

Global Responses to COVID-19 in slums and cities

Practices from around the world

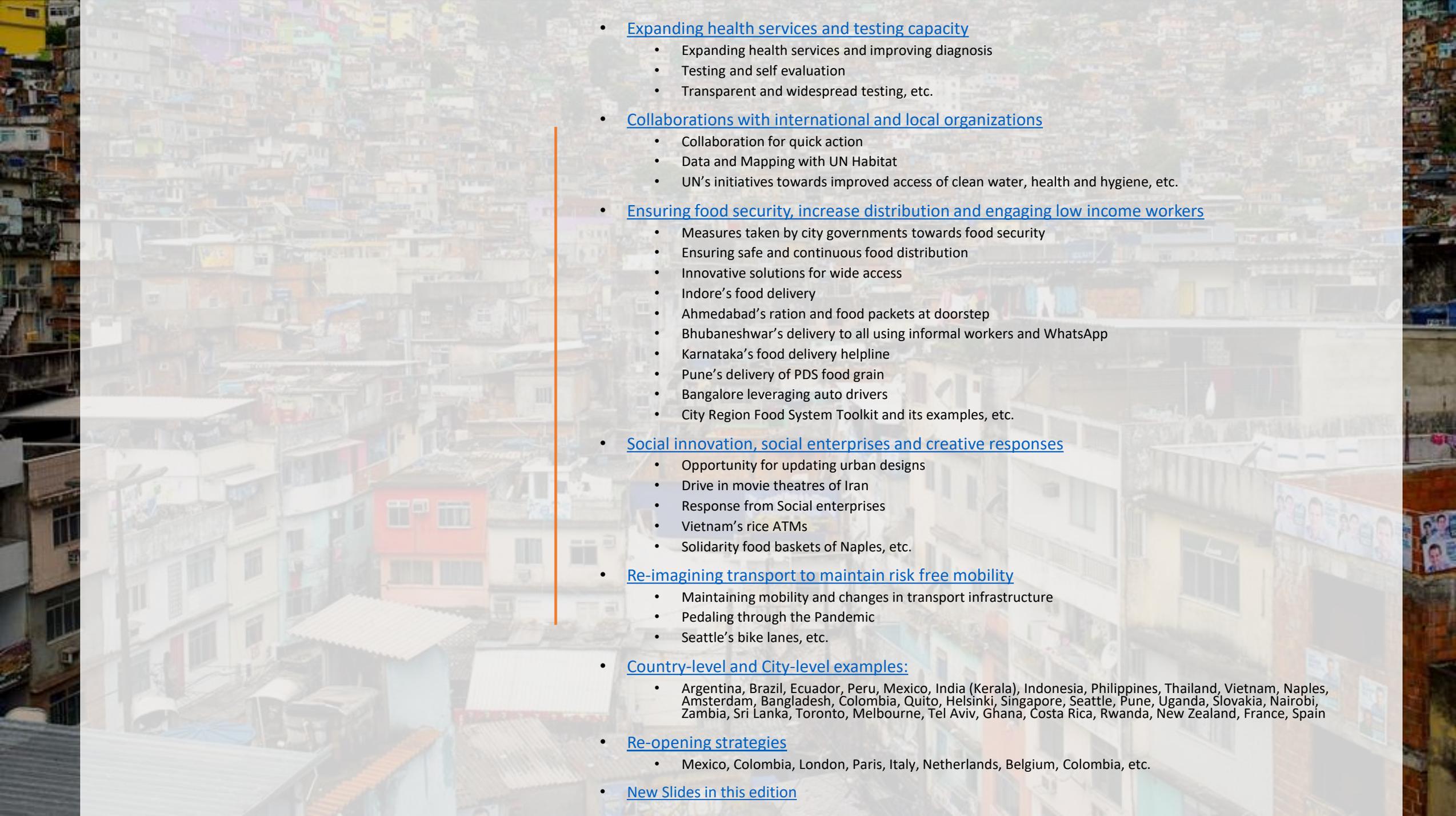
GSG Urban Poverty and Housing

Working Document

Draft March 1, 2021

Presentation Overview

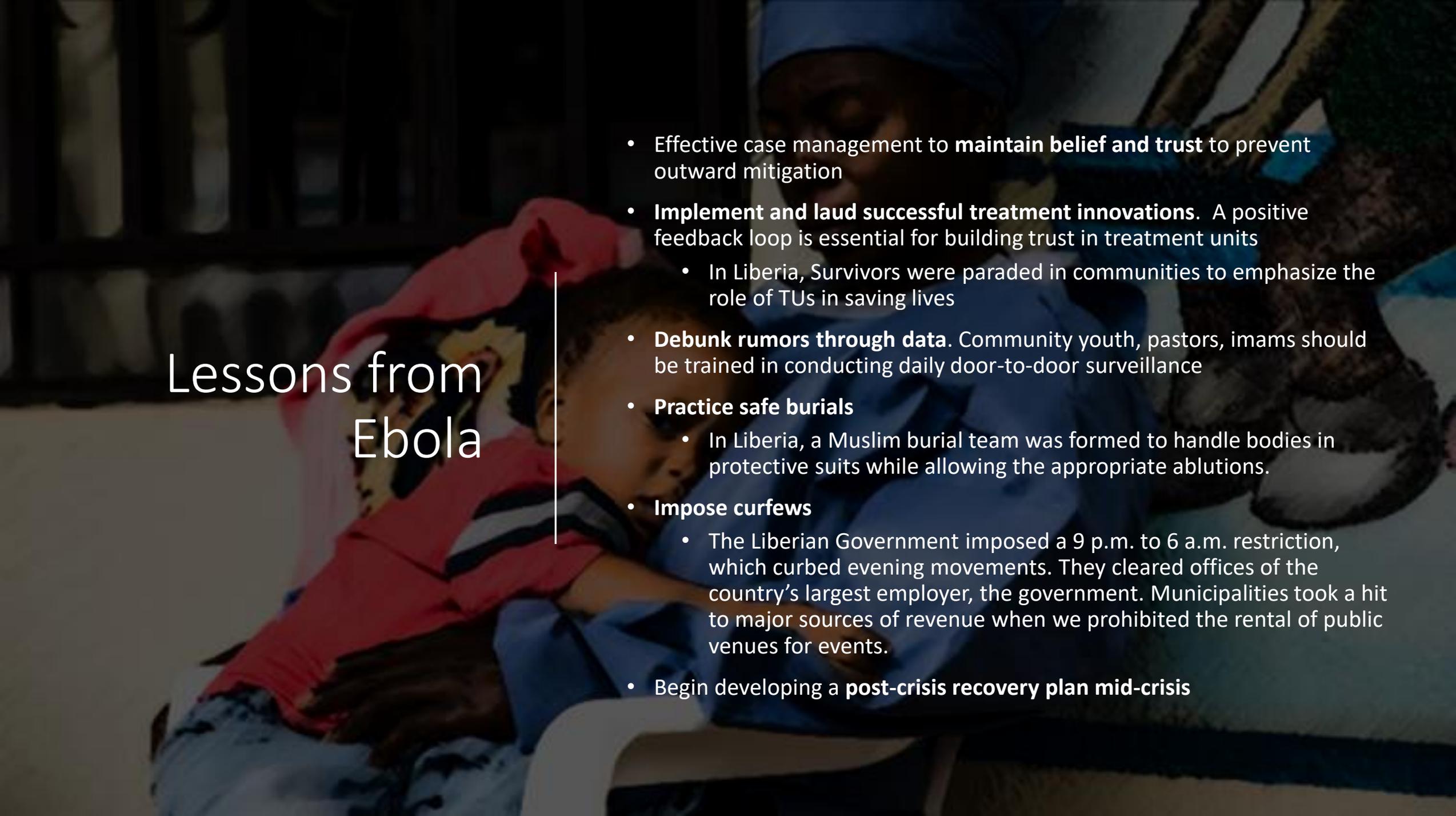
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 - [Re-imagining transport to maintain risk free mobility](#)
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 - [Country-level and City-level examples:](#)
 - Argentina, Brazil, Ecuador, Peru, Mexico, India (Kerala), Indonesia, Philippines, Thailand, Vietnam, Naples, Amsterdam, Bangladesh, Colombia, Quito, Helsinki, Singapore, Seattle, Pune, Uganda, Slovakia, Nairobi, Zambia, Sri Lanka, Toronto, Melbourne, Tel Aviv, Ghana, Costa Rica, Rwanda, New Zealand, France, Spain
 - [Re-opening strategies](#)
 - Mexico, Colombia, London, Paris, Italy, Netherlands, Belgium, Colombia, etc.
 - [New Slides in this edition](#)



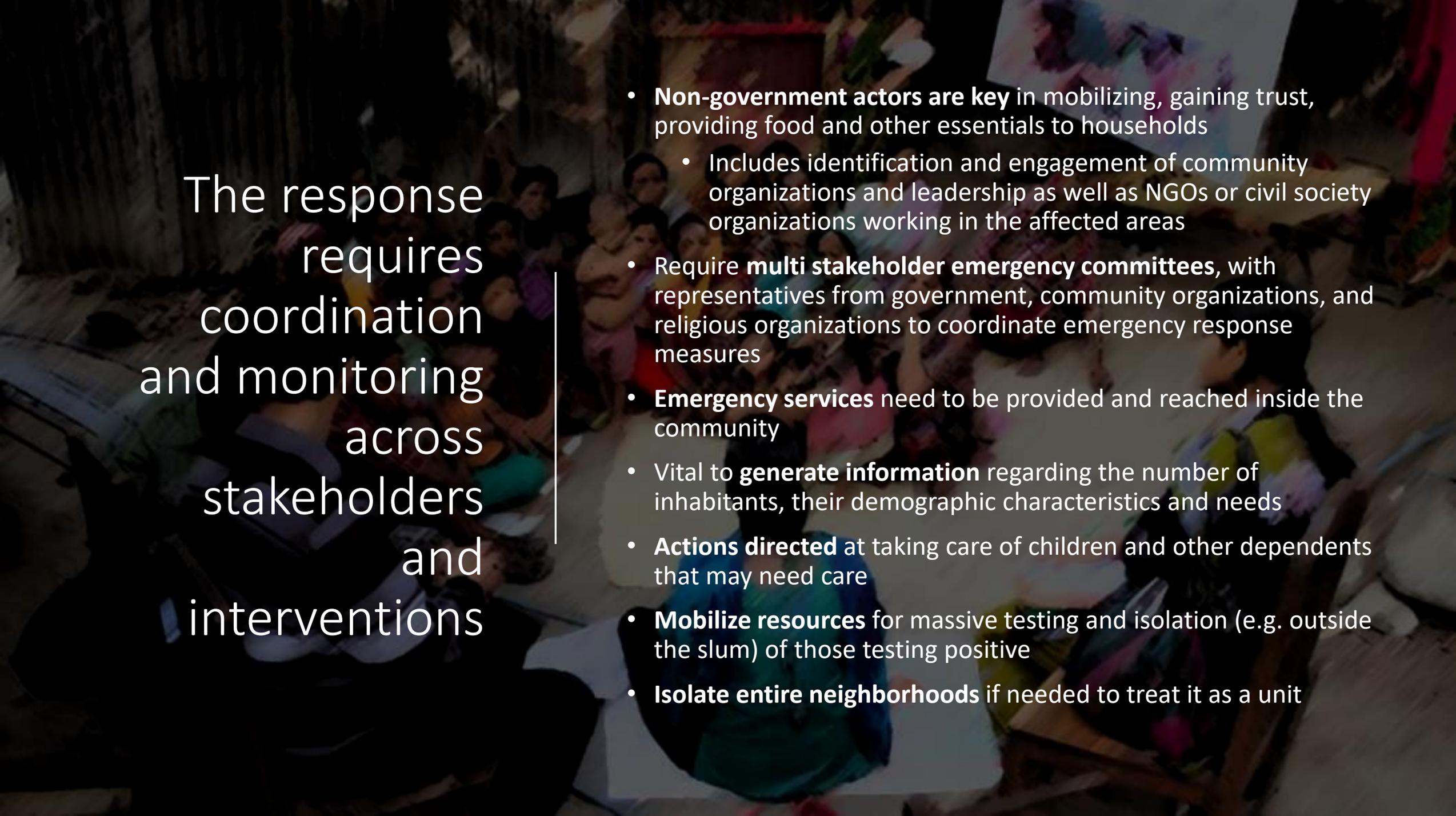
Why slums are at high risk

- High population densities contribute to rapid and broader spread of infection which accelerates transmission
- Household overcrowding makes behaviors like social distancing difficult
- Poor living conditions exacerbate transmission slowing behavior
- Limited access to health services
- Reliance on crowded transport services increases contagion risk
- Working in the informal sector poses risks
- House large share of the urban population that make up the demographic dividend

A woman wearing a blue protective suit and head covering is holding a child in a hospital setting. The child is wearing a red long-sleeved shirt and a patterned blanket. The background shows a hospital room with a bed and some equipment.

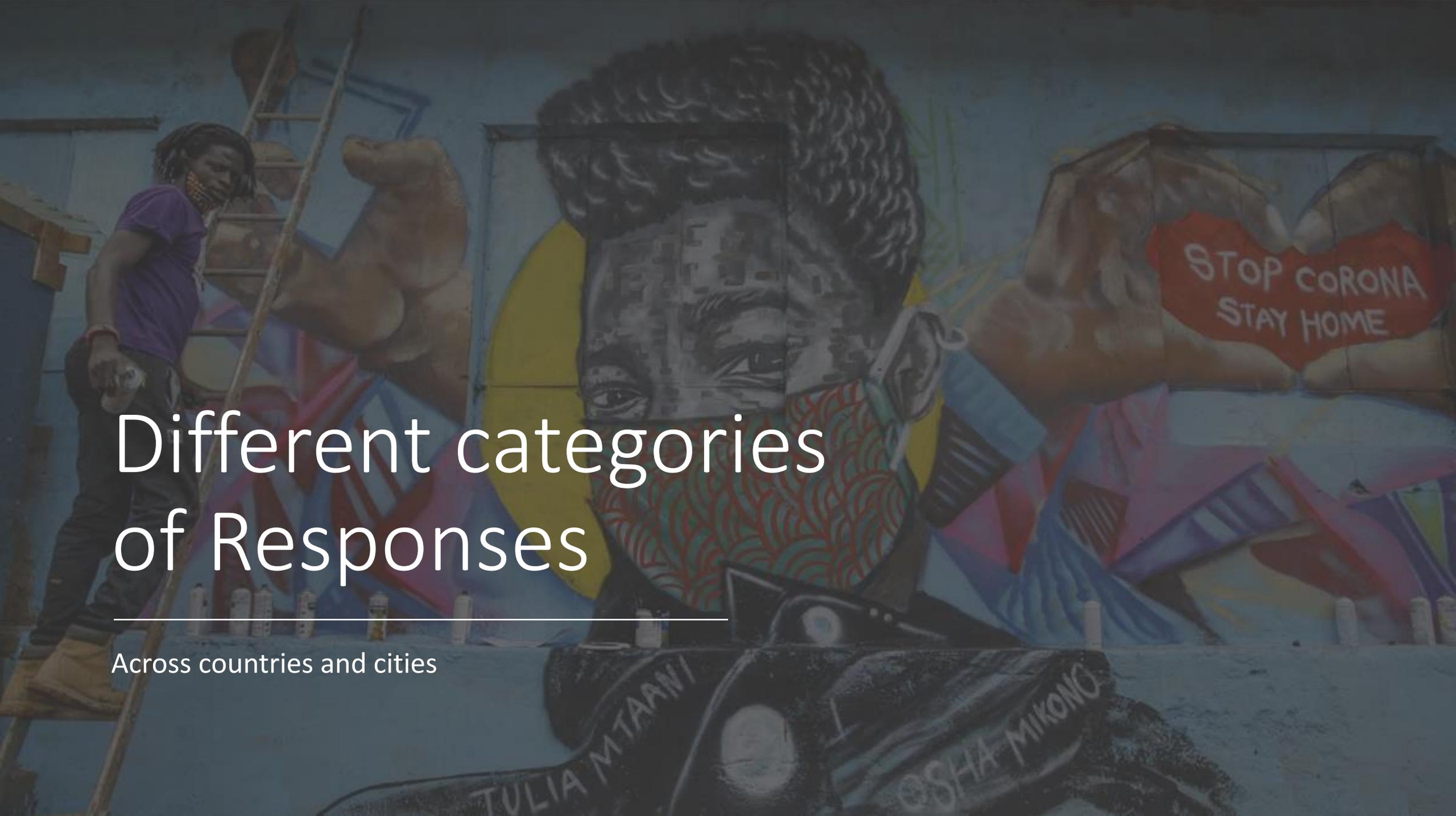
Lessons from Ebola

- Effective case management to **maintain belief and trust** to prevent outward mitigation
- **Implement and laud successful treatment innovations.** A positive feedback loop is essential for building trust in treatment units
 - In Liberia, Survivors were paraded in communities to emphasize the role of TUs in saving lives
- **Debunk rumors through data.** Community youth, pastors, imams should be trained in conducting daily door-to-door surveillance
- **Practice safe burials**
 - In Liberia, a Muslim burial team was formed to handle bodies in protective suits while allowing the appropriate ablutions.
- **Impose curfews**
 - The Liberian Government imposed a 9 p.m. to 6 a.m. restriction, which curbed evening movements. They cleared offices of the country's largest employer, the government. Municipalities took a hit to major sources of revenue when we prohibited the rental of public venues for events.
- Begin developing a **post-crisis recovery plan mid-crisis**

A group of people, including men, women, and children, are sitting on the floor in a community meeting. They are looking towards the camera. The background is slightly blurred, showing more people and some papers on the floor.

The response
requires
coordination
and monitoring
across
stakeholders
and
interventions

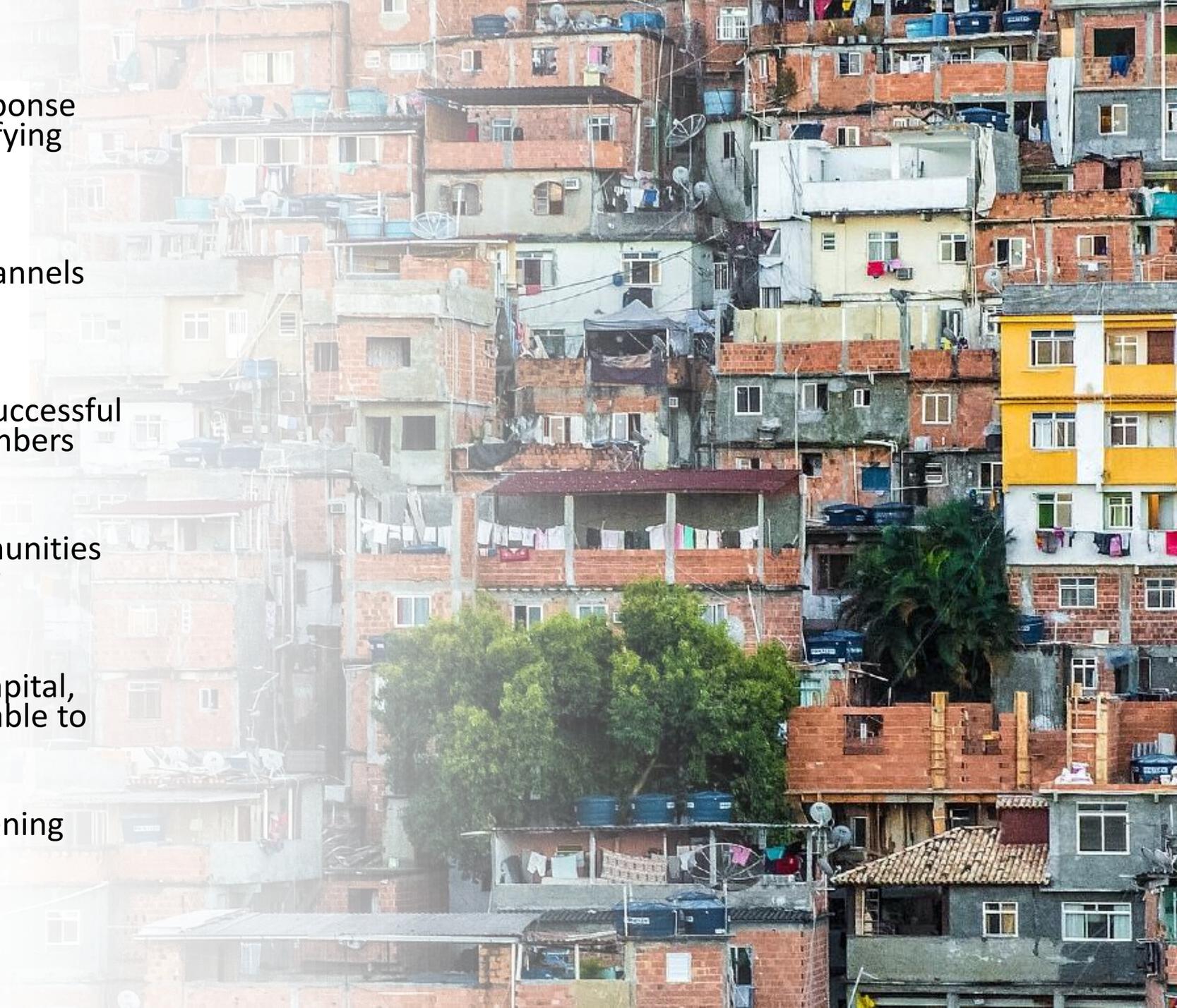
- **Non-government actors are key** in mobilizing, gaining trust, providing food and other essentials to households
 - Includes identification and engagement of community organizations and leadership as well as NGOs or civil society organizations working in the affected areas
- Require **multi stakeholder emergency committees**, with representatives from government, community organizations, and religious organizations to coordinate emergency response measures
- **Emergency services** need to be provided and reached inside the community
- Vital to **generate information** regarding the number of inhabitants, their demographic characteristics and needs
- **Actions directed** at taking care of children and other dependents that may need care
- **Mobilize resources** for massive testing and isolation (e.g. outside the slum) of those testing positive
- **Isolate entire neighborhoods** if needed to treat it as a unit



Different categories of Responses

Across countries and cities

- Ensure coordinated emergency response and maintain surveillance by identifying and targeting hotspots
- Ensuring smooth and tailored communication through trusted channels given the diverse nature of norms, languages and culture
- Centralizing and institutionalizing successful initiatives taken by community members and social enterprises
- Investing in building stronger communities and institutional capacity for higher resilience to future shocks
- Leveraging their budgets, human capital, infrastructure and manpower available to deepen access to basic services
- Preparing carefully designed re-opening plans



Financial support



Vouchers and cash transfers to provide a social safety net

- The Government of Brazil will distribute vouchers worth R \$600 to all informal workers that don't receive resources from the two flagship cash transfer programs
- The state of Uttar Pradesh in India will provide compensation to poor workers via online payments if they lost their job due to the pandemic.
 - Vegetable vendors, construction workers, rickshaw pullers, autorickshaw drivers, and temporary staff at shops will be targeted by this measure



Increased financial support to low income workers

- The Panama government is exploring ideas for transferring money to those who do not have a bank account and converting IDs into a debit card
 - Eg. using an ID, e-purse, or online membership to open a bank account
 - Convert ID into a debit card to provide economic assistance to buy groceries, first need implements and medicines
- Ireland has rolled out a simple application form for unemployment support for workers affected
- Pakistan is scaling up the Ehsaas (Social Safety Nets) Program based on information already available with the National Registry, and disbursing amount for 4-months in one tranche
- Leveraging existing mobile money platforms (e.g. M-Pesa,)
- Governments in Africa are leveraging mobile money and digital finance for payment transactions and cash transfers



UBI and Cash transfers to help the poorest among lockdowns

- Many emerging countries, including Mexico and Brazil, already have a long and successful experience with near-unconditional cash transfers to the poor as the most efficient way to deliver poverty relief. This experience should now be harnessed to make expanded and **unconditional programs available more broadly**, at least through the lockdowns and the gradual easing of restrictions.
- **New Delhi's crisis response has introduced cash transfers** to particularly vulnerable groups.
- Universal cash transfers will take substantial resources. In time, **savings can be made by cutting back on much less efficient poverty relief** in the form of subsidized fuel and food.



Latin America's social schemes encourage stay home behavior

- Preventing the transmission of the virus in people who survive informal jobs requires, in the immediate term, the provision of cash transfers that allow them to survive, as is being done in the Dominican Republic with the [Stay at Home Program](#), without needing to leave the home and getting exposed to the risk of acquiring the virus that causes COVID-19
- The experiences that exist in [maternity homes](#) in urban slums and in rural areas in several Latin American countries can serve as models for organizing isolation care centers.
- Field epidemiology teams in each health district should test each person living with someone who has already been diagnosed, to isolate them and monitor their symptoms, and actively track other potential contacts



Consulting services to SMEs

- **Bilbao (Spain)** has implemented specific measures aimed at supporting entrepreneurs, small retailers and SMEs through an urgent **consultancy service** organized by the City Council, which offers **telephone and online assistance**
- The processing of all **tax procedures** has been postponed. **Yokohama (Japan)** established a special **consulting office** for small and medium sized enterprises as early as January 30th
- In **Seattle (US)** several initiatives of **digital service providers** offer help to small businesses
- **Lisbon (Portugal)** has created a support team for micro, small and medium-sized companies to ensure information on all existing support reaches these companies, as well as consultancy, to mitigate the effects of the crisis and promote economic recovery. The team will include specialists in the various areas
- **Paris (France)** promotes **weekly exchanges** with professional unions, trade associations and economic partners



Setting up relief funds to support groups and individuals

- The Mayor of **Milan (Italy)** announced the establishment of a **mutual aid fund** to help those most in need and to support recovery of city activities.
- The fund, in addition to the allocation of 3 million EUR already approved by the City Council, is open to the economic participation of individual citizens, companies and associations.
- The fund raised 800 000 EUR on the first day (March 14th, 2020)
- **King County (US)** has joined forces with philanthropic organizations to establish a **relief fund**, and created a [donations connector page](#) for people to request what they need and give what they can
- **Seattle (US)** made available **relief funds** of large tech companies



Providing loans and support to businesses

- **New York City (US)** has put in place local support for SMEs, including zero-interest loans repayable over 15 to 20 years for firms with under 100 employees, for loans up to USD 75 000, conditional on demonstrating a 25% decrease in customer receipts
- **Tokyo (Japan)** has set up **one-time payment for SMEs** that are taking steps to prevent the further spread of the virus, such as suspending the use of their facilities.
- An emergency loan program and free consulting services were put in place for SMEs affected by the crisis
- In **Buenos Aires (Argentina)**, the public bank, Banco Ciudad, launched a **new loan program** with the aim of providing funds to small and medium-sized enterprises for the payment of their payrolls.
- All loan schemes show a significant reduction in interest rates with a range of between 20% and 24% of the nominal annual rate

Ensuring basic services:
Water, Hygiene, Education
and Nutrition



Ensuring continued nutrition and education for children

- The Bolivian government introduced the Bono Familia program
 - It feeds children of low-income families who will not have school breakfast during this time of quarantine
Delivered in April, US\$ 72.6 will be paid for each child in elementary school
- The Kerala state government will deliver food ingredients for mid-day meals to over 300,000 children
 - It reaches those in 33,115 *anganwadis* (rural child care center) closed due to the COVID-19 pandemic
 - They are delivering this for ten days. The materials are being packed and distributed by the teachers themselves
- New York has distributed hundreds of mi-fi internet access points to families so kids could keep up with their education
- Some schools, e.g. In Washington DC, continue to remain open to provide meals to children



Ensuring clean water, access to utilities and securing finance to keep them going

- In Colombia, Water services are being provided free of charge for families in a state of vulnerability
- In El Salvador President Bukele, declared a series of social measures including a 90 day moratorium for public services, credit cards and mortgages for those who have been negatively affected by COVID19. Repayment of this moratorium would be done over the next 24 months



Hygiene and Handwashing

- In Mathare, Kenya, hand washing stations have been set up
- Rwanda is flooding its capital, Kigali, with portable sinks for handwashing at bus stops, restaurants, banks and shops
- In Brazil, hand washing stations have been installed by the local communities to wash hands before entering the favela
- Czech Republic and Haiti are proposing masks for everyone
- Sudan is making their own hand sanitizers and distributing it free
 - The neighborhood resistance committees that helped to organize the uprising against al-Bashir have been making their own hand sanitizers using alcohol normally reserved for making illegal liquor and distribute them for free in their communities



Public services for vulnerable populations

- **Rabat (Morocco)** aims to carry out educational follow-up with migrant minors
- **Milan's Social Policies Directorate (Italy)** produced a report on irregular migrants during COVID-19 emergency detailing what services they continue to offer
- **New York City (US)** issues ID cards for all its residents, irrespective of their migration status, to secure access to diverse services (an initiative that existed prior to the COVID-19 crisis)
- **Dusseldorf (Germany)** rehoused several refugees and is now using a refugee centre as a quarantine station

Transparent information
sharing, communication and
campaigns



Fight rumors with awareness campaigns

- The Liberia Country Program is broadcasting a weekly talk show on ECOWAS radio with updates from the NPHI
 - This is in partnership with the Liberian Ministry of Health (MOH) and the National Public Health Institute (NPHI)
- Cities Alliance runs outreach in informal settlements across greater Monrovia
 - Social mobilisers on vehicles with loudspeakers, raising awareness about basic hygiene measures, waste management
 - Target gender-related issues, where messages have been pre-recorded in Liberian English and other local languages
- In Sierra Leone, they are using culturally tailored education messages
- Sudanese health experts at home and in the diaspora have made videos for social media explaining what the virus is and how to avoid infection.
- Pakistan is sending COVID-19 awareness message on cell phones replacing ring tones to help raise awareness among the 165 million subscribers.
 - Most TV channels are running frequent public service messages to raise awareness.



Leverage Creative media platforms

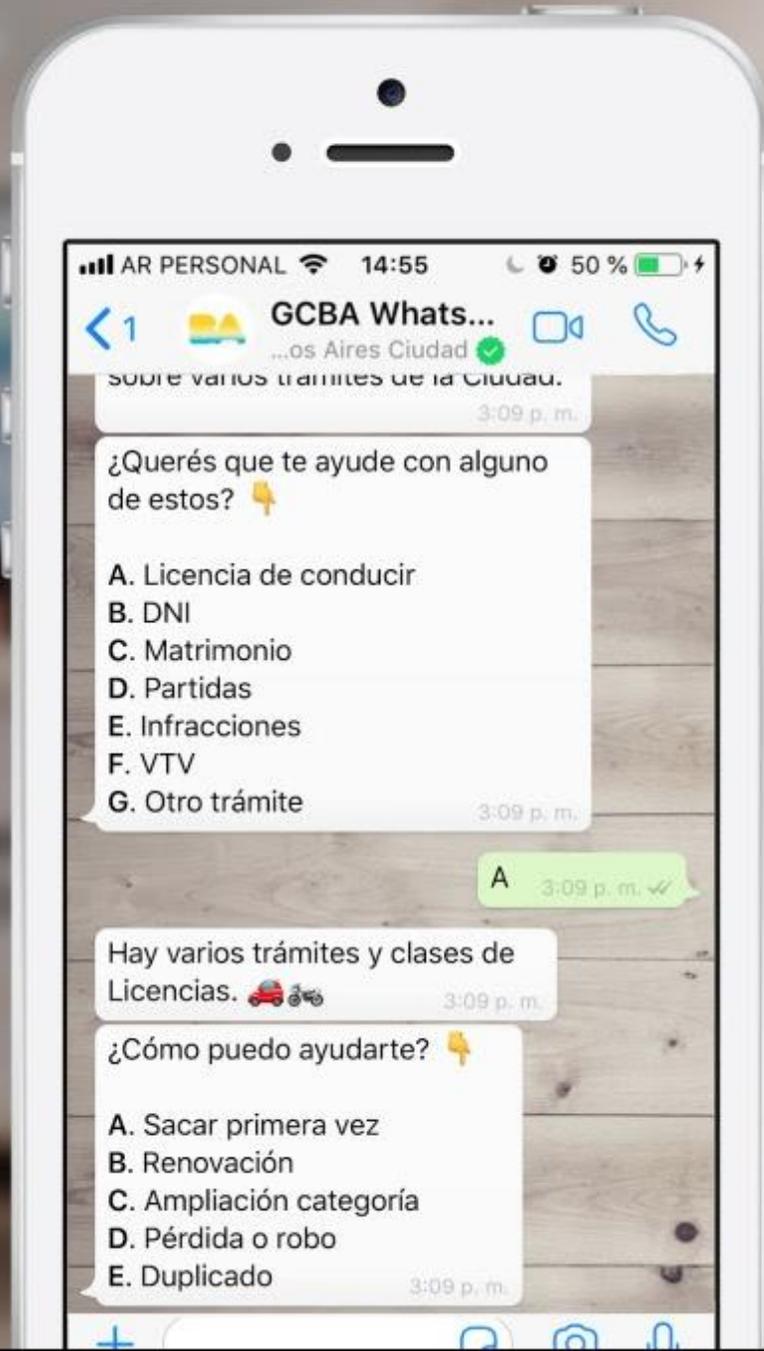
- Songs for awareness have seen a surge across the world
- Popular music has found its way in raising awareness through songs in Africa
- Pakistan is using culturally tailored videos to reach people of all ages
- Leveraging phone access and messaging, in Sudan, cellphone service providers deliver prevention messages to callers before connecting them



An army of women spread awareness in Kenya and Ethiopia

- Armed with a face mask, notebook and pen, thousands of women set out each morning in Nairobi's informal settlement of Kawangware to do a job few others would contemplate in a pandemic
- Standing at the doorways of the cramped, corrugated houses, they talk about COVID-19, shows residents how to wash hands or don a mask, patiently answering their questions
- Poorly paid or not at all, these unsung armies of mostly female community health workers have for years doled out advice and health services to families living in remote villages and urban slums who lack formal support
- Recruited and trained by government and charities — they are found from Kenya to Tanzania, Ethiopia to Malawi, Liberia to South Africa — the women go door to door, dispensing advice on everything from family planning to immunizations
- Charities such as Catholic Relief Services, which is supporting coronavirus training for about 5,000 community health volunteers in Kenya, say this workforce is key

COVID hotlines for information disbursement



- Taipei in Taiwan has created telephone hotlines where quarantined individuals can call 'disease prevention taxis' to take them for routine treatments
- In Lusaka in Zambia, a nun and social worker called Sister Astridah Banda conducts a live radio show about COVID-19 in seven local languages to answer people's questions
- Buenos Aires runs a WhatsApp chatbot called Boti to answer public queries and refer cases to medical professionals
- Social-media and messaging app WeChat and the microblogging website Weibo established platforms that connect hospitals, doctors, government and the media to provide trusted information and direct those in need to services



Mobilize Networks

- In Brazil, G10 Favelas, a network of community leaders across the ten largest informal settlements in the nation, is providing medical supplies and raising donations to hire private ambulances and health staff for residents
- In Bangalore, Chennai, Mumbai and Delhi in India, networks of philanthropists, non-governmental organizations, government agencies and individuals provide food and personal protective equipment to clinical staff and city residents. They compile real-time maps of areas in need of relief to direct emergency help
- Vietnamese cities have forged connections with local clinicians and businesses. Within a month of the first cases, local manufacturers were producing affordable COVID-19 testing kits
- Links developed during previous epidemics have proved useful. Kinshasa in the Democratic Republic of the Congo is repurposing infrastructure and staff trained to respond to Ebola outbreaks. Seoul in South Korea is applying lessons from a 2015 outbreak of Middle East respiratory syndrome (MERS), including improved coordination, scale-up of testing and use of technology for contact tracing
- Connections between cities are another source of strength. Many cities in China received masks and protective gear from sister cities in South Korea, Japan and other countries. Once the Chinese cities had recovered, they reciprocated the assistance

Responding to vulnerable populations:
Migrants, refugees,
women and children



Targeted social protection: Migrant, and vulnerable populations

- West Bengal and Delhi Governments have set up temporary shelters for poor, migrants at schools and community centers
- Texas Legal enforcement announced that they would temporarily halt evictions to prevent people from losing their homes
- Pakistan's Prime Minister's 'Coronavirus Relief Fund' is set up to channel charitable donations towards the most needy and vulnerable. It has already seen an outpouring of generosity across Pakistan
- Pakistan is registering youth under the PM's 'Corona Relief Tiger Force' led by young Senators
 - The Force will assist in quarantine management, identifying the poor, and delivering food/rations to them etc.



