

Urban Regeneration and Viruses: Learning from Past and Present Health Crises



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Urban Regeneration and Viruses

Learning from Past and Present Health Crises

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First published in 2022, updated in March 2024.

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Preface

About UN-Habitat

The United Nations Human Settlements Programme, UN-Habitat, is the United Nations Programme for sustainable towns and cities. Headquartered in Nairobi, it works in **over 90 countries** worldwide to promote transformative change in cities and human settlements through knowledge, policy advice, technical assistance and collaborative action. UN-Habitat is responsible for the coordination of all urban activities and relationships with local governments in the UN system and monitoring the progress of **Sustainable Development Goal 11** on sustainable cities and communities as well as **the New Urban Agenda**.

Over the last 40 years, UN-Habitat has implemented urban projects and programmes in cities all over the world. **Inclusive and integrated approaches** are inherent in UN-Habitat's modus operandi. Technical elements such as urban planning, innovation and research are always combined with capacity building and fostering value-add, inclusive partnerships and dynamic stakeholder engagement processes. As a United Nations agency, engagement, and coordination of various stakeholders - bringing together governments, research institutions, companies and citizens for dialogue is our core mandate. Alongside our focus on human rights and vulnerable groups, these factors are our 'convening power' and a core strength of the UN system.

UN-Habitat's **Strategic Plan 2020–2025** defines four interlinked domains of change (DoC) that overlap and are mutually reinforcing to promote sustainable urbanisation. The domains of change are:

1. Reduced spatial inequality and poverty in communities across the urban–rural continuum;
2. Enhanced shared prosperity of cities and regions.
3. Strengthened climate action and improved urban environment;
4. Effective urban crisis prevention and response

To **reduce spatial inequalities and eradicate poverty**, planned urban growth must be accompanied by effective urban renewal through in-situ upgrading and urban regeneration. Such efforts would also offer the benefit of preserving cultural heritage and helping to build a sense of identity and belonging in cities.

Five different flagship programmes have been defined in the implementation of the Strategic Plan 2020-2025. UN Habitat **Flagship Programme 1 'Inclusive Communities, Thriving Cities'** works to address spatial inequality and in this process, it identifies urban regeneration as a key component.

“Urban regeneration represents a powerful tool for local governments for an inclusive and green socio-economic recovery. Inclusive urban regeneration can be a key tool to transform and recover socially, economically and ecologically affected urban areas, building them back better into dynamic, diverse and vibrant places.”

Maimunah Mohd Sharif, October 2020



Introduction



« Residents enjoy public realm improvements achieved through the George Town Transformation Project in Penang, Malaysia.

1.1 Purpose of the report

The Covid-19 pandemic magnified some of humanity's most pressing challenges, such as the inequitable provision of basic services, infrastructure and environmental resources, and impeded progress on poverty and inequality reduction.^{1,2,3}

The health crisis, however, has demonstrated the decisive and agile role of urban areas in the face of this crisis. Building on their ability to concentrate knowledge, infrastructure and capacity, many cities managed to deliver innovative solutions – from enhanced service provision to the repurposing of local economies to meet the changing needs of residents. Urban regeneration has been brought forth as a **comprehensive process** that through multi-level coordination could provide an urban form generating wide and interrelated public benefits – physical, social, ecological, and economic, and thus advance post-crisis recovery.^{5,6}

A comprehensive and consolidated body of interdisciplinary knowledge on urban regeneration has been built over decades^{7,8,9,10,11,12,13,14}, however there is no consensus on the definition for urban regeneration that is appropriate in different contexts and urban dynamics.^{15,16} This report marks the first step of UN-Habitat's **Flagship Programme 1 'Inclusive Communities, Thriving Cities'** towards conducting a thorough study and transdisciplinary, cross-sectoral and inclusive discussion with relevant urban actors and partners on urban regeneration. The overarching goal is to collaboratively develop guidelines and methodologies and, ultimately, facilitate urban regeneration processes and post-pandemic recovery of urban areas.

This report explores the **spatial dimension of recovery measures** in past and present health crises and identifies essential planning and governance components to adverse the negative effects of such disruptions while making urban areas more inclusive and prosperous. It provides a comparative study of recent urban regeneration case studies in different regions, presenting **valuable learnings to build socio-economic and environmental resilience** at different scales.



The report demonstrates that working together, city leaders, citizens, civil society organisations and other urban stakeholders hold remarkable value for implementing a **sustainable post-crisis regeneration** process with lasting positive impact on communities.

1.2 Who is this report for?

This report presents to city leaders, planners, researchers, civil society, investors and private sector some of the lessons learnt from urban regeneration practices around the world and provides a solid understanding of possible paths to promote socio-economic recovery and urban resilience as a response to disruptions, such as epidemics and pandemics.

– City Leaders

The report is a resource for city leaders as it provides an overview of the essential elements necessary to promote successful regeneration in different scales. Through comparative global case studies, it presents possible ways to financially sustain global projects, to implement innovative participatory processes leading to inclusive development, and how to strategically engage the private sector.

– City Planners

The report provides city planners, architects, and urban planning practitioners with an understanding of the scope of urban regeneration, linkages between intervention scales, inspiring tools, actors involved, and the possible outcomes. The report also helps to clearly understand what urban regeneration means in the post-Covid-19 world and its role to promote resilience and prosperity.

– Civil Society, Investors And Private Sector

The report is also addressed to civil society, researchers, investors, developers, private and voluntary sectors. It aims to help individuals and organisations to imagine the possible transformations their own city could undergo, visualising how each of them could benefit through their specific role.

1.3 How is this report structured?

This report is structured in six chapters: Introduction, Recovery After Disruption, Urban Regeneration in Seoul, Case Studies in Urban Regeneration in Seoul, Case Studies in Urban Regeneration Worldwide and Conclusions.

The **current chapter – Introduction**, discusses the notion of urban regeneration based on extensive literature review and UN-Habitat's project experience. It also describes UN-Habitat's approach to and work on urban regeneration. **Chapter two, Recovery After Disruption**, presents common recovery policies to major socio-economic disruptions in urban history cases through the analysis of three cases: the 1918-1920 Spanish Influenza in the United States, the 1957 Influenza in the United Kingdom and the 2003 SARS Crisis in China. Adaptation measures to Covid-19 integrate this section, providing timely reflections. **Chapter three, Case Studies in Urban Regeneration Worldwide**, gathers five experiences in urban regeneration in cities of different regions around the world. It gives an overview of each initiative and discusses valuable learnings and project characteristics, highlighting strengths and weaknesses. Key messages and findings are presented in **Chapter four – Conclusions**.



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1.4 What is urban regeneration?

It is a challenging and conflicting effort to construct a universal definition for urban regeneration. According to the country and local context, the objectives of the urban regeneration process can be similar, yet adopt different approaches, influencing its perceived meaning. The definition also varies among scholarly perceptions and theoretical ideas.¹⁷

This report presents a working and incremental concept for urban regeneration based on historical research and UN-Habitat’s global project experience. Similarities identified through this analysis were systematised to open a discussion on the criteria for inclusive and sustainable urban regeneration.

Concept

Urban regeneration is a **comprehensive, area-based¹⁸ and a multi-agent collaborative planning process** that improves the physical, environmental and socio-economic conditions of an urban area and links the generated benefits to the wider urban fabric. In the context of this report, it is characterised as an inclusive process aiming to create long-term post-crisis social value, shared economic prosperity and environmental resilience.

A key to urban regeneration is to preserve, protect and enhance socio-economic assets, natural heritage and tangible and intangible cultural heritage.¹⁹ Building on the local assets and strong participation processes, it has the potential to strengthen the sense of identity, contribute to community ‘self-sustaining’ regeneration, promote inclusion beyond the intervention area, and enrich the overall urban diversity.

Key components in urban regeneration

As a holistic process, urban regeneration offers multiple project entry points and opportunities to generate interrelated benefits across different domains. The multidisciplinary **Expert Group Meeting (EGM)** on inclusive and sustainable urban regeneration in Bilbao, Spain that took place in December 2020 identified **6 cross-cutting thematic areas** to be considered in urban regeneration processes for

post-crisis recovery: spatial inclusion, urban health, climate change, conflict and migration, digital transformation, and culture. The present challenges within these thematic areas could also be seen as opportunities to advance, finance and build-back-better through urban regeneration initiatives.²⁰ The combination and alignment of different mechanisms and processes, such as agile governance models, inclusive policies, and integrated urban planning and design strategies, are central to a successful and sustainable urban regeneration process. Multi-level coordination and engagement with all relevant urban actors could activate the synchronistic and strategic use of these enablers.

Depending on the characteristics of the targeted area, the initiatives can combine hard (e.g., construction of physical elements, tactical urbanism interventions) and soft measures (campaigns, programmes, incentives). Interventions typically address demands for infrastructure and services, such as basic services, green and public space, housing affordability, renewable energy, food accessibility, mobility, job opportunity and others.



Mathare Environmental Conservation Youth Group (MECYG) runs a garbage collection business with youth in Mathare, Kenya, to create public open spaces. Source: UN-Habitat, <https://spark.adobe.com/page/Vl8mpWtxFbavw/>

Participation is essential for successful urban regeneration

While urban regeneration is a transformative approach to urban development, capable of promoting significant co-benefits, the process is complex and requires the participation of diverse urban actors, especially existing residents and local stakeholders. If developed through a participatory and comprehensive approach, urban regeneration can promote spatial inclusion and shared prosperity. If done wrong, it can lead to a deepening of inequalities, as well as destruction of valuable cultural heritage in the name of modernisation.

