ways as well. There is an interaction between ecosystem's health and the emergence and spread of zoonotic diseases. Emergence in new regions is caused primarily by pathogen movement due to trade and travel, whereas local emergence is driven by a combination of environmental changes that affect vectors and wildlife hosts and social changes that affect human exposure to vectors²³.

Land use in general is an area where smart, disaster risk-informed and transparent policies are needed to counter-balance common trade-offs. Land areas set aside as nature protected zones or forest habitat have sometimes to be converted for infrastructure projects or industrial and commercial activities, leading to deforestation and loss of biodiversity. In order to avoid that there is a net loss to the critical natural capital, environmental off-sets and eco-compensation measures based on the ecological value of the area that needs to be sacrificed are required. Industrial parks and zones that help businesses benefit from economies of scale with respect to goods and services they use, offer many opportunities for becoming greener, and more inclusive and sustainable, for example, through transitioning to Eco-Industrial Parks (EIP)²⁴. In these parks, resource efficient technologies and circular business practices have yielded significant financial savings, triggered investments and decreased material use and greenhouse gas (GHG) emissions.

Effective and affordable property and housing registration systems, based on non-discriminatory property laws, are crucial to secure tenure²⁵. When families perceive their tenure to be secure, they are more likely to invest in home and neighborhood improvements²⁶. These improvements — including improved building materials and basic services — can serve as a springboard to even greater development and asset accumulation through increasing property values. However, existing laws and regulations often relate to more formal forms of tenure, and therefore cater to those that can access formal means of income, credit and savings, resulting in further exclusion of the marginalized and vulnerable.

Safety challenges encountered by individual cities are increasingly the result of the intersection between local vulnerabilities and criminal groups that pursue their illegal economic activities.

Sometimes these pose a direct threat to structures of governance and the transparency of their operations. States are affected by the destabilizing effects of these illicit activities that can include corruption and money-laundering, sexual exploitation, gangs, drug, illicit firearms and human trafficking and terrorism. These phenomena undercut good governance and the rule of law, threatening individual and community safety, development and peoples' life chances. Approaching these issues through an Urban Safety Governance²⁷ lens emphasizes the need for an in-depth understanding of how a wider set of localized risk factors interact with illicit external flows to give rise to safety challenges.

However, corrupt systems have very little incentive to address inequality, which very often they are benefiting from. It is therefore necessary to consider the fundamental political inequality, much of which will have deeply embedded historical roots. Supporting and protecting, therefore, lawyers, activists, journalists and civil society groups that are engaged in addressing inequality is essential.

5. Means of implementation and the global partnership: mechanisms and partnerships to accelerate progress

While there is a growing recognition that local authorities and actors must play a key role in SDG implementation, this is not always matched with requisite decision-making authority or the authority to independently raise and spend resources. To harness their transformative potential, having resilient institutions grounded in the rule of law, countries should create an enabling institutional environment through coherent multi-level governance, including effective decentralization policies, empowering sub-national governments to act in a more developmental and sustainable way. Inclusive, sustainable and gender-responsive National Urban Policies (NUPs) and sub-National Urban Policies are key tools that can facilitate collaboration and coordination between plans and actions of various actors, including line ministries, state owned entities, local and regional government authorities, donors and the private sector – thereby unlocking interlinked benefits.

a) The importance of planning

Sustainable cities and regions will not arise organically – evidence-based, risk-informed, gender-responsive, participatory, strategic, transparent and efficient urban planning is at the heart of liveable, equal, sustainable and smart cities and regions. Inclusive, people-centered, and participatory planning, potentially using a wide range of co-design or co-production methods to engage all relevant stakeholders, can help ensure that the needs of the most vulnerable are met and that context-specific synergies, trade-offs and risks are addressed. For example, integrating a gender perspective in urban planning and design has long-lasting impacts on women's and girls' access to public services and infrastructure, land rights and housing, mobility and safety in urban spaces, as well as health and resilience. This planning towards a long-term vision needs to be informed and accompanied by independent analytical, research and evaluation work grounded on sound evidence and disaggregated data, including by sex, age, location, race, ethnicity, and social-economic status.