Targeted social protection: Domestic violence towards women and children

- Uttar Pradesh has launched campaign “Suppress Corona, Not Your Voice” which advertises the police’s domestic violence hotline
- Expand shelter and temporary housing for survivors
 - Canadian government earmarked \$50 million funding for GBV shelters and sexual assault centers
- Encourage virtual and informal support networks
 - Platforms like MyPlan from US, iCan from Canada and SAFE from Netherlands can be scaled up. In areas with low internet, options for text (WhatsApp) based networks can be encouraged. These help women and children feel connected and supported, and alert perpetrators that women and children are not isolated
- Build strong violence related first response systems
 - Through community trainings, target informal support groups including neighbors and friends, and exploring virtual options like phones and internet



Singapore's migrant workers

- The vast majority of these cases are in the **overcrowded dormitories that house more than 300,000** of Singapore's roughly 1 million foreign workers
- Singapore is now **testing more than 3,000 migrant workers a day** and hopes to expand that number
- For dormitories where the assessed risk of infection is extremely high, efforts are focused on **isolating those who are symptomatic** even without a confirmed COVID-19 test to allow quick medical care to these patients
- **Extensive screening in the dorms** with finding many workers who are infected with COVID-19 but who didn't appear sick
- The government is trying to find **alternative accommodations for people in the hardest-hit dorms**



Response in Refugee camps

- Camps have partnered with organizations and started **constructing isolation and treatment facilities** to ensure the availability of 1,900 beds to serve both refugees and host communities in the coming weeks.
 - Information-sharing has been expanded through a network of more than 2,000 community volunteers, religious leaders and humanitarian workers
- Angola has started a blog called Histoires de Lovua (French for ‘Stories from Lovua’) to share vital **information about how to stay safe in the pandemic** with fellow refugees in the Lovua settlement
- **Stockpiling essential medicines and medical equipment**, including oxygen concentrators, and distributing soap for the general community.
 - Also stepped up training of staff in early identification, notification, case management and contact tracing
- Chad: The International Organization for Migration (IOM) has **partnered with local traditional town criers and troubadours** to ensure COVID-19 transmission and preventive measures
- Jordan’s refugee camps, **stipulations on when people can go to the shops, leave their homes, and leave the camp** have been put in place.
 - They have drawn marks on the ground themselves to define the two-meter mark when they’re queuing



Appeals to governments from organizations in Refugee camps

- Medical staff won't be able to treat patients in a camp without the right equipment, and now would be the. Organizations are working to **procure personal protective equipment and hand sanitizer for health care workers and community outreach workers** and will get these stocks into camps as soon as possible to prepare for potential market shortages and travel limitations
- Organizations are trying to increase the frequency of water trucking or **providing mobile cash or vouchers for the most vulnerable** to access private water and other supplies
- Governments must first **lift any phone and internet restrictions** that are sometimes imposed on camps and can limit communication. Along with aid groups, governments should then create information campaigns that cater to displaced communities using an SMS system to send texts in local languages
- **Monitoring places where people typically gather** — like water points and clinics — and going there to provide information on social distancing and hygiene practices
- **Appointing COVID-19 focal points within country programs** to coordinate with national health ministries could help ensure refugees and displaced people aren't left behind in government plans.



Equalizing access to basic infrastructure

- Several cities have secured hotel space for people living in the streets, particularly vulnerable to this public-health crisis. [Berlin](#) has opened up a 400-bed hostel for the homeless
- [New Orleans](#) is moving the homeless to temporary hotel housing in the central business district
- Cities like Barcelona had already recognized digitalization as a universal basic right before the pandemic, and it continues its [efforts to reduce the digital divide](#) by designing and implementing public policies aimed at improving citizens' access, use, and quality of use of information and communication technologies, and overall at offering citizens the tools they need to participate, collaborate, and thrive in the digital change



Housing access for vulnerable populations

- **San Francisco's (US)** COVID-19 Data Tracker displays information updated on a daily basis about the City's ongoing efforts to provide temporary alternative housing for priority vulnerable populations and frontline workers. A total of 2,741 beds were made available in private hotels rooms as well other types of facilities, among which more than half were directed to homeless people.
- In **London (UK)**, about 300 rooms located in two Intercontinental hotels were transformed into shelters for vulnerable people already known to homelessness charities as part of an initial trial. The rooms were booked at a discounted rate for 12 weeks. In order to avoid beneficiaries using public transport, the mayor's team worked with cab drivers who volunteered to transport people between support services
- **Stuttgart (Germany)** created over 300 places for accommodation and care as a precautionary measure. The rented buildings are spread over several city districts. Among the first users were refugees and migrants.
- Between 8,000 and 10,000 foreign agricultural workers reside in the Portuguese city of **Odemira**. The mayor prepared a prevention plan for quarantine that takes into account the need to prevent transmission within this population. This includes making public infrastructure available with sanitation services and being able to feed up to 500 migrants working in agriculture.



Governments prioritize affordable housing

- Others have fast-tracked plans already in the works. In June, [two hotels in Vancouver, with 173 rooms between them](#), were purchased to house some of the city's most vulnerable. Months earlier the Californian city of San Jose said it would accelerate a \$17m plan to build up to 500 tiny homes to house homeless residents during the pandemic
- In Barcelona, the virus added impetus to a long-running crackdown on empty homes. In July officials sent a warning letter to 14 banks and investment funds whose stock of 194 homes are believed to have been sitting vacant for two years. If the homes were not rented within a month, the letter warned, the city would move to expropriate them at half their market value and turn them into social housing
- Some have set their sights on short-term rentals, in plans that could nudge landlords to list them on the long-term market. Amsterdam recently banned vacation rentals in its central old town and imposed restrictions on rentals in other neighborhoods, while legislators in the Czech Republic have rolled out legislation aimed at better regulating tourist flats. In September Toronto began requiring short-term rental operators to register with the city, a move aimed at allowing officials to [enforce a bylaw restricting short-term rentals to principal residences](#).



Countries around the world ensuring safety for women

- In Colombia, safe cities free of violence against women has been embedded in the local development plans of five cities with initial allocations of \$1.3 million (USD). The Mayors of participating cities in Colombia (Bogota, Cali, Medellin, Popayan and Villavicencio) in the Global Initiative signed a political declaration of commitment recognizing the impact of COVID-19 on violence against women in private, public and virtual spaces, while reaffirming that they will “Reduce, prevent and comprehensively address sexual harassment and other forms of violence against women in all spaces”. Each city initiative will continue to ensure a gender perspective in urban planning and transportation; implement measures to change social norms; and strengthen women’s rights organizations with a mainstreamed focus on those groups of women and girls who are most at risk of sexual violence.
- In Canada, the City of Halifax, has just begun its participation in the Safe Cities and Safe Public Spaces Global Initiative has included a section on COVID-19 impacts on VAWG in a scoping study that is being conducted to inform the future direction of the city’s program.
- The City of Vancouver, through a review of policy, programs and literature in the city’ scoping study on sexual violence in public spaces being conducted and in evaluating the impacts of COVID-19, disproportionately impacted populations most at risk of sexual violence including women, Two Spirit, trans, non-binary, and gender diverse people who are homeless or precariously housed, substance users, and/or sex workers have been identified, enabling the city to respond to their immediate needs. For example, through washroom trailers and provision of personal hygiene and harm reduction supplies, there have been significant improvements to health, safety and well-being.



Countries around the world ensuring safety for women

- In Chile, with a view to ensuring women's safety and reactivating the economy during the crisis, a scoping study was undertaken to better understand the nature and extent of sexual violence against women and girls in public spaces. Adapted online methods to capture the views and expertise of women's organizations and civil society groups and other stakeholders were used alongside a desk review of available research and data on sexual harassment. The heavy reliance on technology for educational purposes during the COVID-19 pandemic also prompted city partners to support a largescale study currently underway to assess online violence against women and girls.
- In Japan, in partnership with the Sakai Women's Organization, women and their children facing abuse during COVID-19 are provided accommodation, including through hotels in the City of Sakai.
- In Kenya, in Nairobi and Mombassa, five shelter facilities were assessed to strengthen capacities and continue supporting survivors. In partnership with the Centre for Rights Education and Awareness (CREAW), tele-counseling services provide psychosocial support to accommodate social distancing measures in one-on-one sessions and group therapy, informed by the COVID-19 and Essential Services Provision for Survivors of Violence against Women and Girls.



Countries around the world ensuring safety for women

- In Ukraine, the City of Rubizhne adopted a comprehensive and tailored program on ending sexual violence against women and girls in public spaces. The program was designed and validated by representatives of the Rubizhne City Council, representatives of social and health institutions, the National Police, Luhansk Regional State Administration, international experts, and representatives of women's rights NGOs and civil society groups. The methodology of the Global Initiative and the participatory planning process in Rubizhne has recently inspired a similar planning process in four other cities affected by the conflict, including Toretsk, Soledar, Novoaidar and Zolote.
- In Canada, as part of efforts to create a safe city with women and girls in Edmonton, in line with the principle of leave no one behind of the Sustainable Development Goals and the findings of the city's scoping study on sexual harassment in public spaces, the Institute of the Advancement of Indigenous Women (IAAW) received funding from the City of Edmonton and the Province of Alberta to support the IAAW "Safety in the City project". This included support for: training of IAAW on safety audits, the implementation of women's safety audits to inform planning of safe spaces, and a survey on women's safety in taxis



Countries around the world ensuring safety for women

- In Ecuador, the Municipality of Cuenca launched a ‘Guide for the Design, Use and Regulation of Inclusive and Safe Public Spaces for Women and Girls: Parks and Markets’ developed with the active participation of end users, including women with disabilities, and in consultation with urban planning and gender experts and Municipal departments. It details how a gender responsive approach can be applied to infrastructure to meet the needs of all women and enhance services for survivors/victims.
- In Japan, the City of Sakai has established a Steering Committee in 2020 composed of managers across diverse departments to define strategic and evidence-based approaches to mainstream women’s safety across the departments of the city government in their COVID-19 recovery plans. In October 2020, the city provided information on the concept and approach of safe cities with women and girls based on local and global experience during a consultation related to Japan’s National Resilience Program
- In Papua New Guinea, in the City of Port Moresby, free and safe transport services are provided to women survivors during lockdown as part of the Port Moresby Safe City for Women and Girls Initiative



Countries around the world ensuring safety for women

- In Morocco, the City of Rabat, in partnership with the NGO Jossour Forum des Femmes Marocaines completed a neighborhood revitalization initiative Fleurir Ma Medina (Flower my Medina) engaging grassroots women and volunteers. As part of this effort, architects, local government representatives and civil society organizations participated in capacity-building workshops on gender responsive urban planning and public investments. Young women and men students in architecture and engineering were also mobilized in gender responsive design challenges and hackathons to prepare them as future leaders in planning inclusive spaces.
- In Ecuador, the Municipality of Cuenca launched a campaign entitled “24/7 without sexual harassment” mobilizing men champions and informing citizens on what constitutes sexual harassment and how it affects women’s ability to exercise their rights to the city.
- In Egypt, a far-reaching multi-media communications campaign “Our Mental Health is a Priority Initiative” was developed with Safe Kids and Shezlong (a mental health platform) in partnership with the National Council for Women and launched to provide practical tips on balancing life’s demands, positive parenting and healthy household dynamics. Local NGOs (House of Counselling and Shezlong) were also supported to provide free-of-charge support groups and online professional therapy sessions.



Countries around the world ensuring safety for women

- In Mexico, in partnership with the University of Guadalajara and representatives of indigenous peoples' groups, a community campaign was developed using primarily radio to raise awareness on COVID-19 and violence against women. Campaign messages were made available in five languages using an inter-cultural and human rights-based approach.
- In Ethiopia, the City of Hawassa in partnership with Norwegian Church Aid as part of the dissemination of personal protective equipment (PPE) for COVID-19 and health information, messages in local languages were shared as part of community outreach to prevent and respond to violence against women. Messages appeared written on supplies distributed, were communicated by trained youth volunteers and broadcasted via three television channels over a 12-week period.
- In Kenya, in the rural areas of Kericho and Bomet, a multi-lingual, multi-media (posters, radio talk shows and social media) communications campaign on the prevention of COVID-19 and violence against women was strategically paired, reaching the community. Male champions who devised "Men's Guidelines for Staying at Home in COVID-19" to prevent gender-based violence (including sexual harassment) and COVID-19 also engaged directly with community members to sensitize them on the guidelines.



Countries around the world ensuring safety for women

- In Egypt, a surge in reports to the helpline run by the Women's Complaints' Office prompted the establishment of a dedicated WhatsApp modality together with training of an emergency intervention team to facilitate timely and effective referrals for support. In the underserved areas of Alexandria and Damietta, economically hard-hit women were provided with skills-building sessions and other training paired with information on COVID-19 preventative measures. Similar information was provided to women's shelters through various government platforms and broadcast through national television. Together with the Ministry of Social Solidarity, four shelters were re-designed ensuring a survivor-centred approach adapted to COVID-19.
- In Bolivia, the City of El Alto, brought together representatives from neighborhood councils and school boards to increase awareness around COVID-19 and including a tailored digital media platform providing information, guidance and care for survivors/victims of sexual harassment and other forms of violence against women and COVID-19. The initiative will be accompanied by a communication strategy to prevent cyberbullying and ICT facilitated sexual violence. The city also developed communication materials and an "Active Online Listening" initiative with the women's rights organization Kullakita and #TeAyudamos Platform to provide survivors of online sexual harassment and other forms of violence with care, guidance, how to report it and information on COVID-19.



Countries around the world ensuring safety for women

- In the UK, the Mayor of London led a partnership of frontline voluntary sector agencies to support those that were fleeing violence during the first 'lockdown'. A network of accommodation spaces was implemented across the city with wrap around support which included counselling and help to move survivors/victims and their children on to more permanent housing. The city also distributed much needed funding to organizations to enable them to adjust their services to provide support to women remotely. Extra funding was also used to distribute food, PPE, and sanitation products at refuges and other places of work.
- In Colombia, the City of Bogota created a network of 630 stores, supermarkets and pharmacies, 37 gas stations and seven cafes where women could report their abuse to receive guidance, seek institutional accompaniment and access referral pathways for multi-sectoral support. The City of Popayan has instituted the same measure with a network of 50 pharmacies
- In Ethiopia, in the City of Addis Ababa, in partnership with the Association of Women's Sanctuary and Development and the Ethiopian Network of Women's shelters, adjustments were made to ensure that safe accommodations remained available. During this period, the first transitional shelter with comprehensive support services also opened its doors.
- In Belgium, the City of Brussels, is conducting training with women and men police officers so they can better understand the nature and extent of sexual harassment in public spaces and have the skills to respond effectively.



Effective rental housing for migrant workers

- India's [cabinet-approved scheme](#) is targeted at “migrant workers/urban poor” who live in slums, informal or unauthorized colonies, or peri-urban areas to avail formal, affordable, rental housing. Affordable Rental Housing Complexes aims to initially utilize existing government-funded vacant housing through public-private partnerships and subsequently incentivize the construction of such complexes on private lands.
- Chandigarh Housing Board's [Rent-to-Own housing scheme](#) also shows how to enable aspiring socially mobile migrants, who could eventually prosper and consider owning a home in the city.
- In Thailand, schemes like [Baan Makong](#) enable civil society organizations to skill communities to self-finance and self-construct formal, pucca, affordable homes and last-mile infrastructure (like water and electricity lines), while negotiating with government agencies for secure tenure and provision of trunk infrastructure.
- Chile, Brazil and the US issue “rental vouchers” to low-income groups, which can be exchanged in lieu of rent in formal, private housing. This enables them to access a range of housing options, assures landlords of steady rental revenue and relieves the pressure on social housing agencies.



Empowering women and strengthening capacity of women-led businesses

- In Thailand, joint efforts by UN Women, ILO, the United Nations Children's Fund (UNICEF) and the International Organization for Migration helped strengthen the capacity of relevant line ministries to deliver child support grants, disability and old age allowance schemes to more than 10 million beneficiaries.
- In Kosovo, the government allocated two million euros in grant funding dedicated to women-led businesses affected by the pandemic as part of its national stimulus plan.
- In Lebanon, 140,000 female-headed households received cash assistance provided under the Emergency National Poverty Targeting Program.
- In Mali, the UN Women Buy From Women Enterprise Platform was expanded from commercialization of agricultural products to other areas of commerce to support women-led businesses



Empowering women and strengthening capacity of women-led businesses

- In Nepal, access to an e-commerce platform increased through a dedicated app for women to sell their products online with business development and start-up support.
- In Papua New Guinea, UN Women raised emergency funds that enabled a doubling of the number of women market vendors accessing social protection assistance, easing the crisis for 26,000 women in 14 markets across 11 provinces.
- In the Philippines, UN Women provided emergency cash grants for 10 women's collectives affected by armed conflict and the pandemic, worked with women's collectives through establishing online marketing platforms for providing cash grants, and facilitated online learning sessions for 5,200 women.

Leveraging data and technology



Leveraging data for transparency, monitoring and response

- Govt of Honduras has set up a central online portal resource
- El Salvador has set up a Tableau web responsive tool to monitor and track COVID cases
 - This allows users to contrast the number of PCR tests to detect COVID-19 vs. the number of confirmed cases, geographical location of confirmed cases, as well as health containment centers and collection centers for donation of food and household goods for them
- Dashboard using government data to track COVID-19 cases in Côte d'Ivoire: location, total number, and recoveries.



Contact tracing and movement tracking

- The US state of Kansas is tracking residents' locations via a platform called *Unacast*, which compares aggregated GPS data from before and after the implementation of social distancing and grades each county on its compliance
- Moscow is planning to use smartphone geolocation functions to track foreign tourists' movements through the city to prevent outbreaks of COVID-19 after Russia reopens its borders
- South African Government revises phone tracking plans. The new regulations provide judicial oversight and aim to ensure that emergency provisions expire when the 'state of disaster' ends
- The State Disaster Management Authority of the Indian state of Andhra Pradesh, in collaboration with other government agencies, is developing tools to track the travel history of people who have tested positive for COVID-19 and those who are under quarantine



Enforcing quarantine

- In order to enforce mandatory 14-day quarantine orders, Kenyan authorities have been tracking mobile phones of people suspected to have COVID-19
- The Kazakhstani ministry of health requires the 8,000 or so Kazakhstani citizens currently under quarantine to use the SmartAstana tracking app, which enables officials to ensure that they remain in isolation.
- The city of Almaty relies on video surveillance technology called Sergek, produced by the local telecommunications firm Korkem Telecom to find people who break quarantine . So far, these two cases are the only examples of the government employing new surveillance technologies as anti-pandemic tools

Ensuring accountability in emergency funds



Ensure complementarity in expenditure across various sources



When there is a need for exceptions, protocols also need to be enhanced



Financial reporting arrangements should link to outputs and outcomes



Civil society can help improve accountability



Cities adopting smart tech to build resilience

- Drones are being used for communication and enforcement of social distancing rules and delivery of medical supplies
- Artificial Intelligence is being leveraged for remote temperature sensing
- Start-ups are enabling autonomous last mile delivery
- Real time dashboards are reflecting crowdsourced location tracking data



Singapore is leveraging technology to monitor crowd levels at parks

- With parks and green spaces are still open, people of Singapore can now track crowd levels in real-time with an interactive webpage developed by Nparks



China is using drones to fight COVID

- Drones originally designed to spray pesticides for agricultural applications were adapted in China to spray disinfecting chemicals in some public spaces and on epidemic prevention vehicles traveling between impacted areas
- They are being used to deliver medical samples and significantly reduce unnecessary human contact throughout the transport cycle. It can also speed feedback for critical tests needed by patients and medical workers
- Drone delivery of consumer items can ensure that people have access to food and other goods - and make it easier for citizens to keep to recommendations limiting human contact



Singapore using robots to maintain safe distancing in parks

- Singapore is piloting a robot dog to help promote safe distancing in parks, gardens and nature reserves to lower the risk of exposure to coronavirus
- Spot, which is controlled remotely and fitted with safety sensors that detect objects and people in its path, is being deployed over a 3km stretch in the River Plains section of Bishan-Ang Mo Kio Park for two weeks during off-peak hours
- The four-legged robot is also being tested at the Changi Exhibition Centre community isolation facility to deliver essential items such as medicine to patients
- A recorded message is broadcast from Spot to remind park visitors to observe safe distancing measures. It will also be fitted with cameras – enabled with GovTech-developed video analytics – to estimate the number of visitors in parks. These cameras will not be able to track and/or recognize specific individuals, and no personal data will be collected

Singapore leveraging tech to trace and re-open safely



- Technology has played a key role in tackling coronavirus in Singapore through its Safe Management Measures that are required in the workplace before selected economic activities can resume after what it calls its “circuit breaker” period
- For example, organizations must use the SafeEntry visitor management system developed by GovTech to record the entry and exit of all staff and visitors entering the workplace
- SafeEntry is a national digital check-in system that logs the name, NRIC and mobile number of individuals visiting hotspots and venues providing essential services, as well as the information of people working at places providing essential services
- All employees should also download and activate the TraceTogether app, to help the Ministry of Health quickly identify potential close contacts of Covid-19 patients and reduce transmission

Community led initiatives



Community led initiatives

- In absence of public transport system, in Bangladesh, a group of CSO partnered with health ministry to provide free shuttle service to all the healthcare providers
- Argentina's president calls in priests to prepare slums for COVID-19
 - Seven priests, who live and minister in the slums of Argentina's capital met with President Alberto Fernandez and filmed a video urging people to stay home
- Telemedicine/e-health centers with a UANs working 24/7 that directly connect to a doctor for concerns and advice regarding COVID-19. This reduces load on medical facilities.
- In Colombia, the local government and different civil society organizations joined efforts to launch a Hackathon to provide solutions
 - Aims at mobilizing critical workers at the same time as reducing contagion among citizens



Building on community culture and trust to create acceptable and scalable responses

- In many low- and middle-income countries, **governments can repurpose existing buildings such as shuttered schools, shops, and community centers to provide emergency shelter.**
 - They can turn city parks and sports facilities into living spaces for the isolation or care of nearby slum communities and stop forced evictions, as “de-densification” or “decanting” measures will lead to the unintended consequence of further spreading COVID-19
- In Malaysia, communities in informal settlements are very resilient because they are close-knit and well organized. While the spreading of mutual-aid networks in better-off cities where neighbors did not previously know each other is encouraging, **informal settlements have always functioned through communal living, and this will be these communities’ best weapon against COVID-19.** Governments need to bring in these key partners to deliver public health messages and coordinate the response
- Volunteers across Africa — such as those with [Shack/Slum Dwellers International](#)’s Know Your City project — **conduct community censuses that should be leveraged to disseminate vital public health information.** Communities can monitor the spread of the coronavirus and decide on the use of available space for quarantining.



Community groups in Asia are stepping up to respond on the frontlines

- **Community surveys and monitoring to track the impacts** of the virus on the poor, identify vulnerable families and individuals within the community and determine who needs what assistance
- **Monitoring the impacts of government regulations and interventions,** and coordinating with local government agencies
- **Setting up community kitchens, food banks and buying staple foods in bulk,** to distribute and support vulnerable and virus-infected households
- **Raising funds to support specific vulnerable communities** and providing cash assistance
- **Promoting community-level quarantine in crowded settlements** where household-level quarantine is impossible



Community groups in Asia are stepping up to respond on the frontlines

- **Distributing accurate information about the virus** and how to keep safe and prevent its spread
- **Stitching face masks and personal protective equipment** and producing hand-sanitizers
- **Keeping in touch with locked-down and quarantined communities** and sharing virus news by phone, video chat and instant messaging applications like Line, Messenger and WhatsApp
- **Developing systems for exchanging basic goods and necessities between communities or networks** when the usual supply systems close down or are off limits during lockdowns
- **Using community savings and credit groups** to help families survive and meet their families' urgent food and medicine needs, with loans and savings withdrawals, or reducing expenses by suspending loan repayments or reducing interest on loans



Homegrown responses by community members

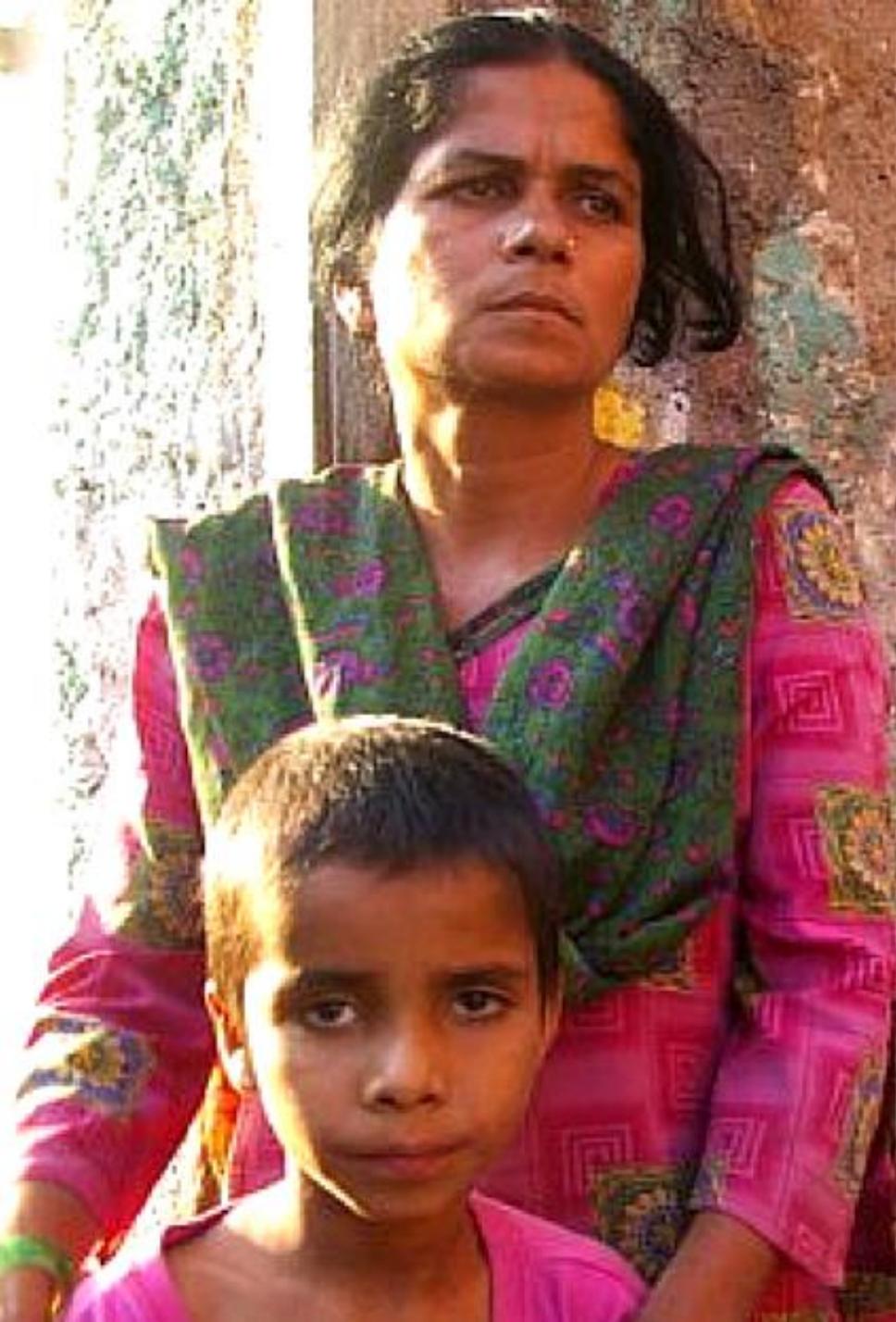
- Expanding non-traditional sanitation means through initiatives taken by NGOs
 - Examples include pee-poo bags and dry toilets
- Curfew imposed by the local communities in Brazil
 - They go around and watch people to make sure they are staying in
- Sierra Leone developed home-made personal protective equipment (PPE) during Ebola
 - They used plastic bags for gloves, sugar or rice sacks to wrap around their body, wellington boots to cover their feet, and woolen facemasks

Following a burial, they also washed their hands and feet with soap and water, and boiled their boots in lime



Community partnerships in India, Indonesia and Bangladesh respond to local needs

- When the migrant workers got stuck during the lockdown, Urban Local Bodies in Kerala promptly set up [community kitchens](#) and distributed relief materials by mobilizing women-run Self Help Groups under the [Kudumbashree](#) program
- City government of Dhaka sought to distribute food to the poor during lockdown, it was realised that detailed information about vulnerable households not readily available and sought assistance of the [Urban Poor Federation of Dhaka North City](#) — a coalition of 350 Community Development Committees (CDC) organised around savings groups
- Indonesia's [National Slum Upgrading Program](#) (NSUP) which provides community infrastructure grants, has now forged partnerships with the local governments and slum communities



Bhopal's organization fighting sexual abuse, raises awareness

- Bhopal's charity-run Gauravi was the first such centre set up after the gang rape and murder of a woman on board a Delhi bus in 2012, a crime that sparked global outrage over women's treatment and led to tougher anti-rape laws in India
- Women at Gauravi decided to find vulnerable people, list their needs, pack kits of food and vital aid and use their tuk-tuks to deliver nearly 10,000 of them over the three months
- They also drove women to work, helped them call government ambulances and raised awareness about COVID-19 when public transport - including tuk-tuks - came to a halt, depriving the women drivers of the daily income of up to 1,500 rupees (\$20)

Expanding health services and testing capacity



Expanding health services and improving diagnosis

- Nigeria has created a tool that allows users to self-assess their risk category based on symptoms and exposure history
- South Africa's WhatsApp chat runs an interactive bot to answer common health questions and has reached 3.5 million users in 1 month
- In Argentina App COVID-19 allows people to self-test for coronavirus
 - Citizens also learn about the development of the pandemic and the measures adopted by national authorities to contain the advancement of the virus. On the first day of launching, 500,000 people already took the test with the app



Testing and Self Evaluation

- The Afghan Ministry of Public Health and Ministry of Telecommunications and Information Technology have launched the "corona.asan.gov.af" **software to provide health advice in three English, Dari, and Pashto**; using the questions embedded in the software users can evaluate themselves for the virus
- Germany's federal agency responsible for disease control and prevention, the Robert Koch Institute, has teamed up with the health technology start-up Thryve to develop an app called Corona-Datenspende ("data donation") that **works with a variety of smartwatches and fitness wristbands**



Transparent testing

- South Korea is asking for public participation in testing. The city of [Goyang](#) has led an **innovative contact-free, drive-through testing method**. The city opened a facility in a parking lot where people can simply roll down their windows and get swabbed by medical personnel in protective gear
- In the 3,300-person town of Vò, Italy, researchers pursued a [fully comprehensive testing strategy](#) that involves **testing and retesting every single resident**. Half the individuals who tested positive had no symptoms. Since they were identified early, they could be quarantined along with anyone they came in contact with. Health authorities now believe they have essentially stopped the spread of the illness in this small community.



Mumbai and Delhi turn public attractions into quarantine facilities

- Beds were also installed in a nature park in the heart of the city, commonly called the lungs of Mumbai. The park - which usually offers respite from city crowds and dusty heat - sits next to Asia's largest slum, Dharavi, where coronavirus cases have spiked among the cramped settlements
- A massive exhibition ground in suburban Goregaon - host to 20 million visitors a year at trade fairs touting everything from gold to housing - has also been turned over for quarantine
- A quarantine tent has come up at the car park area and an ICU (intensive care unit) tent is coming in the members' enclosure at the Royal Western India Turf Club
- In Mumbai, more than 30,000 beds to quarantine the nearly 20,000 people it expected to see with mild symptoms by the end of May, and 6,400 beds for more serious cases, which are expected to total 10,500



Mumbai and Delhi turn public attractions into quarantine facilities

- From ritzy racecourse to people's planetarium, Mumbai is turning iconic sites into emergency coronavirus wards to tackle a chronic bed shortage
- Indian cities are enlisting vast spaces including stadiums in New Delhi and Pune as quarantine centers. A sports village built for the World Military Games in Hyderabad more than a decade ago has been rapidly repurposed as a hospital
- A 5,000-seater stadium was converted into a 500-bed quarantine facility
- Nehru Planetarium, a favorite day trip for school children who gaze up at stars and planets hovering on a massive dome-shaped universe, a landmark now requisitioned for quarantine



Thermal imaging systems to open indoor spaces safely

- Thermal imaging camera systems play a pivotal role, with casinos, retailers and manufacturing facilities to proactively detect an elevated temperature in visitors or employees prior to entry
- These surveillance systems work by picking up heat emitted by an object or a person and can detect vehicles or individuals in a predetermined area.
 - It is especially useful in the dark, when a traditional surveillance system might be limited in its detection capabilities due to limited light sources
- They locally and remotely monitor and manage alerts and integrate with other technologies, such as a turnstiles, physical access control systems and intrusion devices.
 - The combination makes this type of solution ideal for facilities that require a first line of defense in high traffic areas or when rapid people flow is essential
- Installing thermal imaging cameras for scanning elevated skin temperatures will soon become the new normal as more and more companies migrate back to the workplace



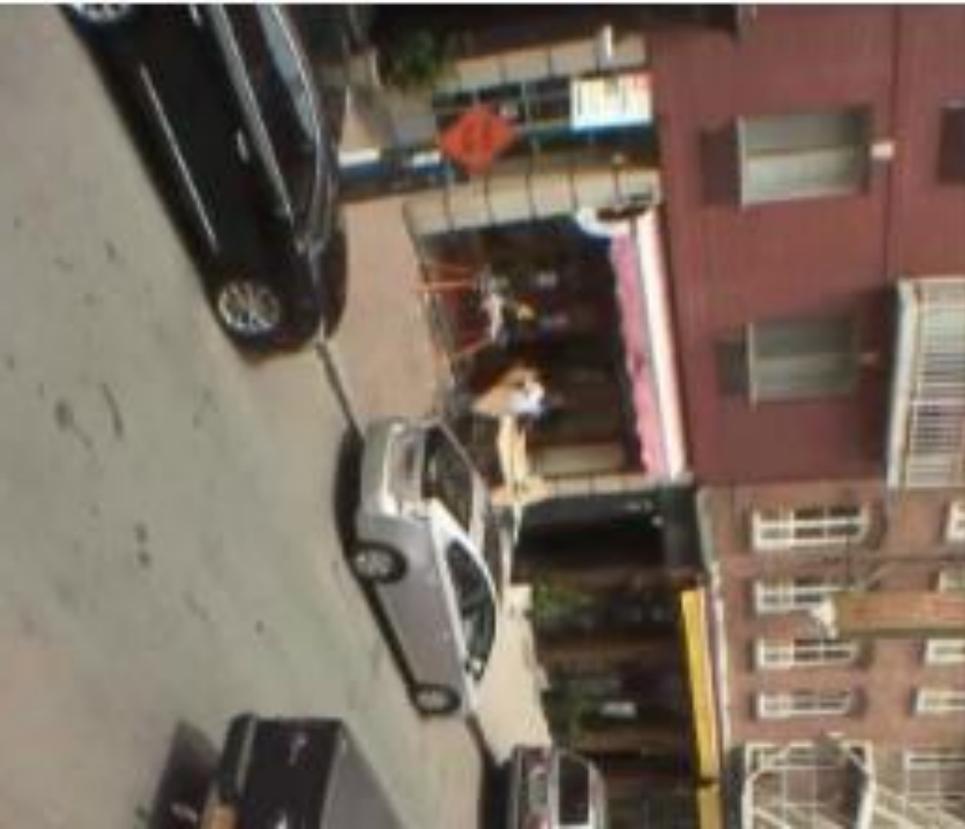
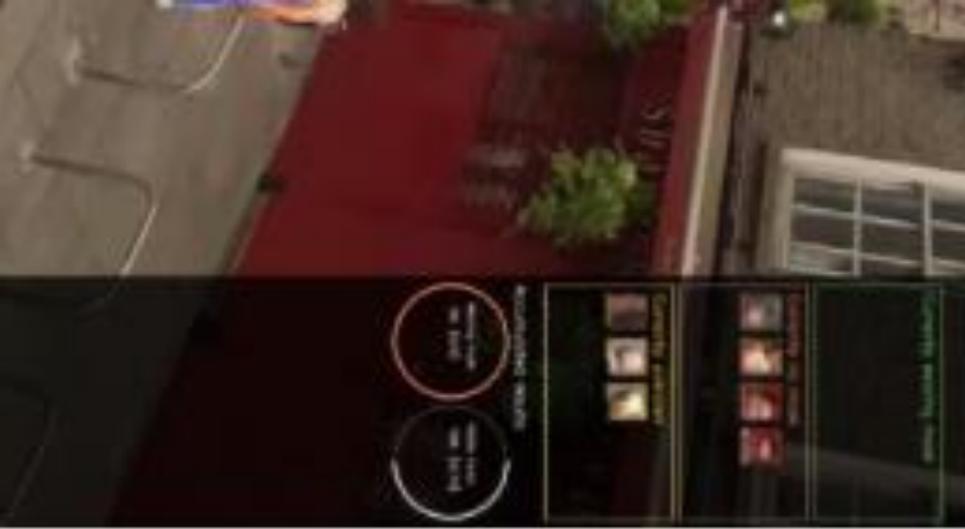
Easy and equal medical counseling and consultation services

- The city of [Bilbao](#) set up a single service line to effectively channel and answer all questions from its residents, regardless of municipal competences or responsibilities, and reassigning from different departments
- The city of Torino, recognizing the massive psychological impact of the crisis, set up free virtual services to provide support and counseling to families and individuals, as well as to facilitate contact with isolated elderly people in residences through the installation of technological devices
- Los Angeles was among the first to appoint a “[Covid-19 Equity Director](#)” to highlight the racial inequality in impact and mortality due to the pandemic
- New York City’s municipal health facilities are providing [free coronavirus testing and care](#) regardless of immigration or insurance status, knowing the reality that public-health concerns cannot effectively be addressed by excluding people, much less vulnerable groups
- Chicago [signed an executive order](#) to protect immigrant and refugee communities during the pandemic, “explicitly ensuring that all benefits, opportunities, and services provided or administered by the city of Chicago are accessible to all residents, regardless of birth country or current citizenship status.”