Inclusive and sustainable urban regeneration should aim at benefiting the city as a whole, directing private investments for the commons while expanding revenue streams for the city. It is crucial to involve all relevant individuals and organisations in the decision-making when reprogramming land management, value-capture and innovative finance mechanisms. As such, this comprehensive process also requires close engagement with the private sector, including real estate companies, investors, businesses, etc. Collaborative effort through public-private and community partnerships is essential to the promotion of economic activities and socio-economic diversity, as well as to the prevention and mitigation of gentrification in the targeted areas.^{21, 22, 23}

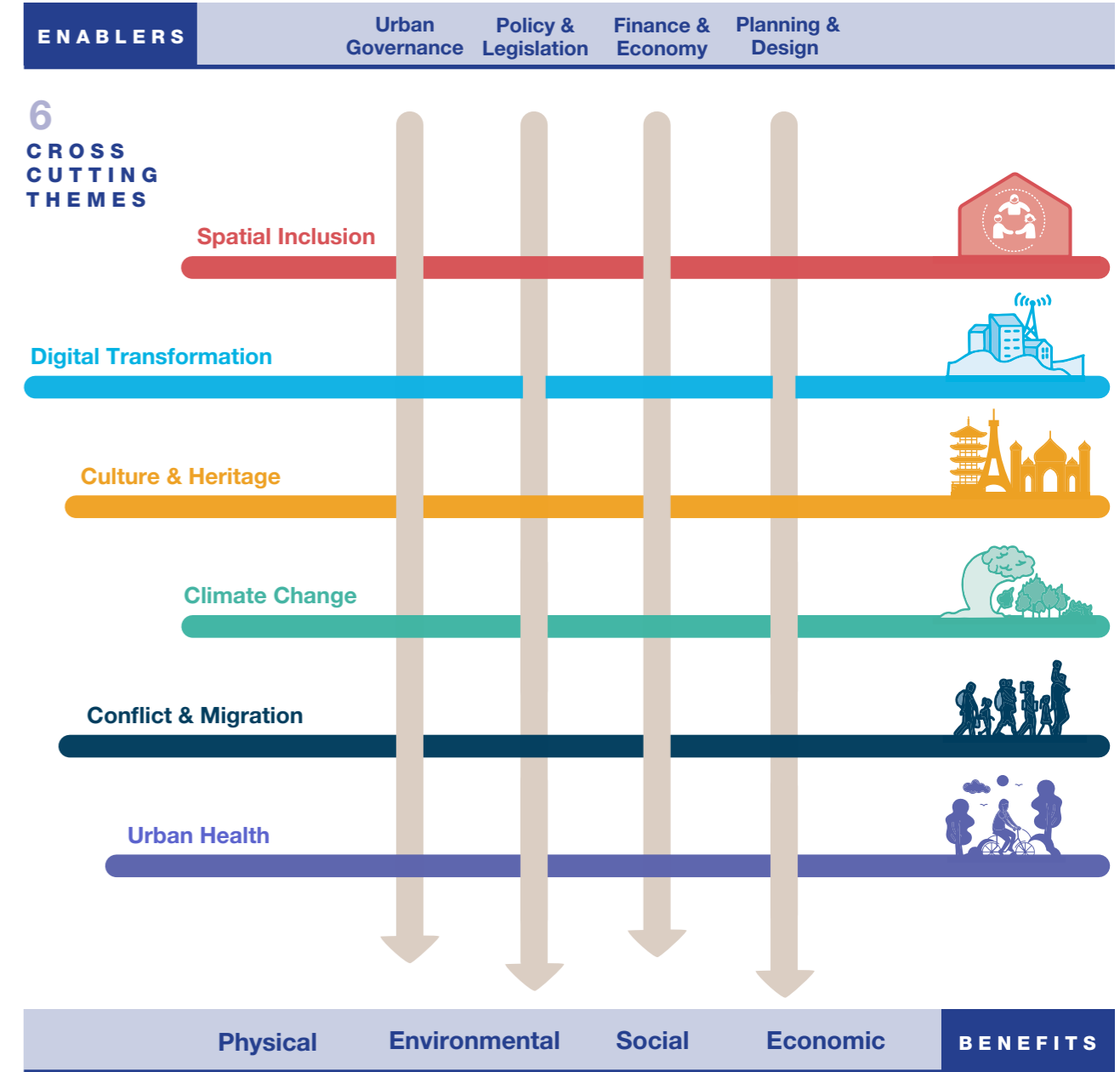
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Enablers and thematic areas in urban regeneration >>

Six cross-cutting thematic areas (illustrated by the coloured rows) were identified to be considered and integrated in urban regeneration processes, as discussed in the EGM in Bilbao, 2021. Governance, urban policy, planning and design and finance and economy stand out as the key enabling instruments in urban regeneration (illustrated by the grey vertical arrows).



<< [Expert Group Meeting Communique](#) 'Urban Regeneration as a tool for inclusive and sustainable recovery', 2022.



Interrelated benefits

Planning and initiating urban regeneration from a **broader area perspective** and through **multi-level cooperation** can bring about **comprehensive benefits** both to the targeted area and the wider city. The benefits could be categorised into four categories with strong linkages between them: physical, social and cultural, environmental, and economic. The impacts translate to a diverse range of individuals across society with considerable variation by income, gender, ethnicity, age, geography and disability.²⁴

Physical

Physical benefits refer to improvements in the built environment – the revitalisation of underutilised land and distressed urban areas with the aim to restore or create new functions, improve vibrancy and urban sustainability. Examples of such interventions could be activation of public spaces, integration and rehabilitation of green areas, installation of bike lanes and pedestrian areas, urban infill and retrofitting, urban farming, and others. The physical improvement could generate gains related to all six cross-cutting areas.

Ecological

Urban regeneration can also bring about environmental benefits and contribute to climate change adaptation and mitigation efforts through the preservation, strengthening and restoration of green infrastructure and environmental assets. Integrating Nature-based Solutions (NbS) and Ecosystem-based Approaches (EbA) in urban regeneration processes delivers multiple positive ecological impacts, such as alleviating heat stress, improving biodiversity and reducing carbon emissions. By improving the thermal comfort for people and urban ecosystems, NbS could reduce the effects of urban heat island (UHI) effect, remove a number of air pollutants from the atmosphere and offer significant energy savings.^{25, 26} Furthermore, inclusive and context-specific nature-based regeneration interventions could unlock socio-economic benefits and create substantial health gains, improving the adaptive capabilities of communities in deprived and disaster-prone zones. For example, through an inclusive and environmentally sensitive approach, regeneration of



Cikapundung Terrace is a river revitalization project in Indonesia which targeted ecological goals and the creation of urban public open space. Source: [Local Guides Connect](#).

blue and green infrastructure could improve biodiversity, resilience to environmental shocks, air quality and sustainable mobility, while also creating economic activities and livelihood opportunities.

Social

The social benefits of urban regeneration relate to the impact on social relations, identity and governance of the targeted areas. The process could alleviate spatial segregation and social exclusion by, for example, providing equitable access to infrastructure, land and housing, services, and livelihood opportunities to vulnerable communities, elderly, youth and women. Furthermore, urban regeneration could leverage community resources and identity and facilitate human interaction at a local level. This includes preservation and protection of cultural aspects, both tangible (e.g., historical buildings and sites, monuments, museum that have a diversity of values, etc.) and intangible (e.g., practices, representations, knowledge, skills, and other forms of cultural expressions transmitted from generation to generation). By improving the public realm, renovating or changing the use of existing structures to create new activities with respect to the cultural context, it promotes the preservation and restoration of tangible and intangible heritage.

Economic

The outcomes on the local economy are linked to improving the access to resources and services and the vibrancy of the area. If public spaces and transport services are undeveloped, communities will have limited access to socio-economic opportunities, health care and leisure. Socially vibrant urban areas attract new economic activities, creating new jobs, enhancing local revenue generation, and promoting more equitable access to resources (food, housing, digital connectivity, mobility, etc.). This could help mobilise diverse investment partners, including private sector and civil society, paving the way towards circular economy and innovations. Initial improvements and pilot projects have the potential to catalyse other improvements, e.g. give way to more and better aligned urban activation projects or advocate for changes in policy and legislation.

Further studying, understanding and articulating the co-benefits of urban regeneration will produce a wider positive effect in urban areas, attract investments for such initiatives and increase resilience to disruptions, such as epidemics and pandemics.

Scale of urban regeneration initiatives

No urban system can be understood through the analysis of a single feature. Physical, economic, and social dynamics are interlinked and connected across the urban fabric and urban regeneration, as the process of physical, socio-economic and environmental urban revival, is not limited to space or time. In the context of this report, four scales categorise the spatial extent of a regeneration vision and action: region, city, neighbourhood, street and building.

– **Regional scale:** the extent of the initiatives is a very large area e.g., metropolitan/ greater city or cross-city. An initiative at a regional scale could include different cities or districts, going beyond the urban boundary. In the case of big metropolises, regional scale projects could connect distant parts of the city.

– **City scale:** the extent of the initiatives is the city. The city scale project goes beyond the local dynamic of a neighbourhood, such as a Strategic Development Plan or city-wide programmes.

– **Neighbourhood scale:** the extent of the initiatives is a large entire area within the city. Neighbourhood urban regeneration should study and work with community dynamics. It often integrates smaller interventions (streets and building) and area-wide tactical urbanism strategies.

– **Street scale:** the extent of the initiatives is a street or a path connecting two places or areas in the city. The focus is often on walkability, social connections, green areas and good design quality.

– **Building scale:** the extent of the initiatives is a building. A building project can alone promote benefits to the surrounding environment, however, it is often a part of a larger spatial plan. Common projects involve, housing, economic activities, basic services, energy efficiency, heritage and culture.



UN-Habitat works with the [Block-by-Block participatory process](#) leveraging digital technologies to support cities in developing community-driven public open spaces. Source: UN-Habitat.

