

WHAT CAN WE DO TO RESPOND TO COVID-19 IN INFORMAL CITIES?

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What can we do to respond to COVID-19 in informal settements?

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ABSTRACT

Covid-19 poses the same health threats to people living in informal settlements as the rest of the population; however, their living conditions puts them at a greater risk and could generate a worse overall outcome. Thus, it is necessary to consider a multi-disciplinary, multi-sectorial and multi-level approach to solving problems in informal neighborhoods during this time. This document proposes recommendations on how to intervene and manage the emergency in urban settlements.

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- O35 Social Innovation
- O54 Latin America Caribbean
- R14 Land Use Patterns
- R21 Housing Demand
- R31 Housing Supply and Markets

On March 11, 2020, the World Health Organization (WHO) classified COVID-19, the disease caused by the novel virus, Coronavirus or 2019-nCoV, as a pandemic. The disease affects the respiratory tracts. Most countries in Latin America and the Caribbean have already reported thousands of confirmed cases and a growing number of deaths. The number of cases, deaths, and affected countries are expected to continue to increase. The disease **COVID-19** can spread directly or indirectly from person to person through respiratory secretions: when these secretions fall on a surface and another person touches that surface and then puts their hands on their eyes, nose, or mouth the virus can be transmitted.1 Preliminary studies indicate that the virus can survive for various days on some types of surfaces.² Given this, hygiene measures, social distancing, and isolation are essential aspects of the public health response to stop the spread of the pandemic. Carrying out these measures is proving to be a challenge around the world, but it is especially difficult for the large percentage of the vulnerable population

that lives in informal settlements.

Overcrowded conditions are conducive to the transmission of diseases³ and there is a particular prevalence of respiratory diseases (such as asthma) in these settlements.⁴

Worldwide, 863 million people in developing countries live in informal settlements. 5 They are unable to isolate themselves due to high levels of overcrowding in their households, they cannot wash their hands frequently because they do not have safe water, and they are not able to manage waste properly because their neighborhoods do not provide sanitation solutions; they have to choose between social isolation or hunger since they live on what they earn daily. In these neighborhoods, moreover, vulnerable populations, including migrants, women, people with disabilities, indigenous peoples, Afro-descendants, and members of the LGTBQ+ community people are often over represented. Epidemiological models predict that the impacts of COVID-19 will be particularly high in informal cities⁶ and there will be important repercussions on

income that will affect the poorest groups that depend on day-to-day labor activities, which are largely informal, to sustain their consumption. Furthermore, epidemiological models also predict that traditional containment measures will be less effective of in these settlements.⁷ In light of this, public policy managers must consider alternative mechanisms and different responses for these areas.

^{1.} According to the World Health Organization (WHO). - 2. According to the medical publication The Lancet. 3. See the following studies: (i)Webb P.M., Knight T., Greaves S., Wilson A., Newell D.G., Elder J. and Forman D. "Relation between infection with Helicobacterpylori and living conditions in childhood: evidence from person to person transmission early in life," in British Medical Journal, vol. 38 (1994); (ii) Fonseca W., Kirkwood B.R., Victora C.G., Fuchs S.R., Flores J.A. and Misago C. "Risk factors for childhood pneumonia among the urban poor in Fortaleza, Brasil: a case-control study," in Bulletin World Health Organization, 74, (1996), 199-208; (iii) Murtagh P., Cerqueiro C., Halac A., Avila M., Salomon H., Weissenbacher M. "Acute lower respiratory infection in Argentinian children: a 40 month clinical and epidemiological study," in Pediatric Pulmonology, 16 (1993), 1-8. - 4. For evidence of the prevalence of resipatory diseases see: (i) Benicio, M.H.D.A., Ferreira, M.U., Cardoso, M.R., Konno, S.C., Monteiro, C.A. "Wheezing conditions in early childhood: Prevalence and risk factors in San Paolo, Brazil," in Bulletin of the World Health Organization, 82, (2004), 51-52.; (ii) Unger, A., Riley, L.W. "Slum Health: From Understanding to Action," in PLoS Med, 4 (2007), 10; (iii) Matte, T., Jacobs, D. "Housing and health: Current issues and implications for research and progress," in Journal of the Urban Health Bulletin, New York Academy of Medicine, 77, (2000), 7-25. - 5. According to a document from the Development Bank of Latin America (CAF), a third of the population in developing countries lives in informal settlements, the total population of these neighborhoods has increased from 650 million in 1990 to 863 million in 2012 (Alves, 2018). For Latin America, this is 21.1% of the urban population as reported by UN-Habitat in 2014 (Open Data from UN Habitat Global Urban Observatory). Likewise, the IDB technical note 604 reports that 60% of the region's poor live in informal settlements (Brakarz y Jaitman 2013). - 6.Chen et. al., "Effect of modelling slum populations on influenza spread in Delhi, BMJO (2016). - 7. Adiga et. al "Disparities in spread and control of influenza in slums of Delhi: findings from an agent-based modelling study," BMJO (2017).