Cities ramp up testing and look to science based strategies

- Well-run cities such as Hanoi in Vietnam were able to avoid major outbreaks at the outset by rapidly restricting travel and scaling up testing, tracing and quarantining
- Thiruvananthapuram (Trivandrum), the capital of the Indian state of Kerala with an estimated population of more than 2.5 million, has one of the lowest infection and death rates in the country — just over 4,000 confirmed cases and 12 deaths by 1 August — despite having thousands of returning international students and workers
- Timely, reliable, accurate and science-based information is crucial. Individuals need to know why and how they should maintain a social distance, wear masks and quarantine. For instance, Bangalore in India publishes a daily dashboard and maps of newly diagnosed infections used for local tracing (<https://covid19.bbmpgov.in>).



Mask face recognition software monitor social distancing (and raise questions on privacy)

- San Francisco-based company is one of many now pioneering mask recognition to get people to comply for the public good. So far, [masks have been confounding traditional facial recognition software](#)—but these new machine learning tools could conceivably be used in private or public spaces to measure compliance
- Today’s facial recognition software studies the features around the eye, nose, mouth, and ears to identify an individual whose picture is already supplied, either by the individual or in a criminal database. Wearing a mask obstructs this recognition—an issue that many systems have already encountered, and others have solved.
- Developers say that mask recognition software in theory bypasses privacy issues because the programs don’t actually identify the people. Such software is trained on two sets of images: one to teach the algorithm how to recognize a face (“face detection”) and a second to figure out how to recognize a mask on a face (“mask recognition”).
- “If we can compute the number [of people who are complying with the mask mandates], people can make policies and monitor on whether or not they need to do another campaign to push mask usage
- Currently, this recognition software is being used in “stealth mode” in multiple settings in the United States and Europe. Restaurants and hotels are using it to make sure the staff is complying with wearing masks. One airport on the East Coast of the United States is also testing the technology on-site



Massachusetts General Hospital (MGH) finds cheap and effective intervention combination

- A public health strategy that combines contact tracing and community-based screening with isolation and quarantine centers can substantially reduce infections, hospitalizations and deaths from COVID-19 by 94 %
- It also estimated that a program combining all interventions would cost an additional \$340 per year of life saved, which represents similar or better value than many other established public health initiatives in South Africa, including tuberculosis diagnostic testing and cervical cancer screening
- MGH developed a COVID-19 microsimulation model to evaluate clinical and economic outcomes of various combinations of five complementary epidemic control interventions in KwaZulu-Natal, South Africa. Those interventions are health care testing, where diagnostic testing is performed at designated health care centers; contact tracing to identify those who may have come in close contact with someone with COVID-19; isolation centers for people with COVID-19; mass symptom screening of local populations by community health workers; and quarantine centers for people who have been in close contact with someone with COVID-19 but have tested negative.



Massachusetts General Hospital (MGH) finds cheap and effective intervention combination

- Many countries have the infrastructures in place for some or all of these interventions, the researchers pointed out. Contact tracing and community-based screening, for example, have frequently been deployed in the past through networks of community health workers.
- Isolation centers, which are likely to require the greatest investment, have been implemented successfully in response to Ebola epidemics in West Africa and the Democratic Republic of Congo, where health care resources are among the scarcest in the world. According to the MGH research team, isolation centers would be particularly effective in areas with high household density and limited capacity for in-home isolation.
- Quarantine centers were also shown by the MGH microsimulation model to be a cost-effective way to reduce the health impact of epidemics, but their implementation must recognize social and human rights issues that have plagued mandatory quarantine in some settings.
- Even where quarantine centers are not feasible due to lack of public support, implementing the other interventions we described can provide major clinical benefits in an economical manner
- The bottom line is that prevention goes a long way

Collaborations with international and local organizations



Collaborations for quick action

- MIT's SENSEable City Laboratory has partnered with the Ecuador Government to develop CURA; **repurposed, 20-foot shipping containers that address the shortage of intensive care units (ICUs)** to treat COVID-19 patients at a third of the pre-bed cost
- Wuhan's **temporary hospital is built from temporary buildings and shipping containers**. The 1,000-bed hospital was built in just eight days
- Waste picker organizations such as [Asociación Nacional de Recicladores](#) in Colombia and [SWACH](#) in India are **promoting gloves and masks to prevent physical contact with trash and to keep a distance** from people as well as from waste that is known to have been generated by COVID victims. The Global Alliance for Waste Pickers has been crowdsourcing global guidance and sharing best practices for waste pickers on their [site](#).
- The [South African Waste Pickers Association](#) is asking people to **separate their waste** at the household level, and also **to wrap tissues or contaminated waste in another layer of bags** to limit the exposure to waste workers.



Data and mapping: UN-Habitat interventions

- Kenya: supporting the Government's effort to **collect data and improve access to water and sanitation** facilities in informal settlements, and to prevent COVID-19 spreading through urban transport systems
- Ethiopia: helping to **supply water to waster pickers** in the capital Addis Ababa who are at risk of infection. They are also conducting rapid mapping of community assets, spaces and vulnerable hotspots to allow appropriate responses
- Iraq: Working with UN partners, they **contribute to an online platform** that provides government endorsed information on COVID-19
- Tunisia: **supporting the development of a Leave No One Behind mobile app** to provide a one-stop-shop information portal on COVID-19 to allow vulnerable communities to easily access essential services provided by the State
- Egypt: using **riverbank filtration technology** which is easy to operate and maintain to extend affordable access to clean water and sanitation
- Sri Lanka: supporting **provincial councils and local authorities to establish a service provision database**, facilitating online discussions with local authorities on their emergency response and training them on online reporting of services they provide



UN Habitat initiatives in informal settlements

- Ensuring safe transport and **repurposing buildings to isolate** those infected are other priority areas
- UN-Habitat is assisting with data collection, **mapping of existing and emerging hot spots and analysis** working with its network of local and global partners
- **Technical advice and online tools for cities**, local leaders and communities
- **Direct programming in informal settlements** to improve access to food and basic services including water, sanitation and hygiene and entrepreneurship for local solutions
- **Public awareness-raising through targeted, accurate information in local languages.** The recovery phase will focus on providing expert policy advice, knowledge sharing and urban recovery programmes to improve services and infrastructure in informal settlements and to sustain the gains made



Mwanza scheme: tackling Tanzania through health and education initiatives

- UN-Habitat and the EIB will provide **14 dedicated handwashing stations to reduce the spread of COVID-19 in informal settlements in the Mwanza region of northern Tanzania**
 - Two thirds of people in the regional capital live in informal settlements and COVID-19 cases have already been confirmed in Mwanza.
- The multiple tap handwashing stations will each include **a 5,000 litre water tank, wash basins and soap will be placed in public places, markets and health centers.**
 - The new handwashing stations will be managed by trained volunteers from the local community who will provide guidance on effective handwashing. The volunteers will be provided with personal protective equipment, including face-masks and gloves, to reduce the risk of infection.
- The Mwanza scheme will be **supported by public health and education activities**, including proper hygiene and handwashing practices.
- The project will be implemented by the Mwanza Urban Water and Sanitation Company (MWAUWASA) which will also install **100 additional water standpipes in vulnerable communities** and suspend water disconnections for the duration of the coronavirus pandemic



Data for planned migration in Uganda

- Cities Alliance, with support from the Swiss Development Cooperation (SDC), and in partnership with AVSI Foundation, Arua Municipal Council (AMC) and the Uganda Bureau of Statistics (UBOS), is working in Arua to support local authorities managing migration and integration of refugees
- The project includes the collection of accurate data on the migrant population, which will allow the city to improve planning and budgeting, and help communities become more resilient



UN Habitat guideline for response in informal settlements

- Declare an end to all forced evictions of informal settlements and encampments and ensure implementation
- Impose a prohibition of any emergency processes, such as ‘de-densification’, that involves the removal of large numbers of people
- Ensure all residents have access to an adequate, affordable and proximate supply of water, toilets, showers, sanitation services, soap, hand sanitizer, disinfectants, and masks
- Provide residents with assistance in establishing or strengthening local community structures so that they can effectively work alongside governments
- Develop emergency plans to assist residents in conjunction with community leaders and residents and ensure these plans are well communicated. Community leaders must be provided with education and training



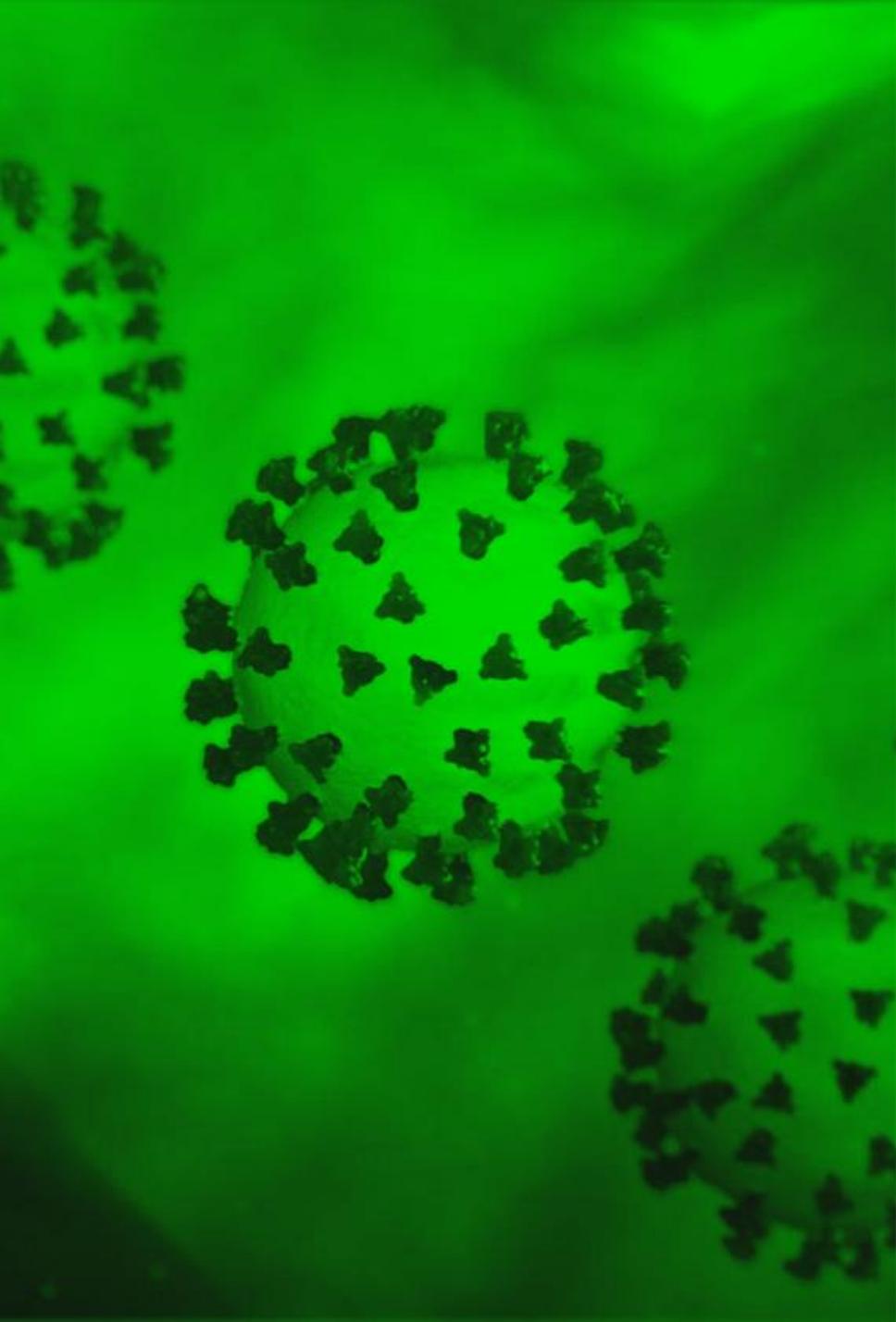
UN Habitat guideline for response in informal settlements

- Ensure residents have non-discriminatory access to public and private health services proximate to their communities and ensure that testing for COVID19 is free of charge
- Ensure housing providers provide rent abatements to those affected by COVID-19 and prohibit the cutting off of water and electricity services to households unable to pay their bills
- Lock-down provisions should not affect essential services that are commonly provided by the local informal economy
- Undertake public education campaigns and ensure residents have access to information on a regular basis
- Ensure any emergency financial aid offered to those in the formal economy affected by the pandemic is also made available to those in the informal economy



Revising Disaster preparedness metrics and scorecard

- Governments, especially at the local level, need to plan and strategize to deal with all hazards, including biological ones, and to address gaps in their preparedness and develop response capacity
- Better data collection will allow city leaders to prepare for future episodes where once unthinkable metrics become normal
- The Scorecard has been augmented by the development of a Public Health Addendum which provides guidance to local governments on the wider issues of management and recovery in case of biological hazards, including a pandemic
- In cities like Lisbon, Kampala and Greater Manchester, the Disaster Resilience Scorecard has proved to be a useful tool helping cities to establish their public-health system resilience baseline and to frame an action plan
- UN-Habitat's City Resilience Global Program provides hands-on support to local governments in urban planning and building resilience to all types of hazards.



Clean air policies take priority among governments

- Leaders of some of the world's biggest cities, including London and Milan, are already repurposing city centres to use cleaner energy and technology.
- They are encouraging to get out of cars, to make more journeys on foot, by bike or — in the long term — via public transport, by investing in infrastructure that makes this possible
- Republic of Korea is introducing a Green New Deal that seeks a new way of life after the pandemic to tackle climate change and air pollution alongside other elements of the UN sustainable development goals, such as inequality and poverty, and to look beyond our borders.
- The region is seeing increasing co-operation with Japan and China to address regional air pollution



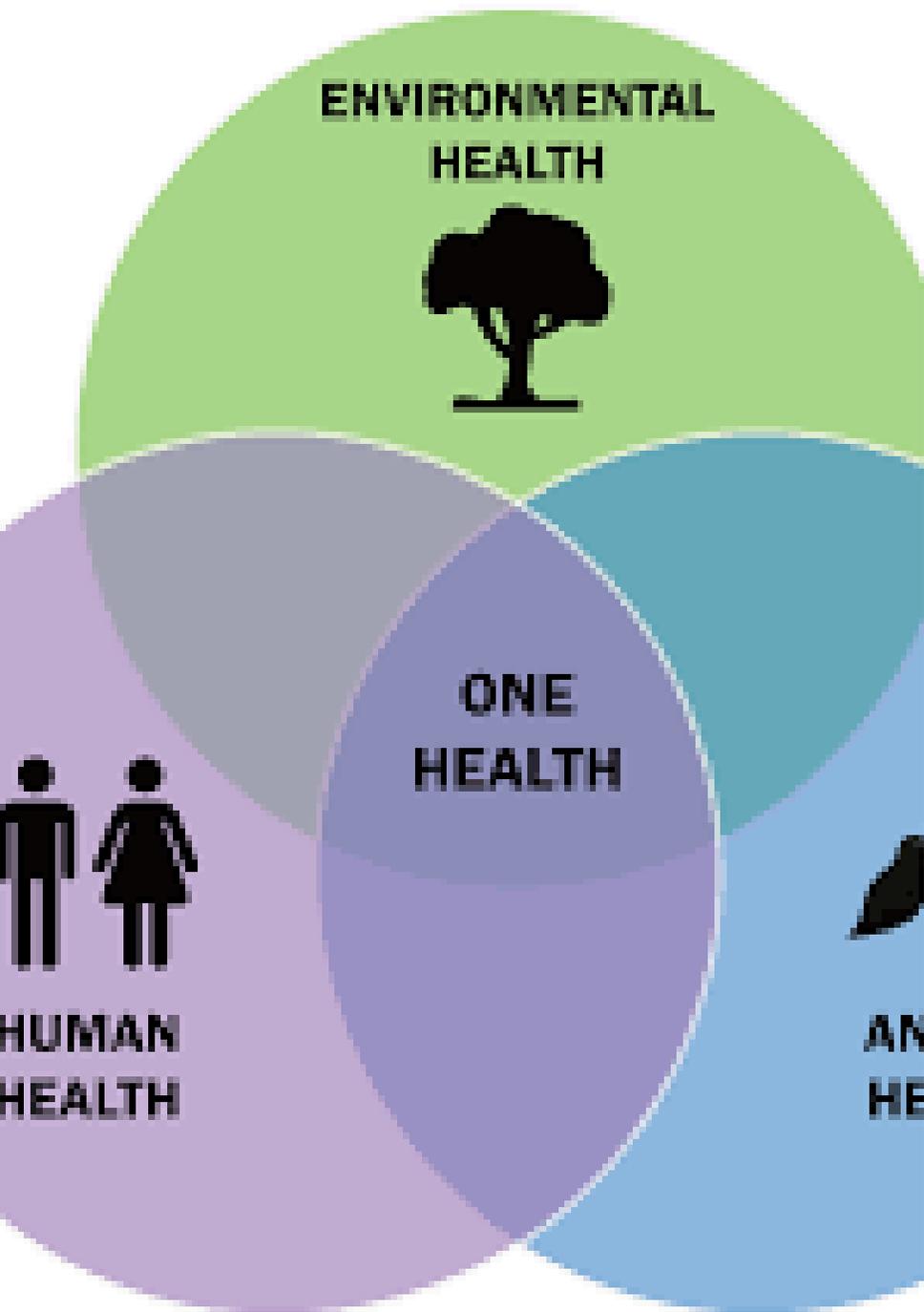
Bloomberg helps city leaders collect data to inform pandemic response

- As mayors in the United States put together their plans to reopen and revive their local economies, the set of metrics have developed in partnership with Johns Hopkins will allow them to focus their resources on communities in need
- These new resources aim to help city leaders analyze data in seven key areas that should enable better pandemic-related decision-making moving forward, including:
 1. Status of infection local rate
 2. Capacity of the healthcare system
 3. Status of testing and contact tracing system
 4. Levels of compliance with public health safety measures
 5. Protection and preparedness of emergency workers
 6. Protection and preparedness of congregate facilities such as nursing homes and prisons; preparedness levels for business reopening



UN-Habitat's innovative tracker platform to assess how ready the world's cities were for the COVID-19 pandemic

- The city-based COVID-19 Readiness and Responsiveness tracker platform uses global metrics to provide critical and often unavailable information from cities around the world.
 - The tracker provides information that is critical for protecting populations and informing resilience and recovery strategies and future responses to global pandemics.
- The COVID-19 Readiness and Responsiveness tracker for cities is a unique scoring mechanism that integrates a range of data points to provide a COVID-19 Readiness Score and a COVID-19 Responsiveness Score on a scale of 0-100.
- The Readiness Score is based on five core indicator areas: public health capacity, societal strength, economic ability, infrastructure, and national collaborative will.
 - Meanwhile the Responsiveness Score is based on: spread response, treatment response, economic response and supply chain response. The input data is normalized to provide comparison between cities.
- The tracker, available at <https://unhabitat.citiq.com/>
 - powered by the CitiIQ platform which is capable of sourcing, translating and communicating both the Readiness and Responsiveness scores of cities.



Preparing against Zootonic diseases

- The UN Environment Programme (UNEP) and International Livestock Research Institute (ILRI) jointly **identified seven trends** responsible for such diseases, known as zoonotic, calling on governments to take steps to stop future pandemics
- These are: rising demand for animal protein, extraction of natural resources and urbanization, intensive and unsustainable farming, exploitation of wildlife, increased travel and transportation, food supply changes and climate change
- Around two million people, mostly in developing nations, die from neglected zoonotic diseases every year. These outbreaks not only cause severe illness and deaths, but also result in major economic losses for some of the world's poorest
- Some African nations had adopted a "One Health" approach - uniting public health, veterinary and environmental expertise which can help to identify and treat outbreaks in animals before they pass to humans



Rethinking street-vending

- The global research/policy network ‘Women in Informal Employment: Globalizing and Organizing’ ([WIEGO](#)) focuses on improving conditions for informal workers, has established a framework, highlighting the importance of:
- registering them through simplifying registration and offering benefits,
- extending their social protection and legal right,
- and increasing their productivity through improved access to financial services and public spaces.



IFC assists countries to deploy smart finance and data solutions

- City of Izmir, Turkey has deployed an open data platform to catalyze innovative recovery solutions and utilizing behavioral science to improve tax payments in the waste sector
- Two Ukrainian cities develop community outreach programs and track and manage disease spread using digital solutions
- Launched in 2007 with the support of IFC and other partners, Peru's [Municipio al Dia](#) is a website cities use to help manage public investments. Post Covid-19, the citizen engagement platform was repurposed to rapidly disseminate information about the government's pandemic responses
- San Jose (Costa Rica) is also rethinking urban development to revitalize its city center. With support from IFC and other investors, its revitalization strategy connects dimensions of urban mobility, broadband connectivity and heritage tourism to create a resilient ecosystem that enables sustainable prosperity and growth



Green Climate Fund aims to support a green COVID recovery

- Rwanda was one of the first countries to submit a stronger climate action plan to the United Nations this year. [The plan](#) contains two scenarios - what Rwanda thinks it can achieve with its own spending, and a more ambitious vision that depends on it getting sufficient international funding.
- One way to fill the gap is through blended finance such as subsidized cheap loans where donor money is used to reduce the risk of default, smoothing the way for commercial investors
- Green Climate Fund (GCF) was set up to help vulnerable countries tackle climate change - has allocated [\\$5.3 billion to 128 projects](#) to cut 852 million tons of planet-warming emissions and boost the resilience of 351 million people.
- The fund is working on a proposal to electrify more than 1,000 villages, which will improve their ability to provide healthcare round-the-clock
- The GCF is also considering contributing to a \$100-million debt fund to keep off-grid power providers in business through the COVID-19 economic slowdown



UNDP releases a policy brief with local response guidelines

The pandemic has exposed deep inequalities in how people live in cities, and how cities serve their residents. The Policy Brief prioritizes:

- Investing in disaggregated data to better understand inequalities;
- Guaranteeing safe shelter for everyone. Significant investments in affordable housing and slum upgrading can ensure everyone has access to shelter that facilitates physical and mental health;
- Ensuring uninterrupted access to essential public services for all;
- Guaranteeing equitable access to health supplies and resources and supporting the poor and other vulnerable groups with free or low-cost access to face masks, testing and treatment. Once available, it will be important to ensure equitable access to a COVID-19 vaccine;
- Engaging marginalized communities as partners in response efforts; and
- Embracing diversity and strengthening social cohesion.



Connected responses across regions and feedback for effective responses

- [An informal chat group](#) started by staff of the city of Los Angeles has grown into an open forum that includes city officials around the world, most of which are at different phases of similar trajectories, and which they have been using to directly share valuable information of all kinds, from how to ensure safe public transport to ways of addressing the increases in domestic-violence cases
- While many governments were still deciding how to respond to the pandemic, mayors from around the world were on joint calls, [notably one led by the mayor of Los Angeles](#), hearing warnings from Seoul, Milan, and other cities that they ought to act faster and more aggressively than they thought was necessary
- C40, a network of the world's megacities committed to address climate change and representing one-quarter of the global economy, developed a [specialized knowledge hub](#); the Mayors Migration Council set up a [live action tracker](#) to collect and share city response and recovery efforts that are migrant- and refugee-sensitive
- EUROCITIES's ["Live updates COVID-19" website](#) was sharing examples already in March of how cities were enacting [rent moratoriums](#), [housing homeless people](#), [assigning tourist apartments to vulnerable families](#), [developing social media apps for the elderly](#), or [creating virtual labor rights offices](#).



Insights from UNESCO's online meeting on Urban Solutions

- Brazil's UNESCO Creative City of Film, explained how the city of Santos has creatively responded to the pandemic. 'Culture time at home' - an initiative launched by the city focuses on providing cultural actions focused on training, entertainment and physical activity (dance, photography, gastronomy, crafts and music) online via social networks
- In Santos (Brazil), a UNESCO Creative City of Film, the needs of the culture sector were combined with those of the citizens by devising ways to use the Internet to bring culture to the citizens, while providing a much needed public to the culture sector. Free online lessons in, for example, theatre, dance and crafts were offered to those under lockdown. In the aftermath of the pandemic, culture offers opportunities, to bring people together again, to reshape public spaces, and make them to represent a more diverse group of citizens



Insights from UNESCO's online meeting on Urban Solutions

- Bogotá presented the city's approach to both the response and reopening process. The city changed the way they were taking care of health—how they used both public and private networks to guarantee that every citizen could have proper health care no matter their affiliation to the health care system. They implemented special care zones, differentiated programs depending on vulnerabilities, and a 24-hour day scheme for the economy
- Portugal recognizes the need to promote sustainable tourism. The city of Barcelos has been working to keep the artist community afloat, for example, by commissioning one work of art from every registered artist in the city. City should “create a happy community” which is creative and safe and which will attract tourists interested in the distinctive features of creative tourism
- Kenya Tourism Board representative highlighted that the future of tourism will rest in “repacking products to appeal to a more domestic market.”
- In Macao (China), for example, the new routes that are devised for local visitors will later also be offered to foreign tourists



UK lends financial support to Kenya's informal settlements

- The United Kingdom on Tuesday announced direct financial support of Sh144 million to help cushion 10,000 vulnerable people and families living in informal settlements in Mombasa from the negative economic impacts of COVID-19
- During a visit to Mombasa, the British High Commissioner to Kenya, Jane Marriott, announced the support for some of the families worst affected by the pandemic
- Channeled through mobile cash transfers directly to individuals and families, it will help with their most pressing needs—such as paying rent, purchasing food, or other basic items
- The announcement is part of the UK's support to 50,000 people living in informal settlements in Mombasa and Nairobi



Development Rights being used to transform former businesses into small flats

- Developers are exploiting planning laws to convert empty shops, banks and barbers into tiny high street flats.
- The new developments have sparked concerns that UK high streets are turning into modern slums.
- The impact of the [coronavirus](#) on high-street businesses have resulted in a rush to transform them into residences under permitted development rights (PDRs)
- PDRs were until recently mainly used to convert office spaces but are now being used to transform former businesses into small flats



Investment priorities as outlined in WRI's report

Investment priorities in green recoveries is the focus of the coalition's [newest report](#), released Monday in partnership with the World Resources Institute (WRI) and C40 Cities. The paper analyzed how the allocation of stimulus funding across several environmental sectors can aid the international COVID-19 response and promote resiliency amid future crises

- Green construction and retrofits
- Clean mobility
- Renewable energy
- Active transport
- Nature-based solutions
- Waste and resources
- R&D for clean technologies



Italy and France implement green stimulus

- As governments prepare to spend huge sums on revitalizing their economies, a few have already enacted green stimulus measures targeted at cities, according to the research backed by the C40 network of cities pushing for swift climate action and the World Resources Institute think-tank
- Italy, for example, has more than doubled subsidies for rooftop solar panels on homes
- France has increased funding for electric vehicles, while Britain has earmarked \$2.5 billion for cycling and pedestrian infrastructure



Sri Lanka leverages World Bank investments to protect the vulnerable

- To protect the poor and vulnerable, the World Bank is rolling out a phone-based monitoring survey in the South Asia region to track the crisis impact on jobs and earnings that can inform its operational response to the crisis
- One critical success will be the creation of the central online portal, a “one-stop shop” for all the country’s welfare programs, in order to better identify the needs of poorer households, reduce overlaps, eliminate leakages, and make it easier for the Government to deliver rapid assistance to those in need.
- Second, by investing in agriculture and food security. Agriculture has been a silver lining during the pandemic. Production has remained largely undisrupted, although lower demand for exported produce is likely to impact wages in some sectors.
- About 80% of Sri Lanka’s agricultural land is cultivated by smallholder farmers. To raise their incomes, the World Bank is helping them to diversify into more commercially profitable crops, adopt new technologies, improve marketing, and adapt to climate change. This work also involves changing the mindsets of public sector institutions to recognise that their role is to create the necessary conditions and lay the groundwork for the private sector to bring in the necessary financing and solutions.
- The World Bank-supported Agriculture Sector Modernisation Project and Climate Smart Irrigated Agriculture Project are helping to innovate agriculture by inter-cropping big onions within mango orchards, growing cassava in village clusters and cultivating hybrid chili seeds in poly tunnels. Farmers in 11 districts of Sri Lanka are receiving support including knowledge in climate-smart agriculture practices



Uganda and Kenya work closely with local organizations

- WaterAid has been working with groups within informal settlement in their work to bring handwashing facilities, clean water and decent toilets to everyone in their community.
- In Kamwokya II, in Kampala, Uganda's capital city, which is home to more than 6,000 people in less than half a square kilometre of land, a community action group called 'Weyonje' (clean yourself'), is supported by WaterAid and the Kampala Capital City Authority
- They have created a Weyonje WhatsApp group during the lockdown where group members share information on how best we can help the community. This is a platform that they can use to counter misinformation about COVID-19 that is circulating on social media.
- Using megaphones, they carry out house to house community education; teaching the community residents that proper and regular handwashing with water and soap is a defence against the spread of coronavirus.
- As many in the community don't have a water source close to home, they create makeshift handwashing stations, filling a plastic bottle with soap and water and tying it to their front door with string, so they can wash their hands before entering their homes.
- In Kenya, for example, Muungano wa Wanavijiji – which means 'united slum dwellers' – are using their knowledge of the country's informal settlement to help track cases of COVID-19 and communicate government messages about preventing the spread of the disease to those who are the most vulnerable.



Vietnam's response includes successful and strong local partnerships

- The government has largely been credited for the country's success in keeping COVID-19 transmission rates under control due to its swift decision-making, effective public health messaging, and aggressive contact tracing
- The [Centre for Sustainable Rural Development](#), a Vietnamese social organization that works with disadvantaged rural communities, provides food packs and loans to families struggling amid the pandemic in Central Vietnam, where a lot of people earn their living through farm work, said Tran Thi Thanh Toan, program manager for SRD in Central Vietnam.
- The iSEE Institute, a local Vietnamese NGO, provides relief to members of the transgender community, many of whom work in the entertainment sector. The pandemic has gutted their source of income. Relief included food, some personal hygiene products, but also phone credits, which communities requested to access the Internet and read the news.
- The government allocated 62 trillion Vietnamese dong, roughly \$2.6 billion, for social assistance, said Dr. Khuất Thị Hải Oanh, executive director of The Center for Supporting Community Development Initiatives, a local NGO that works through a network of local communities across the country.



WFP cash targets 24,000 Covid-hit Mombasa homes

- The programme, in partnership with the national and Mombasa County governments, targets families in the informal settlements.
- Each family will receive Sh4,000 (\$40) monthly with additional nutrition support for women and children provided for three months.
- Mombasa accounts for 12 per cent of Covid-19 cases in Kenya — the second-highest prevalence after Nairobi.
- The assistance is aimed at alleviating the economic suffering of slum dwellers who mostly relied on casual labor before Covid-19 struck and have lost their incomes.
- This is the second such programme by the UN agency in the country. The WFP launched a similar initiative in June for informal settlements in Nairobi.
- The programme in Nairobi is on course to reach 70,500 families. It has also distributed nutrition products to 21,000 people.



Breaking down regulatory barriers is key to achieve smarter cities

- A new Initiative under the European Commission's Smart City Marketplace proposes a path to a modern and fair regulatory and legal framework for positive energy districts and cities, supported by a renewable European energy market
- As a starting point, the Initiative invites European experts to cooperate on 11 multi-sector actions and required changes in current regulatory frameworks
- These proposed actions will provide powerful incentives to create and operate positive energy districts and cities within or including a local energy system, which would hence become a scalable reality
- The Initiative aims to propose changes in regulation focused on best practices in cities, industry, research and societal stakeholders that engage in transdisciplinary demonstration and innovation activities.
- It seeks cooperation and knowledge transfer with experts in local and European projects, networks and platforms, and is the first of its kind in the European Smart City context

Ensuring food security, increase
distribution and engaging low
income workers



Measures taken by city governments to ensure food security

- **Food distribution at neighborhood level** is being scaled up by public administrations and supported by community/non-governmental actors that are stepping up activities to support public efforts
- Food hubs and e-commerce **using Information and Communication Technology (ICT) platforms** or informal networks are providing effective alternatives to support distribution to consumers, retailers, caterers and producers.
- **Local governments and other food system participants** are taking actions to improve the food environment (i.e. what physically surrounds people and which is fundamental for the availability of and access to nutritious food).
- Urban administrations **promote education campaigns** for responsible food purchase behavior, for reducing food waste, and activate innovative mechanisms for sourcing and distributing food to vulnerable people (e.g. alternatives to school feeding programs where schools are closed).