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Grota do Cigano, Maceió. UN-Habitat Alagoas team in collaboration with the State government facilitated an inclusive regeneration process based on UN-Habitat's Block by Block methodology. In a co-creation workshop, the local residents proposed a design of the space which reflects the community's vision, but is also feasible to be implemented by the Alagoas government in a short timeframe and within the available budget. The activity involved 30 young people and children who worked collaboratively to incorporate their needs and wishes in the design.



Introduction

1.3 Urban regeneration in the context of Flagship Programme 1

UN-Habitat through its Flagship Programme 1 **'Inclusive Communities, Thriving Cities'** supports governments and other urban actors to build more inclusive and climate-resilient cities through comprehensive urban regeneration. It aims to bridge the urban divide, nurturing multi-stakeholder collaboration to make cities, neighbourhoods, and communities more inclusive, resilient, and sustainable.

The programme contributes to the commitment of the New Urban Agenda and Toledo Declaration to prioritise the infill, renewal, regeneration and retrofitting of urban areas; promote participatory planning with all relevant stakeholders; and mitigate spatial and socioeconomic segregation and gentrification, while preserving cultural heritage and preventing and containing urban sprawl. Furthermore, it contributes to **localising 15 SDGs**, advancing 45 Targets for the 2030 Agenda, specifically contributing to SDG1 on reduced Poverty, SDG 5 on Gender Equality, SDG 10 on Reduced Inequalities, SDG 17 on Partnerships and SDG 11 on Sustainable Cities and Communities. Urban regeneration could enable Member States to progressively deliver the Right to an Adequate Standard of Living - Adequate Housing, the Right to Water, Sanitation and the Right to Gender Equality for all, as well as equal access to green and public spaces among others.



The New Urban Agenda, 2017



The Toledo Declaration, 2020

1.4 UN-Habitat's approach

UN-Habitat's comprehensive approach to urban regeneration is based on the entity's global experience in integrated urban planning and human rights-based processes.²⁷ It places people at the centre with the aim at mitigating gentrification and exclusion, addressing possible risks for human rights in accordance with international law and related standards (e.g. issues of evictions, displacement, compensation, loss of livelihoods, coercive actions by state) and setting in place a strategy to prevent, mitigate and manage potential resettlement. The Programme 'Inclusive Communities, Thriving Cities' addresses the need to establish and mainstream an inclusive and sustainable approach to urban regeneration that aims to build:

- Social value creation
Reduction of poverty, exclusion and improvement of living conditions with a priority on the fundamental right to an adequate standard of living under the International Covenant on Economic, Social and Cultural Rights.²⁸

- Environmental resilience
Enhancing and protecting the natural assets, addressing issues of connectivity, functionality and resource degradation with a city-wide perspective, improving land use efficiency and circularity of resources.

- Shared economic prosperity
Promotion of economic activities and socio-economic diversity in the revitalised areas. Inclusive urban regeneration should aim at benefiting the city as a whole, directing private investments for the commons while expanding revenue streams for the city.

Working closely with different stakeholders, this approach aims to unlock the value of underutilised assets and community resources, leveraging their potential and attracting mid- and long-term investments. It aims to provide job opportunities, affordable homes and infrastructure, paving the way towards sustainable and inclusive cities and communities that are resilient to shocks and stresses.



Participatory Design Workshop for Jingdian No.1 Renovation of Shuangjing Subdistrict. Through an urban regeneration initiative focusing on inclusive governance, the private sector and social actors participated in activities to improve social welfare based on the principles of government-led and public-private partnership. Source: UN-Habitat.

Following successful collaboration in various contexts, UN-Habitat through its Flagship Programme 1 'Inclusive Communities, Thriving Cities' is continuously **looking to engage** with city leaders, the private sector and communities to **exchange knowledge and co-develop initiatives** to revive distressed neighbourhoods through an inclusive and participatory approach.

27. Universal Values. Principle One: Human Rights-Based Approach. [United Nations Sustainable Development Group.](#)

28. International Covenant on Economic, Social and Cultural Rights. (United Nations, 1967)

“Disease can be prevented by focusing our attention on the design, creation and management of environments in which people live.”

Integrating Health in Urban and Territorial Planning,
UN-Habitat, WHO, 2020



Recovery after Disruption: Urban Implications and Opportunities

« In Wuhan, China, high school students return to school with social distancing measures in place during the Covid-19 pandemic.



2.1 How have pandemics disrupted cities historically and how did they recover?

Major breakthroughs in urban history that transformed urban form and policy are inextricably linked to disruptions. Public health crises have been common throughout the history of cities and have led to radical changes in areas as vast as building codes and standards, the share of green areas, and infrastructure development. For example, in 1854, after physician John Snow discovered that the cholera outbreak in a neighbourhood in London had been caused by a contaminated water fountain, the city developed sanitary disposals of waste and improved access to clean water. Similarly, after the tuberculosis pandemic peaked in western Europe and North America in the 19th c., cities developed public space strategies that would increase the share of green areas, as well as housing policies that would regulate building form and layout to ensure access to light and air in every home.

Speculation abounds as to how the Covid-19 pandemic is reshaping our cities. Many hope that some of the adaptations to the ongoing pandemic, notably those that have increased the share of pedestrian public open space through the closures of vehicular arteries, are here to stay long-term¹. With an increase in remote work and office space vacancies, as well as lower demand for office space in the long-term, the urban core's vacant building stock may become more mixed in its programming as it is adapted to new uses, including residential, civic or commercial activities². In suburbs, growing numbers of people working remotely and spending additional time where they live may demand more amenities, making suburban neighbourhoods further mixed-use as well.

In the meantime, governments around the world are announcing large-scale reopenings and ambitious socio-economic recovery schemes that would bring about the post-pandemic world. This is not the first time such global socio-economic recovery schemes are pushed forward by governments in a post-pandemic world. Notable examples

include the case of the United States after the 1918 influenza pandemic, the United Kingdom after the 1957 influenza pandemic and China after the 2003 SARS pandemic. While several decades and regions apart, the adaptation and recovery schemes these three countries developed to respond to specific global pandemics bear striking similarities and may prove useful when thinking about socio-economic recovery schemes today.

While specific medical and technological advancements have historically supported control and remediation after disruption, urban planning played a central role across recovery efforts. Investments in physical infrastructure, public space and blue-green networks, improved urban governance and institutional collaboration and local policies supporting vulnerable communities are part of integrated recovery efforts that deploy urban planning processes and projects to increase urban mobility, activate neglected areas and improve quality of life. Collectively, recovery after disruption inherently means investing in urban regeneration.

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A New York street cleaner wears a mask to prevent the spread of the influenza epidemic in 1918. The National Archives and Records Administration via Influenza Encyclopedia, The American Influenza Epidemic of 1918-1919, A Digital Encyclopedia, Section New York.

Common recovery policies based on these three responses to past socio-economic disruptions include, but are not limited to:

- **vaccines and treatments** to suppress the source of the pandemic
- **expansion of infrastructure** to increase mobility and stimulate economic activity
- investments in **technological innovation** to bring improved services to more people
- **subsidies to key industries**, notably agriculture, to retain food security
- **increased institutional collaboration** to prevent and better respond to future pandemic impacts and urban crises
- subsidies to **cultural activities** to revitalise urban centres
- **financial support** to vulnerable communities
- investments in **global knowledge exchange** to learn how others have responded to the disruption.
- **public space improvements** and increased share of **urban green open areas**



A classroom on a ferry in New York City. Source: Bureau of Charities, as referenced in The New York Times, Ginia Bellafante, 'Schools beat earlier plaques with outdoor classes. We should, too.', 17/07/2020, <https://www.nytimes.com/2020/07/17/nyregion/coronavirus-nyc-schools-reopening-outdoors.html>, accessed in 05/2021.

Case Study A

1918-1920 Spanish Influenza, United States

Summary of Key Measures to Reduce the Spread*

- Banning mass-gatherings
- Closing schools, theatres, spaces of worship, bars
- Closing public spaces
- Imposing local mask-mandates
- Staggering business opening schedules

Summary of Recovery Actions and Outcomes

- investing in technology research and electrification → increasing industrial production
- investing in infrastructure for developing a highway network → increasing mobility, stimulating construction, and service sectors, notably the tourism and entertainment sectors
- implementing tax cuts in the agricultural sector → improving food security and urban livelihoods

* varied from city to city

Context

The Spanish flu was a particularly deadly pandemic which affected roughly a third of the world population¹ and took the lives of 20-50 million people across four waves starting in 1918 and ending in 1920, each with varying levels of infection and mortality rates². While the exact origin of the virus remains unknown, early reports of infections with the respiratory virus were located in the United States and Western Europe. Mortality as a consequence of the influenza pandemic disproportionately affected young adults between the ages of 20-40 years.

In the United States, the first cases of the Spanish Influenza were observed in the State of Kansas in March 1918 and, within a week of the first observation, the disease spread to New York City. Because virus transmission was through airborne respiratory secretions, cities were particularly vulnerable to the spread of the Spanish Influenza due to high population densities, the regular organisation of large-scale gatherings and delayed measures to contain the virus. For example, during the deadly second wave of the pandemic, the Philadelphia Liberty Loans Parade took place in September 1918 and led to 12,000 deaths after a major outbreak hit parade attendees³. The pandemic also had deep socio-economic impacts on urban life and its economy with mass-unemployment and business closures triggering a series of recovery measures after the pandemic waned down in 1920.

Measures to Mitigate the Impacts of the Pandemic

Because the virus was transmitted through airborne respiratory secretions, national and local governments around the world took measures to reduce the spread. In the United States, many cities instituted social-distancing measures and restrictions to reduce large gatherings in places like cultural venues, churches and bars. They also closed schools and limited public transportation. Concerned about the functioning of social and economic activity, many cities took specific measures to keep the economy open. San Francisco



Crowded Children's Playfround at Golden Gate Park. With most indoor venues closed, outdoor attractions were particularly valued by the public. Source: Influenza Encyclopedia – The American Influenza Epidemic of 1918-1919, A Digital Encyclopedia, Section San Francisco.