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100,000+ confirmed cases 10,000–99,999 confirmed cases 1,000–9,999 confirmed cases 100–999 confirmed cases 10–99 confirmed cases 1–9 confirmed cases

No confirmed cases, no population, or no data available

Figure 1. COVID-19 per capita dispersion date from April 2, 2020. Due to the rapid evolution of the situation, cartographic representation corresponds to of publishing date and it cannot include the most recent cases. See the reports from the World Health Organization (WHO) for more actualized information on the state of the situation. Source: Johns Hopkins Uni-versity CSSE, The Centers for Disease Control and Prevention, New York Times, CNBC

COVERAGE AREAS FOR OLICY IN NEIGHBOR-AFFECTED BY COV/||D-19

Inhabitants of informal settlements face health threats, generated by COVID-19, that are similar to those of the rest of society, however, systemic vulnerabilities put them in a situation of greater risk to the health emergency and its impacts. The following conditions are particularly notable:

- Poor and overcrowded housing.
- Inadequate access to water, healthcare, and other basic services.
- Limited employment opportunities and a high dependency on the informal economy.
- Inadequate access to affordable and nutritious food.
- Limited or no access to information and communication technologies.
- Occupation of areas prone to natural disasters.
- Limited capacities to cope with and adapt to extreme crises and events.

For this reason, it is necessary to consider a multidisciplinary, multi-sectoral, and multi-level approach to address the problems in informal neighborhoods. The approach to COVID-19 in informal settlements must involve different areas of public policy:

1.

Health: through public policy actions that address contagion and the logistics of care and isolation. This area also has the responsibility to address health problems associated with confinement, with a special focus on the treatment of chronic diseases, pregnancies, and psycho-emotional care.

2.

Housing: by ensuring access to decent housing that allows the most vulnerable populations to take shelter during isolation and be protected. This area is also responsible for dealing with rental situations and possible evictions due to the economic impact that social isolation can generate.



Basic Services: guaranteeing access to water, sanitation, and electricity services that are essential in an economic emergency like the one incurred by COVID-19, in order to control the epidemic.



Urban Infrastructure: by providing facilities that improve living conditions, public spaces and circulation in neighborhoods.



Social Development: by providing information for protocol follow-ups and monitoring their compliance. The support of neighborhood leaders will be useful to adapt the language and apply behavioral economic techniques, which can be key to the compliance of protocols.



Social Safety: by implementing a protection system that addresses key issues during isolation, including violence, substance abuse, and mental health.



Work: by establishing financing strategies for food and basic services during the emergency as well as economic reactivation measures with a special focus on the vulnerability of the population living in informal neighborhoods.



Economy: by granting credits to sectors such as commerce or construction so that they decrease interaction with the rest of the city and so that small entrepreneurs in the neighborhood are supported.



Education: by ensuring the educational continuity of children and adolescents who live in informal neighborhoods with digitized study materials and classes. This area is also responsible for designing and implementing training for recovering from the emergency.

The measures to address **COVID-19** must be principally orientated towards constructing and strengthening the capacities of communities and vulnerable populations to respond to the emergency and to recover, involving them directly in decisionmaking processes. Citizen participation and involvement is essential in emergency contexts since it legitimizes policies and makes them more effective.

Below are ten plans of action and concrete measures organized into two stages: emergency and recovery. First, emergency

management allows the contagion to be controlled so that the cost in terms of the quality of life for residents of informal cities is as low as possible. Subsequently, recovery measures should be put in place as many people will be in situations of economic vulnerability as a result of isolation and the social costs of losing family members.

LINES OF ACTION AND KEY MEASURES FOR ADDRESSING THE COVID-19 **EMERGENCY** IN INFORMAL NEIGHBOR-HOODS

This approach to addressing the immediate impacts of Covid-19 in informal neighborhoods focuses on: the distribution of critical information, protecting those sectors of the population who are most vulnerable

to the disease, ensuring effective compliance with obligatory preventative social isolation, and the provision of communication and digital connectivity tools in order to carry out protection measures effectively.

DISSEMINATE

In many informal settlements, clear and verified the information on prevention measures and state services made available to respond to the emergency are not readily available. This is why it is important to develop quick measures that allow the population to be informed on how to act and to promote behavioral patterns that prevent the spread of diseases.



Measure 1.

Key deliverable: community leaders training workshop for managing the crisis.

Measure 2.

Key deliverable: plan for dissemination using signage in public space.

Measure 3.

Key deliverable: loudspeaker broadcast team.



Measure 4.

Key deliverable: printed and digital pamphlets in everyday language as well as in other languages used by the residents of informal neighborhoods in each territory.



Measure 5.

Key deliverable: support for using free applications related to COVID-19.



The morphology of informal settlements tends to be very heterogenous. In order to guarantee an effective intervention, areas of higher risk and treatment organized by 'block' or groups of dwellings that present greater barriers to the implementation of measures or have a high-risk population should be identified for each settlement. For example, in Argentina in 2018, critical overcrowding (more than three persons per room) affected 1,306,000 people in the country's main urban agglomerates, according to INDEC data (2018).¹⁰ Likewise, the critical overcrowding rate in Argentinian settlements reached 35%.¹¹

Measure 6.

Key deliverable: critical blocks map.

Measure 7.

Key deliverable: survey of at-risk population.

Measure 8.

Key deliverable: survey of migrant population and a comprehensive support system during the emergency.



PROTECT

Once the critical zones and the at-risk population have been identified, we must take action to protect the community and facilitate measures related to hygiene and the delivery of health resources. In particular, we must provide housing solutions and basic sanitation and water infrastructure, as well as isolation posts for at-risk populations.

These measures are a first line of defense and are essential to reducing the total number of cases, tracking the spread of the virus and curbing the severity of the emergency in these neighborhoods.



Measure 9.

Key deliverable: enabling healthy care spaces.

Measure 10.

Key deliverable: network of volunteers organized by activity and distributed across the territory.



Measure 11.