Ensuring safe and continuous food distribution

- The municipality of Wuhan has been improving the “**Vegetable basket**” project to guarantee food supply during the lockdown. Wuhan has cultivated 20 000 hectares since February 2020, mainly with fresh vegetables, and will continue to recover local production step by step, consistent with the quarantine policy
- The **e-commerce plays an important role in linking farmers with consumers**, the municipality of Wuhan collaborates with the private sector to facilitate online purchase and delivery of food
- The municipality of Milan, in collaboration with other organizations, has developed the “Food Aid Systems” to compensate for the restrictive measures taken to limit the spread of the virus. A **temporary food supply infrastructure has been created including a one logistic center at the Food Bank hubs** with storage capacities and vehicles and minibuses for food delivery
- New York city government, nonprofit and community organizations, academic institutions and private industry are setting **center-agency teams in the city government to ensure a coordinated response**



Innovative solutions ensure wide access of food

- Rikolto, the municipality of Quito is **facilitating access to food through food hub mobile units utilizing municipal buses**, partnering with food banks, communication campaign for responsible food purchasing and mapping the food access vulnerability
- In Lima, a **mobile wholesale market service distributes food in eight districts** of the Lima Metropolitan area. The city is also working with the Municipal Enterprise of Market to monitor market prices and avoid speculation
- In Montevideo, citizens and local organizations are **implementing a traditional model of home deliveries of food, fruits and vegetables called “ollas populares”** – some directly from producers to consumers, with special attention to vulnerable people
- In Brazil, **popular and community restaurants kept functioning** and expanded their distributions to reach all the marginalized populations
- The municipality of Chía in Colombia, **created a space for those who wish to donate nonperishable food** using a digital platform or a municipal call center dedicated exclusively for this initiative



Indore Is Deploying Its Swachh Bharat Machinery to Deliver Groceries under lockdown

- The **Indore Municipal Corporation (IMC)** has been doing home deliveries of **essentials since the first week of April 2020**. Every day, a team comprising a driver, a helper and a volunteer from an NGO is set out to collect garbage and also hand out and collect grocery order forms
- **Orders ranging from 5,000 to 20,000 are collected on an average per day**. The order forms eventually reach the specified grocery stores to be delivered to homes. To be chosen, a grocery store must have delivery staff as well as a vehicle for delivery.
- For shops that do not have vehicles, the **IMC has arranged private vehicles, such as auto-rickshaws that are lying unused**. Shops that fail to deliver orders in time lose their license to work during the lockdown and have their curfew passes revoked.
- Initially, when fewer grocery stores were linked to the service and when the lockdown had resulted in a high volume of deliveries, the system was unable to cope. Now, the number of grocery stores linked with the service has risen from 200 to 1,000, and the early hiccups, such as late deliveries, have been resolved.



Ahmedabad: Ration and food packets at doorstep for the vulnerable communities and vegetables on wheels

- The Ahmedabad Municipal Corporation has been making various efforts to make sure essential services are not disrupted. The **corporation collaborated with Amul to deliver** over 14,990 tetrapacks of milk, distributed 1,64,981 free food packets to the homeless, and 1,712 food packets to senior citizens.
- Over 11,100 free packets of vegetables and 7,792 grocery kits were also given to those in need. For those in quarantine, 28,281 free cooked food packets and 5,387 grocery kits were also distributed. To meet the needs of the citizens, the corporation also plied 164 vehicles under their project, **Vegetables on Wheels, selling over 42,578 kg of vegetables since the lockdown**
- AMC has also allowed outlets such as Big Bazaar, Reliance Retail, Osia Hypermarket, and D-Mart to deliver vegetables and groceries. **The corporation has released Helpline numbers for people to access these services.**



BMC Mobile Vans and a pool of grocery stores to deliver groceries & veggies at doorstep in Bhubaneswar

- In an effort to ensure that people get groceries and vegetables during the ongoing lockdown period, the **Bhubaneswar Municipal Corporation (BMC)** has rolled out mobile van service for the delivery of essentials at doorstep.
- People can order groceries and vegetables over the phone by dialing the phone numbers of the BMC mobile vans. The civic body has made **120 such vans operational to supply groceries & vegetables** and is proposing to increase the number to 200
- In addition to these, the Bhubaneswar Municipal Corporation (BMC) has also **formed a pool of 28 stores for home delivery of food items and other essential goods to prevent gatherings at markets.** The BMC has also provided a list of WhatsApp numbers of these outlets which can be contacted for placing orders. People can send a list of items they require along with their address for delivery and pay the bill after receiving the articles



Karnataka to Facilitate Doorstep Delivery of Groceries, Orders Can be Sent Via WhatsApp

- Karnataka Chief Minister BS Yediyurappa recently launched a **helpline service for home delivery of essential items and groceries in a bid to ensure that people remain indoors amid the coronavirus pandemic.** The helpline will operate through call and on WhatsApp. Customers can send their grocery list on 08061914960.
- The chief minister said that around 5000 delivery agents will be roped in from various private agencies who will help with the door-to-door delivery. The service was an initiative of the Bruhat Bengaluru Mahanagar Palike (BBMP). **A 9-step manual of how to go about placing an order** through this helpline number has been shared by the BBMP commissioner



In Pune Zilla Parishad, temporary cards to help 80,000 people access PDS food grain

- In the first innovation of its kind to help masses access government benefits during the pandemic lockdown, the Pune Zilla Parishad will **provide temporary 'ration cards' to more than 80,000 undocumented people in the district**, so they can receive food grains under the Public Distribution System (PDS).
- The scheme, which will use one-time Aadhaar authentication, will also **enable the home delivery of grains at the gram panchayat level**, and will include individuals belonging to the Primitive Tribes and the transgender community who are often left out of the ambit of such benefits
- The job of identifying the beneficiaries has been given to the village police patil, who **maintains records of outsiders in a register**. The only verification that will be carried out is that of the kitchen of the beneficiary to prove that they qualify for the scheme. The gram panchayats will home-deliver the rations to avoid crowding. An estimated 120 tons of grains will be distributed.



Auto Drivers to Deliver Groceries and Medicines In Bangalore Amidst COVID-19 Lockdown

- Three Wheels United (TWU) has launched a programme for **auto drivers to provide delivery services for people who are in need of essential goods** like medicines and groceries in Bengaluru
- Three Wheels United is providing their participating auto drivers with a guaranteed minimum income during this coronavirus pandemic. **This has been done since auto-rickshaw drivers have generated less revenue due to decreased activities.** The company, other than supporting the auto drivers, is also helping individuals, especially old people by providing them with essential services. It is also helping local shops make money by connecting them to consumers in need



International cooperation for food security

- The international community must increase funding for food-relief and social-protection measures and this support must come quickly to avoid longer term food shortages
- Invest in local agricultural production. Disruptions to local and regional food-production systems should be mitigated swiftly, particularly at critical times in the planting season, when the distribution of inputs such as fertilizer is crucial
- Other investments should aim to help poorer countries build up three months' worth of strategic food reserves, and supporting market systems for food and non-food crops alike would help poorer countries to become more resilient
- Alleviate disruptions to global food and agricultural produce supply chains by supporting regional and local logistics hubs
- Incentivize the private sector to fund agro-processing and ag-tech companies.
 - Resources should be channeled rapidly toward investment opportunities that are emerging as a result of the pandemic, especially for innovative value-chain solutions



City Region Food System Toolkit

- They provide guidance on how to assess and build sustainable city region food systems. It includes support material on how to: **define and map** your city region; **collect data** on your city region food system; **gather and analyse information** on different CRFS components and sustainability dimensions through both rapid and in-depth assessments; and how to use a multi-stakeholder process to **engage policymakers and other stakeholders** in the design of more sustainable and resilient city region food systems
- The CRFS assessment is aimed to help strengthen the understanding of the current functioning and performance of the city region food system. It forms the basis for further development of policies and programs to promote the sustainability and resilience of CRFS
- The toolkit is developed by RUAF and the Food and Agriculture Organization of the United Nations with support of the [CGIAR Research Program on Water, Land and Ecosystems](#) and [Laurier University](#).



Nairobi linking informal vendors for food distribution

- The Food System Department of **Nairobi, Kenya** applied the City Region Food System Indicators (supported by Mazingira Institute, RUAF, FAO, and the CGIAR WLE programme),
- They collected data on food traders and monitored agriculture training and outreach and showed that it is the informal sector that makes the food system work
- The general response of government was to shut everything down, including food markets. A curfew stopped “mama boga” (women vegetable sellers) getting the supplies they need early morning and selling in the low-income neighborhoods after dark. CRFS indicators showed women are the main informal sector distributors and they operate at that time.
- It is tremendously important to keep on documenting information from the informal sector and try eventually to re-establish links to the City officials



Zambia multi-stakeholder management for food distribution

- In **Kitwe, Zambia**, restricted transportation and/or physical distancing has affected the supply and distribution of fresh food, mainly fruits, vegetables, meat and dairy products
- The risk is to significantly lower farm gate product prices and to increase farm level losses particularly for perishable products. The challenges faced by the country regarding food supply are mainly being dealt by the central government
- Nevertheless, despite the limited power of the local government, the multi-stakeholder platform that has been created by the city to coordinate actors in the CRFS is becoming instrumental in fostering coordination among actors in the supply chain in defining strategies and coordinated actions to mitigate COVID-19 impacts and dealing with post pandemic scenarios



Sri Lanka's coordinated approach to maintain food hubs for farm products

- In **Colombo, Sri Lanka**, there is a strong alignment between the measures introduced by a government taskforce to ensure sufficient availability of staple foods (and fruits and vegetables, since there has been no shortage of this) and the CRFS approach.
- The taskforce is taking a systemic approach to ensure that communities have access to food using alternative supply chain linkages by coordinating with multi-stakeholders across administrative boundaries
- It addresses issues such as farmers' access to inputs, food affordability, waste management and establishing hubs for the distribution of farm products



Toronto leveraging local efforts and advocacy to respond to farmers markets and community gardens

- The vulnerability assessment of **Toronto's** food system, completed in 2018, has helped frame the action towards engaging food system actors more broadly and at a community-level
- In the fall of 2019, Toronto adopted food as a lens that each division must report on. Despite this increased food awareness in Toronto, the biggest impact of COVID-19 has been on the increased demand on emergency food provisions for low-income, homeless and unemployed
- Local efforts are emerging to meet the growing need for food and has led to many organizations pivoting their services to emergency food provision. The services provided at through these agencies includes food hampers, food boxes and meal preparation and distribution by commercial and community kitchens.
- The [Toronto Food Policy Council](#) has focused advocacy efforts on re-opening farmers markets and community gardens which were closed since they were not designated essential services by the provincial government. The advocacy efforts of urban food growers in Toronto and surrounding region resulted in the re-opening of community gardens in Ontario



Melbourne's farmers using online channels to overcome shocks in food system

- The Victorian state government is providing emergency food boxes to vulnerable people, but government response has been patchy
- Some farmers markets in Melbourne have been closed down by local governments, reducing opportunities to buy fresh local food and leaving farmers without their usual sales outlets. There have also been significant price increases for some fruits and vegetables (also because of recent drought and bushfires)
- An alliance of social enterprises, the [Moving Feast collective](#), provide food relief to low income households by delivering produce boxes, emergency meals and backyard gardening kits. There has been a huge increase in farmers and farmers markets going online on the Open Food Network to overcome physical distancing restrictions.
- A city region food system approach could help Melbourne to strengthen the resilience of its food system to these multiple shocks. Local production and distribution of food within the city region could increase fresh food supply and reduce dependence on more distant sources of food.



Quito leveraging local organizations and private enterprise maintain smooth service access

- Improving operation of the wholesale market and retail distribution
- Introducing controls on prices and on speculation for financial gain
- Regulated shopping hours at municipal markets
- Adoption of bio-protection measures for all parties
- Partnerships with the private sector to enable neighborhood shops to re-open (currently only 45 per cent of shops are open)
- Establishing shelters for the homeless (many of whom are Venezuelan migrants)
- Strict controls on informal sales (47% of Ecuador's workforce are in informal jobs, INEC 2020)



Quito leveraging local organizations and private enterprise maintain smooth service access

- Special permits allowing food transportation vehicles to circulate during the lockdown (alongside vehicles for health workers, police, fire service, security, and basic services), as the general population can use vehicles only on one day per week and at restricted times
- Delivery of food to vulnerable people who are registered users municipal social programmes
- The geographic information system (GIS) of Quito's food system, generated with the support of RUAF and WLE in 2018, have been very helpful for visualizing the problem of food during the crisis, and formed the basis of maps that allow the municipality to target assistance where it is needed most
- Private enterprise has played a role in the donation and delivery of food rations, in partnership with the municipality, the Food Bank of Quito and other humanitarian aid organizations



Social safety nets and strict enforcement in Africa

- [Kenya](#) announced tax relief and voluntary reduction of salaries of senior state officers
- [Nigeria](#) is using an existing [National Social Register](#) to map and identify [vulnerable groups](#) for conditional financial help
- The [Rwandan government](#) has announced a safety net, including through food distribution in Kigali, although details and any help that might be offered outside of the capital remain unclear
- South Africa's human settlements, water, and sanitation minister announced that her department would [increase the provision of water](#) and sanitation measures in high-density public areas, informal settlements, and rural areas
- In the [Democratic Republic of Congo](#), [Kenya](#), and [Uganda](#), security forces have used excessive and, in some cases, deadly force to enforce stay-at-home orders
- The African Commission laid out [critical measures](#) that should be incorporated into national Covid-19 response strategies. They include the right to health, access to information, and temporary judicial measures to reduce the number of prisoners



Supporting local production and distribution

- **Vila Nova de Famalicao (Portugal)** has developed a marketplace for local commerce, in conjunction with economic entities and a program to encourage the consumption of local products.
- It is also promoting local distribution and supply chains in partnership with cooperatives, companies, distributors, restaurants, supermarket trade. It has created a helpline to answer questions about national measures for companies and for the local employment exchange
- **Paris (France)** helps connect independent businesses and logistic entities to deliver goods, and supports the agricultural sector and next-door distribution circuits by allowing local farmer associations (AMAPs) to keep delivering and maintaining some open markets
- **Sydney (Australia)** has published a draft of the Central Sydney Planning Strategy to contribute to the post-COVID-19 recovery and future livelihoods, by, among other elements, favoring local employment

Social innovation, social enterprises and creative responses



Opportunity for changing urban designs that maximize space while maintaining distance

- A **Micromarket 16-square grid design for a tiny marketplace** that can be quickly and cheaply assembled in public squares, allowing people to shop local while also following social distancing guidelines
 - Each micro market consists of just three stalls - each selling a different kind of produce - organised around the grid, which holds a maximum of six customers at a time
 - The stalls have **separate counters for orders and collection**, and the marketplace has one entrance and two exits. "Friendly, smaller markets are needed in more points across cities and towns ... this could be applied to most Western societies,"
- The idea of organizing urban infrastructure around social distancing principles also underpins a new **maze-like design for a crowd-free public park** by Studio Precht, an architecture studio based in Austria.
- Their Parc de la Distance was **conceived as a proposal for a vacant lot in Vienna** but could be replicated on any unused patch of urban land, of any size, the architects said
- The paths in the park are 2.4 metres (8 feet) apart, with 90-cm (35-inch) hedges dividing them, **allowing visitors to experience the benefits of green space while remaining at a safe physical distance**



Drive in movie theatres of Iran

- The pandemic has brought back something unseen in Iran since its 1979 Islamic Revolution: a **drive-in movie theater**
- The drive-in theater now **operates from a parking lot** right under Tehran's iconic Milad tower
- **Workers spray disinfectants on cars that line up each night** here after buying tickets online for what is called the "Cinema Machine" in Farsi. They tune into the film's audio via an FM station on their car radios





Response from social enterprises

- Karma Healthcare Services India: upgraded/adapted to help address COVID-19 by providing contact-less audio-video consultations and referrals, a phone helpline, and awareness campaigns, reducing the need for in-person engagement
- ARMMAN India: In response to hospitals shutting down or reducing their OPD capacities, armman is leveraging mobile technology to provide Pan-India Free Virtual OPD for Antenatal and Paediatric Queries
- AlTibbi, Jordan : In collaboration with the Ministry of Health, they have launched a Corona dedicated hotline, accessible to all Jordanians. By dialing 111, users can get connected to certified doctors and obtain medical assessment from home



Response from social enterprises

- Opendream, Thailand: Created an anonymous data collection tool to identify covid hotspots. Currently has 30,000 users. Smartphone users can store their state of health and possible symptoms on their devices
- SEWA (women's association), India: Scaled up procurement of farm produce from the small and marginal farmers for RUDI. The objective is to ensure that they get cash to ensure food security and plan for the next season. Livelihoods options for remote working of the informal sector - The focus will be on developing an alternative livelihood measure which helps their value chain run during the pandemic or future disasters.



Response from social enterprises

- HewalTele, Kenya: Hewa Tele is providing medical-grade oxygen to Nairobi's COVID-19 isolation hospital, with a set of cylinders dedicated to the facility
- Safe Hands, Kenya: The immediate provision of the tools for rapid mass sanitation for free (hand sanitizer, soap, face masks and surface disinfectant).
 - They have simultaneously launched a massive consumer education campaign to drive behavior change
- Food Flow, South Africa: Food Flow purchases vegetables and food products directly from small-scale farmers or producers (those not a part of large retail supply-chains) using donor funding.
 - Food Flow then matches the farmer with a community organization in their vicinity who distributes harvest bags or cooks a meal for their beneficiaries
- mPharma, Ghana: The organization launched a price control program for chronic patients dubbed "Mutti Keep My Price". The Mutti Keep My Price program for patients on chronic medications will help patients choose between a 3 month or 6-month price control plan
- Connect Hear, Pakistan: ConnectHear is helping deaf individuals across Pakistan access all of the government's advice regarding COVID-19 through interpretation services.



Vietnam's Rice ATM

- Hoang Tuan Anh has invented a new way of **distributing free rice, around the clock**, to people who are out of work and have no money to feed their families, while still ensuring social distancing during the pandemic
- The "Rice ATM" machines he invented, distribute a bagful of rice at the press of a button, were first put into operation in Ho Chi Minh City in early April, and they are both a mechanism for distributing free rice and a gimmick for attracting rice donations
- Unlike real ATMs, these don't require any kind of card – anyone who needs a bag of rice can help themselves



Solidarity food baskets of Naples

- A group of street singers were out of work and penniless decided to revive an old Neapolitan tradition, in which housewives would lower basket from the windows of their city apartments to collect the things they purchase from food vendors in the street down below
- **In their new version, if people have something to give to the poor and hungry and homeless, they drop it down in these "solidarity food baskets."**
- If someone comes along who is hungry, he can help himself from those baskets to whatever is on offer: bread, cans of tuna, coffee, sugar, pasta, parmesan. Initially, the street singers helped manage the whole thing and also to deliver donated items to the baskets of hungry families lowered down from their apartments above
- But now the "solidarity baskets" filled with goodies go up and down and the exchange of kindnesses carry on by themselves, without anybody managing at all



Start-ups in India creating tailored solutions

- Asimov Robotics, a start-up based in Kerala, has deployed robots at entrances to office buildings and other public places to dispense hand sanitizer and deliver public health messages about the virus
- Other robots are also being deployed in hospital isolation wards to carry food and medicines, which eases the pressure on medical staff
- In early April, the Indian government launched a COVID-19 tracking app called Aarogya Setu which uses GPS and Bluetooth to inform people when they are at risk of exposure to COVID-19
- Start-ups including KlinikApp and Practo are providing COVID-19 tests at home and online consultation with doctors through their platform



Start-ups in India creating tailored solutions

- In response to the shortage of ventilators for critical care, start-ups such as Nocca Robotics, Aerobiosys Innovations and AgVa Healthcare are developing low-cost, easy-to-use, and portable ventilators that can be deployed even in rural areas of India
- Start-ups are also supporting the government's public information campaign on coronavirus by developing technology platforms to disseminate government notifications. The Kerala state government launched an app called GoK-Kerala Direct using a platform developed by Qkopy. It sends COVID-19 updates and travel information via phone notifications, and via SMS to older phones for the less than half of India's population without smartphones. These messages are delivered both in English and in Malayalam, the local language
- Start-ups such as Marut Dronetech have partnered with state governments to test the use of drones to monitor adherence to social distancing rules.



Start-ups in India creating tailored solutions

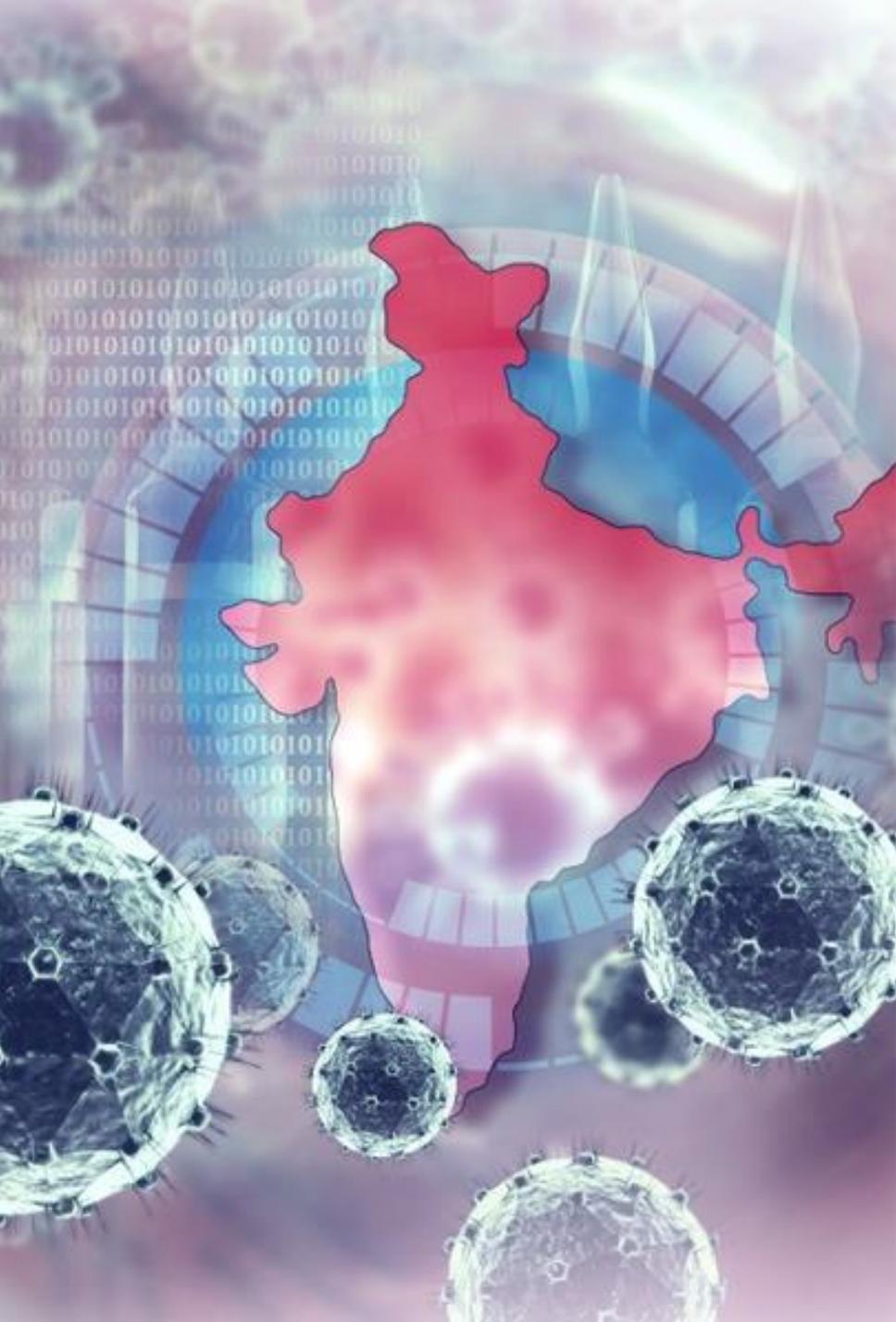
- The hygiene of public spaces is another area of notable innovation. Start-ups such as Aqoza technologies and PerSapien claim they have developed chemical formulations that disinfect public spaces
- Aqoza's approach, developed during an outbreak of Nipah virus in Kerala in 2018, is a water-based sanitiser disinfectant, while Airlens minus Corona from PerSapien is a machine which the company claims dispenses ionised water droplets to oxidise the viral protein
- Another startup, Droom, claims it has come up with a special anti-microbial coating called Corona Shield, which inhibits the growth of microorganisms such as bacteria, algae, yeast, moulds, and mildew on the surfaces of vehicles. It is being tested by police in Gurugram in Haryana state



Smart cities framework to leverage technology and prepare response



- India's Integrated Command and Control Centres (ICCC), which are an integral part of smart cities, have been playing an immensely significant role in making the fight against COVID-19 a highly viable one
- Through the use of sensors, technology, and the data mined from them, state and central governments are using this to keep a check on how their efforts are paying off. It is also being used to monitor movements across states
- Smart cities have facilitated creation of [war rooms](#). These war rooms by using a strong network of surveillance cameras along with location-based services are aiding in providing updated information to the public. In cities like Tirupati these command centers are also facilitating deliveries of essential goods and groceries



Smart cities framework to leverage technology and prepare health response

- One way of monitoring citizen's movements is through the use of heat maps.
- Governments are actively using this technology along with geo-fencing to keep tabs on movement, especially those of suspected cases, or residents of containment zones. They are also using this to monitor periodic health status. Technologies like GIS have also been used to map each positive COVID-19 case
- GPS systems are deployed to track health care workers in real-time and draw up containment plans.
- Smart cities like Mangaluru, Nagpur, Kanpur and Agra, have provided telemedicine services through centralized portals
- These portals have been helping citizens to access medical help, without having to step out. These facilities have also eased the burden on healthcare systems and freed up hospital beds



Adapting cash transfers for financial relief in Africa

- Map the risk to inform the response to COVID-19 early on. Policymakers should preemptively identify the communities that are most in need of health and financial support. Using existing census or household survey data, governments can identify high-risk populations
- Shift to e-payments, or bundle cash transfers. Delivering transfers electronically is generally faster, cheaper and more secure than in-person cash distribution
- Expand existing cash transfer programs to newly at-risk communities
- Use cash distribution points to share health messaging
- Use phone surveys to monitor pandemic's spread and economic impact



Consulting services to SMEs

- **Bilbao (Spain)** has implemented specific measures aimed at supporting entrepreneurs, small retailers and SMEs through an urgent **consultancy service** organised by the City Council, which offers **telephone and online assistance**
- The processing of all **tax procedures** has been postponed. **Yokohama (Japan)** established a special **consulting office** for small and medium sized enterprises as early as January 30th
- In **Seattle (US)** several initiatives of **digital service providers** offer help to small businesses
- **Lisbon (Portugal)** has created a support team for micro, small and medium-sized companies to ensure information on all existing support reaches these companies, as well as consultancy, to mitigate the effects of the crisis and promote economic recovery. The team will include specialists in the various areas
- **Paris (France)** promotes **weekly exchanges** with professional unions, trade associations and economic partners



Setting up relief funds to support groups and individuals

- The Mayor of **Milan (Italy)** announced the establishment of a **mutual aid fund** to help those most in need and to support recovery of city activities.
- The fund, in addition to the allocation of 3 million EUR already approved by the City Council, is open to the economic participation of individual citizens, companies and associations.
- The fund raised 800 000 EUR on the first day (March 14th, 2020)
- **King County (US)** has joined forces with philanthropic organisations to establish a **relief fund**, and created a [donations connector page](#) for people to request what they need and give what they can
- **Seattle (US)** made available **relief funds** of large tech companies



Providing loans and support to businesses

- **New York City (US)** has put in place local support for SMEs, including zero-interest loans repayable over 15 to 20 years for firms with under 100 employees, for loans up to USD 75 000, conditional on demonstrating a 25% decrease in customer receipts
- **Tokyo (Japan)** has set up **one-time payment for SMEs** that are taking steps to prevent the further spread of the virus, such as suspending the use of their facilities.
- An emergency loan program and free consulting services were put in place for SMEs affected by the crisis
- In **Buenos Aires (Argentina)**, the public bank, Banco Ciudad, launched a **new loan program** with the aim of providing funds to small and medium-sized enterprises for the payment of their payrolls.
- All loan schemes show a significant reduction in interest rates with a range of between 20% and 24% of the nominal annual rate



Innovations across Africa

- Ghanaian pilot Eric Acquah started a drone company in 2017 to spray crops with pesticides. The company has used 20 drones to disinfect 38 open-air markets in Ghana - spraying a couple of acres in minutes, a job that would take a dozen people several hours - and also plans to use them to disinfect classrooms
- In Benin, a dozen entrepreneurs are developing ideas to tackle the coronavirus pandemic, from masks to 3D-printed protective gear, with financial and technical support from a government-United Nations taskforce launched in April
- Atingan is one start-up which received backing from the taskforce to adapt to the crisis, switching from making eco-friendly stoves to handwashing stations operated by pedals so users do not have to touch anything
- The Alodo Initiative - a group of fashion designers - is another project receiving support from the taskforce to rapidly scale up its work. It is producing masks from locally available fabrics, which were tested in a lab to ensure their effectiveness in preventing coronavirus transmission



Innovations across Africa

- Mbambo set up the company, QuickFresh in April after seeing that a government-imposed lockdown had left smallholder farmers stranded with fresh produce while people stuck at home could not buy food. Linking up with QuickFresh has saved the small farmers
- In Kenya, charities are boosting economies in poor communities by using a blockchain-backed local currency to provide slum-dwellers with emergency aid on their mobile phones which they can spend on local goods and services
- The project was set up by the Danish Red Cross and Kenya-based foundation Grassroots Economics in 2019 and expanded to respond to help people whose income has been hit by the coronavirus crisis.



Cities offerings and entrepreneurial ecosystem

- [Portland Prosper](#), the economic and urban development agency of the city of Portland, is working in real time to help residents and has formed a “[COVID-19 Economic Relief and Stabilization Framework](#)” to mitigate economic hardship on impacted individuals, help local business stay solvent and retain employees, and evaluate city business practices and redirect available resources. The framework prioritizes support to the most vulnerable, also applying a racial-equity lens
- Amsterdam is identifying how to organize as “[1.5 meter society](#)”. It has asked entrepreneurs to share their ideas for making it a success in a way that makes Amsterdam smart, green, and healthy while having a positive social and economic impact. By May 2020, residents, entrepreneurs, and cultural and educational institutions [had already submitted 1,132 plans](#) for temporary space for neighborhood initiatives and other activities. At the time of writing, the city had approved 645 of these. [The first initiatives have already been deployed](#)



A crowd simulation model to manage social distancing

- Utrecht University along with start-up [uCrowds](#) have deployed a crowd simulation framework to help manage groups of people in this new world of public space under coronavirus
- The software allows users to create and run models for simulating realistic crowd behavior, including how people move around a space and how they avoid collisions within environments
- The software can also make projections: for example, if you simulate 20,000 people, you can fast forward the simulation to 35 times the actual speed. That means that the software can also look into the future and warn officials to close off access routes in areas that are becoming too busy
- Governments can use this software to send text messages to people's mobile phones to direct pedestrians to take other route options to their destinations
- A pilot project is running at [St Pancras railway station](#) in the UK which demonstrates this technology
- The software has been previously used for the Grand Départ of the Tour de France in 2015, which brought 800,000 spectators to Utrecht
- It supported the Utrecht municipal government in planning the surroundings of the cycling course and testing the prognoses for the [flows of the spectators](#). One of the scenarios included computing the maximum number of individuals that would safely fit on a square. When this number was reached in reality, the entrance to this square could be safely closed in time.



Tech solutions to manage safe mobility

- DBL Partners is looking at self-sanitising technology in their bikes and scooters, as it can enhance safety measures and potentially safeguard consumers from potential infections
- [Wheels](#), a portfolio company of DBL Partners, has partnered with [NanoSeptic](#) to bring a first-of-its-kind self-sanitising technology in the shared transportation space. They are equipping their e-bike handlebars and brake levers with mineral nanocrystals that are [powered](#) by any visible light to create a powerful and toxin-free oxidation reaction that breaks down any organic contaminants at the microscopic level without the use of toxic substances, traditional heavy metals or dangerous chemicals
- Riders will see no additional cost and government approvals will not be required



Geospatial Sewerage Surveillance solution for detecting COVID traces in communities

- Transerve has introduced a 'Geospatial Sewerage Surveillance' model which offers community-based group testing with routine monitoring of sewage as a non-invasive early warning tool.
- In fact, wastewater testing can also be used as an early warning sign if the virus returns.
- This model has been successfully implemented in detecting illegal drug use in Australia, to eradicate polio in Israel, track salmonella outbreaks in Hawaii, to name a few. In India, where approximately 38% of households dispose of their wastes into septic tanks and 33% of households are connected to a piped sewer system.
- The proposed Geospatial Sewerage Surveillance solution has the potential to cover these 70% of households for tracing early signs of infection. Built on a cloud-based tool 'Transerve Online Stack', this solution tracks the movement of Fecal Sludge Management (FSM) by collecting data using spatial analytics, location on mobile devices and studying the patterns over time and geography.
- Cities can provide the network of sewerage pipelines with manhole location for collecting samples and demarcating the boundary on the map where traces of viruses are found, to create local containment zones, which can be strictly monitored for restricted movement. The solution is not only apt for urban areas but also for slums which are more prone to contamination. In these regions, samples can be traced from faecal sludge collected from bulk generating locations like community toilets. These samples can be highly valuable wherein containment zones can be created using the tests carried out on sewage water and through spatial tracking of the samples collected

Re-imagining transport to
maintain risk free mobility



Maintaining mobility and changes in transport infrastructure

- Istanbul has deployed a [hygiene fleet](#) of 40 vehicles and hundreds of personnel to **sanitize and re-sanitize public and municipal facilities**. The fleet is responsible for cleaning municipally owned public spaces too.
- In Switzerland, some **buses have separated drivers from passengers with temporary barricades**. In both Europe and China, bus operators have started using floor markings to indicate safe distances between riders.
- In many cities, more than 76 kilometers (47 miles) of street closures will now take effect each weekday to give people **alternatives to commuting through the public transit system**. The temporary new cycling routes add to the city's 500 kilometers (310 miles) of permanent bike lanes.



Pedaling through the pandemic

- Italy: **Floors of metro cars and buses will be marked** out with circles showing passengers the right level of distance to maintain
- The city will **encourage stores to stay open throughout the evening and the start of the school day will be staggered**, with different classes starting at various points between 8 a.m. and 10 a.m. To help students catch up with missed classes, meanwhile, the city also wants to set up summer schools over the long break, which normally starts in the second week of June and continues until September
- From May 4, the Belgian capital's entire city core will be a [priority zone](#) for **cyclists and pedestrians**, one in which cars cannot exceed a speed of 20 kph and must give way in the roads to people on foot or on bikes



Seattle makes space for more bike lanes

- Nearly 20 miles of Seattle streets will permanently close to most vehicle traffic by the end of May, Mayor Jenny Durkan announced
- The streets had been closed temporarily to through traffic to provide more space for people to walk and bike at a safe distance apart during the coronavirus pandemic.