The front page of Bemidji Daily Pioneer, 12/10/1918, as referenced in The Bemidji Pioneer Online, 'Déjà vu? Public gathering places were ordered closed in 1918 during deadly Spanish flu crisis', 20/03/2020, accessed in May 2021.

imposed a mask mandate in public spaces to reduce the spread while retaining people's mobility and "New York City staggered the openings and closings of certain businesses to reduce crowding on streets and on public transit⁴." Recent research into the economic impacts of the 1918 influenza pandemic in the US found those cities "that intervened earlier and more aggressively experienced a relative increase in real economic activity after the pandemic subsided⁵."

Social and Economic Recovery in Cities

While World War I caused 117,000⁶ deaths for the U.S.A., the influenza pandemic had a death toll of 675,000⁷. In 1920, the U.S. was experiencing mass unemployment at 11.7%, an increase from 1% in 1918⁸, mainly due to post-war recessions⁹. Unrest and violence as a consequence of the economic impacts of the pandemic and the end of World War I were growing in American cities. By 1923, however, the United States was experiencing full employment and an economic boom which lasted until the Great Depression, triggered mainly by the federal government's recovery measures.

In 1921, the federal government deployed a series of large-scale socio-economic recovery measures that would improve urban economies and reduce social unrest in urban areas. One of the pillars of the recovery package was large-scale public investment in the country's interstate road infrastructure through the development of a national highway network being the centrepiece of the investment plan. The national road network was made possible by federal and state authorities working together.

The Federal Highway Act of 1921 allocated federal funds to match 50-50 state investment in interstate road infrastructure as a way to encourage State highway agencies to develop multi-year infrastructure plans that would connect siloed areas, notably the West of the U.S., with the assurance they would get reimbursed. The Act was also premised on the development of an interstate alternative to railroad transportation to offset



Public School 51 in Manhattan. Source: Library of Congress, as referenced in The New York Times, Ginia Bellafante, 'Schools beat earlier plaques with outdoor classes. We should, too.', 17/07/2020, accessed in 05/2021: <https://www.nytimes.com/2020/07/17/nyregion/coronavirus-nyc-schools-reopening-outdoors.html>

potential disruptions to the transportation of people and goods¹⁰. The new national road infrastructure anticipated the boom of the car manufacturing industry that lasted through the 1920s and was made possible by the development of affordable automobile models.

The affordability of the car stimulated demand in urban areas and put pressure on federal authorities to expand the electrification network to areas with large population densities (homes) and to industrial areas (factories). The latter provided the basis for a rapid increase in industrial productivity and stimulated the car industry with manufacturing output increasing by more than 90 percent between 1921 and 1929¹¹. Throughout the decade, people's mobility grew and led to the growth of the tourism and entertainment industries throughout the country's cities. The increase in mobility stimulated the urban construction and service sectors, bringing many jobs to cities experiencing high unemployment.

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Summary of Recovery Actions and Outcomes

- Investing in infrastructure
- Disbursing financial support to retirees in the form of direct additional income
- Improving housing security and tenure
- Improving standards for health and safety at work
- Disbursing financial support for sickness benefits

Context and Impact on Urban Life

In April 1957, thousands of Hong Kong residents had been reported to have contracted a new form of influenza, breaking out into a pandemic. In total, the new virus, transmitted through airborne secretions, killed an upper estimate of 4 million people worldwide¹. “As an entirely new strain there was no immunity in the populace and the first vaccines were not distributed until August in the US and October in the UK, and then on an extremely limited basis².” However, the 1957 pandemic was the first opportunity to deploy mass-vaccination campaigns to stop the spread and to protect vulnerable people. The health crisis sparked a subsequent economic shock which saw 3-8% work absenteeism experienced by the United States and overall global industrial output shrank by roughly 1.2%³.



Danes in temporary sick quarters set up in a gymnasium at Copenhagen's naval shipyard, October 1957. Source: AP, as referenced in the Guardian Archive, 'Archive, 1957: flu vaccine for hospitals – epidemic past peak?', 01/10/2020



A typist wearing a mask in the UK, 1957. Source: Daily Herald Archive, as referenced in The Irish Times Online, Una Mullaly, 'An 'Asian flu' pandemic closed 17 Dublin schools in 1957', 2020.

The pandemic rapidly spread worldwide and reached the United Kingdom in June 1957. The pandemic peaked in October of that year in the UK and took an estimated 33,000 lives in the country alone⁴. 9 million people had been estimated to have contracted the flu across the country and more than half of the cases had been under medical attendance⁵. The UK's GDP shrank by 2.4% in the UK⁶ in 1958 which sparked an economic shock. In the period immediately following the pandemic, the government undertook an extensive recovery plan to stimulate the economy and recover the losses experienced during the pandemic.

Measures to Mitigate the Impacts of the Pandemic

In the first months of the pandemic, UK authorities largely dismissed the spread of the virus, a fact which led to the death of 30,000 Britons in the winter months of 1957. National UK authorities decided to let Medical Officers of Health implement their own schemes to reduce the spread of infection locally.

“In some areas officers ordered complete closure of schools while in others only assemblies and physical training were banned⁷.” In many areas, factories, offices and mines closed, having deep economic consequences. The government advised those with flu-like symptoms to self-isolate and spent £10 million on sickness benefits to support the population in seeking medical attendance when contracting the virus, under the condition they receive a doctor's note⁸.

Social and Economic Recovery in Cities

Thanks to the ensuing containment of the pandemic and the mass roll-out of the vaccines, economic recovery quickly followed in the summer of 1958. After GDP had shrunk by 2.4% in 1958 mainly due to the closure of factories and mines, the national government implemented a wide-ranging socio-economic recovery plan which brought investments in and around urban areas. Central to the recovery plan were large-scale infrastructure investments that built the UK's first motorway and that led the way to major road-building programmes throughout the 1960s which increased connectivity between urban areas, stimulating commerce. The major road-building programmes triggered an increase in car ownership, further improving urban and inter-urban mobility. The socio-recovery plan also included anti-poverty actions, supporting vulnerable groups and older adults in cities with direct additional income. Addressing concerns raised throughout the pandemic about housing tenure, the Landlord and Tenant Act of 1958 emerged to make it harder for landlords to evict tenants and to regulate how and when rents can increase. In an attempt to prevent future health crises, important milestones were reached in legislation covering health and safety at work. The 1961 Factories Act regulated health and safety measures in factories.



Staff of the store Selfridges are seen lining up for an anti-flu vaccination from a hypospray gun. Source: Frank Leonard Tewkesbury, AP Images, accessed in May 2021: <https://apimagesblog.com/historical/2020/3/12/influenza-pandemics-throughout-history>

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Case Study C 2003 Sars Crisis in China

Summary of Recovery Actions and Outcomes

- Upgrading medical infrastructure at county-level
- Improving access to medical resources for farmers and low-income urban residents
- Implementing temporary tax relief for affected industries, particularly the agricultural sector
- Subsidising affected industries, particularly the agricultural sector

Context and Impact on Urban Life

In the fall of 2002, a new viral respiratory disease, SARS, transmitted through airborne secretions, was reported to have infected people in southern China. After first reports, the disease subsequently spread internationally and reached global public media in the spring of 2003 when the World Health Organisation issued a global alert regarding SARS.

While fatality rates for SARS were reported to be as high as 9%, the virus was slow to spread and was easily contained¹. Nevertheless, the country's economic growth dropped from 11.1% to 9.1% in the three months since the outbreak started². The decrease in growth is mainly a result of disruptions in supplies and a slow-down in industrial output as China was battling the epidemic in the first months. In this period, in urban areas across the country, 10 million jobs were lost³. Cities didn't just struggle with job losses and increased unemployment, but also with containing the virus in densely populated areas. A series of measures which included localised quarantines that affected tens of thousands of people took hold of many urban areas.

Measures to Mitigate the Impacts of the Pandemic

With the onset of the SARS epidemic in the early months of 2003, local authorities took strong action to fight the spread with context-specific measures. "They sealed off villages, apartment complexes, and university campuses, quarantined tens of thousands of people, and set up checkpoints to take temperatures. By May 7 2003, 18,000 people had been quarantined in Beijing. In Guangdong, 80 million people were mobilised to clean houses and streets. In the countryside (...) roadside booths were installed to examine all those who entered or left."⁴

The strictest measures were implemented in urban areas which seemed more susceptible to spread. Beijing was shut down tighter than other parts of the country and had cultural venues, bars, shopping malls and sports facilities closed in



A masked employee cleans a table at an empty restaurant in Beijing. Photo copyright: Eugene Hoshiko. Source: Business Insider Netherlands, James Pasley, 'How SARS terrified the world in 2003, infecting more than 8,000 people and killing 774', 2020.



Passengers helping themselves to free vitamins. Source: Bullit Marquez, as found in Business Insider Netherlands.

the first quarter of 2003. Measures to combat the epidemic also included increased institutional collaboration at multiple levels. The national government funded and set up a three-tiered disease prevention network and improved collaboration between its local and national health agencies.

Social and Economic Recovery in Cities

Social and economic recovery after the SARS pandemic in China hinged on two packages. The first package focused on addressing healthcare-related needs to prevent and contain future SARS outbreaks. The second package aimed at mitigating the economic effects of the outbreak.

When the SARS epidemic started waning in late spring, a national fund of 2 bn yuan (\$250 million), complemented by local funds of 7 bn yuan (\$875 million), was set up by the national government to control the outbreak and prevent future ones. Because the outbreak revealed key weaknesses in the country's medical infrastructure, the recovery package centred on upgrading county-level hospitals and healthcare infrastructure. The fund also aimed at improving access to medical resources for farmers and disadvantaged urban communities in both rural and urban areas by purchasing SARS-related medical resources (protective equipment, medical equipment, medication), notably in central and western China.