Key deliverable: tax exemption regulations aimed at those with unused housing.



Measure 12. Measure 13.

Key deliverable: comprehensive system of support and protection for women against gender violence.

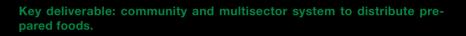


Key deliverable: construction of temporary hygiene points.



Measure 14. Measure 15.

Key deliverable: financing directed to community kitchens.







Key deliverable: support for neighborhood businesses in managing authorizations and accessing digital points of sale. Measure 17.

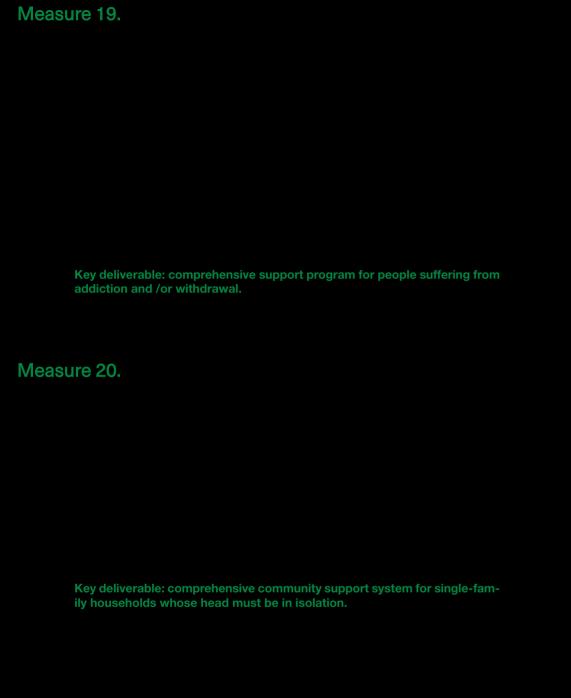
Measure 16.

Key deliverable: access program for equipment for cooking and heating.

Measure 18.

Key deliverable: training program for psychological assistance and support personnel.





Measure 21.

Key deliverable: program to distribute of personal protection kits for COVID-19.



CONNEC-TIVITY

Digital connectivity is a key form of reducing circulation in neighborhoods while allowing operations and communications between neighbors to continue. In informal settlements, 72% of children and adolescents (from 5 to 17 years old) do not have their own mobile phone.²⁰ These numbers drop to 54% at the medium socioeconomic level (and 43% for the upper level). According to the same source, 55% of children in settlements do not use the internet while in the middle socioeconomic level the number goes down to 32% (it is 13% among children in the upper socioeconomic level). Likewise, young people from poorer households are less likely to have access to a computer or to acquire digital habits as compared to their peers in more well-off households (INTAL 2017;²¹ OECD 2017; Galperin, Cruces, Greppi 2017²²). According to the Organization for Economic Co-operation and Development (OECD, 2017),²³ in Argentina, 47% of households with no educational background have internet access (the rate is 94% for the segment with the highest level of education), based on INDEC data. It is important to connect people digitally to generate information, communication, education, and work in the household.

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Key deliverable: distribution of mobile internet devices to households.

Measure 23. Measure 24.

Key deliverable: distribution of mobile internet devices in public spaces.

Key deliverable: digitization program for the school-age population living in informal neighborhoods





CONTROL

Compared to formal cities, total isolation is barely viable in informal neighborhoods, so strategic measures must be sought to control circulation flow through at-home care and the staging of accumulation centers.



Measure 25.

Key deliverable: business distribution plan by sector.

Measure 26.

Key deliverable: location plan for social service providers.

Measure 27.

Key deliverable: extension of the isolation perimeter from the house to the block.

LINES OF ACTION AND KEY MEASURES FOR **RECOVERY** IN POPULAR NEIGHBOR-HOODS AFTER COVID-19

To address the impacts of COVID-19 in the long term and to deal with a process of recovery in popular neighborhoods, a series of measures linked to reactivating the economy, training for insertion in the labor market after the health crisis, and improving the structural conditions of housing, public spaces, and community facilities is proposed.

The measures of sectors that inhabit popular neighborhoods are organized in strategic action lines for a post-crisis context in which the consequences of social isolation will require a reactivation of the economy, a reconfiguration of the labor market, and a workforce that is able to adapt to new conditions.

REACTIVATE

Income in informal cities will be affected by isolation measures; the neighborhood economy and the consumption of goods will also be hit. To address this, we must consider methods to inject resources into small and medium-size businesses, which will be among the most affected.



Measure 1.

Key deliverable: Non-reimbursable fund to finance community projects.

Measure 2.

Key deliverable: suport program for the venture ecosystem of informal neighborhoods.

Measure 3.

Key deliverable: technical and financial assistance program to reactivate the neighborhood economy.

Measure 4.

Key deliverable: package of essential services at accessible prices.



Measure 5.

Key deliverable: program to digitalize banks and commerce in popular neighborhoods.

TRAIN

Returning to normal will be a gradual process; this will also be true for the economic and education sectors. The recovery period presents an opportunity to train neighborhood residents i products that will be useful during reactivation. At the same time, it is possible to work with students whose education was negatively impacted by the period of social isolation.



Measure 6.

Key deliverable: educational support and mentorship program for children and adolescents.

Measure 7.

Key deliverable: training program to meet new job demands.

Measure 8.

Key deliverable: program for the insertion of local workers in neighborhood markets and in gastronomic activity.