Cairo curbing air pollution

- The government is moving forward with plans to expand the Greater Cairo subway network to accommodate 6 million passengers a day by 2025, up from 3.5 million
- It plans to give grants to private car owners to help them convert their vehicles to run on natural gas
- Continue production at factories and other industrial institutions while applying high environmental standards
- Expanding a bicycle-sharing project that started in Fayoum city, north of Cairo, in February
- The project, backed by the U.N. Development Program, the Global Environment Facility and the Dutch government, gives students who commute to university classes access to a stand of a dozen shared bicycles at four locations in the city



UK and European cities include more bike lanes

- Berlin included 14 miles (22 km) of new bike lanes almost overnight
- Athens plans to allocate 50,000 square meters of public space for cyclists and pedestrian.
 - The scheme includes a four-mile “grand walkway” uniting archaeological sites in the historic center. Pavements will be widened, boulevards pedestrianized, squares enlarged and traffic banned from areas beneath the Acropolis
- In Budapest, 12 miles of temporary bike lanes have been introduced on some of the city’s busiest roads over a month
- Around 20 miles of temporary bike lanes have been set up across Paris
- Dublin city council has set aside swathes of Ireland’s capital for pedestrians and cyclists to facilitate physical distancing in a “temporary mobility plan”
- Authorities in Milan have said 22 miles of streets will be transformed as part of a scheme to reallocate space from cars to cycling and walking
- Rome’s council has approved the construction of 93 miles of temporary and permanent cycle routes as a way to be more sustainable while allowing people to adhere to physical distancing rules



Slow streets movement make cities more bike-friendly

- The ‘Slow Streets’ movement (sometimes dubbed “Safe Streets or “Healthy Streets”) was designed as a response to COVID-19 public health guidance that encouraged social distancing
- According to a [crowdsourced database](#) initiated by a transportation planner at the University of North Carolina, over 291 cities, regions and nations have created safer, people-friendly streets initiatives
- The Slow Streets movement takes advantage of one key truth: Most trips are short and close to home. According to data collected before the pandemic, [60% of journeys](#) made in France and [46% of vehicle trips](#) in the US are less than 3 miles (5 kilometres). In England, around [60% of 1-2 mile trips](#) are made by car.
- This movement has helped reshape cities across the US. The City of Oakland, California closed 74 miles of its streets this March – 10% of the city’s entire street grid - to through-traffic. These streets remained open to local vehicles in search of a parking space but were prioritized for Oakland residents travelling by foot or bicycle



Ensuring safe mobility using preventative measures

- Fukuoka (Japan) is publishing information on subway congestion levels by time slot on the city's website
- Public transport stations and vehicles in San Francisco (US) have sanitizer available and are more frequently cleaned
- In Venice (Italy), canal boats went through extraordinary disinfection in the early stage of the pandemic
- Napoli (Italy) ensured suitable preventive measures to protect employees and users, by cleaning and disinfecting passenger compartments of trains and buses and visibly displaying to the user the appropriate disinfection certification.
- In Moscow (Russian Federation), random temperature checks are conducted at the entrance to the metro through a non-contact method
- In Madrid (Spain), metros are equipped with automatically opening doors in 64% of trains to prevent direct contact
- Bratislava (Slovak Republic) has made it compulsory to wear a protective facemask when travelling on public transport. The transport authority has also banned entering or exiting through the front doors closest to the driver. Doors open automatically, so passengers don't need to push any buttons



Technology shaping post-COVID public travel in the UK

- Technology is now affecting road networks and traffic systems with traffic monitoring tech already in place across UK roadways.
- This gives the UK the ability to control the flow of traffic and preempt issues with accidents at rush hour. To assess the impact of COVID-19, there has been an increased focus in developing technological solutions for monitoring transport.
- Vivacity Labs has worked on AI-based video road sensors to assess the impact of the Coronavirus on daily travels on highway networks.
- With emphasis on post COVID-19 and post lockdown seeming to be leaning towards more pedestrianized city centers, there's also a greater emphasis on public transport and green alternatives to keep the CO2 emissions lower.
- There are research and development companies across the world working on solar panel roads, kinetic electrical charging roads, road police drones, self-healing concrete to repair surfaces and smaller changes like changing the color of the roads themselves



Streets where cars use less space

- In large U.S. cities, nearly half of all car trips are [less than four miles](#). Two pedestrians or cyclists die every hour on U.S. city streets.
 - [New visions](#) for streets, where cars use less space and are replaced by smaller vehicles built for individual riders, are gaining currency
 - These include [new forms of e-bikes](#), e-scooters or hoverboards. These were already [attracting attention](#) before COVID-19, complement conventional bicycles, whose [sales have boomed](#) during the pandemic
- The quickest way to build one that is scaled and purposed for people begins by identifying streets used to make short trips. These are places near neighborhood retail districts, schools and other activity centers.
 - Informed by local data, leaders can make decisions about which streets should give priority to vehicles such as bicycles, not cars. Changes include physically demarcated lanes and signs making statements like "Cars are guests."
- Minneapolis has [closed a number of parkways to cars](#), reserving them exclusively for cyclists and walkers. [Portland, Oregon](#), [Seattle](#) and [Oakland](#) are using this time to test ways of sharing a broader array of streets among cyclists, walkers and car users.
 - Researchers are providing tools to identify the most promising places to reallocate space for [pop-up cycle ways](#)



Mayors promoting greener cities

- **Hong Kong:** The government is promoting the use of electric cars in the city by subsidizing the installation of charging points in car parks of private residential buildings
- **Rotterdam:** The Dutch port city has so far allocated 150 million euros (\$170 million) for solar and wind energy projects as part of its aim to boost clean energy and halve its use of materials based on fossil fuels by 2030. City Mayor Ahmed Aboutaleb also has pledged to set up a 9.5 million euro fund to help businesses and residents retrofit homes and offices with solar or wind power, and plant-covered green roofs to absorb carbon emissions and improve air quality. The city also is planning seven large new green areas and parks across the city to reduce heatwave risks.
- **Seoul:** Plans are underway to retrofit and cap the emissions on old and large public buildings that account for nearly 70% of the city's greenhouse gas emissions. The city also will tighten zero-energy building standards for new buildings. Both measures aim to create about 20,000 green jobs by 2022.



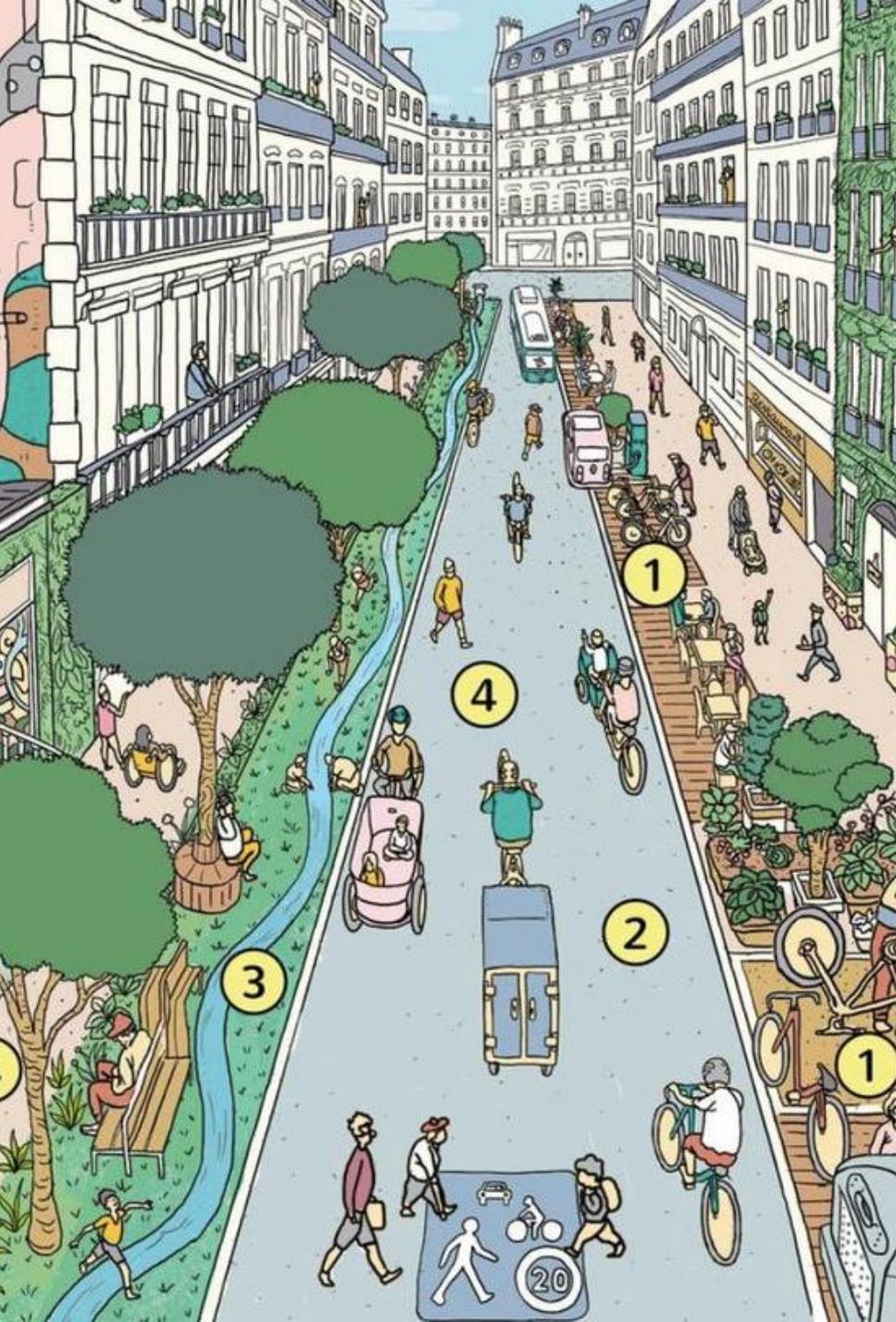
Mayors promoting greener cities

- **Los Angeles:** City hall has backed installation of free solar panels on the homes of nearly 2,000 low-income families, employing 200 people released from prison to do the work.
- **Lisbon:** In response to COVID-19 and to allow for social distancing on public transport as well as to promote the use of green energy, Lisbon is building new, dedicated bus lanes and buying more trams and electric buses than previously planned.
- **Montreal:** Since the coronavirus started, Montreal has created 300km (185 miles) of new bike and walking paths across the city in two months.
- **Seattle:** The city has permanently closed to cars 20 miles of city streets so residents can use them for biking and walking.
- **Freetown:** In Sierra Leone's capital, authorities are looking at building an electric cable car network to ease traffic and promote greener public transport. Work also has started on planting a million new trees by 2021 to help ease flooding and landslide risks as climate change brings more severe rainy seasons.



Mayors promoting greener cities

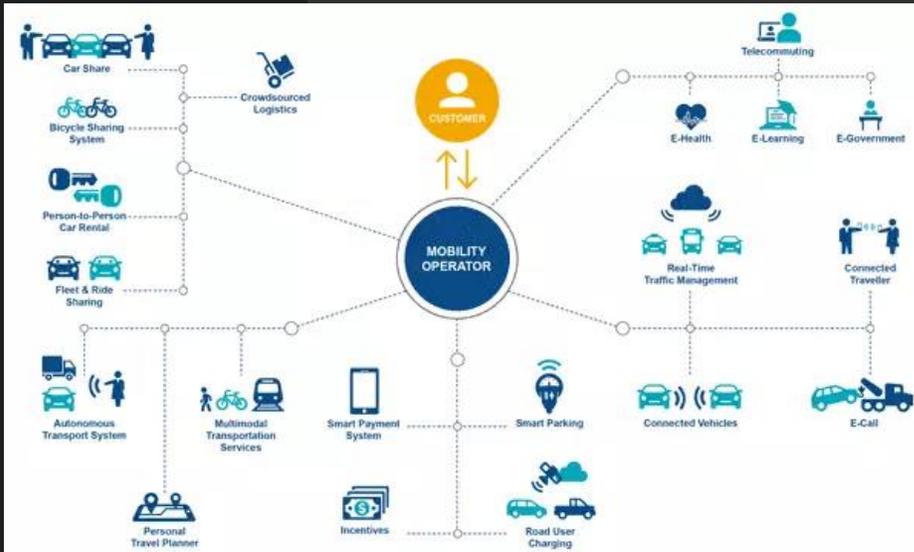
- **Medellin:** Colombia's second city plans to train 25,000 residents in new skills to access green jobs as the city tries to become a software and technology hub.
- **Cape Town:** The city is investing in retrofitting houses in low-income neighborhoods and is training and hiring people from poor communities to carry out the work. A pilot project has improved the living conditions in more than 2,000 homes, cut emissions and created more than 2,300 jobs.



Creating walkable cities

- [Milan](#) was the first, but many others are following suit in announcing ambitious plans to reduce the use of private vehicles in urban centers after the lockdown.
- Paris is taking [steps](#) to create more pedestrian, green, and community space at the expense of car lanes as part of its “[15-minute city plan](#),” according to which all residents should be able to access essential needs within a short walk or bike ride.
- Barcelona’s urban development model and “[superblocks](#)” plan involve guaranteeing that residents of any age can access any type of urban service (food, health, education, culture, sports, administrative, civic/recreational) within [a 10-minute walk](#)
- Many of cities’ efforts at reimagining themselves are based on values, ideas, and approaches that have existed for a while. Restricted mobility has made many people not just discover their neighborhoods, but question the need to drive so often in the first place.
 - For those who have been forced or had the option to work from home (once schools resume, for many), the need to be in the office as much is being reassessed. In this context, beyond pushing the accelerator of the change they hoped for (less car traffic, for example), cities will need to reimagine the use and centrality of office-based real estate developments and business districts

Israel's on-demand and revamped mobility network



- The market for mobility as a service (also known as MaaS) is expected to grow by \$180 billion from 2019 to 2023. Commuters using MaaS would, for example, be able to enter their destination into an app, which then offers a range of options such as car- or bike sharing, bus and train, taxis or car rental, or a combination of these options
- Israel mobilized 176,500 responders for the national effort to fight COVID-19. In place of its existing rigid transport network, it introduced a tailored commuting system. An on-demand transit routing algorithm calculated the most efficient journey for each passenger and routed buses accordingly. In a trial involving 5,500 responders, users simply entered their location and planned destination via a specially created app. In 60% of cases, they were dropped-off within 300 meters of their destinations.
- Within three weeks of its launch, 12,000 responders had downloaded the app, and 75,000 trips were taken using 250 different modes of transportation, from buses to vans and cars. While this system was implemented to deal with the crisis, it may be here to stay and may save the public \$25 million a year



Mumbai and Bogota see and uptick of bicycle lanes

- In Mumbai (India), cycle advocates have recently emulated Bogotá's approach, appointing a ['bicycle councillor' to help promote cycling infrastructure in each of the city's 24 wards](#)
- As in the UK and US, the pandemic saw demand for bikes outstrip supply in Bogotá. So a voluntary initiative of civil society and the private sector (Colombia Cares for Colombia) has responded with an integrated effort to develop the broader value chain and policy 'ecosystem' required to ensure the city can put cycling and other active transport modes at the centre of recovery efforts.
- Last month, 19 "bike councils" were formed, with citizen representatives charged with advising local and district administrations on policies for cycling and other alternative transportation modes.



Technology allows safe transport protocols

- The use of robots, disinfection tunnels, digital technologies, ultraviolet lamps, and intensive work of staff – all this helped to reduce the risk of the spread of coronavirus in public transport and made a significant contribution to fighting the global problem.
- According to the coronavirus distribution model, developed by Imperial College London at the beginning of the pandemic, if no action had been taken by mid-March there would have been over 500,000 deaths from COVID in the UK and over 2.2 million in the USA.
- At the moment, in the middle of October, there are about 43,000 deaths in the UK and about 214,000 in the USA. Of course, these are high rates, but they could have been much higher if the necessary measures were not taken in time.
- Technological innovations already available today will continue to be used, which will make the stay of passengers on public transport more comfortable and safer, reducing the risk of the spread of any infectious disease, especially during the flu and cold seasons.

Country level examples

Interventions in Urban areas



Argentina

- Establishing multi stakeholder emergency committees, with representative from government, community organizations, religious organizations, etc. to coordinate emergency response measures at the neighborhood level
- Community quarantine where in the poorest slums, no one is allowed to enter or leave
- Emergency shelter provided for people over 70
- Repurpose chapels for emergency shelter for the elderly
- “Puntos Solidarios” in the Municipality of Quilmes installed to provide lunch for vulnerable families



Argentina

- Local organization distribute food bags to children who miss free school meals
- The military brought mobile kitchens and is providing more than 40K meals a day in municipalities of the great Bs As area
- Installation of mobile ATMs with specific times for vulnerable people to withdraw cash
- Incentive the use of electronic payments where possible
- Whatsapp group managed for the Government with info for slum inhabitants
- Free wifi spots to increase connectivity
- President engaged religious leaders to spread messages on COVID-19 prevention



Buenos Aires's Barrio 31 is strengthening its social and urban policy

- Invest in **improving structural conditions** by building and improving infrastructure, and moving families into new housing
- **New health centers** are set up with close tracking of electronic medical records
- Use **surveys and workshops** to engage and inform people
- **Designated spokespersons from neighborhood** to keep the myths and misinformation away. Door to door brochures are used to reach distance areas
- The **Secretariat sends WhatsApp messages, makes customized calls** and use mobile loudspeakers in public areas
- The **digital content is customized** to use phrases and icons that are familiar to the community



Buenos Aires's Barrio 31 is strengthening its social and urban policy

- **Targeted care for at risk populations** through identification, communication and targeted action; people over 70, living in overcrowded homes, those with preexisting conditions, essential duty personnel
- **Comprehensive care plan for senior adults** to be distanced and Health security persons designated to safely move the at risk population
- **Designated call takers, immediate secretariat notification and follow up team set up for women and children's safety from domestic violence**
- **Health checkpoints staffed by promoters with phone communication** with neighbors for early detection, immediate transfer to designated health center and confirmed cases transferred to designated hospital



Brazil

- Local and federal initiatives to maintain school feeding, PPE and Hygiene items distribution, free water utilizes, installation of hand washing stations, targeted communication and awareness campaigns involving community leaders
- Construction of subsidized housing and temporary suspension of mortgage payments for *Minha Casa Minha Vida* beneficiaries; temporary resettlement of at-risk groups to government-managed facilities
- Whatsapp news channel on COVID19
- Handwashing stations installed at entry points to favelas
- Delivery of food and hygiene kits to needy residents



Ecuador

- Cash transfers to be paid in April and May to 400,000 families with incomes below USD\$400/month
- Social security payments delayed for 90 days
- Distribution of food transfer to families in need (through Ministry of Agriculture)
- Free provision of water through water tanks for households not connected to the system in Duran



Mexico

- Targeted social protection *in* Mexico City
- Network of professionals convened by the City Government to do daily phone check-ins with elderly population that live alone, and delivery food and medicines
- Provision of Medical Kits and Mobile Clinics (Unidades Moviles) to attend symptomatic patients
- Jalisco has made available mobile testing units



Peru

- District municipalities have been charged with the responsibility of purchasing and delivering food aid to their vulnerable residents
- Implementation of decentralized Supply Points of essential goods for vulnerable areas.
- Implementation of a mobile market, in order to transit vulnerable areas providing essential good
- Creation of a temporary shelter “Casa de Todos” (Home for All) for homeless people in Lima. Provision of temporary housing for homeless people (in Lima, a temporary shelter has been built inside the Plaza de Toros de Acho (bullfighting arena).
- Creation of the Program “Cocina para todos” (Kitchen for All), to help feed vulnerable people
- Implementation of the Program “Comida para todos” (Food for All), which enabled the delivery of essential goods to areas of extreme poverty and vulnerability.
- Provision of drinking water and temporary bathrooms in vulnerable areas, including in Cantagallo, where the Shipibo Conibo, an ethnic group that migrated from the Amazon rain forest some 20 years ago reside



Kerala, India

- The local village council galvanised local health and community workers and opened a community kitchen to feed the people in isolation.
- Using a local helpline and two WhatsApp groups, the council encouraged local villagers to accommodate people who were in isolation and didn't have enough space for social distancing at home
- Covid-19 care centers in all districts to accommodate outsiders who were stuck and had been advised to isolate
- Two-dozen families vacated floors and even homes for this. Everyone in isolation now has to observe a 28-day quarantine
- Rigorous contact tracing, using detailed "route maps" of people coming in from abroad.
- Health workers supported people with special needs and the elderly living alone. Counsellors made more than 340,000 telephone calls to personnel working in affected areas to counsel them on how to handle stress



How did Kerala do it?

- Robust public health system, and a culture of thriving grassroots democracy with power devolving effectively to the village councils
- Community outreach, rigorous contact tracing and mass quarantine.
- Experience with tackling two consecutive floods and an outbreak of the vicious Nipah virus in the last three years



India's Informal settlements require unique solutions

- The **densely cramped settlements** have no possibility for social distancing or frequent handwashing
- Approx. 450 million informal workers, accounting for 80% of India's workforce are stuck away from their homes in the village
- The slums have a **large number of TB patients**
- A majority of the population lives without formal documentation and are unable to access the free food distribution and other social schemes
- Community organizations are **collecting donations to complement Government Relief packages** for the most vulnerable populations
- The **assistance is being provided in the form of food items** like rice, wheat, dal, oil and vegetables, distributed in packets that can last an average family for 10-15 days
- In Ahmedabad and Pune, **local organizations working on issues of shelter, housing and food are partnering** to manage the scale of operations and respond quickly



Indonesia

- Community groups in Jakarta are **collecting data on community needs, raising funds, promoting kampung-wide rather than household quarantine**, distributing information about the virus and initiating several projects to directly address people's needs
- Communities are **producing own hand sanitizers to give to community members**, distributing spice drinks from Jogja to help people maintain their stamina, **spraying disinfectant in kampungs** and distributing information about the Corona virus and government policies
- When community members experience virus symptoms and have to be **quarantined inside their houses, we help provide family meals during their isolation**
 - By April 14th, local organizations had given cash assistance to **452 families (out of a target of 800 needy families) with a total of US\$ 37 per family**. The idea of the cash assistance is to enable the family to stay home and keep safe from the virus
- Yogyakarta is **organizing a lot of online meetings** to keep in close touch with the communities through WhatsApp messages, phone calls and video chats.
- **Developing plans to help the communities assess their needs, strengthen their capacity to help each other, and develop community-driven plans** to address needs that come up and to help their own most vulnerable neighbors.



Philippines

- The government has a **Social Amelioration Program** to provide **food packs and cash support** of US\$150 to qualified families
- The Homeless People's Federation is planning to organize a **pandemic response with member communities across the regions**, using the funds from ACCA and SDI for housing loans which have already revolved. They plan to use part of the money to assist communities with their **immediate needs and part will be kept for longer-term economic and health revival**
- Communities are **partnering with several NGOs and religious and corporate donors** to identify the most needy families and help distribute to them food packs, frozen chicken meat, rice and cash assistance in communities around Metro Manila
- Iloilo: A **night curfew is in effect from 8pm to 5am**, and a 24-hour curfew is in effect for the elderly and children below 18 years old. Those who violate the curfew are arrested
- **Each barangay (sub-district) has set up checkpoints** at their boundaries and nobody is allowed to go outside their own barangay. |
- **Informal settlements and in homeowners associations, people have put up barricades** and are guarding them around the clock, to keep strangers from coming inside their community and possibly bringing in the virus



Thailand

- Local networks are discussing what kind of support it can arrange for communities with their **collective community welfare fund**, to which all community members have been contributing 30 baht (US\$1) per month for many years.
- The Thai Government announced a basic income for **daily-wage and informal workers of 5,000 baht (\$156) per month**, for the next three months.
- The government will also provide **individuals access to low-interest loans**, to tide their families over the crisis.



Vietnam

- Hoang Tuan Anh has invented a new way of **distributing free rice, around the clock**, to people who are out of work and have no money to feed their families, while still ensuring social distancing during the pandemic
- The "Rice ATM" machines he invented, distribute a bagful of rice at the press of a button, were first put into operation in Ho Chi Minh City in early April, and they are both a mechanism for distributing free rice and a gimmick for attracting rice donations
- Unlike real ATMs, these don't require any kind of card – anyone who needs a bag of rice can help themselves



Naples

- A group of street singers were out of work and penniless decided to revive an old Neapolitan tradition, in which housewives would lower basket from the windows of their city apartments to collect the things they purchase from food vendors in the street down below
- **In their new version, if people have something to give to the poor and hungry and homeless, they drop it down in these "solidarity food baskets."**
- If someone comes along who is hungry, he can help himself from those baskets to whatever is on offer: bread, cans of tuna, coffee, sugar, pasta, parmesan. Initially, the street singers helped manage the whole thing and also to deliver donated items to the baskets of hungry families lowered down from their apartments above
- But now the "solidarity baskets" filled with goodies go up and down and the exchange of kindnesses carry on by themselves, without anybody managing at all



Bangladesh

- UNFAO is working with the community federations in North and South Dhaka to try to **track the impacts of COVID-19 on the poor and learn about how they are coping and what they need**
- They are **connecting with community women to monitor prices of basic food** sold near slum communities, the economic impacts of the virus and other government interventions
- Jhenaidah has kept only a **few markets open at certain times of the day** for people to get fresh food
- All public gatherings, including praying together during Ramadan, have been suspended



Colombia

- **Municipalities are delivering food aid** to their vulnerable residents through decentralized supply points located in vulnerable districts “localidades”
- **Creation of temporary shelters for vulnerable population** in main cities like Bogota where recreation centers are being used
- The **GoC developed measures to attend the COVID-19 emergency:**
 - i) freeze the increment in the monthly rent payment during the quarantine to low and middle income; ii) provide a framework for mortgage grace periods; iii) promote negotiations between tenants and landlords to freeze the monthly rent payment ; iv) forbid eviction process, and iv) create a rental housing subsidy for poor households families during the quarantine period and up to 2 more months
- The GoC defined a **basic income, above 50 USD, to cover minimum needs** for the low-income population registered on the national data base of poorest population (SISBEN)
- The government has developed **subsidies for small and middle size companies** regarding: i) Grace periods for depots rent and mortgages payments, ii) grace periods for property tax and sales tax payment (Industry and Commerce Tax -ICA-) for up to 3 months; ii) Offset rate for credits to small and medium-sized companies (MIPYMES) with sales below 300.000.000 million COP (preference for companies dedicated to tourism and commerce services)



Amsterdam, Netherlands

- The initiative '**Everybody connected**' makes **1000 refurbished laptops and 1350 internet connections available** to elderly people and citizens with a low budget who lack these facilities
 - The platform www.wijamsterdam.nl connects community initiatives (300+)
- **Domestic violence victims will be able to reach out to their pharmacy** by using a special word. This process is developed together with the national government and pharmacies
- There are **daytime and night shelters at different locations** available for homeless people to ensure that people do not spend much together in one room
- **Vulnerable families are moved** to hotel and hostel rooms
- The city tries to **reach out as much as possible to groups that do not speak Dutch** in their mother tongue. The city stays in close contact with main contact persons of civil society groups and for example religious organizations
- The City of Amsterdam announced an emergency measure and **bought 3250 chrome books and 450 wifi-hotspots, which were distributed among schools**. Students can borrow these devices as long as the schools are closed. There is one laptop available for each family



Amsterdam's economic measures

- The city set in place a **measure to support local independent entrepreneurs**, among which freelancers, with income support and company credit so that they can better continue their company
- **Support for initiatives such as Farmers & neighbors**, where people collectively buy from a local/nearby farmer
- The City of Amsterdam has **informed owners of accommodations that they do not have to pay the rent for a period of three weeks**. The national government has announced a support package. Through the national government sport clubs can apply for a one time subsidy of EUR 4.000
- The City has **announced a 50 million euro emergency fund** to take the necessary measures during the Coronavirus
- The City has decided **to not ask fees to entrepreneurs at local markets**. Because of security measures, not all entrepreneurs can continue their fixed spots at the local market and thus fees are suspended
- The City of Amsterdam will **not send reminders or debt collection agencies** for unpaid rent to entrepreneurs who are renting municipality property



Amsterdam's social measures

- The City of Amsterdam provides **free parking space for health care workers** who are fulfilling crucial work during the corona crisis. Almost 4700 parking licenses have been granted.
- To **counteract loneliness a phone line has been set up for citizens** to call and talk to staff members of the municipal public transport company)
- An **office is opened for art projects that respond to the Corona crisis**. Applicants are encouraged to reach out to citizens (digitally) and reflect on the current crisis. The amount differs from 1500 – 5000 euros
- Action plan for watchdogrole on Coronavirus Surveillance in Amsterdam to **protect Digital Rights**
- Start of **R&D for Unlock Amsterdam**, to analyze which tech can be used to ease the lockdown-process
- **Map the risks in supply chain's**, ie. The supply chain for public safety



KOTAKU: Indonesia's slum upgradation program

- Rich education and mass media **reach out campaigns** led by government, NGOs and civil societies
 - Banners and websites with context based messages
- Implementation of **COVID-19 Protocols in Construction Works** (Ministerial Instruction No. 02/IN/M/2020 on the Protocol of COVID-19 Prevention in Construction Work Services)
- **Intensive Internal Coordination Through Online Video Conferencing** (PIU, NMC, Advisory, Provincial Management, City Coordinator Team)
- **Socialization of COVID 19 SOP through Webinars** for Provincial Managements and City Coordinator Team
- **Community monitoring of health and housing conditions** through geo-spatial data, communication system connecting people to local governments, auto data analysis, transparency and data sharing
- **Community led initiatives distributing** masks, buckets, soap, food, disinfectant equipment, and neighborhood self quarantine spots



Indonesia, Kampung

- Developed adaptive preventative measures to work with the local government by **involving influential community leaders** like the local mosque imams
- **Strategically placing low-cost public water containers** with soap holders throughout kampungs (slums) and community awareness programs



Response in Buenos Aires: Health

- Health systems were restructured to increase installed capacity and diversify emergency support channels
- To **increase installed capacity**, the city doubled the number of intensive care beds, added a further 600 general hospital beds, 790 beds in isolation centres, and installed 18 febrile emergency units outside hospitals to screen patients with Covid-19 symptoms
- Over **5,500 rooms in 80 hotels** were made available to house repatriated citizens for mandatory 14-day quarantine as part of a **hotel relocation policy** to keep potential cases separated from the general population.
- To **diversify emergency assistance channels**, the city's "**Boti**" **whatsapp chatbot** for government services support was upgraded, reducing pressure on traditional emergency response services
- Further **technological improvements to remote attention and monitoring within the health system** have been made, including the enabling of digital prescriptions and digital medical records,



Response in Buenos Aires

- **470 community kitchens have had food provisions increased by a third**; local churches and clubs have been converted into shelters; new house payments for hundreds of families in vulnerable neighbourhoods have been suspended; local businesses are offered training and support to provide services online.
- **33 social inclusion centres and a further 7 shelters** provide beds, food, showers and leisure activities - while respecting social distancing - for the city's homeless people.
- The city's **gender violence helpline has been reinforced**, along with available refuges and halfway houses. **Gender perspectives** are mainstreamed across all Crisis Management working groups
- **Social distancing markings** between seats are set out on public transport; commuters and transport staff must wear masks at all times and **health controls are in place at busy junctions**. The main Constitution station uses **thermal cameras** to measure passenger temperatures



Helsinki using trust, data and quick targeted action

- Relying on local and international networks for city-to-city collaboration
- Digital cultural services for its population in its aim to maintain urban life and reduce the mental health impacts from social distancing and isolation
- Schools have been closed since March 18, although pre-schools and grades 1-3 were allowed to remain open to allow critical personnel to work. To maintain the quality of its school system, the city leveraged its impressive digital technology platforms to create digital classrooms for students
- Teaming up with NGOs and the church, the city ensured that each and every one of its elderly residents above 70 years of age may get personalized services, including support in their shopping for food or pharmacy needs



Helsinki using trust, data and quick targeted action

- Supporting the creative industries, which are a mainstay of the economy and especially vulnerable
- Three-month rent-free periods in city-owned properties for entrepreneurs
- City Hall maintains a special Operations Group that collects data through various digital technology platforms and runs scenario analysis to inform decision-making
- The city has transferred civil servant staff from non-critical to critical functions to keep the social and health services high-functioning throughout the crisis.
- Effective delivery of measures has been supported by the trust-based relationship between local government and citizens that allows the administration to act efficiently



Singapore's reopening

- Businesses that have been allowed to reopen must meet tighter safety measures including spacing out employees and avoiding staff gatherings
- Locations including offices, factories, hospitals, hotels and hairdressers are also required to use a contact tracing app called SafeEntry that registers the arrival and departure of employees and visitors. The app will also be gradually rolled out to taxis as well



Pune's slum redevelopment

- The Pune Municipal Corporation (PMC) has decided to redevelop slums in core city areas to decongest these locations and reduce the population density
- The Pune Municipal Corporation (PMC) will execute the slum rehabilitation projects instead of giving them to private builders
- The slum rehabilitation authority (SRA) will carry out the redevelopment of the slums at the same location. The PMC has around 25 SRA schemes across the city
- PMC's data shows that slums are an integral part of the city's habitat. Over 40% of the citizens - nearly 11 lakh people - live in these slums
- The civic administration is also looking at using the existing schemes as shelters. Nearly 700 flats will be used to shift slum dwellers who are not able to follow social distancing norms in their slum pockets