With a focus on economic recovery, the national government disbursed a stimulus package in the value of \$3.5bn to mitigate the economic effects. The stimulus package included temporary tax relief for affected industries and provided subsidies to key areas of the economy. As in the experience of previous pandemics in different parts of the world, the food production industry was seen as key in social and economic recovery and as such received generous subsidies through the recovery package.⁵



Teacher of Yan Chai Hospital Wong Wha San Secondary School leads a virtual class in an empty classroom, 2003. Photo copyright: Vincent Yu. Source: Business Insider Netherlands, James Pasley, 'How SARS terrified the world in 2003, infecting more than 8,000 people and killing 774', 21/02/2020.

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2.2 How have cities adapted during the Covid-19 pandemic?

The government responses to the Covid-19 pandemic have had a tremendous impact on cities. People, businesses and authorities have rapidly adapted urban environments to ensure the continuous functioning of the economy and the provision of public services.

With office closures came the rise in **home offices** which has brought housing tenure, provision and design to the fore. In the wake of lockdowns in spring 2020, many cities urgently adopted eviction bans and rent freezes to ensure housing provision for as many people as possible. Similar to previous public health crises, the Covid-19 pandemic has evinced inadequacies in housing building quality, layout and design with overcrowding and inflexibility in use being two main concerns. Cities have already responded by adapting vacant urban buildings into emergency shelters for the homeless, as part of a series of **anti-poverty** actions to mitigate the disproportionate impacts on vulnerable communities. In total, authorities have been challenged with the urgency to house 1.8bn people worldwide who would otherwise not have access to safe housing or who are particularly exposed to contagion¹. **Adaptive reuse** has also been a powerful tool for local authorities to extend hospital uses and to set up vaccination centres. Use adaptation has also been applied to the public realm with many cities closing streets off to motorised vehicles. **Reprogramming streets** accommodates outdoor dining and playgrounds, **new green areas** and cycle lanes that help people commute safely. The new cycle lanes and walkways have been especially helpful in the context of a **reduction in use of public transportation** to lower the risk of contagion.¹

A further adaptation of urban life is the rise in e-commerce which helped many businesses continue their economic activity and gave consumers access to essential services and goods. This is coupled with the more general trend of digitalisation of commerce and services, including public ones, which many cities have adopted.

Anti-poverty actions



Adaptive reuse



Reduction in use of public transport



Work from home



Reprogramming of streets



Rise of E-commerce



2.3 What adaptations will stay in a post-Covid-19 world?

Many of the urban adaptations developed as emergency responses to the Covid-19 pandemic will remain with cities in the long-term. Given the proven viability of work-from-home schemes, many offices will shrink in size and vacant office buildings may need to accommodate new uses in higher demand. Early pandemic-related office closures and hybrid work schemes today have reduced economic activity and the vibrancy of the urban core. For example, the number of people walking in Denver's urban core dropped from 96,000 on March 9th, 2020, to 20,000 on March 30th, 2020. In March 2022, 37,000 visitors were counted on a given day in the city centre, suggesting the vibrancy of the urban core would not return to pre-pandemic levels.² With many city centres experiencing **retail vacancies**, cities and businesses will have to identify new uses to retain vibrancy.

The closure of many streets to cars in favour of outdoor dining and pedestrianisation will stay in the long-term where it is viable from a transportation planning perspective, part of larger efforts to achieve health gains. New York City announced that 100 miles of its 6,000 mile street network which became fully pedestrianised during the Covid-19 pandemic will remain so permanently.³ The fall in use of public transportation may also be retained if work-from-home schemes are extended and affordable housing provision is developed closer to urban centres. This will favour an increase in cycling and anticipates the development of cycling infrastructure and networks. During the Covid-19 pandemic, many cities set up cycling lanes to provide commuters with safe transportation infrastructure. Paris announced that 'coronapistes' - cycling lanes set up during the Covid-19 pandemic - would become a permanent feature of the transportation arteries connecting the city.

Affordable housing development in urban centres will be on local authorities' agendas in the long-term, as part of efforts to reduce spatial inequality. In many cities, affordable housing development and tenure protection schemes had been underway since before the Covid-19 pandemic, but they have been accelerated by the impacts of the public health crisis.

The need to adapt uses of vacant or underused buildings to new uses will be encouraged to preserve identity and to reduce CO2 emissions associated with new construction⁴, in an effort to combat climate change. For example, demolishing and reconstructing an English Victorian terrace house produces up to thirteen times more embodied carbon than adapting or restoring it⁵. Where new construction is done, new building standards will encourage design for flexibility as resilience measures in the face of future crises.

The rise in e-commerce is a trend that had also started gaining ground prior to the pandemic, but which has experienced tremendous growth during the health crisis to the detriment of mainstreet retail. Rapid shifts to e-commerce in the private sector and the emergence of online public services demonstrate the importance of digital transformation for economic activities and transparent and accessible governance.

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Work from home



Office Space Vacancy?

Reprogramming of streets



Increased pedestrianisation?

Rise Of E-Commerce



"Mainstreet" retail vacancy?

2.4 What challenges and opportunities does the pandemic present for the future of cities?

In the context of the urban disruptions caused by the Covid-19 pandemic, **planning for urban health** will be a central departure point of urban regeneration. Given the rapid adaptations cities have undertaken during the Covid-19 pandemic, opportunities and challenges abound in the urban regeneration agendas of the post-pandemic world. **Making cities more pedestrian- and cycle-friendly and safe, extending public health networks to ensure equitable access across the city, reducing social inequality and increasing the digitalisation of public services** are some

opportunities lying ahead. Schemes to achieve these goals had been started before the Covid-19 pandemic hit, yet the urgency of their implementation has been accelerated by the public health crisis. Nevertheless, several challenges abound.

The **financing of affordable housing schemes** is becoming more urgent in urban contexts with precarious housing supplies. In this context, public-private partnerships and public financial commitment to the development of affordable housing in and close to urban centres will need to be secured. The pandemic has revealed and augmented already **growing social inequality** across the urban landscape with many low-income workers losing their sources of revenue during

the Covid-19 pandemic. In the long term, **economic resilience**, especially that of low-income and vulnerable groups, will need to be brought to the fore. Accompanying urban regeneration efforts that aim to tackle social inequality, **meaningful and continuous participatory processes** are needed to ensure community consent, input and inclusion.

With **digital transformation** accelerated by the Covid-19 pandemic, notably through the shift of some public services online, such efforts will only be expanded to enhance **public participation**, provide access to more people and increase governance transparency. Some countries are