RECONFI-GURE

During the reactivation period, it will be important to reconfigure neighborhood space so that they can resume their functions. Temporary infrastructure and healthy public spaces will reduce the effects of isolation during recovery without exposing residents.



Measure 9.			

Measure 10.

Key deliverable: plan for the reconfiguration and financing of improvement works in public spaces.

Measure 11.

Key deliverable: community garden program for the production of local food.

MITIGATE

The isolation period will have consequences in neighborhoods, and thus it will be important to think of mechanisms that mitigate the economic and psychological effects of the crisis for the most affected families, supporting them with medium-term solutions.



Measure 12.

Key deliverable: adequate housing access program through the financing of rental housing.

Measure 13.

Key deliverable: regulations that manage and reschedule evictions for a period of at least six months after isolation measures are lifted.

Measure 14.

Key deliverable: economic support bonds and subsidies for food purchases.



Measure 15.

Key deliverable: exchange incentives program in the framework of the COVID-19 recovery.

RECONDI-TION

Given that many structures will be temporarily built to respond to the emergency, it is important to think of how they are going to be reconditioned for new uses or how they can improve inadequate housing during the partial isolation period.



Measure 16.

Key deliverable: health care center of medium and/or high complexity.

Measure 17.

Key deliverable: improvement program and construction of new housing in informal neighborhoods.

OTHER RECOVERY MEASURES

Measure 18.

Key deliverable: close and accessible health structures for inhabitants of popular neighborhoods.

Measure 19.

Key deliverable: participatory plan with proposal for recovery.

RESPONSES FOR INFORMAL CITIES: WHAT CAN BE DONE IN PLACES WHERE RECOMMENDATIONS ARE NOT WORKING?

Day

April 16, 2020, from 7 to 8:15 pm (UTC-3).

Presenters

Alejandro Aravena

Architect, winner of the Pritzker Architecture Prize 2016

Rahul Mehrotra

Appointed Dean of the Faculty of Design and Director of the Department of Urban Planning and Design at Harvard University

Fernanda Miño

Resident of the informal neighborhood La Cava and secretary to the Urban-Social Integration of the Territory and Habit Development Ministry of Argentina

Jaime Pumarejo

Mayor of Barranquilla, Colombia

Jorge Muñoz

Metropolitan Mayor of Lima, Perú

Sebastião Bruno

Secretary of Infrastructure, Housing, and Conservation of Rio de Janeiro, Brazil

Moderator

Tatiana Gallego Lizón

Head of the Housing and Urban Development Division of the Inter-American Development Bank.

TATIANA GALLEGO LIZÓN

Head of the Housing and Urban Development Division of the Inter-American Development Bank.

General Context

Latin America is considered one of the world's most unequal regions. Twenty percent of the region's residents live in informal settlements and around 50% work in the informal economy. In the context of the heath crisis produced by COVID-19, isolation measures are not easy to follow in lower-income neighborhoods due to conditions of precarity. Furthermore, self-isolating in these circumstances is difficult due to overcrowding in households, a lack of access to potable water as an impediment to personal hygiene, in addition to sanitary and waste management problems.

Epidemiological models predict that the impacts of COVID-19 will be particularly high in informal cities and that there will be important economic consequences that will have a particularly acute impact on the poorest sectors, who depend on largely informal labor activities to sustain their basic consumption.

It is also relevant to consider that informal settlements concentrate high populations of other vulnerable populations, including migrants, female-headed households, people with disabilities, indigenous peoples, Afro-descendants, among others; these groups are expected to be affected to a greater degree by this pandemic.

Given this context, decision-makers should evaluate a variety of alternative methods and responses to these areas in order to protect the most vulnerable. Some governments are considering money transfer programs that would cover basic family necessities in light of the decline in income and economic activity in general; however, it is also relevant to make considerations for providing public goods and access to resources.

In this context, the Inter-American Development Bank intends to carry out a series of virtual conferences to analyze local management during the COVID-19 crisis. This document presents compiled notes from six presentations in which experts shared their experiences in Latin American and Caribbean cities with a special focus on informal neighborhoods. The event's primary aim was to gather responses to the question, what do we do where the recommendations are not working?

ALEJANDRO ARAVENA

Architect, winner of the Pritzker Architecture Prize 2016

Aravena observes that the COVID-19 context, in addition to constituting a clear health emergency, also represents a social, political and economic emergency of global magnitude. The current situation presents us with a dilemma of deciding which problems must be addressed--health or economic--as if the two could be separated or disconnected.

Webinar, April 16, 2020. Speaker: Alejandro Aravena

Aravena notes that, because Chile has had to respond to natural catastrophes, forest fires, floods, and earthquakes, the country has experience in the management of catastrophes or crises related to three elements: land, fire, and water.

However, he says, Chile does not have experience with the element of air, and without air one cannot survive for more than a few minutes. The COVID-19 crisis is linked to air and has many complex manifestations, including a problem of containment, as air does not have manageable borders. It is an invisible and ubiquitous threat.

Aravena points out that this crisis relates to the absence of air understood in relation to the lack of space. He argues that, the housing conditions of informal settlements render the request to remain at home impossible. Distancing measures, cleanliness and hygiene, relatively simple demands in formal cities, are impossible to carry out in informal cities.

Aravena remarks that, in the Italian experience, for example, the air crisis is seen in relation to pollution, in which two factors came together to worsen the problem: the age of the population and the pre-existing pollution. In the case of low-income neighborhoods, there is an additional problem of overcrowding.