Participatory planning and participatory budgeting, among other modalities of citizen participation (i.e. referendums, open councils, e-participation, etc.) are becoming useful tools to enhance ownership and accountability of urban development decisions. For example, informal sector businesses are often seen as eyesores and undesirable activities in public spaces, and in many cases authorities forcibly evict informal sector activities in the name of

urban order. Yet, such evictions often compound the problem by destroying livelihoods, making public spaces more unsafe, and exacerbating conflict in the city. An inclusive dialogue can bring in all of these groups in the management and regulation of public space.

b) Data and analysis

Appropriate indicators and disaggregated data are essential to improve evidence-based decision-making at all levels and to understand urban system dynamics and their challenges. Suitable, integrated and gender-responsive indicators are needed for the desired development outcomes. Focus on just one field of analysis alone, for example economic figures, may not always provide the comprehensive picture of a certain urban context and may have unwanted trade-offs in pursuit of overall wellbeing and sustainability. Geo-spatial data has become an essential tool to help map spatial inequalities across the city, but must be validated by bottom-up, community-based data collection methods. Special attention should be given to the disaggregation of data, for example, by location, gender, age classes, etc., so that the planning processes can capture and respond to the lived realities of those at risk of being left behind.

c) Coordination and collaboration

Member States may benefit from involving local and regional governments in the policy-making process from the start, including design, formulation, implementation, monitoring, reporting and evaluation phases, as well as in the voluntary national review (VNR) processes, following a policy coherence approach to ensure sustainable wellbeing in urban areas. Vertical coordination should be accompanied by horizontal coordination, between different departments and entities operating at the local or sub-national level. Bringing to bear such cooperation in the arena of law enforcement, for example, can help to ensure that police responses to criminality are accompanied by violence prevention approaches and framed within a developmental perspective that focuses on addressing structural inequalities. Collaboration and coordination between national, regional and local governments and their communities in implementing the SDGs should be enhanced.

d) Reporting on progress

Local decision-makers must also communicate evidence in clear and easily understandable ways to residents. While access to a high-quality granular data about cities remains a challenge in many contexts, more and more cities and regions are committing to undertaking a Voluntary Local Review (VLR), taking their inspiration from Voluntary National Reviews (VNRs) to transparently account for their progress on Agenda 2030. Cities and regions have used VLRs to articulate a vision that integrates various strategies, plans, and priorities into one coherent document. A VLR can also be a tool for strengthening evidence-based policymaking, coordination, ownership and stakeholder engagement, and ensure accountability, and enabling dialogues among cities. Disaggregated data gathered can also help better orientate resources and priorities and target specific groups and neighborhoods through people- and place-based policies. The development and use of standards on measuring SDGs at the local level can strongly enhance the VLR process.

e) Partnerships

Efforts should be made to facilitate effective partnerships and to provide technical assistance to local and regional governments, where possible together with Local Government Associations. There is a need to encourage peer learning among city and regional authorities, particularly

between cities and regions in developed and developing countries, and among small and medium-sized cities, as well as enhanced collaboration between cities and academia and research institutions. Decentralized cooperation can support sharing of evidence-based good practices and lessons learned. The common language of the SDGs, combined with transparent, constructive and regular communication, can enable greater connectivity with different sectors and facilitates a whole-of-society approach, public-private partnerships and trust among actors.

f) Financing the transformation

Where appropriate, greater decentralization of functions to local and regional authorities to support their efforts to deliver on the SDGs should also address the issue of “unfunded mandates”. There is a growing gap in urban local finances caused by growing transfers of competencies, population growth and growing needs for infrastructure and public services on the one hand, and declining incomes on the other. Another challenge for many local governments is that their political boundaries--and therefore, their tax-base--doesn't correspond to their de-facto functional area. Many central cities have to bear the maintenance of infrastructure and public services also for peri-urban populations. National governments can strengthen multi-level governance²⁸ and financial decentralization policies to better align the areas served and the tax-base supporting that.

Adequate local fiscal systems should adopt an incremental approach based on a dynamic and buoyant local tax system, including environmental taxes (“polluter pays” principle). Cities need to strengthen land management to better capture land values to reinvest in risk-informed and resilient local infrastructure, including social infrastructure. Likewise, transfers from the national level to local and regional governments, including equalization grants, should redistribute a fair share of national fiscal revenues to allow cities and regions to deliver quality services, particularly to those furthest behind.

In middle- and high-income countries, local governments are allowed to borrow from financial markets with guarantees provided by them or the central government. However, less than 20% of the largest 500 cities in developing countries are deemed creditworthy in their local context, and in many cases, although formally allowed, borrowing in practice is also strictly restricted²⁹. Despite strong investment interest in emerging market infrastructure, perceived risk, a lack of well-prepared projects and high transaction costs can inhibit deployment of capital. Capacity building is needed for cities to make the best use of existing assets and to develop bankable projects.

g) The role of Science, Technology and Innovation (STI)

Science should form the basis of urban decision making for the short-term preparedness and long-term planning to inspire transformative change. Owing to co-dependencies, delivery of effective and efficient urban services requires integration, cooperation and collaboration among different scientific disciplines, urban professions, various levels of government, the public and the private sector.