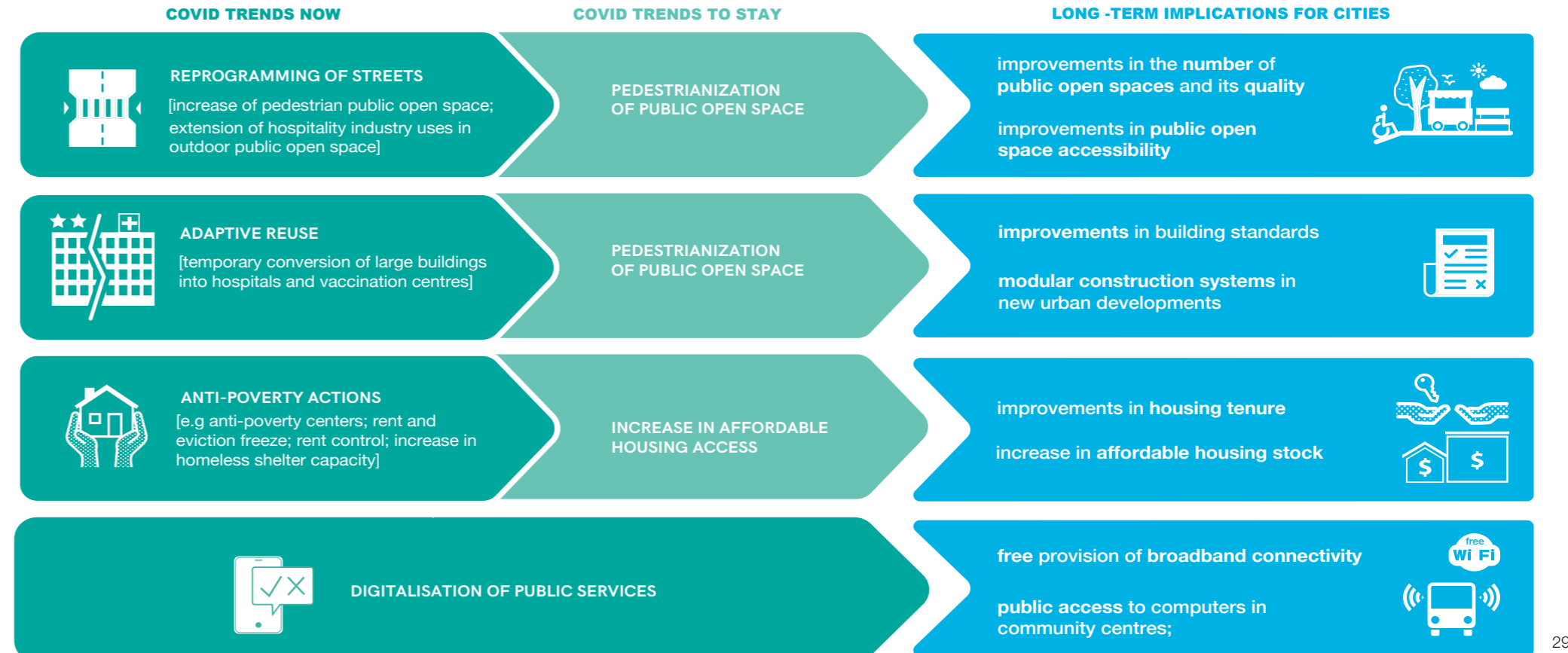
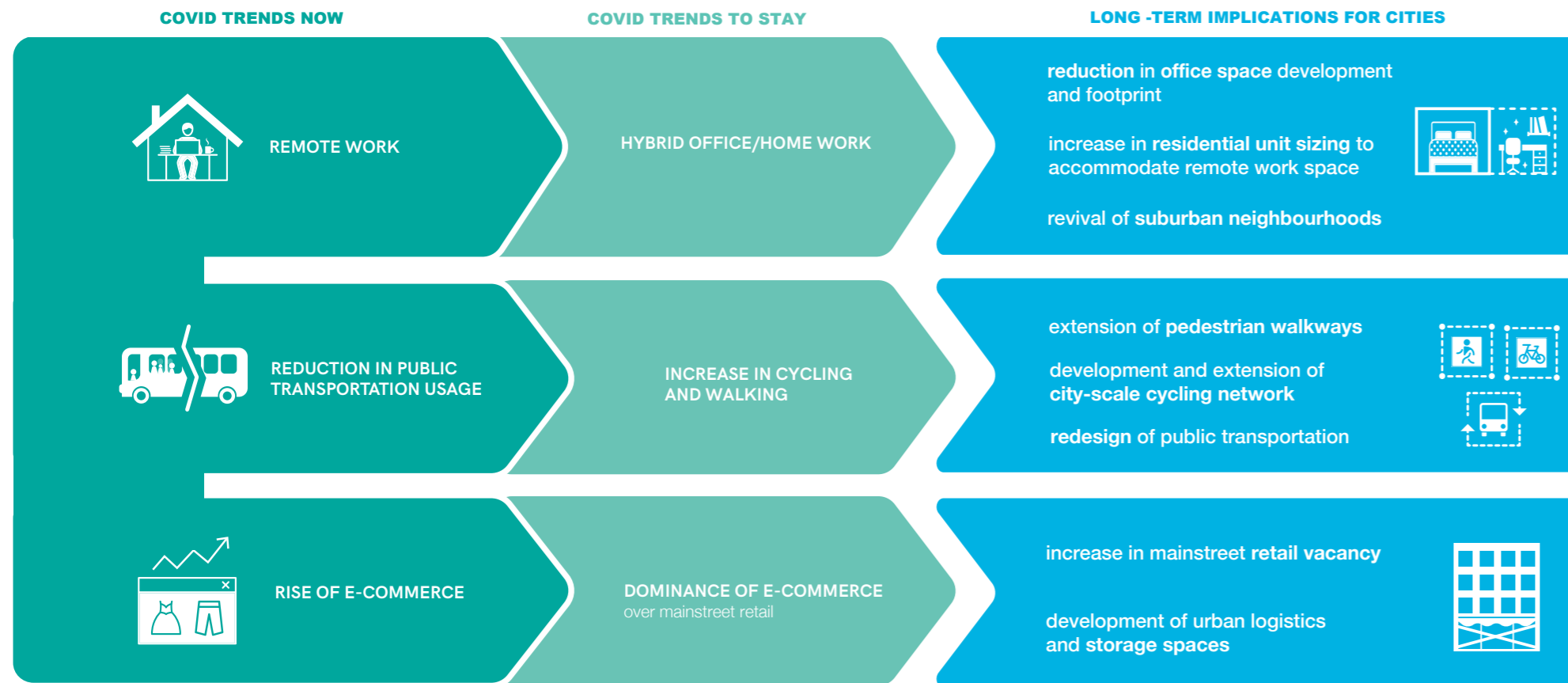
already extending specific programmes with Kenya pursuing the mobile-first technology in the digital transformation of its services to reach the 80% of people who own a phone. The experience of the pandemic has also revealed the insufficiency of **public health infrastructure** with many vacant buildings rapidly adapted to accommodate extensions of overcrowded hospitals. These weaknesses need to be urgently addressed to ensure resilience in the face of future public health crises.

Within a reorganisation of home-office settings, a reduction in commutes and a reduction in car dependency, the **public realm has to be reimagined** to become more

inclusive and to accommodate new uses in a more equitably distributed public space and blue-green network. Temporary and permanent playgrounds, outdoor dining, cycling lanes, green areas and recreational uses need to be accommodated in newly pedestrianised streets, underused and vacant lots across the city. With a rethinking of public realm programming, an opportunity emerges to integrate diverse **cultural activities** in public spaces to nurture a more inclusive sense of belonging. This large-scale vision and challenge also provides an opportunity to incorporate strategies of urban **environmental resilience and climate action** in new, vibrant public open spaces.

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“Through a multi-sector effort and inclusive approach, urban regeneration enables cities to provide accesas to residents to fundamental human rights: the right to the city, to adequate housing and land, the right to water, healthcare and sanitation and the right to gender equality, ensuring equal access to public and green spaces.”

Maimunah Mohd Sharif, October 2020



Case studies in Urban Regeneration Worldwide



« Over 100 buildings have been rehabilitated through the al-Darb al-Ahmar Housing Rehabilitation Programme in Cairo, Egypt.

Knowledge exchange is an essential component of the recovery process within the field of urban regeneration. As recovery schemes and project financing kick in globally, specific case studies about how cities in different regions have developed successful urban regeneration projects in response to the impacts of the Covid-19 pandemic or other specific urban challenges will suggest how urban regeneration can be approached at different physical scales and across culturally different communities. The following five case studies are organized along the size of the object of intervention of the specific urban regeneration project, from big to small: **region, city, neighborhood, street**

and building. Opening the list, the regional scale takes on city-specific dimensions and meanings. Urban regeneration projects taking on this scale need to be adapted to specific local contexts. In this case study, located in Quito, Ecuador, civil society took on the initiative of bringing together local and regional public authorities, large corporations, local farmers, and representatives of local communities to change the **governance structure** of regional food production and its urban distribution.

The second case study, located in Paris, France, hones in on a city-scale urban regeneration project and policy,

the implementation of which has been accelerated by the Covid-19 pandemic. The project takes on a holistic approach to **sustainable urban development, quality of open space and housing tenure.** The neighborhood takes multiple definitions depending on urban form, density, environment, socio-economic make-up and must therefore be identified within the context of the city where the intervention takes place. This case study, located in Chiang Mai, Thailand, identifies an urban farming intervention on a single lot, but whose object of impact is at the scale of an entire neighborhood and its **food security**, notably within its vulnerable communities.

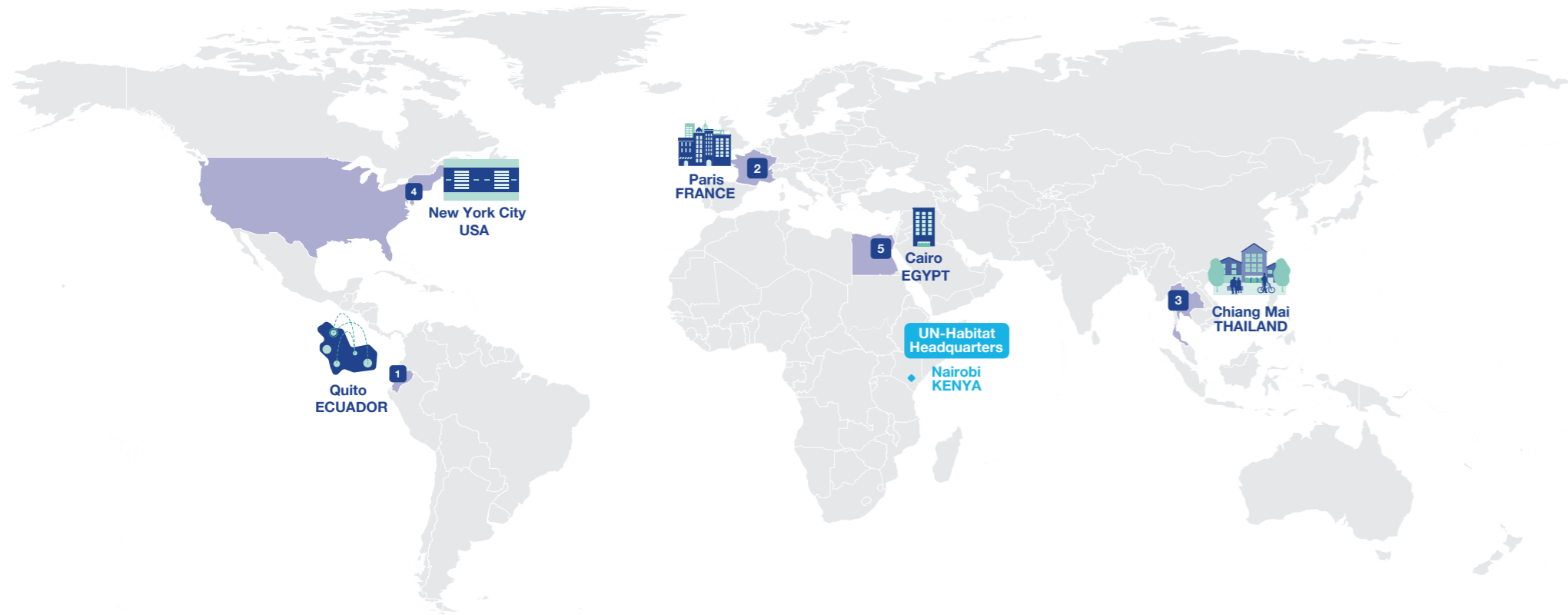
The fourth case study, located in New York City, USA, focuses on a small-scale urban regeneration project in direct response to the Covid-19 pandemic. Its object of intervention is a single street where community organizations, small businesses and city agencies come together to support safe **economic development.**

Closing the list of case studies, 'building' implies that the object of intervention of the urban regeneration project is a physical building, while the actual urban regeneration plan may be covering an entire neighborhood. This case study, located in Cairo, Egypt, focuses on improving **housing**