Over the last year in Chile, social economic conditions improved, which was foregrounded by a social uprising that was produced by general discontent; a legitimate social and majority discontent that anarchism has created. Anarchism and populism are a threat in the region, Aravena says.





Webinar, April 16, 2020. Speaker: Alejandro Aravena





Legítimo descontento social

Anarquismo

Delincuencia (narcos)





Webinar, April 16, 2020. Speaker: Alejandro Aravena

Aravena says that the magnitude of social uprising in Chile cannot be anticipated. However, he also points out that it is important to not lose sight of the window of opportunity represented by not separating health threats from economic emergency. We must take advantage of the context to change our cities because there is a willingness in society to accept extraordinary measures, which in normal situations is very difficult to attain. We have to know how to take advantage of the context and link both emergencies.

Aravena affirms that, today, the hooded man with a mask that a few months ago was a threat in Chile and was linked to protest actions and social uprising has become, months later, a solution and a way to combat a problem. Thus, he argues that this represents an opportunity to introduce distance or porosity, without altering the density of informal neighborhoods.



Webinar, April 16, 2020. Speaker: Alejandro Aravena



Webinar, April 16, 2020. Speaker: Alejandro Aravena

Aravena observes that it is necessary to generate porous housing in an incremental way, within a model in which the state takes charge of structure, health, and basic resources. He proposes the development of basic service cores that, once structures are provided, can be filled by neighbors, or by the state, in a gradual way so as to expedite construction using focalized resources.



Webinar, April 16, 2020. Speaker: Alejandro Aravena

Aravena suggests that COVID-19 offers a window of opportunity by generating a context that, in another model, would not have transpired, which allows for the decoupling of legitimate citizen discontent from other more complex components, such as delinquency and drug-trafficking.

Making use of Joan Clos's notion of inverting the paradigm in which we link economic development and the formation of a good city, Aravena suggests that if we construct good cities, we can generate development. For this, coordination—which is the scarcest resources, not money—is key. If the construction of the city itself is coordinated correctly and made more sustainable, it can provide the economic sustenance that is needed. If there exists a suitable design with an open system (including citizen participation) that listens to people and channels their complaints, we can arrive at a horizontal and collaborative system.







Webinar, April 16, 2020. Speaker: Alejandro Aravena

To conclude, Aravena points out that it is necessary to listen to the people involved and channel their needs. It must be understood that all actors can contribute and improve actions for the common good, without being either paternalistic (from top to bottom), or driven by "guilt," that is, avoiding the idea that "the people know, thus what they say must be done." A framework for channeling different knowledges is needed.

RAHUL MEHROTRA

Appointed Dean of the Faculty of Design and Director of the Department of Urban Planning and Design at Harvard University

Known internationally for his role as an articulator of experiences and knowledges from different latitudes of the southern hemisphere, particularly in relation to informal conditions, Mehrotra suggests we consider the management of the pandemic provoked by COVID-19 in low-income neighborhoods of Latin America by starting to implement sequential measures, with short, medium, and long-term visions.

He argues that in the short term it is necessary to think about health as a form of infrastructure, and from a more holistic perspective. Generally, health is addressed in a fragmented way (water, sewers, garbage collection). We find here an opportunity to generate integration; we must understand that, if we want people to wash their hands many times a day, they must have access to water and health services.

In the medium term, we must work to meet the basic needs of people in relation to their habitat and their means of subsistence. This health crisis has made two great opportunities evident. On the one hand, digital connectivity offers a large access point to a better quality of life.

On the other hand, housing itself and the process of construction presents a second important opportunity. People who do not have a home do not survive; today we see cases of thousands of migrants in India who do not have their own housing. Understanding the importance of housing is decisive. This is an opportunity to establish having a home as a fundamental right. The exhibitor argues that if we add connectivity to this idea of housing as a fundamental right, we are going to reach a good outcome.

Finally, Mehrotra suggests that, in the long term, we must rethink urban land and stop addressing the problem only in the short term; we must think ahead and reconsider how the city is organized and planned.

The problems of informal settlements do not fall solely on the settlements. It is necessary to supply land with service infrastructures that help to provide appropriate housing that is not just affordable, but also contributes to an urban system and creates new ways of using it.

It is fundamental that we understand that urban systems must be resilient. We are accustomeded to refer to resilience in terms of climate change, but this health crisis has made us think of resilience from another perspective. If we use this opportunity to re-orchestrate the urban system, then housing is critical for rethinking the city. The orchestration of housing is fundamental, we must use it in a strategic way, as a creative incentive to reform the urban landscape, reimagining the housing typology; we are myopic in our imagination of it.

Finally, understanding this moment through resilience will also mean that issues such as density, the compactness of cities, and access to goods and services (for example: access to places of work, places for recreation, health, and education, among others) must be revised and challenged by new forms of work, education, and recreation.

JAIME PUMAREJO

Mayor of Barranquilla, Colombia

For Pumarejo, one of the greatest challenges in the crisis caused by the virus COVID-19 is the obligation for people to isolate when the resources are not there to do so. This situation worsens when the state does not have data on the people that are living in these conditions, as is the case of the Venezuelan migrants that live in the low-income neighborhoods of Barranquilla.

In a context of high levels of migration, Pumarejo points out that Venezuelan migration has had a large impact on the city and has increased poverty levels. Two types of poverty are relevant: monetary and absolute.

Absolute poverty increases with the appearance of COVID-19 and as a consequence of the context of social-residential vulnerability.