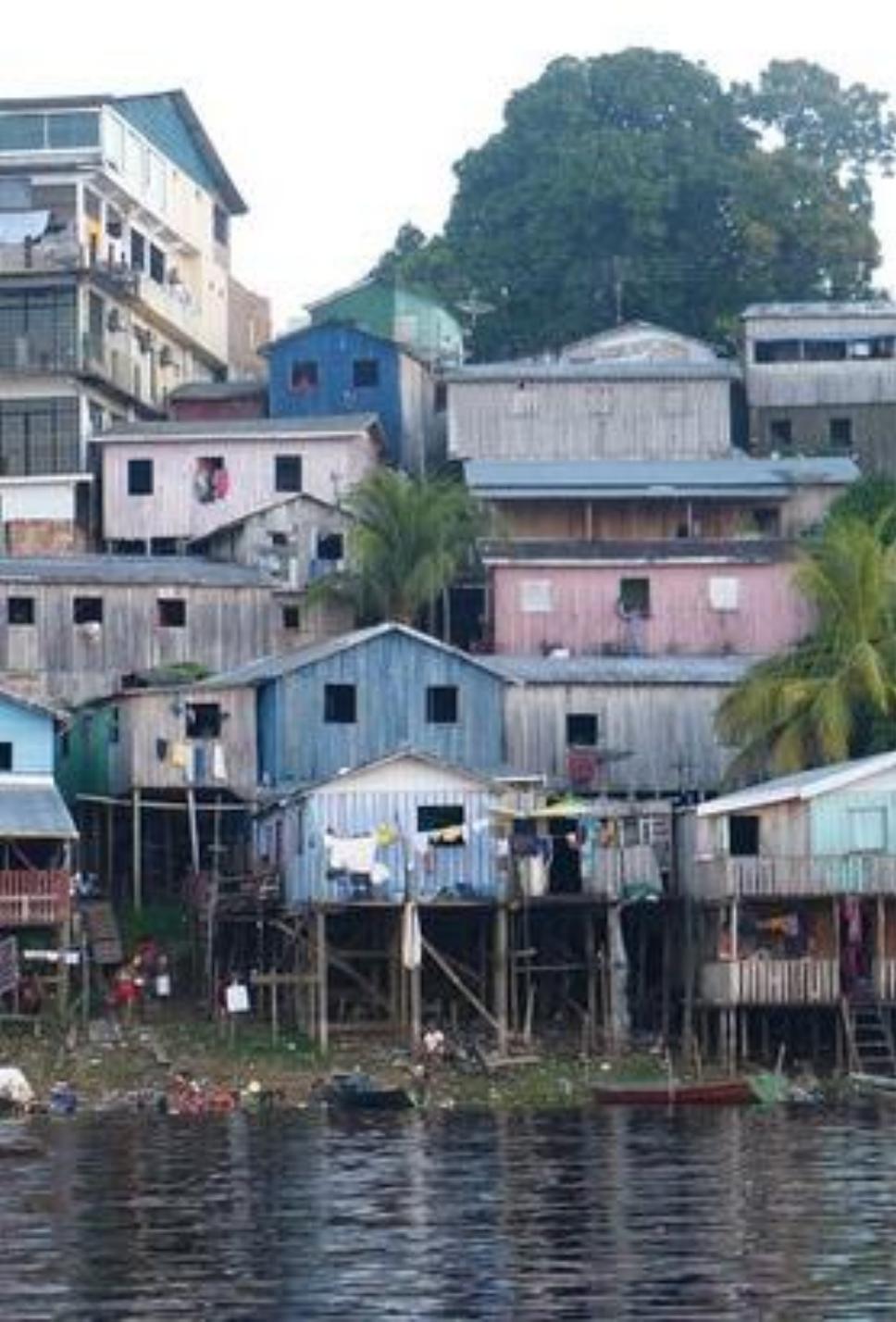
Uganda's focus on informal settlements

- An all-women team holds key positions that are crucial in the response to the crisis, including the [Ministry of Health](#). Minister Jane Ruth Aceng has recently launched the [Tonseemberera campaign](#) which means “don't come near me, keep your distance”, to encourage citizens to adopt safer behaviour in public spaces
- On 12 May 2020, communities in the informal settlements of Kinawataka and Kasokoso, and informal vendors at the Nakawa Market, in Kampala, received a donation of tarpaulins hand-washing stations and protection supplies, in support to the Government's efforts to fight the coronavirus
- The donation included 840 tarpaulins for the Nakawa vendors who, due to the COVID restrictions, are required to live in the market
- Health centers in the settlements have also been provided with personal protection materials including masks, gloves, and sanitizers, while health teams engaged in community sensitization were also equipped with protective gear



Slovakia's quick action and public interaction to encourage safe distance practices

- The most important was the government's quick decision to institute a national lockdown effective March 16, 10 days after the country confirmed its first coronavirus case. The country also secluded itself by closing all airports and implementing mandatory quarantine for citizens returning from abroad
- Slovaks acted voluntarily without the need for large-scale coercive enforcement. The response by the country's political elites contributed to this compliance. Though Slovakia saw partisan conflict over who was responsible for the lack of preparation, there was no disagreement about the seriousness of the threat or the need for the lockdown
- Experts credit the media as crucial to Slovakia's success. The universal use of face masks—instituted early despite the dismissive attitude of the World Health Organization—has become a symbol of Slovakia's response to the coronavirus. The government officials led by example, no Slovak politician, news reporter, or celebrity would be seen in public without a mask
- The coronavirus crisis has also [increased readership](#) of the more serious media outlets. This allowed the mainstream media to dominate public discourse



Tefe, Brazil imposes strict measures in absence of a national policy

- As the death toll rose from less than 7,000 to more than 10,000, local authorities began adopting stricter anti-virus measures
- The riverside community of Tefe in the Amazon region was among the first, with a lockdown decree specifying criminal charges for residents leaving home except for visits to hospitals, pharmacies and supermarkets.
- The mayor imposed it because only about half of Tefe's 60,000 residents complied with an earlier recommendation by the governor of Amazonas state to take virus precautions.
- Over the next three days, the governors of the northern and northeastern states of Maranhao, Para and Ceara decreed lockdowns for their capital cities as intensive-care units filled with COVID-19 patients



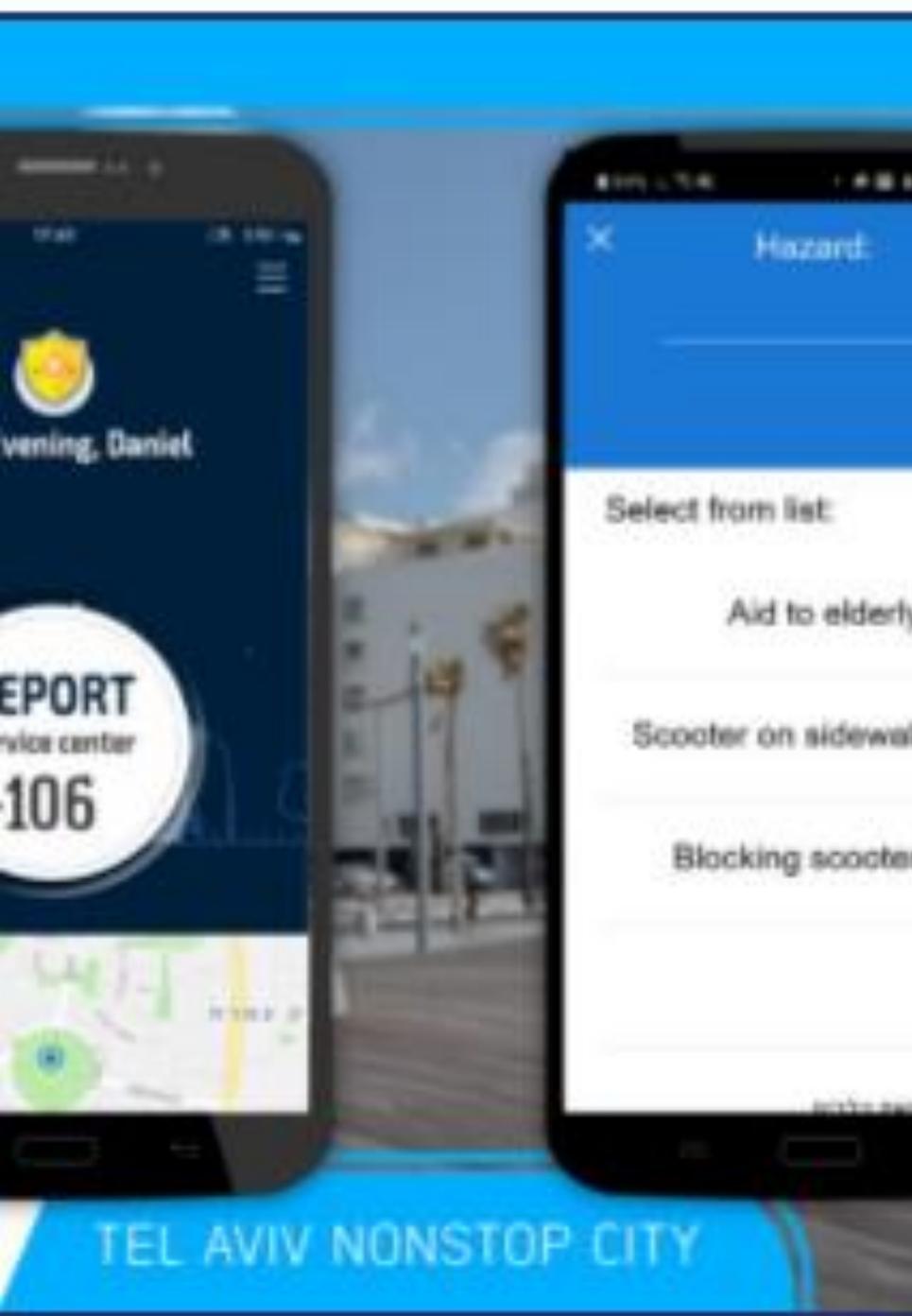
Latin America's response leveraging community health workers

- This is the case of community health agents operating on behalf of Brazil's national [Saúde da Família](#) program. These workers are typically more trusted than other public officials in the communities where they operate, and trust is critical to spreading health-related campaigns and in convincing locals to adhere to public health directives.
- Community health workers are best-placed to visit hard-to-reach patients, including in informal settlements.
- Attributed to their personal relationships with the people they serve, their words are more convincing than a message delivered by radio or WhatsApp
- Have specialized knowledge about the neighborhoods they serve and ideally suited to tailor health campaigns to local realities
- Cities can also convert under-used and distressed assets into serviceable "low-intensity" medical facilities



Pune cleaning slum toilets daily

- Civic body wants the common loos — many located in slum pockets — to be cleaned at least five times a day
- There are currently 69 containment zones within the municipal corporation's limits with over 155 community toilets between them
- Supervisors have been told to ensure the facilities are sanitised throughout the day. They have also been asked to upload photos of the toilets into the PMC's mobile app
- Community toilets serve thousands of people in the city's slum pockets where many households are still without attached loos.
- Besides regular cleaning, teams have been told to ensure each toilet has functional [wash](#) basins, adequate supply of water and soap.
- There are over 1,200 such toilets within PMC limits. The municipal corporation has also installed hands-free wash basins at hotspot localities within Patil Estate slums, [Parvati Darshan](#) and at [Covid Care Centers](#)



Tel Aviv's tech based approach

- Developed a dedicated [dashboard](#) to provide an overview of the COVID-19 situation, including the number of people sick, critically ill, in quarantine, or recovered as well as to highlight hotspot areas
- Set up a city's helpline so that decision-makers can shift resources and priorities as needed – queries related to food, for example, were high in the early phase. Originally an internal tool, aspects of it were then opened to residents
- 106 app to report issues such as scooters blocking the pavement, which feeds into the city's real-time situation report
- The DigiTel Residents' Club service, which provides citizens with discounts and targeted information via an app, text and email, has been key to keeping people informed
- To further harness start-up talent, Tel Aviv held its first international virtual hackathon in early April, in collaboration with the Global Resilient Cities Network (GRCN)



Vietnam's rapid testing

- Vietnam's rapidly scaled-up in laboratory testing and contact tracing
- The country implemented "a broad-based communications strategy that builds public support"
- The country is seeking an economic rebound as international trade moves away from China, it aims to strengthen Vietnam's international positioning and reputation, and boost public confidence in the government



Ghana's effective and innovative response

- In Ghana, the government has had more than 161,000 people tested, the region's second highest rate after South Africa
- The country's corps of community health workers [help it respond effectively](#). The WHO is studying some of Ghana's techniques, including the potentially time saving practice of "pool testing," in which multiple blood samples are tested together and processed separately only if a positive result is found
- They were proactive in using their own budget to get a grip on the outbreak and drawing from a government emergency fund rather than waiting for international aid



Costa Rica's effective institutions

- Strong and unified health care system, and a centralized government that mobilized effectively to provide basic services and support
- With a history of fast response, people trust the government, trust the state to help them with a crisis, so the degree of compliance was higher
- Costa Rica has a universal health care system, and services including water and electricity have not been privatized, these have helped the country to cope with and contain the virus and the economic fallout



Nairobi taking a multi target approach

- Complete household mapping conducted for disease patterns and monitoring in Kibera, Lang'ata, Mukuru with only parts of Mathare continuing
- Additionally, 5,100 community health workers have been distributed all over Nairobi as well as 720 community health units that have mapped out every single place in the city
- Contact tracing is currently ongoing in Nairobi for those who have tested positive for Covid-19, with contact tracing in a multi-agency team; a disease surveillance team, security agencies and the national command center
- Deployed health workers at all border points to identify and isolate any suspected Covid-19 case as part of a management and containment program



Nairobi taking a multi target approach

- A dedicated Ngara Health Centre and South B Clinic for testing of truck drivers and all hotel workers within Nairobi as well as mapping out all communities in the county putting in place 2,400 hand wash stations, complete with liquid soap and sanitizers
- Rolled out free mass testing in various sub-counties in Nairobi
- Mbagathi Hospital and Kenyatta National Hospital have been dedicated for treatment of Covid-19 infected persons with 55 staff deployed to man the 58 quarantine facilities which were handed over to the new office by the ministry
- Began household registration on April 30, to map all households that need maternity care, child care, emergency treatment and chronic diseases
- Giving free Uber/Bolt rides to pregnant mothers during this Covid-19 period



Bangalore's swift response

- The city sealed Padarayanapura, a slum was the first to be sealed. This stern decision ensured cases did not spread to other areas as had happened in Dharavi in Mumbai
- The city started testing primary and secondary contacts and even random sampling, even before the Central government made it a norm
- Special mention was given to the Sachidanand Committee which closely examines all cases and suggests the best treatment model. Early training disseminated by the Rajiv Gandhi University of Health Sciences to all health professionals
- Victoria Hospital was recognized as a role model for the treatment methods adopted, usage of ventilators, dividing Covid-19 and non-Covid patients. The hospital also ensured that the staffers treating patients did not leave the premises by providing them proper accommodation
- Success factors
 - Swift declaration of containment zones
 - Establishment of fever clinics and Covid-19 hospitals
 - Use of technology and field staff in contact tracing
 - Creating teams of medical experts for better treatment
 - Bengaluru followed Kerala model in contact tracing



Karachi's communities self organize to respond

- Communities self-organize to get rations to the most vulnerable
- The lockdown's impact on livelihoods of those living in informal settlements were quickly recognized and people donated generously. Ration parcels consisting of flour, rice, sugar, cooking oil, and tea were distributed to families of six to cover a period of 7-10 days
- The well organized communities also have stronger links with civil society and government organizations and with political parties and can access relief in bulk more easily
- Households with members who had permanent jobs were not given any rations; those that had successful businesses were given 50% of the ration; day wage laborer and those living in extreme poverty were given 100%.
- Drawing from the these lessons, the [Urban Resource Center \(URC\) Karachi](#) has proposed that the Union Council (UC), which is the lowest rung of local government and which is usually ignored, should be developed and made proactive by higher levels of government and that all relief could be distributed through it



Colombia's red SOS flags

- Colombians have been sending out an eye-catching SOS — with encouragement from local politicians
- In a sprawling mountainside slum in Soacha, just south of the capital Bogotá, needy families tie or hang something red from their doors, windows and balconies — a red T-shirt, a red dishtowel, even red pajamas — as a distress signal to neighbors who may be willing and able to provide them with food
 - "They will ask: 'Do you need tomatoes? Take some! Do you need onions? Take the onions!'"
 - Soacha's "red-rag movement," which started in March, was the brainchild of Mayor Juan Carlos Saldarriaga
- Saldarriaga began organizing massive food handouts in March. Soacha's city hall has so far handed food to 350,000 families, but city workers can distribute rice, beans, pasta and other provisions to only about 6,000 families per day. So the mayor [called on](#) the neediest to fly makeshift red banners from their doors and windows as a signal for immediate help
- Since then, the red-rag movement has spread to [Bogotá](#), Medellín, Barranquilla, [Florencia](#) and other cities. Under a similar [initiative](#) in Guatemala, families that are going hungry fly white flags



India reimagines streets for walkers and cyclists

- An advisory issued by the Ministry of Housing and Urban Affairs recommended the pedestrianization of up to three markets in each city, and adding more bicycle lanes
- While cities worldwide [ease lockdown restrictions](#), some are closing roads to vehicles, adding bicycle lanes, widening pavements and handing over parking spaces to cafes
- Authorities in India can also use unclaimed and under-utilized public spaces to increase walkability
- Under [India's Smart Cities](#) program that aims to make 100 urban centers more livable and sustainable, some cities had already been promoting public transit and bicycle lanes
- The southern Indian city of Chennai has carved out more than 100 km (62 miles) of pedestrian-friendly streets
- Small-ticket items like non-motorised transport infrastructure expansion and improvements that got left out in the scramble for metro and light-rail will now see renewed interest



Chennai's Response team for each municipal division

- The Greater Chennai Corporation has come out with a micro plan by forming a COVID-19 Response Team for each of the 200 divisions in the city
- The micro plan has been worked out after a meeting held by senior officials with the assistant engineers/junior engineers and assistant executive engineers
- The division-level Response Team would consist of Divisional Health Officer, medical officer of the Urban Primary Health Centre, sanitary inspector, tax collector, license inspector and conservancy inspector. The team would meet every day and analyze all the issues related to pandemic management, including clinical care of the patients, contact tracing, quarantine, intensive disinfection, containment measures, intensive door-to-door surveillance for fever and distribution of *Kabasura Kudineer*, zinc and vitamin C tablets and provision of masks
- A second-line response team will monitor the effective functioning of the division-level response team has been formed at the unit level to be headed by the jurisdictional assistant executive engineer. The team would have unit health officer, sanitary officer, assessor, conservancy supervisor, and a police official from the particular police station for enforcing home isolation and home quarantine
- The team would organize fever camps, contact tracing and fleet management for shifting patients to hospitals and home isolation



Dharavi successfully battles COVID-19

- The scale of the measures put in place - containment, extensive screening and providing free food to an out-of-work population
- Municipal officials say they have traced, tracked, tested and isolated aggressively to halt the spread of infection
- At the heart of this has been the screening effort, involving fever camps, doorstep initiatives and mobile vans. The early door-to-door screening by workers in sweltering personal protective gear was not sustainable when the weather turned hot and muggy
- The effort pivoted to the fever camps, more than 360,000 people have been screened for symptoms so far
- At each camp, a team of half-a-dozen doctors and health workers in protective clothing screen up to 80 residents every day for temperature and blood oxygen levels using infrared thermometers and pulse oximeters
- People showing flu-like symptoms are tested for the disease on spot. Those who test positive are moved to local institutional quarantine facilities, a bunch of schools, marriage halls, sports complexes. More than 10,000 people have been put into quarantine so far. If their condition deteriorates, patients are moved to public and three private hospitals in the area



Indian cities instituting strict quarantine rules to control spread from different States

- All asymptomatic passengers who enter Delhi will need to home quarantine or isolate themselves for a week. They need to self-monitor, and if they develop Covid-19 symptoms they should report to health officials
- [Aargoya Setu](#), India's Covid-19 contact tracing app, has been made mandatory for all passengers
- Incoming passengers in Mumbai will be stamped on the hand to indicate they are meant to be in isolation
- Passengers arriving to Bangalore from the hotspot state of Maharashtra will have to stay under institutional quarantine for seven days followed by two weeks of self isolation at home. Before arriving, passengers need to register on the Seva Sindhu website, the state's Covid-19 tracking and monitoring website
- In Kolkata, all passengers will have to fill out a declaration form in the local 'Sadhane App', for further tracking
- In Tamil Nadu, all incoming passengers have to apply for a 'TN e-pass' approved by the government's Covid-19 website



Namibia's plan to decongest informal settlements

- The government is planning an effort to decongest informal settlements of those towns, as the spread of Covid-19 has risen sharply there in recent weeks

The Ministry of Urban and Rural Development, together with the regional and local authorities will identify suitable venues or facilities with adequate provision of water and ablution facilities, where residents can be temporarily relocated

- The governor has reported that 60 mass houses are available at Walvis Bay and 100 at Swakopmund, and are determining how to utilize those for this purpose



Rwanda vows to identify every coronavirus case

- Whenever someone is driving a vehicle, bicycle, motorcycle or even walking, everyone is asked if you wish to get tested. The sample and information collection takes about five minutes. Anyone who tests positive is immediately quarantined at a dedicated COVID-19 clinic. Any contacts of that case who are deemed at high risk are also quarantined
- They responded really early and put stringent lockdowns in place compared to every other African country.
- Rwanda mobilized community health care workers and police and college students to work as contact tracers. It set up national and regional command posts to track cases. It's even using human-size robots in the COVID-19 clinics to take patients' temperatures and deliver supplies.
- The strong leadership from President Paul Kagame has been effective during this crisis. Kagame demands accountability from his health ministry.
- Whether the people trust or fear the government, Rwandans listen to their government and have been following the orders regarding masks, washing hands and staying home.



Favelas of Rio establish a dashboard to track COVID cases

- The dashboard, a collection of charts and information arranged in a graphic display, aggregates coronavirus data from about 120 of Rio's estimated 1,000 poor neighborhoods
- Because the rates in favelas are hard to track, community members started keeping their own counts, with help from non-profits, and the dashboard integrates data from about 30 favela-based rapporteurs, government information and news reports.
- Residents from favelas may also report if they think they have the disease and whether their symptoms are mild or severe.
- In some cases, the number of dead on the dashboard is far higher than the number officially recognized by Rio de Janeiro's government.
- While the dashboard reaches only about 10% of Rio's favelas, they are some most populous ones, like Rocinha, one of Latin America's largest slums with a population of more than 100,000 people.



Uruguay and Paraguay's robust national response

- Uruguay became the first country in the region to reopen virtually all public schools. It's the only country in Latin America from which the European Union will accept visitors
- Officials and analysts credit stable and united leadership, a robust national health system and a voluntary but broad lockdown for the country's success
- The country closed the borders, shut down schools and public spaces, and urged people to quarantine. Uruguayans 65 and older were required to quarantine
- The country has begun to reopen, carefully. The border remains closed to virtually all foreigners. But the government has allowed bars, restaurants and hotels to resume operations, guided by careful testing
- Paraguay has been successful against the coronavirus is early, forceful action and an emphasis on gaining and maintaining the trust of the people.



Ecuador's indigenous groups identify hotspot areas

- The goal of this dashboard is to show the spread of COVID-19, identifying outbreak hotspots that can inform emergency response to priority areas
- Ecuador's indigenous groups in the Amazon have launched an information dashboard to monitor the coronavirus and identify contagion hotspots as the disease spreads through the rainforest and threatens ancient cultures
- The dashboard, a collection of charts that aggregates coronavirus data, shows COVID-19 infection and death rates and suspected and recovered cases by area and tribe since early May
- About 250,000 indigenous people live in Ecuador's Amazon region where they are facing a high risk of infection and death from the coronavirus due to malnutrition and a lack of drinking water, health services and COVID-19 tests.



Morocco imposes strict restrictions to contain the surge in cases

- Morocco will stop people entering and leaving some of its biggest cities from midnight to contain a surge in COVID-19 cases, the interior and health Ministries said on Sunday.
- The cities to be locked down include the economic powerhouse of Casablanca as well as Tangier, Marrakech, Fez and Meknes
- The country eased a nationwide lockdown a month ago, though international flights are still suspended except special flights by national airlines carrying Moroccans or foreign residents
- Morocco has carried out 1.1 million tests and has made mask-wearing mandatory. It has extended an emergency decree, until August 10 2020, giving authorities leeway in restoring restrictive measures on a region-by-region basis depending on developments in the epidemic

How New Zealand successfully fought COVID

- **The lockdown was swift and tough;** On March 15, when New Zealand had only 100 confirmed cases and no deaths, it closed its borders to foreign travelers and made people coming home quarantine for 14 days. 10 days later, it introduced full lockdown measures, which were strict by international standards. Only grocery stores, pharmacies, hospitals and gas stations could stay open, vehicle travel was restricted, and social interaction was limited to within households. Those restrictions lasted for over a month [before they were slowly eased again](#). Now, all social and economic restrictions have been lifted, and only border restrictions remain.
- **The rules were communicated effectively;** Shortly before the strict lockdown, the government sent emergency text messages to residents. "This is a message for all of New Zealand. We are depending on you," it read. "Where you stay tonight is where you must stay from now on ... it is likely [the strictest] measures will stay in place for a number of weeks." The government was really good at managing people's expectations, they were told it would take two weeks for signs that the lockdown was having an impact on the numbers. This made the purpose of the lockdown easy to understand and accept. Consistent messaging about prioritizing health and frequent communication and daily PM press conferences directly to the population — including children — helped to achieve buy-in from the public



How New Zealand successfully fought COVID



- **The country ramped up its testing capacity and contact tracing;** The country processed up to 8,000 tests per day, one of the highest testing rates per capita in the world. In total, it had tested just under 295,000 people by June 2020, giving it a comparatively high per capita rate of testing. New Zealand's strict lockdown meant the country's contract tracers could more easily trace people who needed to isolate when cases were identified.
- The Ministry of Health said that more than 558,000 people were registered users of NZ COVID Tracer, [the ministry's contact tracing app](#). Here's how it works: Businesses and organizations are given posters with an official QR code specific to that location. People are then encouraged to scan the QR code with the smartphone app to create a diary of where they've gone. Users can sign up to [receive alerts](#) if it turns out a person with COVID-19 was at the same location at the same time. If identified as a confirmed or probable case of COVID-19, you can share your check-ins with the Ministry of Health, helping contact tracers identify others who might have been exposed
- **Geography was an advantage;** The fact it is a relatively isolated island has greatly helped New Zealand's pandemic response. It has more control over who can enter than other countries with large land borders. It also has a relatively low population density, meaning the virus cannot travel as easily through the population, as fewer people encounter each other.
- **It followed the pandemic guidebook properly;** New Zealand's government was following the best guidelines for dealing with a new virus. It was driven to find, test, isolate, and care for every case, and to trace and quarantine every contact



Singapore, Hong Kong and South Korea use electronic monitoring devices for incoming travelers

- Singapore will make some incoming travelers wear an electronic monitoring device to ensure that they comply with coronavirus quarantines
- From August 11, the devices will be given to incoming travelers, including citizens and residents, from a select group of countries who will be allowed to isolate at home rather than at a state-appointed facility
- Similar measures using electronic wristbands to track peoples' movements during quarantine have been used in Hong Kong and South Korea
- Travelers to Singapore are required to activate the device, which use GPS and Bluetooth signals, upon reaching their home and will receive notifications on the device which they must acknowledge
- Any attempt to leave home or tamper with the device will trigger an alert to the authorities
- Hong Kong in March introduced a scheme for incoming travelers to use a slim electronic wristband, similar to a tag worn by hospital patients, to enforce quarantines for arriving passengers
- South Korea has also used such wristbands connected to smartphone apps for those who violate quarantine



Singapore, Hong Kong and South Korea use electronic monitoring devices for incoming travelers

- Malaysia needs to adapt fast to reshape its urban environments in terms of new policy interventions to adapt to changes brought about by Covid-19, one of the most pressing being how those in high density areas were worst affected by the pandemic
- make sure that the B40 (low income) communities have equal access to public and green spaces
- reconsider transport and mobility, such as increasing the frequency of trains to de-densify public transportation. In the long term, one concept that has been promoted widely for resilient cities is the “15 minute city” where a commuter need not travel more than 15 minutes to get to work or school from his or her home. This, however, would require prioritising and investing in an efficient and accessible public transportation system
- Effective management of crises requires central coordination, says Hamdan, but it should be at the local level where effective enforcement and delivery takes place. This is why it is important to set up systems that allow local governments to respond to local needs through tailored interventions rather than having a one-size-fits-all approach
- The first challenge is that urban planning and health planning are taking place in their respective silos without merging their expertise in an interdisciplinary way.
- The second challenge is that the health system has not yet caught up with the unique challenges in urban health, like higher population density and disease outbreaks, poor nutrition and “food deserts” leading to weaker immune systems, and air pollution worsening airborne diseases



Africa looks at an upgradation plan for water and sanitation

- African governments have not made investments in informal settlements to manage the downsides of density – including contagion
- Only an estimated [56% of the urban population across Africa](#) has access to piped water. This makes the minimum standard of [20 litres per person a day](#) to attain essential levels of health and hygiene near impossible
- The South African government has allocated [R2 billion](#) to upgrading slums to improve access to water and sanitation facilities
- Urban dwellers face a [55% price premium](#) on rent compared to other cities in the world. This is driven by poorly functioning land markets coupled with the fact that [construction costs as well as registering property formally are more expensive](#) than elsewhere
- Governments have tried to address this in a number of ways, from housing voucher schemes, used frequently in the [US](#), which allows poorer households to select where they want to live, to large scale government public housing programs, as is being undertaken in [Addis Ababa](#)
- Relocation of people to greenfield sites is another option. But it's important that these sites have been planned and serviced before people settle. This was done, for example, in various [Tanzanian cities in the 1970s and 1980s](#)



Prioritizing energy efficiency for job creation and reducing emissions

- **Metropole of Lille (France)** announced EUR 66 million recovery plan ;investment in the energy efficient renovation of 3,000 social housing units, more than 3,600 private homes and 600 student residences for the next three years to promote both job creation in the construction sector and low-carbon transition
- **Lille** is injecting about EUR 32 million, in the form of different business support systems, into its local economy. The “Rebound Fund” will allocate EUR 20 million to small businesses who will have to pledge in favour of an ecological or energy transition to benefit from the fund. A new facility dedicated to small companies or associations with less than ten employees has been created, which will provide loans up to EUR 6.6 million that can be paid back over a 3-to 5-year period
- **Copenhagen (Denmark)**, is implementing municipal construction projects which are estimated to create between 50 and 100 new jobs in the city administration facilitated by lifting of restrictions on capital expenditures on public procurement



Prioritizing energy efficiency for job creation and reducing emissions

- **Seoul (Korea)** placed solar panels on all municipal buildings and a million homes between 2018 and 2022, which is estimated to create 4,500 jobs. To date, the city has installed 98 MW of solar PV systems on municipal assets, more than 13,125 households have received solar panels, and emissions of the air pollutant PM_{2.5} have been cut by 8.7 tonnes
- **Swansea Bay City (UK)** announced a GBP 60 million marine energy project in June that will help tackle climate change while reviving Pembrokeshire's economy in the wake of Covid-19. It is expected to generate more than 1,800 jobs in the next 15 years. The project is made up of four elements - 90km² Pembrokeshire Demonstration Zone, delivered by Wave Hub Limited that will enable the deployment of future energy generating technologies as well as Marine Energy Engineering Centre of Excellence – a technology, innovation and research centre delivered by the Offshore Renewable Energy (ORE) Catapult



Varanasi's slums kept COVID away from the start

- Varanasi's 210 slums remained safe even though the district numbers were rising
- Varanasi Municipal Corporation ensured repeated sanitization, carried out awareness campaigns and distributed precautionary articles including mobile handwashing facility
- Direct Bank transfer facility was ensured to disburse salaries and other financial assistances, while mobile ATMs were placed in localities to avoid bank gatherings
- 500 self help groups were formed to generate employment among slum dwellers, they manufactured PPE kits, face shields, sanitary pads and masks



Philippines to follow Dharavi model for tackling Covid-19 in slums

- The Dharavi model of containing the spread of Covid-19 includes testing in high numbers, moving positive patients to institutional quarantine facilities, shifting high and low risk contacts to separate quarantine facilities, and treating patients in time. BMC organised fever camps, door-to-door surveys, used private clinics and dispensaries to reach maximum number of people and detect Covid-19 early
- They are giving the Philippines government information on how they conducted fever camps in Dharavi, and carried out contact tracing, and organised institutional quarantining



Kenya expands green open public spaces

- 1000 hectares of land were secured by activists and Kenya Forest Service in 2010- it has been turned into a public park. Weekend visitors have doubled since the onset of COVID-19
- The forest is a boon too to adults who live in a growing culture of processed food and long sedentary hours in traffic. In Kenya, non-communicable diseases account for over 50% of hospital admissions
- With schools closed, and families at home, the park has been a respite for the populations



Japan's thoughtful urban planning curbs COVID-19

- The areas between buildings formed public gardens – the ground levels of residential buildings were used for parking cars and those of commercial buildings for shops and restaurants
- Public transport in Tokyo is an intricate yet easily navigable network of public and private lines connecting various parts of the city, enabling 51% of the trips to be made by public transit
- The Japanese recognize that while infrastructure is important, cities are for people. They place immense focus on creating enabling conditions for people to thrive in cities
- The little things matter – temperature-controlled seats in trains gave us a much-needed respite in the January cold, granular signs painted on the floor served as handy directions, designated repacking area at airports assisting those with overweight luggage
- The pavement are often wider than the road on which cars travelled
- Citizens followed government directives and the police did not need to enforce rules.
- In addition to sanitization, temperature checks and other protective measures, new orders restrict eateries from playing loud music, which compels people to raise their voices to be heard. This follows research stating that talking loudly produces droplets that can potentially transmit the virus



Morocco orders free distribution of washable protective masks

- Interior Ministry will proceed to free distribution of washable facemasks to underprivileged citizens
- This large-scale operation concerns all the cities which have recorded a surge in the number of infections in recent days, namely the regions of Casablanca-Settat, Tangier-Tétouan-Al Hoceima, Marrakech-Safi, Khénifra-Béni Mellal and Fès-Meknes
- The binding nature of this measure, specifying that any violation of this rule is punishable by a fine ranging from 300 to 1,300 dirhams or imprisonment from one to three months
- The washable protective masks are reusable up to 40 times. These 100% cotton fabric masks are deemed effective in that they filter more than 90% of particles



Temporary water access through portable stations become permanent in Kenya

- The residents of Kibera, Nairobi's largest slum, have created a network of handwashing stations many hope will now become permanent
- Local leaders raised funds to install the portable stations under tents and outside small shops across the sprawling settlement which, according to the UN, has an estimated population of 500,000-700,000.
- Local organization SHOFCO has 90 such stations in Kibera — part of a wider program which has set up 318 of them across 11 slums. It estimates they have been used almost 38m times.
- “People want it. If people basically want it, it means now it’s the new order . . . Covid has advanced that [hygiene] opportunity.” Other organizations, such as Everlyne Bowa's Woman and Child Empowerment Foundation, are making soap for the stations.



Brazil's bike lanes change behaviors and improve health

- The scheme aims to encourage social distancing by getting people off public transport, and to take others out of their cars, easing congestion on the streets
- It is one of a series of measures introduced by the city in a bid to adjust its economy to the pandemic. Others include expanding cycle lanes, closing city center streets to motor vehicles, licenses for bars and restaurants for outdoor tables and assigned spaces for informal street vendors.
- Antonio Carlos Magalhães Neto, Salvador's mayor, said that while measures such as the cycling incentive were designed to encourage more of the city's economy to move outdoors during the pandemic, many of them would last beyond the immediate crisis. "Things will change definitively. There will be a cultural change in the relationships between citizens and public spaces," he said.



Singapore's pocket-sized tracker

- Singapore began handing out pocket-sized coronavirus contact-tracing devices to residents on Monday, part of a planned nationwide rollout to help the city-state safely reopen its economy
- Like an earlier smartphone app released by the government, the box-shaped tokens use Bluetooth signals to record nearby devices and store encrypted data of a users' close contacts
- If users test positive for COVID-19, the devices must be handed over to the authorities to extract the data on other people they have potentially exposed to the virus
- While the government plans universal distribution of the tokens, elderly residents have been prioritized because they are less likely to have smartphones and therefore own the existing app
- Authorities say the contact-tracing app has been downloaded by about 40% of residents, although it has encountered problems, especially on Apple devices where its operating system suspends Bluetooth scanning when the app runs in the background
- Singapore has not made the app or token mandatory but has urged residents to use them when they are outside their homes.
- Similar apps have raised privacy concerns, but Singapore has said its contact-tracing token will store data locally for no more than 25 days and that it does not have internet or cellular connectivity



Kenya's informal markets enforce safety protocols

- At Toi Market, a few vendors have set up handwashing stations and one or two even provide sanitizers for their customers.
- The vendors have the space to maintain physical distance and are also responsible for providing handwashing stations for themselves and their customers. Kenyatta Market is a built-up market with stalls which enable the vendors to maintain some distance. There are also regular points to wash hands within the market that is supplied through a water tank.
- Kibera informal settlement has been carrying out sensitization campaigns within the Toi and Kenyatta markets.
- Together with community health volunteers, they educate the vendors on proper handwashing, the signs and symptoms of COVID-19, how to protect themselves and what to do if they suspect they have the virus. There is free water to the vendors at Toi and other markets in the informal settlements.
- At the outskirts of Nairobi County, Wangige Market in Kiambu County has set up strict rules for buyers and sellers. Nobody can enter the market without wearing a mask and washing their hands with the water provided at the various entry points.
- The market known for its sale of vegetables, fruits, chickens and eggs, has also implemented wide distances between the sellers, allowing for physical distancing. The market is cleaned every evening. Each of the stall owners pay Sh50 per month (\$.50 cents) for the water, soap and the custodians posted at the market entrances to ensure people wash their hands before entering.