Digital technologies have immense potential in transforming the way cities and regions manage resources and deliver basic services. Artificial intelligence can enable cities to turn data into actionable insights that would improve operational efficiency and resource allocation. For one, an AI-enabled traffic control system is able to analyze traffic patterns and provide drivers with optimal route options and information that can help reducing idling time and hence pollution on the road. STI solutions can increase the robustness of urban risk assessments and are also

critical for end-to-end early warning systems, and locally led risk monitoring and assessment. Big data solutions can also be used to model disaster risks to inform their prevention and reduction, coordinate responses to disaster and provide early warning, improve healthcare and financial inclusion³⁰³¹. International standards can enable cities and regions to overcome interoperability challenges of ICTs, align their urban strategies with global commitments such as the SDGs and ensure the benefits of digital technologies are shared by all.

However, local and regional governments should pay close attention to the safety of the digital tools they use as well as to the oversight of data use and surveillance measures. For example, technology is being used to assess, identify and trace potential COVID19 patients. This essential work must remain under review, with clear oversight, to ensure that surveillance measures are withdrawn once the aim of outbreak control is achieved.

Digital tools can also enhance transparency and inclusivity in cities, including through information dissemination and new ways of participation. Data visualization can translate complex ideas into easy to understand concepts that can improve citizen engagement. In some cities, crowdsourcing is being used in areas of high sexual assault to work with police to improve things like lighting, public safety presence and other measures. These types of tools are often being developed by civil society organizations, in concert with public officials and private sector. Social innovation, which goes beyond technologies, should also accompany this new digital era.

STI solutions can also contribute in a focused manner to women's livelihoods and development activities. For example, technology can address care responsibilities through inclusive infrastructure such as accessible childcare facilities, increased safe access to energy sources and public provision of water. Technology can improve women's safety in public markets and streets, including through better lighting, cleanliness, visibility and access to assistance. Greater access to education, capital and markets through STI can also improve their livelihoods.

However, the persistence of the digital divide will worsen inequalities if not properly addressed³². According to data by ITU, half of the world population is online, but the other half remains offline³³. Girls, women, and marginalized groups are least likely to have access to technology. In low- and middle-income countries, 433 million women are unconnected and 165 million fewer women own a mobile phone compared with men³⁴. Targeted action is also needed to ensure that technological developments, including artificial intelligence, algorithms and machine learning, do not reproduce or exacerbate pre-existing inequalities.

Communication and technology are powerful tools, but they should be the means, not the end. By listening to different stakeholders, local and regional governments will be able to design the ICT tools that are needed in that specific context. In terms of access, there is a need to consider access to the hardware such as mobile phones and computers, but also to ensure usable, accessible software, adequate data packages and digital literacy.

¹ The Sustainable Development Goals Report 2019, United Nations New York, 2019, <https://unstats.un.org/sdgs/report/2019/The-Sustainable-Development-Goals-Report-2019.pdf>

² The Sustainable Development Goals Report 2019, United Nations New York, 2019

³ 2019 Special edition: progress towards the Sustainable Development Goals; Report of the Secretary-General, E/2019/68