Faced with this situation, Pumarejo states that the city is using numbers from the last census (2019) and the levels of multi-dimensional poverty, which suggest that 150,000 families live in households occupied by six or seven families.

In regards to measures, Pumarejo says that brigades are being implemented to bring food aid to residents via routes used for public services. Over the following months, the program will deliver food to more than 360,000 families in a house-by-house distribution system.

Furthermore, the city of Barranquilla is advancing in provisions for a field hospital to care for people affected by COVID-19, which will be built at the Puerta de Otro events center.

There has also been an initiative to generate independent, flexible credits and microcredit lines, so that people can access needed tools and materials and re-initiate their activities and work once mandatory social isolation ends.

Pumarejo highlights that the crisis produced by COVID-19 allowed for advances in issues that otherwise took years of debate, like inter-municipal public transport, which needed to be resolved quickly to respond to the pandemic. In this way, Pumarejo understands that the lessons learned from the crisis are going to modify the way in which cities manage and make decisions.

Finally, he points out that the crisis has helped many to recognize that working from home is a real option, that sometimes we work more at home than at the office and, therefore, the pressure on fixed systems and transport, for example, can be reduced. We can plan a much more interesting city with flexible methods that reduce the impact on the environment and that are based on working from home.

JORGE MUÑOZ

Metropolitan Mayor of Lima, Perú

Lima is a city with more than 10 million inhabitants; it presents high levels of inequality as well as many needs that have been impacted by COVID-19 since the first patient appeared there on March 6th. However, Muñoz states that while COVID-19 itself may present the immediate risk, the virus will have a prolonged impact in different spheres of society.

Lima is in the center of the country and has many points of vulnerability; it is located in the Pacific Ring of Fire, earthquakes are quite common and the city is always subject to the consequences of climate change.

Moreover, in Lima, 70% of the economy is informal. This number is high compared to other urban areas in Latin America. Informal workers are particularly impacted by the obligatory social isolation and the mandated curfew between 6 pm and 4 am.

Given that the needs of those who rely on informal work and daily pay are deeply impacted by confinement, Muñoz notes that a series of itinerant markets with subsidized wholesale prices to bring food aid rations directly to households and to avoid overcrowding in markets were initiated. With the aim of providing facilities and bringing essential food from the Greater Lima Wholesale Market to the city's retail markets, the Mayor of Lima implemented three decentralized supply points to service basic necessities for vulnerable populations. The city implemented the first decentralized supply point, which provides food to more than 100 retail markets, in the Suan de Lurigancho district; it serves 390,000 families in East Lima. The second decentralized supply point supplies food to more than 45 retail markets in the Villa El Salvador district and benefits more than 80,000 families in South Lima. A third decentralized supply point brings staple foods to more than 47 retail centers in the Comas district, assisting around 100,000 families in North Lima.

Another measure implemented was a house-by-house biosecurity delivery system. The municipal staff delivers fifty lunches and provisions per day to elderly adults, pregnant women, children, and people with disabilities who live

in vulnerable areas and are enrolled in the community program Programa de Complementación Alimentaria. Furthermore, the Municipality of Lima delivered food and basic need products to vulnerable groups in informal settlements, reaching more than 110 families.

The curfew also made the homeless population more visible. Together with a group of professionals and solidarity hospitals, a shelter, "La casa de todos," was organized in Plaza de Toro with a capacity for 120 homeless people. A multidisciplinary team made up of specialists from the Municipality of Lima is in charge of relocating people, receiving them, registering their data, and carrying out a comprehensive evaluations that include COVID-19 testing for each individual. The reception center offers three meals a day and activities with the aim of preventing people from being infected and becoming transmitters of the virus.

In the long term, Muñoz shares that they are considering a future for La Casa de Todos, so as to accommodate this population once the virus has passed. Some of the individuals at the shelter have misdemeanors or suffer from addictions and withdrawal syndromes; the program became an interesting experience that sparked the city government to consider creative alternative and structural solutions to these situations.

Along the same lines, Muñoz points out that Lima has inaugurated a shelter house for abused women during the quarantine period, as there has been an increase in domestic abuse and attempted femicides.

The Municipality of Lima has also initiated a series of actions to reinforce and guarantee the supply of drinkable water for its most vulnerable sectors, securing access to a resource that is vital and fundamental in fighting the spread of the new virus. Currently, the city initiative supplies potable water to specific zones, making deliveries in coordination with local government; the days and times for delivery have been established. A 9,000-gallon cistern of water supplies each district in two trips per day, benefiting more than 500 families daily, per district. Regarding healthcare, Muñoz says that when the COVID-19 emergency began, there were only 220 beds with ventilators in intensive care units. The system has already become overwhelmed, with 12,000 cases and 1,277 interned patients at the time of the presentation.

Finally, Muñoz points out that the crisis generated by COVID-19 incited a review of the pending tasks and available infrastructure in Peru, especially with regard to healthcare and education. As we move from emergency to recovery, we must look to the future and plan the development of the city.

SEBASTIÃO BRUNO

Secretary of Infrastructure, Housing, and Conservation for Rio de Janeiro, Brazil

Rio is a city with a difficult topography and a sizeable informal settlement problem. In the city, there are 1,600,000 people living in favelas. Faced with this situation, Bruno shares the Mayor of Rio's concerns for these families and began to take measures to address their situations, including arranging for the relocation of people in risk situations (older than 65, with medical conditions, with chronic illness, among others) to hotels located in the southern part of the city.