Open-air mobile informal markets to ensure safe selling

- Some enterprising individuals who have taken the opportunity to set up car-boot 'shops' where they offer fresh vegetables, fruits, eggs and other food items.
- They source these items directly from farmers but mainly from the open-air markets and then sell to those afraid to go to the open-air markets. They park their cars by the side of the road, open their car-boots and offer their produce for sale.
- Others have utilized social media and e-commerce to provide fearful residents with fresh fruits and vegetables. For example, Eazi Pizi fruits and vegetables have created their own niche. The three women behind the venture source fresh produce from the open-air markets and deliver this to their customers. Unfortunately, many of the e-commerce businesses do not cater to the ordinary citizens and that is why thousands of people still throng the open-air markets in search of a deal and a sale.
- In Kwale, the county government has put in place a walk-through sanitizing shower stall at the entrance of the market. Sellers and visitors to the market are hit with a cold mist of spray containing a disinfectant which is supposed to kill the COVID-19 pathogen.
- Customers and vendors alike have been encouraged to use M-Pesa payments to limit the risk of transmitting the virus through the exchange of cash. Safaricom waived fees on M-Pesa for transfers under Sh1,000 shillings (\$10), while another provider Airtel has waived charges on all payments through its platform Airtel Money.

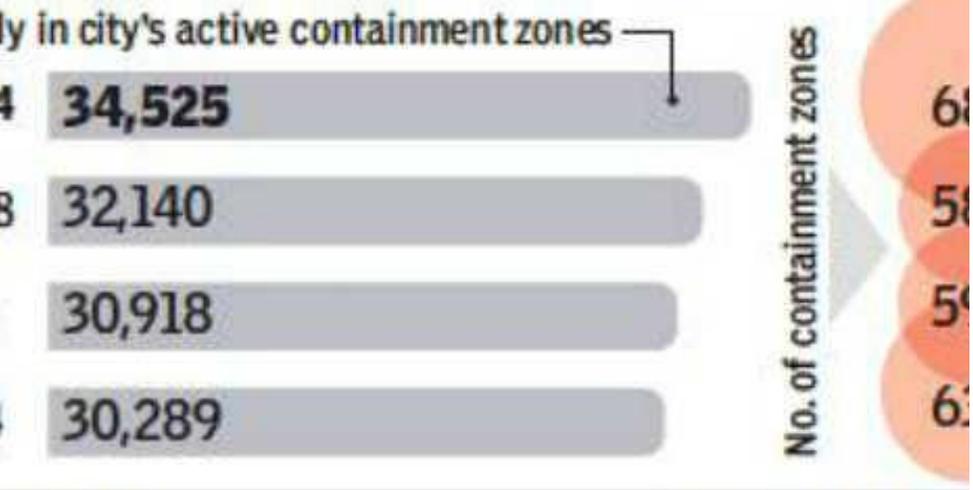


Market Associations enforce safety protocols in Abuja

- While local markets ignore dangers presented by COVID-19, things are better organized in markets under the Abuja Markets Management Ltd (AMML). AMML manages fourteen markets within the FCT, including Wuse and Garki markets which were visited.
- In Wuse market, located in the heart of the city of Abuja, a different approach to dealing with the new realities COVID-19 presents has been adopted. For them, survival of their business trumps personal convictions and beliefs about the nature or existence of the virus.
- Observing preventive protocols has become paramount to the smooth running of their businesses. As such, traders have come together to provide hand washing facilities for customers.
- The market management also plays a role in ensuring that measures put in place are complied with. From the entrance visitors are scanned with infrared thermometers and those without face masks are not allowed into the market.
- A joint monitoring taskforce comprising of public health officers, market officials and market traders has been set up to encourage compliance in the markets.
- At the beginning of the pandemic, canopies were used to set up neighborhood selling points to encourage social distancing and to decongest the markets.

CONTAINMENT ZONES AGAIN

containment zones in slums, chawl areas or buildings constructed for slum-dwellers have gone up over a week



With Most Containment Zones

th (Dahisar) 74
neri East) 70
andup 65
st (Govandi) 57
st (Andheri) 40



Wards With Few Containment Zones

1 G-South (Worli)
2 H-West (Bandra West)
3 M-West (Chembur)
4 R-Central (Borivli) 10
5 B (Dongri) 10

Mumbai re-focuses on slums to curb rising cases in the city

- With an uptick in cases, Mumbai is re-focusing on slums
- They are marking slum pockets, chawls and SRA buildings as containment zones if they find a positive case
- They are focusing on areas with small lanes, common toilets and high population density
- Cases are rising after a relaxed attitude from people going back to work and allowing domestic workers to come to their homes



India launches Affordable housing scheme for migrant workers

- The Ministry of Housing and Urban Affairs has launched the Affordable Rental Housing Complexes (ARHC) as a [sub-scheme](#) under the Pradhan Mantri Awas Yojana (Urban)
- This scheme is to be executed via two models: In model one, the existing government constructed homes; for example, the 1.8 lakh houses constructed under the JNNURM scheme, will be utilised either through the PPP mode or by public authorities.
- The second model would employ the construction, operation and maintenance mode either by private or public players on their own vacant land. The ownership of these complexes are to be surrendered to the Urban Local Bodies post 25 years.
- The rental housing complexes are expected to consist of both single and double bedroom accompanied by a living room, kitchen, bathroom and toilet; of 30 to 60 sq. m. carpet area. Dormitories are to have a common kitchen, bathroom and toilet.



Bogota undertakes transformative institutional changes

- This congress highlighted the institutional actions that Bogotá has led during these months, as an example of the actions that different authorities have carried out to handle the current crisis
- It is important to remember that Bogotá has led important actions not only in terms of health but also in social and economic care to face the different impacts of the pandemic
- Expansion of the number of intensive care units, home care, detection, tracking and isolation of COVID cases; Mass testing, sector-based quarantines, promotion of bicycle mobility with new bike paths, economic reactivation, the basic income program and delivery of markets to vulnerable families, are just some of the actions that the Mayor's Office of Bogotá has led to cover the main axes of attention that this global pandemic demands.



Resilient programs in India's villages

- Nearly 44 million households sought work under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in June 2020, the highest since its launch in 2006. Some work sanctioned under this scheme has led to the creation of livelihood assets that can generate income for individuals and the community. MGNREGS is also being used to build assets under the Jal Jeevan Mission, Pradhan Mantri Awas Yojana and Swachh Bharat Mission. Such convergence is crucial, given that workforce is available and needs employment
- The Garib Kalyan Rojgar Abhiyaan aims to work with 12 ministries on 25 public infrastructure works such as construction of rural roads, housing and anganwadis
- Similarly, schemes like the Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan can be combined with Pradhan Mantri Kaushal Vikas Yojana to train workers to promote, install and maintain solar pumps for efficient irrigation



Cold storage facilities for agriculture support

- When cold storages are powered by decentralised renewable energy, it has been observed that farmers are able to stock their supply for longer periods, reduce losses of perishable commodities and sell at more competitive prices.
- in Uganda, solar-powered refrigerators have increased farmers' incomes by 20 per cent. Storage further needs to be complemented by sorting, grading, packaging, local processing, as well as last-mile transportation and refrigeration of perishable produce.
- The Agriculture Infrastructure Fund announced in October, can provide financial support to create post-harvest management infrastructure like cold storage and processing units.



Enhanced Climate resilience training for rural population

- One of the cornerstones of climate resilient agriculture is the use of Climate Information Services (CIS) for decisions such as when to sow, irrigate and spray pesticides. Basic CIS services are available via text messages on mobile phones and more complex services which cater to specific regions and crops, via applications on smartphones.
- The Karnataka State Natural Disaster Monitoring Centre's Varuna Mitra has benefitted five lakh farmers through its weather advisories. The ability of the younger workforce to learn and apply this information can help improve farm productivity.
- Trainings on watershed and farm management can be amended to include use of clean energy for efficient irrigation and cold storages along with CIS, to build supply chain resilience.



Israeli cities take part in project to monitor sewage for outbreaks

- The Israeli Ministry of Health has signed an agreement with Ben-Gurion University of the Negev (BGU) to extend a monitoring program to identify Covid-19 in sewage samples from 14 new cities around the country.
- Monitoring will serve as an early warning system of outbreaks. It is part of a larger pilot study being conducted and funded by the Ministry of Health before implementing the tracking methodology countrywide.
- If monitoring a city with only a small number of known Covid-19 cases, and traces show up in the sewage, you can see something is wrong and more testing can be done
- Monitoring sewage will help mitigate expansion of Covid-19 cases earlier, especially in areas where testing isn't being maximized



Hi tech and innovative interventions globally

- Temperature-scanning robots, drone deliveries of food and medicine, facial recognition: these are just some of the hi-tech, futuristic solutions that cities have already rolled out to contain the spread of the virus
- In Florence, restaurants have repurposed traditional “[wine windows](#)” – used to serve customers during the bubonic plague of the 17th century – to serve drinks and snacks once more
- Measures like eviction bans, rent freezes and mortgage holidays have sought to protect renters and homeowners
- Mumbai has repurposed iconic sites, turning a ritzy racecourse into a sick ward, while rental company Airbnb has connected medics in France and Italy with free flats

Hi tech and innovative interventions globally



- In Rotterdam, architect Harm Timmermans created a simple 16-square grid design for a tiny marketplace that can be quickly and cheaply assembled in public squares, allowing people to shop locally and at a safe distance
- Paris mayor Anne Hidalgo wants a “15-minute city” where most people’s daily needs are a short walk, cycle or commute away
- From Singapore to Estonia, business is [exploiting technology](#) to help people resume work and travel, with apps, scanners, check-in systems, and so-called immunity passports
- Lockdown has also spurred architects to [reconfigure bijou flats](#) for a new dual life, sliding walls and secreting desks



Hi tech and innovative interventions globally

- The city of Braga in northern Portugal has opened public squares, sidewalks, parks and more to restaurants and businesses seeking to cater to customers with social distancing
- In June, Bangkok opened a new park [built on an elevated rail line](#) that lay unused for decades, which it hopes will serve as a model for ‘greening’ abandoned spaces
- To lure riders back, Delhi and Seoul introduced mobile apps, temperature-check kiosks and smart bus shelters to make public transit safer as offices and businesses reopened after lockdown



Lisbon to turn tourist flats into homes

- A rapid transformation had rippled across the city centre as Airbnb-style tourist rentals swelled to a third of the properties. As locals found themselves priced out and communities began hollowing out, many began grumbling about the aftershocks of *terramotourism* – [a tourism earthquake](#).
- The city seized on the moment to cast new light on a program that was in the works prior to the pandemic: an ambitious plan to convert some of the city's more than 20,000 tourist flats into affordable housing.
- The initiative, billed by the city as a “risk-free” option, offers landlords the possibility of receiving up to €1,000 a month by renting their properties to the city for a minimum of five years. From there the city takes over, finding tenants and renting the homes at a subsidised rate capped at a third of the household's net income.
- A handful of governments have started doing just that. In England [officials have promised to make 3,300 homes](#) available to rough sleepers by next May, while Venice has struck an agreement that will see [some tourist flats rented](#) to university students.



City of Cape Town was equipped for Covid-19 crisis

- Cape Town is the only city among the members of the Global Resilient Cities Network that has a dedicated focus on processes and behaviors to build resilience, as seen during the drought
- This way, we ensured that resilience considerations were already incorporated into our processes and started fostering resilience thinking into decision-making for some time already
- The City's Covid-19 transversal response took a portfolio approach to implementation. There are several programs and projects supported by project managers and the entire response has been guided by the principles of resilience, including the need to create redundancies, to be integrated, to be flexible and to be robust
- The Resilience Department hosted a workshop with 25 City staff early in March to map the possible disruptions of the coronavirus on a range of City systems. A report was produced, and this work birthed the pandemic business continuity committee, which has been chaired by the City's resilience director. Adaptive management remained a key founding principle in our response as the pandemic is multidirectional in nature



City of Cape Town was equipped for Covid-19 crisis

- During the pandemic, multiple data tools were produced and used including a business continuity dashboard to present responses to service requests; a vulnerability viewer to direct line department actions in a targeted way; a human resources online tool to track staff Covid-19 cases, notably in front-line services, and a fatalities management dashboard to track preparedness for worst-case scenarios. The vulnerability viewer is expected to be repurposed now for preparation of other shocks, such as flooding and heatwaves.
- The viewer has multiple layers of data and has also been used to track food relief distribution.
- The City made use of robust scenario planning for several projects in the portfolio response, including for determining the number and location of clinic overflow facilities that were constructed and for considering approaches to quarantine and isolation facilities.
- The City collaborated extensively with the provincial government, which led the public health response to the pandemic, including the approach to quarantine and isolation; developing an approach to hot spots and planning for fatalities management, among other topics.
- Looking ahead towards our road to recovery, scenarios have now been endorsed by the City's leadership and the City's mayoral committee.
- Many of the actions in the resilience strategy and tools that have been developed thus far will most definitely guide our priorities during the recovery period and our response to the future trajectory of the Covid-19 pandemic in the city.



Japan's response to COVID-19

- Japan [lacks](#) legal means to enforce a lockdown, but other strengths emerged quickly
- Due to tuberculosis outbreaks in the past, the country has [maintained](#) a public health center system staffed with contact tracers who were quickly redeployed on Covid-19
- High levels of social trust and compliance meant citizens pro-actively wore masks and avoided crowded places
- Although it's now seeing a [record uptick](#) in infections as winter looms, the nation of more than 120 million people has just [331](#) serious cases of Covid-19 currently; France, with a population half the size, has nearly 5,000 virus patients in [intensive care](#)
- Japan's ability to avoid fatalities despite having the oldest population in the world propelled it higher, as did its foresight in sewing up four vaccine deals—including both frontrunner candidates that use the revolutionary [mRNA technology](#).



Taiwan's response to COVID-19

- [Whisper networks](#) conveying worrying news from Wuhan allowed Taiwan to act [early](#) in restricting entry at its borders
- The island then pioneered a tech-focused approach to rallying its 23 million people to protect themselves: launching [apps](#) that detail where masks are in stock or list locations where infected people visited
- It's gone more than 200 days without a locally transmitted virus case and much like New Zealand, life has largely reverted to normal, though borders remain shut
- Taiwan has so far, however, failed to ink any bilateral deals for the most progressed vaccines



What was common between cities that responded most efficiently

- Border control has been a key element, starting with China's original cordon sanitaire around Hubei province, which largely shielded the rest of the country from infection.
- The economy where this crisis began is the biggest of the top performers, with mass testing deployed at the first sign of new cases and a mandatory 14-day quarantine for travelers. China's propensity to impose aggressive lockdowns on regions where medical or tracing resources are scarce is one [downside](#).
- Effective testing and tracing is a hallmark of almost all the top 10, embodied in South Korea's approach. The country approved home-grown diagnostic kits within weeks of the virus's emergence, pioneered drive-through testing stations and has an army of [lightning-fast contact tracers](#) who comb through credit card records and surveillance camera footage to track down clusters.
- Like Japan, Pakistan and other parts of Asia, Korea has drawn on recent epidemic experience after suffering an [outbreak](#) of Middle East Respiratory Syndrome, or MERS, in 2015.



Indian slums survived the lockdown with sustained engagement from slum leaders

- Slum leaders are not idly watching the virus spread and economic distress deepen. Roughly six in ten leaders contacted a local politician during the lockdown to request assistance.
- 91% of requests during the lockdown were for food rations, instead of more usual demands for public infrastructure. This shift in focus highlights a hidden cost of the pandemic—a reduction in the time leaders had to address pre-existing deficiencies in basic public services.
- Slum leaders are not uniform in their ability to help residents. A survey asked leaders to enumerate any relief schemes that had been initiated or expanded during the lockdown that slum residents might benefit from. 47% of leaders correctly identified zero or 1 scheme, while 25.5% of leaders correctly identified 3 or more schemes. Slum leaders also varied in their reported ability to get requested assistance from politicians.
- Two key factors underpinned their influence with city leaders: education and their embeddedness in political party networks.
- Prior, pre-pandemic research found these exact traits corresponded with effectiveness in everyday problem-solving. Leaders who were effective before the pandemic remained more effective during it



Indian slums survived the lockdown with sustained engagement from slum leaders

- Public health experts have called for community-driven solutions to slow transmission and soften the economic blow of containment measures
- In India's slums participatory efforts encounter informal leaders. Survey findings reveal these active forms of leadership even in the most underserved areas of India's cities
- It also finds that slum leaders are deeply dependent on party networks, and that nine in ten are men. These traits inevitably bias the types of residents that leaders are most likely to hear and help. Rather than flatten and simplify slum communities, participatory efforts must recognize these complexities within them.
- A small silver lining to the pandemic has been in rendering visible the Indian state's inadequate understanding of important urban communities, ranging from circular migrants to slum residents. Acting on this realization requires more than calls for making cities inclusive



Few Covid-19 deaths in India's old-age homes

- Data from states in India shows that a little over half (53%) of Covid-19 deaths are in people who are 60 years, compared to around 75% of deaths in those aged 65 years and above around the world, according to data reported to World Health Organization (WHO) till October
- There have been accounts of fewer deaths in congested urban slums and old age homes in India. Public health officials investigated and found no increase in Covid-19 deaths or all-cause mortality there, even though older persons account for more than half of all Covid-19 deaths in India
- The study indicates that older persons in care homes are somewhat protected from the new coronavirus infection, in large part because of the protective measures being taken, which included decongesting homes and sending residents home wherever possible, stopping all visitors, giving attendants temporary accommodation within the home if needed, sanitization all items from outside, including fresh fruit and vegetables, and frequent sanitization of the premises
- The study found that on average, 26% of the residents were sent back to their homes or to relatives before the lockdown to decongest the care homes, and administrators strictly adhered to the government guidelines for social distancing and personal protection.
- All the homes, including the 15% under-funded ones, made dietary changes were made to add vitamins C and D and multivitamins to the diet and increase physical activity to improve the health of the residents. The residents were also encouraged to make video calls to their families and films and entertainment was added to the daily routine to reduce anxiety



The coronavirus is ravaging the world. But life looks almost normal in much of Africa

- The signs of severe outbreaks seen elsewhere — crowded hospitals and a spike in deaths — have emerged in only a handful of African countries. Surveys by the World Health Organization have found negligible excess mortality rates in most African countries, reducing suspicion that many covid-19 deaths are going uncounted.
- Youthful populations, warmer climates, less time indoors, less traveling, less obesity and diabetes, immunities derived from other diseases — even other coronaviruses — are all playing a part.
- Almost all African countries closed their international borders early in the pandemic. Many imposed localized lockdowns, curfews and bans on social activities such as bar-going even before notching their first cases. Experts agreed that while adherence to other mandates such as mask-wearing and social distancing may have been lax, their early implementation along with more heavy-handed measures were effective at flattening the curve of infections.
- Those interventions have exacted immense economic damage, however, and with many African governments not seeing uncontrolled growth in cases, they have been rolled back in many places
- Ghana, Senegal and Cameroon, for instance, have shuttered some special treatment centers, citing a consistent lack of patients in need. Officials in the Cameroonian capital, Yaoundé, had turned a soccer stadium into a quarantine facility, fearing the worst. Athletes reclaimed it three months ago.



Cambodia's stringent lockdown

- The Cambodian government has taken additional measures to curb the country's latest outbreak of [COVID-19](#), including giving power to provincial and municipal authorities to close shops not adhering to public health protocols, imposing a [mandatory 14-day quarantine](#) for travelers entering the country, and controversial moves such as publishing the names of people infected with the coronavirus
- These measures come on the heels of the first cases of a community transmission, dubbed the "Nov. 28 incident," after Cambodian General Director of Prisons Chhem Savuth, his wife, and several family members tested positive for COVID-19
- The Government underscored the importance of the public to avoid the "three Cs" — crowded places, close-contact settings, and confined spaces — and said ongoing investigation into the latest cluster is focused on these high-risk areas where the conditions are ripe for virus transmission.



N20,000 cash grant to 160,000 poor and vulnerable rural women in Nigeria

- Nigeria is targeting over 160,000 poor and vulnerable rural women in Nigeria for the N20,000 grant, to uplift their economic status. Rural women with a disability will also be included.
- The goal is that the beneficiaries will use this opportunity to increase their income, enhance their food security and contribute toward improving their families. The N20,000 can also go a long way in supporting a woman to start a business
- The minister said that over N9.5 billion was received by Katsina State, under the Conditional Cash Transfer program
- The grants had impacted lives of over 142,474 vulnerable households in the state, as well as 12 local governments
- The minister listed the benefitting local governments to include, Bakori, Batagarawa, Baure, Bindawa, Dandume, Ingawa, Kaita, Kankara, Mani, Musawa, Rimi and Danmusa.



Kenya slum dwellers battle COVID-19 downturn with virtual currency

- Sitting on a low bench at her shop in a Nairobi slum, Grace Wangari sifted through a handful of grains that a waiting customer had just ordered. As she poured them into a shopping bag, the customer scrolled through her phone to pay for the purchase.
- The transaction happened through Sarafu, a blockchain-based community currency that is helping thousands of Kenyan slum dwellers pay for food, water and sanitary items as they battle through the COVID-19 economic downturn.
- Each week, families are issued with virtual vouchers worth 400 Kenyan shillings (\$4), which they can use to buy essential goods, said Roy Odhiambo, an innovation officer at Kenya Red Cross Society (KRCS), one of the groups behind the project.
- Vendors can then send the vouchers to Grassroots Economics, the Nairobi-based social enterprise that co-developed Sarafu (“coins” in English) with U.S.-based engineering firm BlockScience, and redeem them for cash.



1m Nigerians to benefit from COVID-19 Cash Transfer

- No fewer than One million Nigerians are to benefit from the Federal Government's COVID-19 Cash Transfer Project which aims to lift the urban poor affected by the pandemic out of poverty.
- The Vice President, Prof. Yemi Osinbajo, said this on Tuesday in Abuja while inaugurating the COVID-19 Rapid Response Registration (RRR) Cash Transfer Project.
- According to him, the project is a national initiative to build a shock responsive framework for capturing and registering the urban poor and vulnerable populations across Nigeria.
- As of Dec. 31, 2020, they had identified and registered about 24.3 million poor and vulnerable individuals into the National Social Register; equivalent to about 5.7 million households.
- Through this project, they are injecting about N10billion directly into the hands of about two million poor and vulnerable households every month.
- With the RRR, which uses a wholly technology-based approach, they are primed to achieve an end-to-end digital foot-print in cash transfers for the urban poor
- The first set of 3,115 beneficiaries have already received N5,000 each cash transfer and the program will continue until it reaches the one million target



India's vaccination

- The Union government has launched the COVID vaccination drive in order to give protection to the people from the coronavirus. Health workers are getting vaccination at the selected places in the State and the country. Later, frontline workers, municipal workers, revenue staff will be covered, followed by the people, who are aged over 50 years.
- As per the rules, Aadhaar card and mobile number is must for the vaccination. The interested people have to enroll their names in the COWIN app and they will get SMS to get the vaccination. So far, the health workers are registering their names at the given vaccination centers and receiving the shots.



Malawi: Macoha Strengthens Covid-19 Awareness Amongst Children With Disabilities

- Caregivers were provided with soap, hand sanitizers and washing buckets to be used at community-based caregiver centers
- The Access to Early Childhood Development and Education for Children with Disabilities in Malawi is funded by Open Society Initiative for Southern Africa (OSISA) at a cost of \$50,000.
- The project endeavors to strengthen the participation of parents of children with disabilities, school authorities and communities with emphasis on ensuring that children with disabilities attend school and parents are able to make assistive devices.
- As the project reached its final stages, there was need to assess the impact made and many parents of children with disabilities as well as caregivers in the three districts were. During the visits, many parents sent their children to various early childhood development centers and some are attending primary schools after MACOHA's intervention.
- Many caregivers bemoaned lack of interest by parents to take their children with disabilities to community-based care centers, inadequate skill services such as sign language, shortage of caregivers and in adequate play materials for their learners.
- MACOHA completed training parents of children with disabilities and other community members in cerebral palsy in the three districts in the production of assistive devices using appropriate paper technology using local resources. MACOHA worked hand in hand with parents and guardians of children with disabilities taking cognizance from researches that prove children with disabilities enjoy good health and wellbeing if taken care of from infancy.



Freetown Receives International Support to Help Migrants Amid Covid-19

- The city of Freetown has become one of five across the world to receive an award to help it expand a waste-management scheme aimed at helping young people in informal settlements to make a living and improve public health amid the challenges of Covid-19.
- The award has been announced by the Mayors Migration Council, a U.S.-based advisory body led by an international board of mayors, which helps cities to develop policies for coping with the migration and displacement of people.
- On January 7, the council launched a "[Global Cities Fund for Inclusive Pandemic Response](#)", which it described as a \$1 million initiative to provide direct financial and technical support to cities so they can assist migrants, refugees and internally displaced people during the current pandemic.



Indian Govt. rushes expert teams to 10 states to help manage rise in Covid-19 cases

- Centre has rushed expert teams to 10 states that have reported a surge in the number of coronavirus disease (Covid-19) cases.
- The Centre's high-level multi-disciplinary teams have been deputed to Kerala, Maharashtra, Karnataka, Tamil Nadu, West Bengal, Chhattisgarh, Punjab, Madhya Pradesh, Gujarat and the Union territory of Jammu and Kashmir, to ascertain the reasons for the surge and coordinate with the state health departments in Covid-19 control and containment measures.
- The expert teams that have been sent to these states comprise a public health expert and an epidemiologist.
- The states and Union territories have been advised to increase Covid-19 testing in a focused manner in the affected districts, and to also ensure that all symptomatic negatives of antigen tests are compulsorily retested via the RT-PCR method.
- Infected persons are to be promptly isolated or hospitalized, all their close contacts are to be traced and tested without delay.



India's next round of Covid-19 vaccination from March, 2021

- The vaccination will take place at around 10,000 government facilities which will be free of cost
- More than 1.30 crore Covid vaccine doses have been administered so far, as per the Union Health Ministry
- Registrations of the next phase of India's Covid-19 vaccination is slated to begin from 1 March and those who are eligible for the jab in this phase can self-register on the government's portal, Co-Win for the same, according to officials.
- India started its vaccination drive on 16 January. In the first phase, healthcare and frontline workers have been vaccinated.



AgUnity in Papua New Guinea

- With COVID-19 causing massive disruption to global food supply chains, while simultaneously increasing demand from people who need a safe way to get healthy produce, smallholder farmers are particularly affected due to local market, school, and restaurant closures.
- AgUnity Response helps farmers in any country, connect directly with buyers through our digital platform, which includes contactless delivery and payment. Allowing farmers to continue business, increase income and reduce food waste.
- By using the AgUnity Response App, they safely and effectively get produce to consumers by limiting the amount of people handling produce and/or long exposure in markets.
- With other methods that currently exist, (e.g. concierge services at supermarkets) the process of what the produce endures from farm to consumer goes through numerous handovers of produce. This could look something like; produce from farmer, to transportation, to distribution centre, transportation to supermarkets, stock room, to market shelves, and long exposure to potentially infected people in the supermarket. Same goes for other delivery methods of fresh produce.
- There are still multiple points of hand off that could potentially be dangerous. With the AgUnity Response App, produce comes from the farmer, to a delivery driver and directly to the consumers door. The AgUnity Response App is specifically tailored for farmers in rural and remote areas and for farmers with low-literacy, low-technology usage.



VillageReach improves service delivery

- VillageReach works with governments and the private sector to increase access to medicines and vaccines, improve the capacity of the health workforce and enable digital health technologies for better decision-making for patients, health workers and policy-makers.
- Building on the solutions developed, they plan to extend approach beyond the health facility, working with partners to reach deeper into the community and build responsive, people-centered health systems.
- VillageReach is a recognized global leader in supply chain transformation and bring to bear their extensive knowledge of supply chain challenges at the last mile to create systems level change. They put government and their needs front and center, and work to bolster - not replace - their existing systems. They take up the seat next to the government, bringing their own 20 years of expertise in supply chain logistics, along with private sector partners who understand our challenges. Together, they design next generation supply chains and scalable solutions that can be transferred to the government for the long term. They have successfully transferred most aspects of the Mozambique immunization supply chain to the Ministry of Health, and other VillageReach programs, like CCPF Health Center by Phone solution, are now being owned and operated by the government.
- VillageReach's goals are to scale and replicate successful solutions and to transition them to partners. In the next 3-5 years, they aim to: 1.) Replicate Health Center by Phone in 3+ countries while transitioning the Malawi project to the Ministry of Health. And add AI capabilities; 2.) Expand Supply Chain for Community Workers to 2+ countries; 3.) Expand Drones for Health throughout DRC and replicate this in Malawi and Mozambique.



App Building in Sierra Leone

- The Directorate of Science, Technology and Innovation (DSTI) has introduced an array of tech-based solutions to fight Covid-19 and improve service delivery in Sierra Leone, some of which have been leveraged from the country's experience containing Ebola.
- A leading private-sector partner in the Covid-19 response, Niche Technologies is run by a former Director of Planning and Strategy in Sierra Leone's National Ebola Response Center. Together, Niche Technologies and the government of Sierra Leone have collaborated on utilizing technology in Covid-19 response efforts, including digitizing the end-to-end laboratory management system to respond to changing needs and introducing an electronic pass system that essential businesses can use in order to safely continue operating during strict lockdown periods.
- With partners Grid3, Flowminder, and MIT GOV/LAB, the DSTI has aggregated clinical data repositories to produce mobility indicators that report population redistribution, epidemic modelling, areas with high population mix, and morbidity patterns. Analysis of mobility data is supporting the government's evidence-based response. Sierra Leone was among the first countries in the region to reopen its international airport in late July thanks to the rapid development and deployment of a travel portal – this time with local private-sector partner Fix Solution – that tracks passengers and facilitates contact tracing; processes travel authorisation, payments for and booking of Covid-19 tests; and answers frequent questions about the new travel rules.
- A similar portal system has since been replicated in Ghana.



App Building in Sierra Leone

- Another Sierra Leone tech success story has been the launch of its Quarantine App, created to improve the National Covid-19 Emergency Response Centre's (NaCOVERC) ability to track quarantine services.
- The app, developed in partnership with technology-for-social-impact entity Dimagi, tracks isolation periods for quarantined persons, food delivery, and psychosocial support needs, among other features. Whereas this information used to be logged on paper before being manually inputted into a software system and then sent electronically to a central system in Freetown, now these data are tracked in real-time, allowing for more efficient and accurate decision-making.
- When the government transitioned from designated, supervised quarantine facilities to a quarantine-at-home policy, the app allowed NaCOVERC to continue monitoring contacts, ensure needed services were delivered, and, critically, geotagging quarantine locations to verify that supervisory visits were taking place.
- To ensure effective implementation of the app, more than 350 staff were trained in each district over the course of 13 weeks on how to monitor live quarantine compliance. The app was officially launched in July, and since that time, the improved monitoring and supervision has led to a reduction in complaints made by people in quarantine.
- As of 8 December, 12,211 people had been discharged through the quarantine process.



Robots and Drones in Rwanda

- In Rwanda, frontline workers attribute the government's highly tech-oriented approach to effectively controlling the spread of the virus. Five human-sized robots were introduced in May to support medical staff at two Covid-19 treatment centers in Kigali. The robots perform numerous frontline tasks such as temperature screening, reading vitals, disinfecting, instructing people who are not wearing masks to put them on, playing pandemic awareness videos, and delivering food and medications to patients.
- The robots were deployed to reduce the risk of health-care workers contracting the virus by minimizing their contact with potential positive Covid-19 patients.
- There are 0.1 physicians and 1.2 nurses per 1,000 people in Rwanda, so protecting health workers is vital. WHO Africa reports that from May to July, patient-health-worker visits were reduced from three or four to two per day with the introduction of the robots at the treatment centers.
- The robots are also credited with speeding up the work of screening possible cases and reducing the workload of health-care providers. Since May, one of the robots has been deployed in Kigali International Airport, where it screens up to 150 people per minute.



Robots and Drones in Rwanda

- Rwanda has also led the way in using innovative technology to communicate with traditionally hard-to-reach communities. At the start of its initial lockdown in March, the country found that low compliance with key directives – such as staying home or wearing a mask – was due to limited penetration of awareness-messaging teams in densely populated and high-risk zones as well as rural areas.
- To access these communities, the government deployed drones to communicate messages by air. The drones allowed the government to critically increase its reach in order to reduce the spread of infections and continue to support the government’s ability to enforce lockdowns in targeted outbreak areas.
- Rwanda’s tech-based application of containment policies has been hailed as a world-leading example: On 20 October, WHO Director-General Tedros Adhanom Ghebreyesus tweeted praise for the country’s pandemic response, highlighting its “use of technology in the service of public health”.



Chatbots in South Africa

- After the first case of Covid-19 was identified in South Africa on 5 March, the government initially set up phone hotlines to answer questions directly from the public. But the volume of calls was too high to manage, and misinformation was spreading alongside the virus.
- To solve the problem, South Africa's National Department of Health partnered with Praekelt, a South African mobile-tech-focused non-profit, and the Facebook-owned social media platform WhatsApp to launch an interactive chatbot that responds to questions about Covid-19. By texting "hi" to the WhatsApp number, the chatbot engages with the user to answer common queries regarding symptoms, treatment and latest statistics, and can also counter myths about the disease.
- Within the first ten days, more than 3.5 million users had engaged with the chatbot, which caters to a diverse user base by providing responses in five different local languages.
- After the first seven weeks of implementation, 211 million messages had been exchanged with 6.2 million users, averaging 750,000 users per day and accounting for 780,000 health checks.-The chatbot is cited as empowering citizens and officials with accurate information in order to take appropriate measures during the crisis.
- The service was so successful in South Africa that the WHO adopted the technology for its own global helpline initiative. Collaborating with the same development partners (Praekelt and WhatsApp), the WHO launched its HealthAlert service in late March, designed to serve people and governments globally with the latest information and situation reports 24 hours a day.
- According to Praekelt, in the first eight weeks of the service, 12.2 million unique users exchanged 117 million messages.-Now available in 15 languages, the service is considered to have the potential to reach more than 2 billion people.

A person is walking from left to right in the foreground, partially obscuring a large mural on a wall. The mural features the text 'IT WILL GET BETTER' in large, stylized, pinkish-orange letters on a yellow background. Below the main text, there is smaller text that reads 'Inspired by Liberty Fire Co. # R. Field 1888'. The scene is dimly lit, suggesting an indoor or shaded outdoor environment.