⁴ The Sustainable Development Goals Report 2019, United Nations New York, 2019

-
- ⁵ UCLG Standing Committee on Gender Equality, Women, leadership and development from SDG 5 to Habitat III, 2016
- ⁶ IOM, World Migration Report, Geneva, 2018.
- ⁷ Ibid.
- ⁸ UN HABITAT, *Access to adequate housing: The Pathway to Migrants' Inclusion in Cities*, Policy Brief within the context of the 5th Global Mayoral Forum on Human Mobility, Migration and Development in Marrakesh, 2018.
- ⁹ Responses to the COVID-19 catastrophe could turn the tide on inequality, POLICY BRIEF NO 65, United Nations Department of Economic and Social Affairs, May 2020
- ¹⁰ UNESCO has established a selection of [digital learning resources](#) that governments, schools, teachers, parents can use to open opportunities for learners unable to attend to school
- ¹¹ OECD Policy Responses to Coronavirus (COVID-19), The territorial impact of COVID-19: Managing the crisis across levels of government: <http://www.oecd.org/coronavirus/policy-responses/the-territorial-impact-of-covid-19-managing-the-crisis-across-levels-of-government-d3e314e1/#boxsection-d1e1135>
- ¹² Mobilizing Sustainable Transport for Development, High-Level Advisory Group on Sustainable Transport, p. 13, available at: <https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2375&menu=1515>
- ¹³ Mobilizing Sustainable Transport for Development, High-Level Advisory Group on Sustainable Transport, p. 15, available at: <https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2375&menu=1515>
- ¹⁴ For more on how COVID-19 is affecting jobs and employment across various social and economic sectors as well as ILO's sectoral and thematic policy briefs see: https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_742203/lang--en/index.htm.
- ¹⁵ The integration of disaster risk reduction in transparent urban planning is critical, and this must be informed by local and urban disaster risk reduction strategies and plans, in line with the Sendai Framework's target (e) and SDG 11 (target 11.b), integrated into urban development plans and complemented by sufficient financing.
- ¹⁶ At the same time, responses to the pandemic can have unwanted implications, such as a reduction of use of public transport. To counteract this, some cities (i.e. Paris, Milan, Brussels, etc.) are quickly realizing significant increment of biking lanes and networks to promote sustainable transport modes while preserving social distancing.
- ¹⁷ For example, Wuhan, UNESCO Creative City of Design, launched a global Call titled « Fight the Pandemic, Wuhan We Can », inviting Creative Cities, designers and cultural professionals to strengthen public knowledge of precautionary measures. Another example is the global ResiliArt movement launched by UNESCO.
- ¹⁸ Independent Group of Scientists appointed by the Secretary-General, Global Sustainable Development Report 2019: The Future is Now – Science for Achieving Sustainable Development, (United Nations, New York, 2019).
- ¹⁹ United Nations, 2019; Global Conference on Strengthening synergies between the Paris Agreement on climate change and the 2030 Agenda for Sustainable Development, Conference Outcome: https://sustainabledevelopment.un.org/content/documents/25236un_bookletssynergies_v2.pdf
- ²⁰ ICAO and UN-Habitat joint report “Promoting Synergy Between Cities and Airports for Sustainable Development”, p. ii, available at: https://www.icao.int/ESAF/aviation-urbanism/Documents/ICAO_UN-Habitat%20Study%20report_%20July%202018_final.pdf#search=SYNERGY%20icao%20and%20un%20habitat
- ²¹ Global Alliance for Buildings and Construction, <https://globalabc.org/news/globalabc-secretariat-covid-19-building-back-better>
- ²² One Planet Network, Sustainable Food Systems Programme, <https://www.oneplanetnetwork.org/sustainable-food-system>
- ²³ A Malm Kilpatrick and Sarah E. Randolph; Drivers, dynamics, and control of emerging vector-borne zoonotic diseases; The Lancet, Volume 380, Issue 9857, 1–7 December 2012
- ²⁴ A UNIDO-GIZ-World Bank initiative: “International Framework for Eco-Industrial Parks” at: <https://openknowledge.worldbank.org/bitstream/handle/10986/29110/122179-WP-PUBLIC-AnInternationalFrameworkforEcoIndustrialParks.pdf?sequence=1&isAllowed=y>
- ²⁵ World Bank. Land Policies for Growth and Poverty Reduction: A World Bank Policy Research Report. (Oxford, World Bank and Oxford University Press, 2003): 70.
- ²⁶ Payne, Geoffrey, Alain Durand Lasserre and Carole Rakodi. Social and economic impacts of land titling programmes in urban and peri-urban areas: International experience and case studies of Senegal and South Africa. (Final publication to Norway, Sida, GLTN and UN-Habitat, 2008).
- ²⁷ The Urban Safety Governance Approach has four key Axes :Regulation, Enforcement, Engagement and Resilience and is more fully defined Governing Safer Cities: Strategies for a Globalised World , <https://www.unodc.org/documents/justice-and-prison-reform/SaferCities.pdf>
- ²⁸ A recent development in this regard has been the devolution process initiated by the UK government and the creation of metro mayors. For example, the Greater Manchester Combined Authority, and its Metro-Mayor elected in 2017, effectively creating an elected office with power over most of Manchester's functional area.

²⁹ Ivanya, M, Shah, A. *How close is your government to its people? Worldwide indicators on Localization and Decentralization*, Policy research Working paper 6138, World Bank, 2014, in Ahmad et al (2019).

³⁰ <https://futurecities.catapult.org.uk/2017/02/08/digital-tools-can-make-planning-transparent/>

³¹ <https://www.gsma.com/betterfuture/news/transparency-inclusivity>

³² The Broadband Commission for Sustainable Development has launched Target 2025, committing to bring the other half of the population online and providing training to youth and adults on sustainable digital skills.

<https://broadbandcommission.org/about/Pages/default.aspx>

³³ <https://news.itu.int/itu-statistics-leaving-no-one-offline/>

³⁴ <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/03/GSMA-Connected-Women-The-Mobile-Gender-Gap-Report-2019.pdf>