Amid the crisis produced by COVID-19, Bruno shares that the mayor established a crisis cabinet coordinated by the mayor's office and in which all of the members of the secretaries participate. This cabinet meets online every other day to evaluate measures.

He also notes that the city of Rio de Janeiro is organizing field hospitals that can be ready in the short term and will increase the number of beds made available for health services. A hospital will be built in 25 days in a stadium and will have more than 500 beds and care rooms.

At the same time the city is working together with the IDB to build housing units for communities at risk.

Additionally, Bruno says that the Rio de Janeiro prefecture is distributing 100 basic need packages to families with less resources who are impacted by the economic crisis created by the social and preventive isolation. These basic aid packages are also being distributed to persons working in sectors that have suffered from the economic impact of isolation, such as taxi drivers, truck drivers, and street vendors, etc.

Bruno states that another mitigating action implemented in Rio de Janeiro was to procure housing for families living on the street as well as those with addictions. In the city, there is a large stadium used during Carnaval that has been converted into a shelter to house these populations.

Finally, he points out that the city will try to make these actions more flexible, but not until the contagion curve stops growing. When the curve decreases, the activities will be relaxed slowly with the aim of minimizing impacts.

FERNANDA MIÑO

Secretary to the Urban-Social Integration of the Territory and Habitat Development Ministry of Argentina

Miño points out that the crisis situation produced by COVID-19 presents an opportunity to rethink the contexts presented in low-income neighborhoods, where traditional solutions do not work. However, it is important to understand that the debate on decent housing goes beyond the present situation. In low-income neighborhoods, there is a continuous pandemic that results from the daily violation of the rights of its inhabitants and the lack of basic resources and overcrowding. Given this, Miño argues, the residents of low-income neighborhoods must denaturalize the vulnerable living situation and the poverty in which they find themselves in order to begin to act. When people are in a place where rights are violated, they naturalize the conditions in which they live. But when the condition of poverty is denaturalized, they begin to act.

Additionally, Miño argues that it is not enough for residents or social organizations to work on the problems of low-income neighborhoods from within—the state must share responsibility. It is important to be able to bring the debate regarding low-income neighborhoods to all levels of decision-making. It is not enough to cover it from a space of struggle, the state must understand its own problematics and responsibilities. Only when the debate is shared are solutions found through different approaches and visions.

Regarding community participation in the decision-making process, Miño argues that organizations, generally, are presented as external actors in the neighborhoods, arriving with a way of working that is not consistent with residents' methods of working. To this point it is important to listen to those who live in the neighborhoods because the measures that are successful are those that involve them in their processes.

She points out that the COVID-19 crisis is an opportunity for the inhabitants of low-income neighborhoods to express themselves in the first person, without reinterpretation or mediation. In this way, and as an inhabitant herself of a low-income neighborhood in Argentina, Miño argues that there exists a romanticism around "stay at home," that does not help the realities of these neighborhoods. It is important to understand that the pandemic is expereinced in relation to the conditions of the place in which one lives. Many informal neighborhoods have single-width 80 cm-wide corridors through which food distribution and other services must be organized. In these precarious conditions, isolation and social distancing are difficult to carry out.

Miño points out that the solutions provided by the state do not work and do not arrive in time, so it is necessary to speed up responses and public policy. To solve this problem, community participation is fundamental. When bureaucracy is not effective, work in the neighborhoods must be done from within, by residents. It is

important to maintain this and that the residents take care of each other.

One of the measures that the presenter sees as a priority in this context is budgetary allocation that can create information points inside the low-income neighborhoods from which hygiene and sanitation materials and protections can be distributed. At the same time, the elderly population and other at-risk persons should be identified. Miño argues that these tasks can be undertaken by residents; community leaders already have detailed knowledge of the territory and could simplify and streamline the process.

To conclude, the presenter proposes three actions to strengthen the position of low-income neighborhoods and help address the pandemic:

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Planning of small and medium-sized operations to attend first to urgent needs and then to organize what can be done over the long term.



Use of local labor, when neighborhood organizations are incorporated in the processes of putting into practice methods for planning work, the measures become more effective and are more likely to endure.



Collective actions are fundamental and must be carried out in the community and be participative. The living conditions of low income neighborhoods populations should not be naturalized. In order to do this, it is necessary to strengthen collective organization, starting by sharing experiences and increasing visibility of what occurs.

Tatiana Gallego Lizón

Between February 2015 and May 2017, Gallego Lizón was the Director of the Urban Development and Water Division of the Southeast Asia Department of the Asian Development Bank (ADB). Between 2002 and 2014, she led negotiations and the identification, formulation, processing, and implementation of urban loans and no-credit assistance for various countries in Asia. She was also responsible for the conceptualization and development of the sector's special work on topics such as competitive cities, group city development and metropolitan planning, public-private participation (PPP) and urban infrastructure, resilience to climate change in cities, electronic governing and intelligent cities, among other initiatives.

The IDB Cities Network is a platform for developing knowledge, relationships and solutions at the municipal level; it aims to share knowledge, best practices, and lessons learned in 160 cities in Latin America and the Caribbean in the realms of environmental, economic and social sustainability. In our meetings, we promote institutional support, innovation, and the exchange of knowledge between the public and private sector, civil society and academia with the aim of boosting the demand and capacities of loans and investments that can solve major urban challenges in the region.