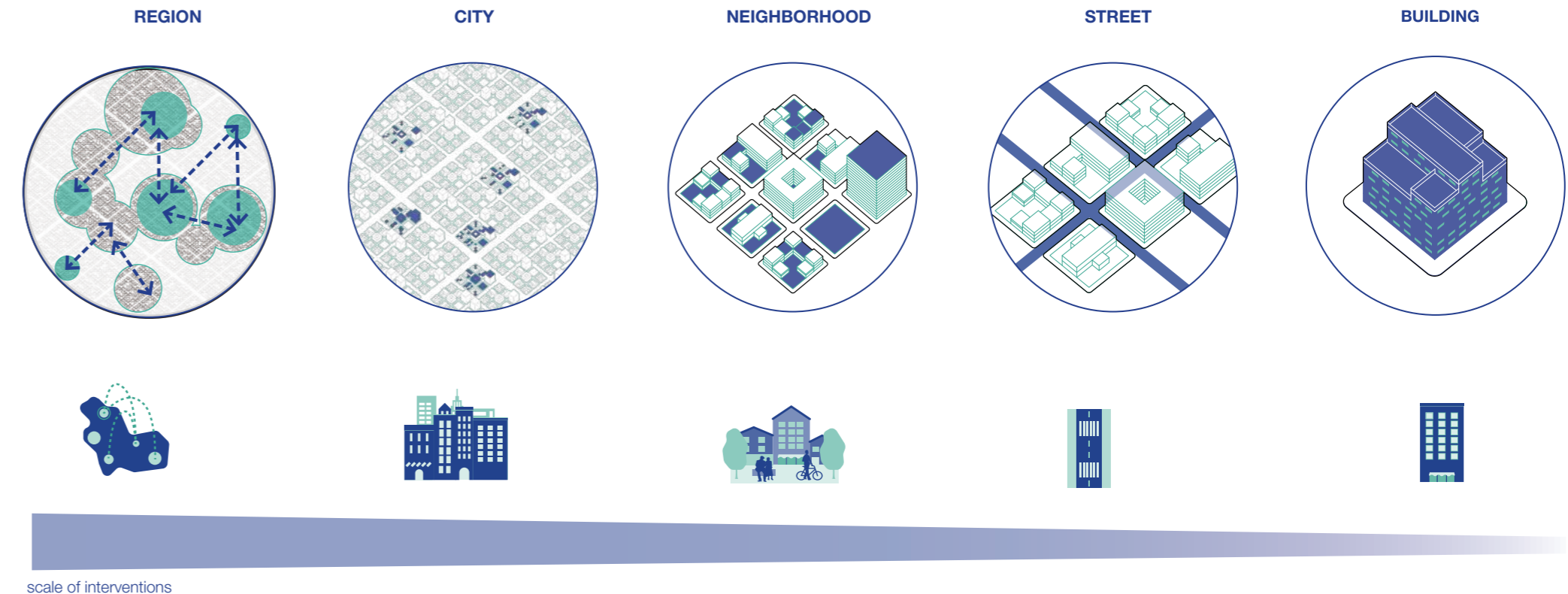
quality, public safety and preserving the historic built fabric through urban regeneration approaches.

This organization challenges conventional approaches to urban regeneration which start from large-scale plans or which are formulated by city agencies. Instead, the following examples showcase that urban regeneration could, for example, take place at the scale of a single street where the physical, social and economic elements are reshaped to improve specific aspects of urban life. While the fundamental organizational principle of the case studies is that of the scale of the object of intervention, each case study is

selected from a different geographical and cultural region to showcase how urban regeneration schemes adapt to local specificities. The geographic diversity emphasizes that there is no blanket approach to urban regeneration. Instead, urban regeneration approaches have to adapt and respond to local history, culture, economy, and urban form, while always grounded into a community engagement and participation scheme to raise consent and capacity.



Location of case studies (in purple) and the headquarter's office of UN-Habitat (blue).



Case Study 1
The Quito Agrifood Pact (PAQ)

Quito, Ecuador



Key stats

Project Dates = 2018 - ongoing

Key terms

- Participatory planning practices
- Public health outcomes
- Food security
- Urban governance
- Evidence-based public policy
- Multi-stakeholder engagement
- Community resilience

Key Project Financing Sources

- Quito Municipality
- Rikolto
- RUAF
- Center for Rural Development in Latin America



Project Description

Quito is the capital city of Ecuador with 2 million inhabitants. The city has over 3 million people in its metropolitan area. Even though agriculture is one of the city region's most lucrative industries with rice, bananas, cacao, sugar and coffee crops, Quito depends heavily on food imports from other regions in Ecuador. This is because the city exports most of its agricultural products and depends on few large food distributors who rely on large-scale supply chains. The city region only supplies 5% of the food its population needs locally and a further 12.7% of its food is supplied by the province the city is located in.¹ Moreover, Quito struggles to feed its population with growing food insecurity due to lack of affordable food, increasing food prices and potential supply problems.² The latter is mainly due to Quito's physical location which makes it vulnerable to volcanic threats that may disrupt larger food-supply chains, but also to its poor



Source: Resilient Cities Network, 'The Transformative Impact of Quito's Resilient Food Security Program', accessed in May 2021: https://resilientcitiesnetwork.org/urban_resiliences/quito-food-program/



Source: ISOCARP Review 15, David Jácome-Pólit et al., 'Quito's resilient agrifood system', p. 300, 2000, accessed in May 2021: <https://ruaf.org/assets/2020/01/Quitos-Resilient-Agrifood-System-1.pdf>

road infrastructure which urban food provision is dependent on. This is further exacerbated by a population projected to reach 2.8 million inhabitants by 2022.³

The three main food markets of meat, bread/grain and dairy are heavily dominated by few large food distributors with prices local farmers cannot compete with.⁴ Due to gradual food price increases, only 17% of food purchases of Quito families are from supermarkets with farmers markets and the informal food sector being the other source of food procurement.⁵

The increasing dominance of large food distributors via supermarkets who promote modernisation and concentration of food supply systems excludes small- and medium-sized producers and low-income consumers from access to food chains. However, supporting small- and medium-sized producers and businesses can be beneficial in the context of an urban crisis as they have stronger ties to local communities and their specific needs and, given their size, can be nimble and adapt to changing circumstances. In addition, smaller

Urban Regeneration Worldwide | Case study 1 | The Quito Agrifood Pact

Quito, Ecuador

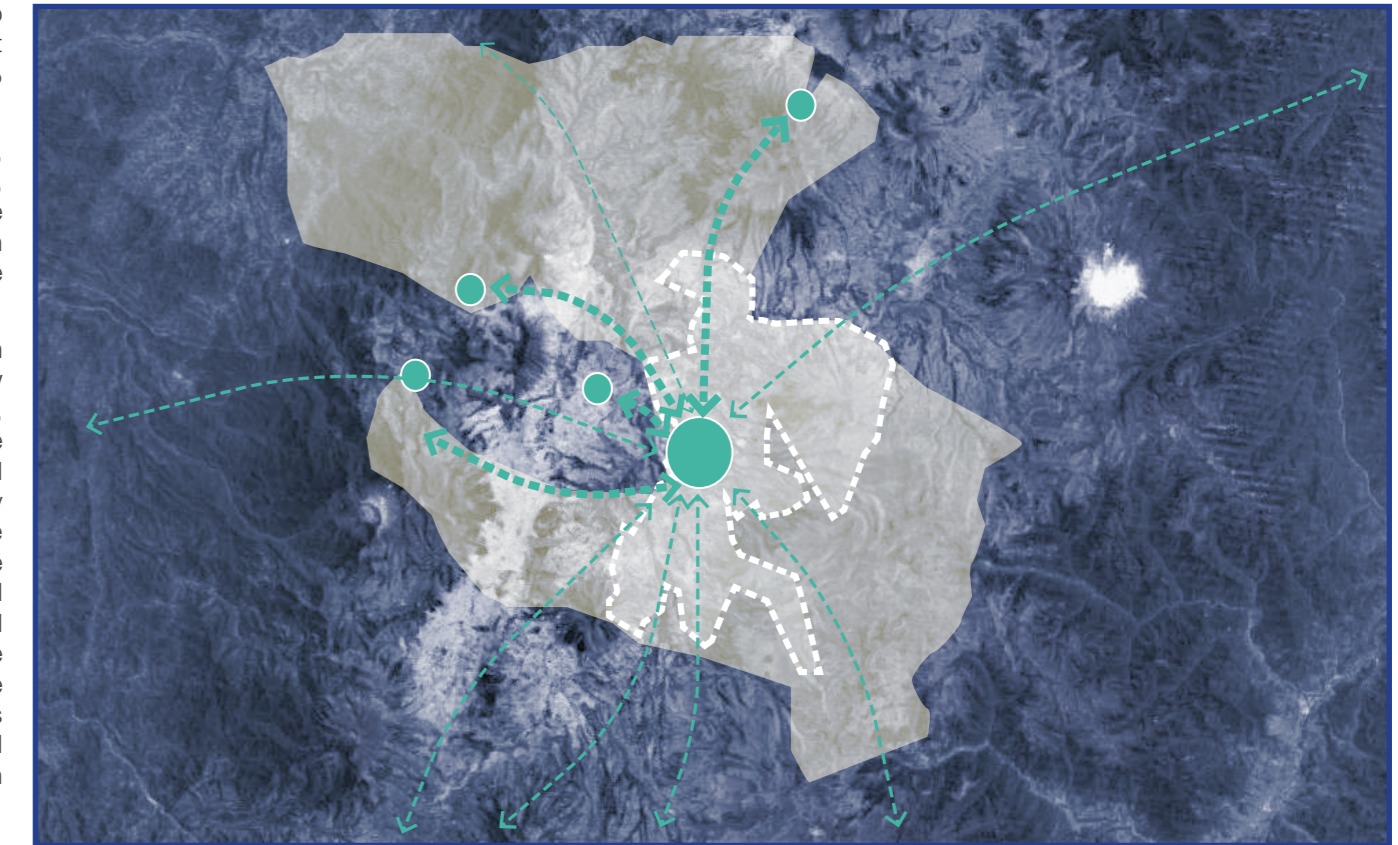


local food producers can provide fresh nutritious food to improve Quito's general public health in a city where almost of adults suffer from obesity⁶ and where a healthy diet is 60% more expensive than a regular diet.⁷