Re-opening strategies



Paris ramping up testing and monitoring

- Shops and factories reopened, along with some schools operating with reduced class sizes
- Some parks, green spaces and walkways have reopened. The city has reserved some streets for pedestrians and bicycles. Outside exercise is allowed again
- Red zone due to the high number of COVID-19 cases there, has begun distributing 2.2 million masks
- Masks are compulsory on public transport and stickers on seats mark out social distancing. Passengers who do not comply face a 135 euro (\$150) fine
- Security forces are monitoring station entrances to prevent crowding. Bus stops and metro stations have been equipped with hand gel dispensers
- Officials want to cut daily passenger numbers to 1.5-2 million, down from 5 million pre-lockdown. Employees who cannot work from home have to work shifts and travel at off-peak hours on authorized time slots
- Testing has been ramped up in areas with a high number of cases
- The city is aiming for the “quarter-hour city”, where most daily needs are within a short walk, bike ride or public transport commute, to reduce congestion and pollution, and improve quality of life



Italy maintaining distance in social spaces

- Shops, restaurants, cafes and hair salons [reopened on May 18](#) after a 10-week lockdown.
- Friends can now meet up and restaurants can serve if tables are at least 2 metres (6.5 ft) apart.
- Unlimited travel is now permitted in individual regions. The government has said it will allow travel between regions on June 3 when it will also open Italy's borders with Europe
- Italy first started easing restrictions on May 4 when factories and building sites were allowed to reopen
- Schools will remain shut until September, leaving families facing childcare problems
- Milan has announced an ambitious scheme to turn streets over to cycling and walking



Netherlands ensuring face masks and small groups

- Across the Netherlands, primary schools reopened on May 11 with classes split in two groups attending on alternate days. Parents have been asked to walk or cycle children to school to avoid overburdening public transport
- People aged over 70 who live by themselves are now allowed to receive one or two regular visitors.
- Facemasks are mandatory on public transport
- Restaurants, cafes, cinemas, theatres and concert halls can reopen on June 1 for a maximum number of 30 customers who have to book in advance. This will be increased to 100 from July 1



Belgium prioritizing bikes and tracing

- In Brussels, pedestrians and cyclists have [priority over vehicles](#) in the city center to enable social distancing as the lockdown eases, according to local media
- Cordons have been placed on streets to create one-way routes
- Belgium has allowed most shops to reopen with strict hygiene rules, but bars, cafes and restaurants remain shut until June. Beauty salons, hairdressers and tattoo parlors are also closed
- Schools started reopening
- In Antwerp, port workers [will begin testing wristbands](#) developed by a Belgian technology company that could help with social distancing requirements by giving a warning signal if people get too close. Developers believe the bands could also help with contact tracing if someone becomes infected



Colombia extending bike lanes and restrictions

- Bogota has added more than 100km of temporary bike lanes to its already extensive network, closing some roads to do so
- The initiative announced just before the March 20 lockdown was aimed at easing crowding on buses to curb the spread of the virus
- Colombia opened its construction and manufacturing sectors
- In Bogota, children aged 6 and older are now allowed to go out three times a week to exercise for 30 minutes between 2-5pm. Adults under 60 are allowed out before 10am to exercise for one hour
- Bogota's gender-based lockdown – where women and men are allowed out on alternate days



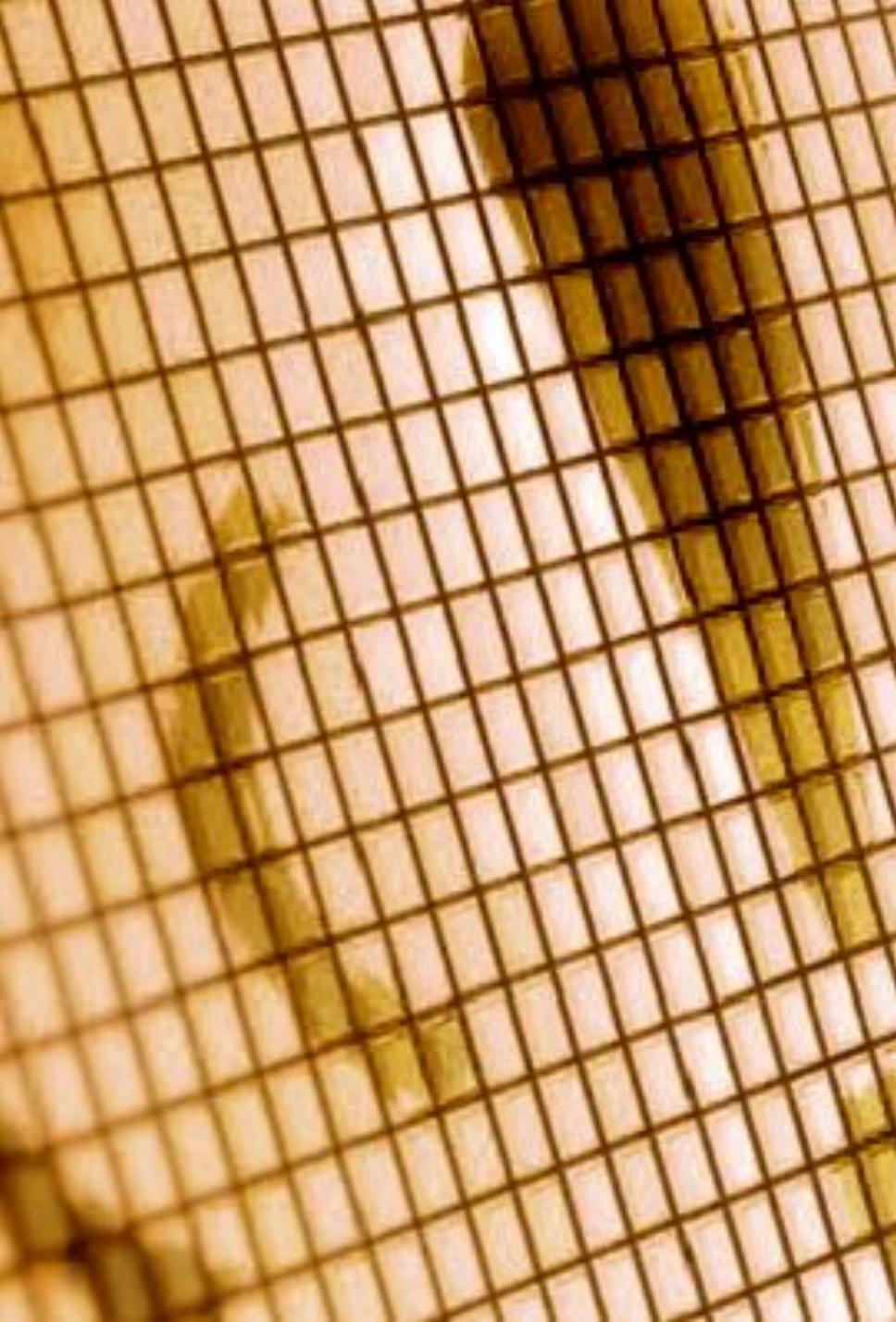
London is banning cars on busiest roads as lockdown eases

- London is planning to ban cars on the busiest roads to manage the return of tens of thousands of commuters to the streets of the financial district
- It has drawn up proposals for 12- or 24-hour closures for cars on its main artery routes to widen pavements for walking and bike lanes, and to allow safe queueing for shops and cafés.
- Plans to do it in phases



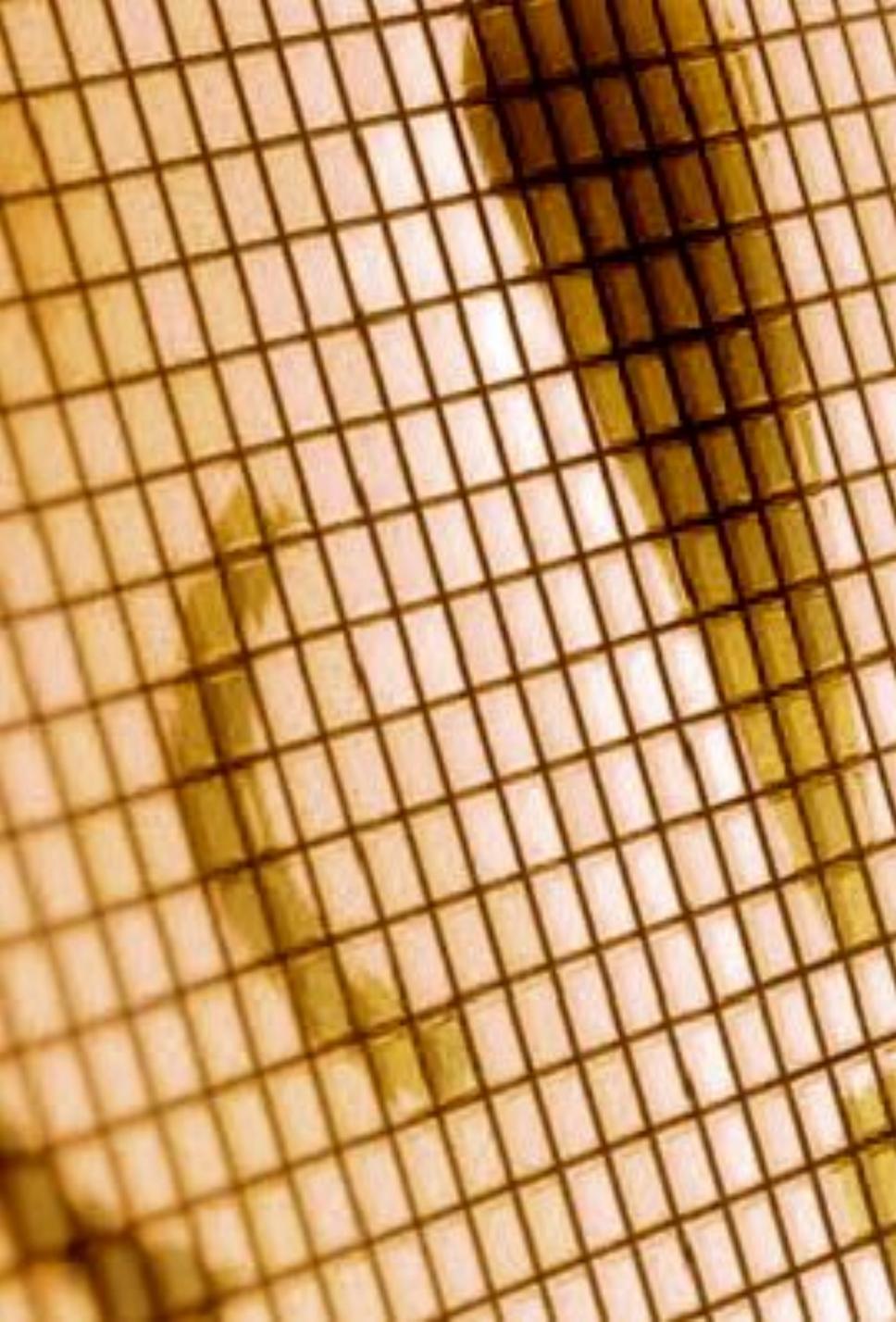
Mexico's phased approach with strict monitoring

- Mexico's government said 269 coronavirus-free towns will reopen next week as part of a gradual nationwide return to a "new normal", while auto, construction and mining industries will be allowed to resume
- The phased reopening will follow a red, amber, yellow and green "traffic light" system
- They are primarily in remote areas away from industrial centers
- The "green" traffic light status meant that social distancing should still be applied, although schools and public spaces like churches, museums, cinemas and restaurants would reopen
- Sanitary filters will be erected around towns
- Health protection measures for workplaces and training for employees will be introduced
- "Red" areas included Mexico City and the surrounding metropolitan area, is home to 22m people, where the authorities say the pandemic has peaked but cases will nevertheless continue to grow for some weeks. Only essential activities will be allowed to operate



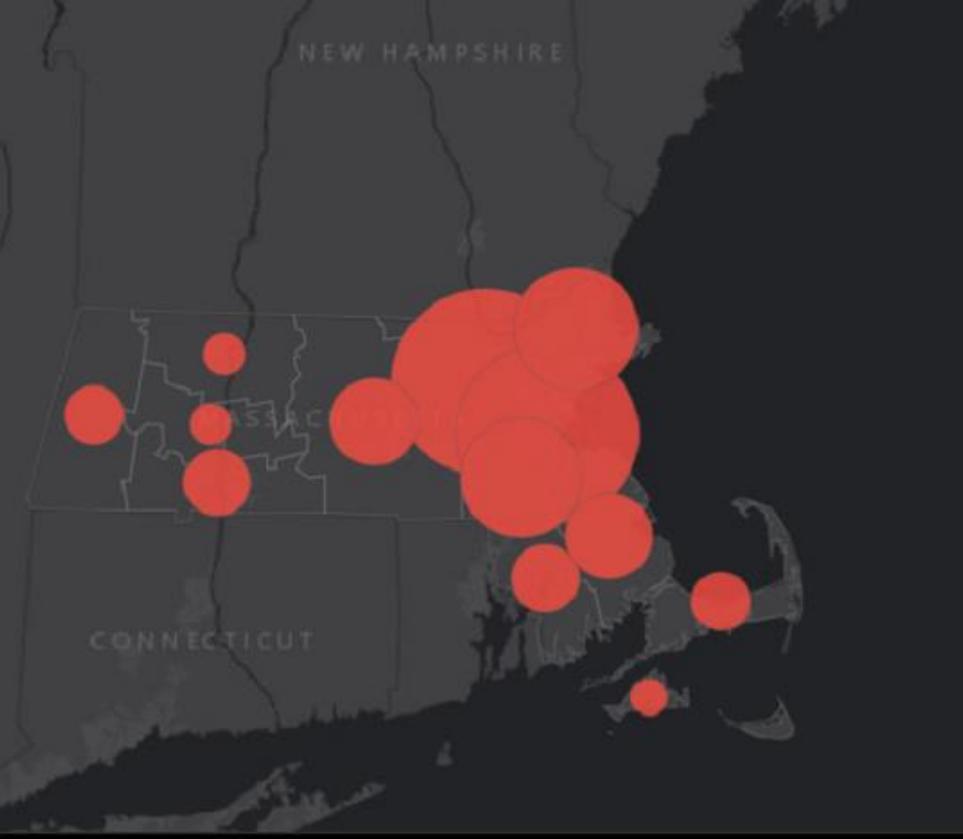
Live data dashboards leveraged by cities in the United States for decision making and information sharing

- **Baltimore, MD:** COVID-19 city operations data tracking — Provides concrete steps and information about how Baltimore City set up data tracking systems to support the city's management of service delivery and emergency food access during the city's coronavirus response
- **Boston, MA:** The city's Department of Innovation and Technology's Citywide Analytics Team developed and launched two dashboards — the **first** includes a day-by-day breakdown of the spread of COVID-19 in Massachusetts and tracks daily updates from the state's public health department for the number of COVID-19 cases, and the **second** includes information specific to the city, including total daily cases, recovered cases and total cases over time
- **Cambridge, MA:** The city's **COVID-19 Data Center** site, developed as a collaboration between data analytics, communications, and subject matter experts, is being used to keep residents, staff, and decision makers informed about pandemic trends. Cambridge's data site includes a user-friendly navigation menu and its data visualizations include how the city compares to state and national trends

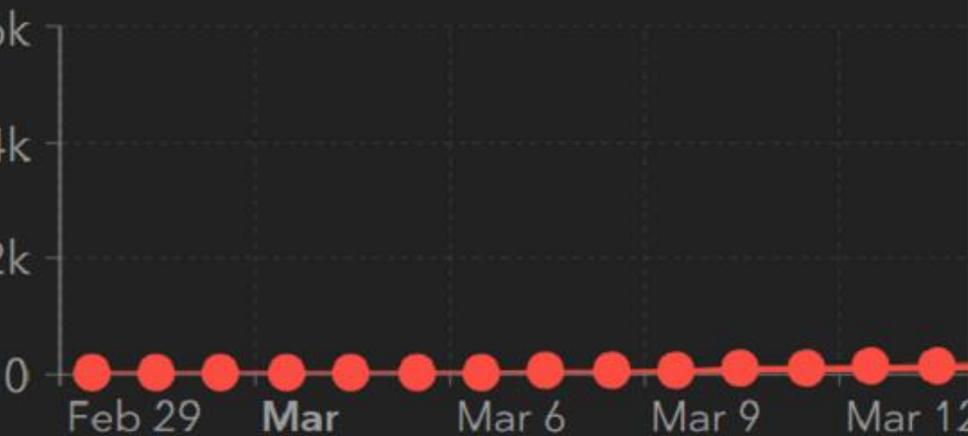


Live data dashboards leveraged by cities in the United States for decision making and information sharing

- **Chicago, IL:** The “Chi COVID Coach” is a **mobile-friendly, web-based health app** developed by the City in partnership with Google and MTX. Chicago residents are asked to register their information through the app, even if they do not have symptoms, to allow the Chicago Department of Public Health (CDPH) to communicate directly with them and provide them with important information and guidance
- **Kansas City, MO:** Surveying Our New Work From Home Employees — Methodology and the actual questions that DataKC, the city’s central data team, used to **conduct a survey of its city employees about working remotely**
- **King County, WA:** A user-friendly data dashboard that provides the public access to data, analysis, and information in areas such as education, food, health, housing, transportation, and public safety



al Cases Over Time



Policy initiatives in the United States for the homeless and vulnerable population

- **Boston, MA:** Mayor Marty Walsh announces subsidized housing for 1,000 homeless, at-risk Boston families
- **New York, NY:** City to put 6,000 homeless, some COVID-19 positive, into local hotels
- **Portland, OR:** COVID-19 guidance for people experiencing homelessness without shelter
- **San Francisco, CA:** San Francisco increases COVID-19 protections for homeless residents and people living in single room occupancy hotels
- **Seattle, WA:** King County and Seattle expand COVID-19 emergency housing to create additional shelter space and temporary housing options for people who are unable to isolate and recover in their own homes, or do not have a home



USA: Food support for families in need

- **Augusta, GA:** Augusta mayor and nonprofits partnering to provide 25,000 meals weekly
- **Charlotte, NC:** Charlotte-Mecklenburg Schools providing free meals for students during school closings over coronavirus
- **Chicago, IL:** All Chicago Public Schools to offer free meal pickup during coronavirus closure
- **Houston, TX:** Houston launches food delivery program to serve 1,000 people with disabilities amid COVID-19 pandemic
- **Lansing, MI:** Monthly “drive-thru” mobile food pantries continues to provide food support for low-income Lansing families



USA: Food support for families in need

- **Little Rock, AR:** Little Rock's massive effort to feed kids amid the pandemic — an in-depth look at Little Rock's program, including a break down of the operations and division of labor behind the effort
- ***Seattle, WA:** Seattle to invest more than \$7 million to help get food to seniors, homeless residents — Note: Funding from federal stimulus bills (CARES Act and Families First Coronavirus Response Act).
- **Washington, DC:** D.C., Md. and Va. schools offer learning plans, free meals for students during coronavirus closures
- **In rural areas,** school districts are experimenting with providing free meals along bus routes



USA: Support to small businesses

- **Durham, NC:** [COVID-19 relief for small businesses](#) — website centralizes all relevant COVID-19 information for small businesses and connects small businesses to available grant and loan programs
- **Gilbert, AZ:** [City-developed searchable map of Gilbert's small businesses with ways residents can support specific businesses](#)
- **Hillsboro, OR:** [Crisis funding for small businesses and employees to apply for emergency business support grants, loans, and rental assistance](#)
- **Little Rock, AR:** Mayor Scott announces [new Small Business Emergency Assistance Program](#), made up of \$500,000 to assist Little Rock small businesses, plus zero-interest loans and potential loan forgiveness.



USA: Support to small businesses

- **Philadelphia, PA:** The city of Philadelphia and the Philadelphia Industrial Development Corporation (PIDC) launched the COVID-19 Small Business Relief Fund, a grant and loan program to support struggling and barely afloat businesses in the city. **Update:** As of March 30th, the city is no longer accepting relief fund applications from businesses with \$500K or more in revenue; micro-enterprise grants will continue.
- **New York, NY:** Interest-free loans and other financial assistance for small business owners in New York City affected by COVID-19
- **Salt Lake County, UT:** Salt Lake County opens up new business relief hotline, launched by their COVID-19 Economic Impact & Recovery Team
- **San Jose, CA:** San Jose moves forward with moratorium on evictions, proposes financial aid for small businesses
- **Tulsa, OK:** Tulsa offers \$1.1 million in loans to small businesses
- **Washington, DC:** Mayor Bowser and the Council of the District of Columbia investing \$25 million in the COVID-19 Recovery Effort and the DC Small Business Recovery Microgrants Program



Relief Funding & Support for Individuals and Families in Need

- **Atlanta, GA:** Mayor Bottoms announces fund with Georgia's Own Credit Union to provide grants during COVID-19 crisis
- **Baltimore, MD:** New diaper-delivery service for vulnerable families for two months — plans to distribute 500,000 diapers to nearly 10,000 vulnerable young children across the City
- **Dallas, TX:** Dallas City Council approves \$13.7 million in rent, mortgage, and utilities relief for residents in need
- **Jacksonville, FL:** City to pay \$1,000 to Jacksonville residents most impacted by coronavirus — this new, local stimulus package is the result of a \$160 million federal CARES grant the city received to fund COVID-19 relief
- **King County, WA:** King County Executive Constantine transmits emergency legislation to fund child care services for first responders and other essential workers.



Relief Funding & Support for Individuals and Families in Need

- **Louisville, KY:** The One Louisville: COVID-19 Response Fund will support both individuals & community-based organizations that need help as a result of the outbreak. The city is raising funds in partnership with philanthropic and community partners, as well as corporate and civic donors. See Mayor Greg Fischer's tweet about the fund here.
- **New Orleans, LA:** Partnership with the New Orleans Business Alliance to stand up a relief fund for gig economy workers impacted by loss of income
- ***Newark, NJ:** \$1 million Emergency Housing Assistance Fund created to provide low-income residents struggling due to coronavirus up to \$1K each to help pay rent or utilities
- ***Philadelphia, PA:** Philadelphia is launching a **COVID-19 Emergency Rental Assistance Program** to help people who have lost income because of COVID-19 pay their rent. Payments are made directly to the landlord.



Relief Funding & Support for Individuals and Families in Need

- **Pittsburgh, PA:** Mayor announces COVID-19 funding for residents and small businesses — From over \$12M in federal funding (Emergency Solutions Grant and Community Development Block Grant)
- ***San Diego, CA:** Childcare support for essential workers expanded; \$10 million in CARES Act funding directed to provide childcare for essential workers during the coronavirus pandemic response (\$5M county commitment + \$5M city match)
- ***San Jose, CA:** San Jose approves a new coronavirus relief fund to help the city receive federal resources for those affected by the pandemic
- **Seattle, WA:** Seattle will provide \$800 each in supermarket vouchers to thousands of families during coronavirus crisis
- **St. Paul, MN:** St. Paul will provide emergency cash assistance for up to 1,000 families and 300 small businesses that have lost income because of the COVID-19 pandemic



Tencent's 'smart city' seen as model for post-coronavirus China

- Chinese tech giant Tencent is creating a "smart city" that utilizes technology to put people and the environment first
- Net City will be a 2 million square metre (21.5 million square feet) neighborhood in the southeastern city of Shenzhen, comprising Tencent offices and residences for its employees, as well as public amenities such as parks and a waterfront area
- With fewer streets for cars, "green" garden roofs on buildings and the use of artificial intelligence, Net City is a model for the "future of city building"



COVID restrictions in Europe's cities

London:

- In London, face coverings must be worn on public transport. Masks are also mandatory in taxis and private hire vehicles
- [Face coverings must be worn in shops](#), including supermarkets, indoor shopping centres, as well as banks, building societies and post offices
- Anyone who does not wear a mask can be fined £100

Paris:

- The city of [Paris has been designated as a high-risk coronavirus "red zone"](#) after cases increased to more than 50 per 100,000 people. Paris has not been [classified as a red zone since May](#)
- Face masks are mandatory in a number of areas, including the city centre and along the banks of the River Seine.
- Authorities in Paris widened the area of the city where masks are compulsory at the weekend. Those who fail to comply could be fined €135 (£122).
- France is [considering making masks compulsory in workplaces](#) and the government will propose the move with employers and unions



COVID restrictions in Europe's cities

Madrid

- Face masks are mandatory in all public spaces in Madrid, including at outside cafes.
- People can be fined up to €100 (£90) for not wearing a mask.

Berlin

- Masks are mandatory in certain public places in Berlin, such as public transport.
- People can be fined €50 (£45) for breaching the mask rules.
- Individuals must also wear masks in supermarkets, hairdressers, beauty salons and tattoo parlours.



Singapore uses congestion charge to de-congest cities

- With ride-hailing and delivery services already having increased gridlock in cities, and the growth of autonomous vehicles seen as exacerbating the problem, congestion pricing is seen a way to manage traffic better
- Singapore will be the first city to switch to a GPS-based pricing system that will provide more flexibility, with charges based on distance travelled
- It would also do away with 70-odd gantries which are more than two decades old, and take up precious land in the space-starved city, according to the Land Transport Authority (LTA)
- There would be an 18-month switchover period, with the new system implemented progressively from 2020, and the government will bear the one-time cost of replacing in-vehicle units

A photograph of a woman in a blue shirt and a light blue face mask looking at a mural on a wall. The mural depicts a woman in a yellow and black sari, also wearing a light blue face mask. The scene is set against a textured, light-colored wall. The text 'Slides added in this edition' is overlaid on the left side of the image.

Slides added in this
edition

TYLER
STREET ART



Empowering women and strengthening capacity of women-led businesses

- In Thailand, joint efforts by UN Women, ILO, the United Nations Children's Fund (UNICEF) and the International Organization for Migration helped strengthen the capacity of relevant line ministries to deliver child support grants, disability and old age allowance schemes to more than 10 million beneficiaries.
- In Kosovo, the government allocated two million euros in grant funding dedicated to women-led businesses affected by the pandemic as part of its national stimulus plan.
- In Lebanon, 140,000 female-headed households received cash assistance provided under the Emergency National Poverty Targeting Program.
- In Mali, the UN Women Buy From Women Enterprise Platform was expanded from commercialization of agricultural products to other areas of commerce to support women-led businesses



Empowering women and strengthening capacity of women-led businesses

- In Nepal, access to an e-commerce platform increased through a dedicated app for women to sell their products online with business development and start-up support.
- In Papua New Guinea, UN Women raised emergency funds that enabled a doubling of the number of women market vendors accessing social protection assistance, easing the crisis for 26,000 women in 14 markets across 11 provinces.
- In the Philippines, UN Women provided emergency cash grants for 10 women's collectives affected by armed conflict and the pandemic, worked with women's collectives through establishing online marketing platforms for providing cash grants, and facilitated online learning sessions for 5,200 women.



Indian Govt. rushes expert teams to 10 states to help manage rise in Covid-19 cases

- Centre has rushed expert teams to 10 states that have reported a surge in the number of coronavirus disease (Covid-19) cases.
- The Centre's high-level multi-disciplinary teams have been deputed to Kerala, Maharashtra, Karnataka, Tamil Nadu, West Bengal, Chhattisgarh, Punjab, Madhya Pradesh, Gujarat and the Union territory of Jammu and Kashmir, to ascertain the reasons for the surge and coordinate with the state health departments in Covid-19 control and containment measures.
- The expert teams that have been sent to these states comprise a public health expert and an epidemiologist.
- The states and Union territories have been advised to increase Covid-19 testing in a focused manner in the affected districts, and to also ensure that all symptomatic negatives of antigen tests are compulsorily retested via the RT-PCR method.
- Infected persons are to be promptly isolated or hospitalized, all their close contacts are to be traced and tested without delay.



India's next round of Covid-19 vaccination from March, 2021

- The vaccination will take place at around 10,000 government facilities which will be free of cost
- More than 1.30 crore Covid vaccine doses have been administered so far, as per the Union Health Ministry
- Registrations of the next phase of India's Covid-19 vaccination is slated to begin from 1 March and those who are eligible for the job in this phase can self-register on the government's portal, Co-Win for the same, according to officials.
- India started its vaccination drive on 16 January. In the first phase, healthcare and frontline workers have been vaccinated.



AgUnity in Papua New Guinea

- With COVID-19 causing massive disruption to global food supply chains, while simultaneously increasing demand from people who need a safe way to get healthy produce, smallholder farmers are particularly affected due to local market, school, and restaurant closures.
- AgUnity Response helps farmers in any country, connect directly with buyers through our digital platform, which includes contactless delivery and payment. Allowing farmers to continue business, increase income and reduce food waste.
- By using the AgUnity Response App, they safely and effectively get produce to consumers by limiting the amount of people handling produce and/or long exposure in markets.
- With other methods that currently exist, (e.g. concierge services at supermarkets) the process of what the produce endures from farm to consumer goes through numerous handovers of produce. This could look something like; produce from farmer, to transportation, to distribution centre, transportation to supermarkets, stock room, to market shelves, and long exposure to potentially infected people in the supermarket. Same goes for other delivery methods of fresh produce.
- There are still multiple points of hand off that could potentially be dangerous. With the AgUnity Response App, produce comes from the farmer, to a delivery driver and directly to the consumers door. The AgUnity Response App is specifically tailored for farmers in rural and remote areas and for farmers with low-literacy, low-technology usage.



VillageReach improves service delivery

- VillageReach works with governments and the private sector to increase access to medicines and vaccines, improve the capacity of the health workforce and enable digital health technologies for better decision-making for patients, health workers and policy-makers.
- Building on the solutions developed, they plan to extend approach beyond the health facility, working with partners to reach deeper into the community and build responsive, people-centered health systems.
- VillageReach is a recognized global leader in supply chain transformation and bring to bear their extensive knowledge of supply chain challenges at the last mile to create systems level change. They put government and their needs front and center, and work to bolster - not replace - their existing systems. They take up the seat next to the government, bringing their own 20 years of expertise in supply chain logistics, along with private sector partners who understand our challenges. Together, they design next generation supply chains and scalable solutions that can be transferred to the government for the long term. They have successfully transferred most aspects of the Mozambique immunization supply chain to the Ministry of Health, and other VillageReach programs, like CCPF Health Center by Phone solution, are now being owned and operated by the government.
- VillageReach's goals are to scale and replicate successful solutions and to transition them to partners. In the next 3-5 years, they aim to: 1.) Replicate Health Center by Phone in 3+ countries while transitioning the Malawi project to the Ministry of Health. And add AI capabilities; 2.) Expand Supply Chain for Community Workers to 2+ countries; 3.) Expand Drones for Health throughout DRC and replicate this in Malawi and Mozambique.



App Building in Sierra Leone

- The Directorate of Science, Technology and Innovation (DSTI) has introduced an array of tech-based solutions to fight Covid-19 and improve service delivery in Sierra Leone, some of which have been leveraged from the country's experience containing Ebola.
- A leading private-sector partner in the Covid-19 response, Niche Technologies is run by a former Director of Planning and Strategy in Sierra Leone's National Ebola Response Center. Together, Niche Technologies and the government of Sierra Leone have collaborated on utilizing technology in Covid-19 response efforts, including digitizing the end-to-end laboratory management system to respond to changing needs and introducing an electronic pass system that essential businesses can use in order to safely continue operating during strict lockdown periods.
- With partners Grid3, Flowminder, and MIT GOV/LAB, the DSTI has aggregated clinical data repositories to produce mobility indicators that report population redistribution, epidemic modelling, areas with high population mix, and morbidity patterns. Analysis of mobility data is supporting the government's evidence-based response. Sierra Leone was among the first countries in the region to reopen its international airport in late July thanks to the rapid development and deployment of a travel portal – this time with local private-sector partner Fix Solution – that tracks passengers and facilitates contact tracing; processes travel authorisation, payments for and booking of Covid-19 tests; and answers frequent questions about the new travel rules.
- A similar portal system has since been replicated in Ghana.



App Building in Sierra Leone

- Another Sierra Leone tech success story has been the launch of its Quarantine App, created to improve the National Covid-19 Emergency Response Centre's (NaCOVERC) ability to track quarantine services.
- The app, developed in partnership with technology-for-social-impact entity Dimagi, tracks isolation periods for quarantined persons, food delivery, and psychosocial support needs, among other features. Whereas this information used to be logged on paper before being manually inputted into a software system and then sent electronically to a central system in Freetown, now these data are tracked in real-time, allowing for more efficient and accurate decision-making.
- When the government transitioned from designated, supervised quarantine facilities to a quarantine-at-home policy, the app allowed NaCOVERC to continue monitoring contacts, ensure needed services were delivered, and, critically, geotagging quarantine locations to verify that supervisory visits were taking place.
- To ensure effective implementation of the app, more than 350 staff were trained in each district over the course of 13 weeks on how to monitor live quarantine compliance. The app was officially launched in July, and since that time, the improved monitoring and supervision has led to a reduction in complaints made by people in quarantine.
- As of 8 December, 12,211 people had been discharged through the quarantine process.



Robots and Drones in Rwanda

- In Rwanda, frontline workers attribute the government's highly tech-oriented approach to effectively controlling the spread of the virus. Five human-sized robots were introduced in May to support medical staff at two Covid-19 treatment centers in Kigali. The robots perform numerous frontline tasks such as temperature screening, reading vitals, disinfecting, instructing people who are not wearing masks to put them on, playing pandemic awareness videos, and delivering food and medications to patients.
- The robots were deployed to reduce the risk of health-care workers contracting the virus by minimizing their contact with potential positive Covid-19 patients.
- There are 0.1 physicians and 1.2 nurses per 1,000 people in Rwanda, so protecting health workers is vital. WHO Africa reports that from May to July, patient-health-worker visits were reduced from three or four to two per day with the introduction of the robots at the treatment centers.
- The robots are also credited with speeding up the work of screening possible cases and reducing the workload of health-care providers. Since May, one of the robots has been deployed in Kigali International Airport, where it screens up to 150 people per minute.



Robots and Drones in Rwanda

- Rwanda has also led the way in using innovative technology to communicate with traditionally hard-to-reach communities. At the start of its initial lockdown in March, the country found that low compliance with key directives – such as staying home or wearing a mask – was due to limited penetration of awareness-messaging teams in densely populated and high-risk zones as well as rural areas.
- To access these communities, the government deployed drones to communicate messages by air. The drones allowed the government to critically increase its reach in order to reduce the spread of infections and continue to support the government’s ability to enforce lockdowns in targeted outbreak areas.
- Rwanda’s tech-based application of containment policies has been hailed as a world-leading example: On 20 October, WHO Director-General Tedros Adhanom Ghebreyesus tweeted praise for the country’s pandemic response, highlighting its “use of technology in the service of public health”.



Chatbots in South Africa

- After the first case of Covid-19 was identified in South Africa on 5 March, the government initially set up phone hotlines to answer questions directly from the public. But the volume of calls was too high to manage, and misinformation was spreading alongside the virus.
- To solve the problem, South Africa's National Department of Health partnered with Praekelt, a South African mobile-tech-focused non-profit, and the Facebook-owned social media platform WhatsApp to launch an interactive chatbot that responds to questions about Covid-19. By texting "hi" to the WhatsApp number, the chatbot engages with the user to answer common queries regarding symptoms, treatment and latest statistics, and can also counter myths about the disease.
- Within the first ten days, more than 3.5 million users had engaged with the chatbot, which caters to a diverse user base by providing responses in five different local languages.
- After the first seven weeks of implementation, 211 million messages had been exchanged with 6.2 million users, averaging 750,000 users per day and accounting for 780,000 health checks. The chatbot is cited as empowering citizens and officials with accurate information in order to take appropriate measures during the crisis.
- The service was so successful in South Africa that the WHO adopted the technology for its own global helpline initiative. Collaborating with the same development partners (Praekelt and WhatsApp), the WHO launched its HealthAlert service in late March, designed to serve people and governments globally with the latest information and situation reports 24 hours a day.
- According to Praekelt, in the first eight weeks of the service, 12.2 million unique users exchanged 117 million messages. Now available in 15 languages, the service is considered to have the potential to reach more than 2 billion people.