Alejandro Aravena

Alejandro Aravena received his degree in Architecture from the la Universidad Católica de Chile in 1992. Thereafter he studied Theory and History at the IUAV in Venice. In 1994 he founded his own office, Alejandro Aravena Arquitectos. Between 2000 and 2005 he taught at Harvard University, where he founded ELEMENTAL together with Andres Iacobelli. In 2010, he was named an International Fellow of the Royal Institute of British Architects and served as a curator of the 15th Venice Biennale. In 2016 he received the Pritzker Architecture Prize. He has served as the director of ELEMENTAL since 2001.

Rahul Mehrotra

Appointed Director of the Faculty of Design and Director of Urban Planning and Design, Rahul Mehrotra is Professor of Design and Urban Planning at the Graduate School of Design at Harvard University. He is an architect, urban designer, and educator. His firm, RMA Architects, with offices in Mumbai and Boston, was founded in 1990 and has designed and executed a vast array of projects. Mehrotra is a member of the steering community of the Lakshmi Mittal and Family South Asia Institute at Harvard. His research on urbanism focuses on the evolution of theoretical frameworks for design in informal growth conditions, what he calls the "Kinetic City." His current research focuses on small cities and the emerging urban conglomerations of India. He studied at the Architecture School of Ahmedabad (CEPT) and graduated with a Master's with Distinction in Urban Design from Harvard University. Currently, he is Director of the Urban Design program at the School of Design at Harvard University.

Jaime Pumarejo

Elected mayor of Barranquilla for the 2020-2023 term, Jaime Pumarejo Heins was born in Barranquilla in 1980. He is the Information Systems Administrator at Purdue University, Indiana, and has a Master's in Business Administration with an emphasis in Finance from the Instituo de Empresas, in Madrid, Spain.

Upon receiving his MA, he returned to Barranquilla to work with his father to bring growth to the city. He started in the public sector during Alejandro Char's first administration as an Advisor for Competitiveness and Concessions. He was manager of the Caribbean Exposition Center Puerta de Oro. He also served as Development Manager for the City of Barranquilla, in charge of the Planning, Housing, Infrastructure, Mobility, Transmetro transportation, Public Space, and Urban Development areas. He has led and coordinated emblematic urban projects, including el Gran Malecón, the Todos al Parque program, the new plan for the forestation of Barranquilla Siembra, the infrastructure of the Central American and Caribbean Games, the renovation of the center, the channeling of the city's creeks, and the housing allocation and construction. In working on these projects, Pumarejo has been addressing strategic issues for Barranquilla's growth and development.

Pumarejo also served as Secretary of Mobility of Barranquilla and as Minister of Housing under President Juan Manuel Santos, a position that reflected his executive profile and his expertise.

Jorge Muñoz

Jorge Muñoz Wells is from Lima, and since January 1, 2019 has served as Mayor of the Metropolitan Municipality of Lima. He is a lawyer for the Pontificia Universidad Católica of Peru and has a Master's in Land Planning and Environmental Management from the Universidad de Barcelona; he is an executive with more than 23 years of experience in municipal management.

Before being elected as the mayor of Lima, he was the twice-elected mayor of Municipalidad Distrital de Miraflores (2015-2018). His first term as mayor was between 2011 and 2014. Before that, he was a three-time councilman in Miraflores (1999–2010), holding the position of Deputy Mayor between 2003 and 2006. He was the municipal director of the Miraflores community (1996–1998).

He has been a member of the Consejo Nacional de la Competitividad y la Formalización (CNC) and was also the president of the Coordinadora Nacional de Redes de OMAPED.

As the Mayor of the Miraflores district, he won the Reina Sofía Prize in 2012, a recognition from the Spanish government bestowed by the Queen of Spain. Additionally, while serving as mayor of Miraflores, he was recognized with more than 15 prizes for good practice in public management, including the Ciudadanos al Día (CAD) and the Business Creativity Awards from the UPC as well as recognitions for environmental management, social inclusion, and attention for citizen initiatives, among others. One of his most important recognitions was for the implementation of the program "Miraflores 360°: Todos juntos por la seguridad ciudadana," an internationally-recognized municipal model.

As Lima's Mayor, his governing plan is focused on four core strategies: citizen security, transportation, the fight against corruption, and public hygiene/sanitation. He aspires to transform the city of Lima into a place where all deserve to live.

Sebastião Bruno

A civil engineer, Sebastião Bruno has held the position of Secretary in the General Coordinating Committee of the General Coordination of Urbanization of Precarious Settlements in Rio de Janeiro, Brazil, since March 2, 2015. On January 2, 2017 he was placed in charge of the commission as General Coordinator of Social Interest Programs. Currently, he is the Secretary of Urbanism, Infrastructure, and Housing.

Fernanda Miño

Fernanda Miño has served as the Secretary of the Urban-Social Integration of the Territory and Habit Development Ministry of Argentina since December 2019. Miño is a resident of La Cava neighborhood, a long-standing informal settlement with a population of 13,000 people in the San Isidro district (which has a total of 300,000 inhabitants) in the Province of Buenos Aires. Several years ago, Miño converted the patio of her own home into a community space, EnBarriarte, that continues to operate in La Cava, providing school support and arts and crafts workshops. While pursuing her advanced degree, Fernanda turned to social activism, supporting urbanization and territorial projects in different districts in the suburbs and neighborhoods of the Autonomous City of Buenos Aires. In 2018, within the framework of the creation of the National Registry of Popular Neighborhoods coordinated by San Isidro, she began to form the National Board of Popular Neighborhoods that brings together references from organizations in Argentina. She was also councilmember of the Honorable Deliberative Council of the San Isidro Party from 2017 to 2019.