With the aim of developing a solid food system with little waste, a healthy offering to consumers and fair prices for local farmers, Rikolto, RUAF Global Partnership on Sustainable Agriculture and Food Systems, the Center for Rural Development in Latin America and the Municipality of Quito partnered up to create the multi-stakeholder platform Pact Agro-Food Quito (PAQ).⁸

Founded by civil society and local authorities, this platform has shifted the governance of the city's food policy to a new body consisting of the private and public sectors, academia, civil society and cooperation agencies. This new structure augments the voices of small producers, farmers and distributors, permits the development of inclusive food policy and ensures the right to food by redirecting surplus and waste to communities which are in most need. The governance platform has also been able to strengthen urban-rural linkages within the Quito region to leverage local agricultural production with large-scale distribution and to increase the share of fresh and affordable food on Quito's food market. The project initiators, Rikolto and RUAF, deployed mapping tools to identify the city's food supply and distribution chains and the city's vulnerable areas, such as, for example, localities with high numbers of people on food assistance programmes.

These mapping outputs have been instrumental in setting up the new governance of Quito's food policy as they revealed gaps in food distribution, vulnerabilities in food storage and lack of affordable food options in many urban areas. In this context, the Quito Agrifood Pact is an urban regeneration process that sets out to improve a specific aspect of urban life - food security - by restructuring its governance to make it more inclusive. This goal is made possible by continuous data gathering towards the development of evidence-based public policy.



Legend

- Quito City
- Quito Metropolitan District
- Regional Food Storage/Distribution Centers
- Provincial and National Food Distribution Connections

1:500,000



Key project outputs

- ✓ Governance platform bringing together civil society, private companies and local and regional authorities
- ✓ Participatory strategy for developing food policy
- ✓ Workshops around food economics, security and policy
- ✓ Collaborative platform with private sector to redirect surplus to communities in need and schools
- ✓ Map of the city's food production, distribution and consumption system to identify vulnerable areas
- ✓ Food hub mobile units using municipal buses
- ✓ Local organic production farms

Covid-19 Implications for the Project

The Quito Agrifood Pact and the city's new food policy governing body were launched in 2018 shortly before the Covid-19 pandemic and its ensuing disruptions started, but proved to be an essential platform to ensure the right to food in a period of urban crisis and broken urban-rural linkages. The disruption's impacts are especially concerning in Quito, where supply goods are concentrated in two opposite points of entry into the city connecting the region to national supply chains in areas of the country that are particularly vulnerable to climatic events. Given that the pandemic has hit low-income communities with mass unemployment, lack of access to healthy food makes these communities especially vulnerable.

The Quito Agrifood Pact brought together local producers, distributors and small- and medium-sized businesses to shorten the distribution chain and to increase local affordable food production. Data gathering and GIS mapping were used to understand the make-up of the food distribution and consumption systems and their vulnerabilities. The maps helped identify the locations of people in need of food assistance, including people with disabilities or older adults.

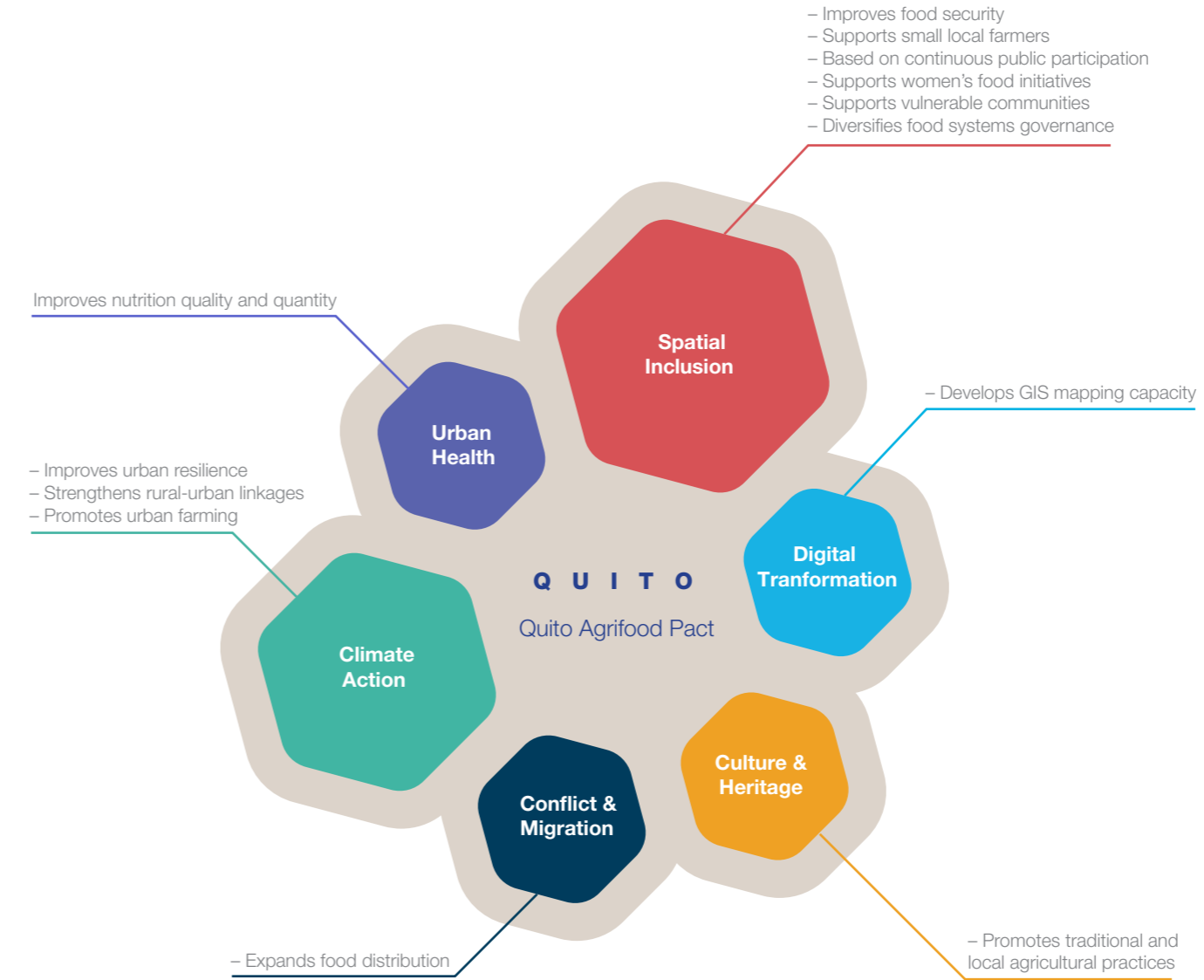
The new governance structure that amplified the voices of local communities and food producers, distributors and businesses and raised institutional capacity was also able to swiftly facilitate access to food. This was done through food hub mobile units using municipal buses, partnering with food banks and developing a communication campaign for responsible food purchasing.⁹ In addition, the new regional governance body also identified and set up prototypes for initial urban farms on underused lots where local residents could produce fresh food closer to where they live. The new governance structure thus ensured community resilience in the face of the public health crisis. Moreover, by increasing the share of locally produced food and access to affordable fresh, more nutritious food, the new governance structure also improved the population's nutrition.



Large volumes of food delivered on repurposed city buses in Wuhan. Quito has also adopted this approach to facilitate food access. Source: C40 Knowledge Hub, 'Food and Covid-19: How cities are feeding residents today and building a better tomorrow', 05/2020.



Source: Rikolto Online, Nataly Pinto Alvaro, 'Quite: A food system put to the test in the pandemic', 26/02/2021, accessed in May 2021: <https://congo.rikolto.org/en/news/quito-food-system-put-test-pandemic>



The diagram maps the contribution to the six crosscutting areas linked to urban regeneration processes in the current context.

Considerations for Inclusion and Sustainability

The adjusted lens identified at **UN-Habitat's Expert Group Meeting 'Urban Regeneration as a tool for inclusive and sustainable recovery'** enables a reflection on the new contexts in which urban regeneration takes place today. The Quito Agrifood Pact was developed to integrate the multiple scales of the agri-food network (from the neighbourhood to the region and beyond)¹⁰ with the aim of developing a more resilient system that is able to respond and adapt to changing circumstances. In this context, the Quito Agrifood Pact is a model for an **inclusive participatory approach** to urban regeneration. Firstly, it is a platform that brings together city leaders, city planners, policymakers, the private sector and academia to work together towards strengthening and adapting food distribution. Secondly, the Pact commits to meaningful and continuous engagement with residents. During the Covid-19 pandemic, RUAF and the Water, Land, Ecosystems Programme (WLE) generated GIS maps visualising food distribution across the Quito area which enabled the municipality to target local disruptions. This action specifically addresses the challenge of **spatial inequality** by leveraging **digital tools**. Targeting SDG 2, the Pact focuses on improving **urban health** and supporting local communities to become more resilient in the face of **climate change** and its disruptive effects on food production and supplies in the long-term. Through a programme that started in the 2000s, AGRUPAR (Participatory Urban Agriculture), anticipating the Agrifood Pact, the municipality engaged mainly female heads of household to support their access to nutritious food produced locally in urban gardens¹¹, addressing the **gender dimension** within the food system's distribution and leveraging urban agriculture as a bridge to **community-led processes**.



Key strengths

- + Inclusive participatory planning process
- + Promotion of sustainable development and resilience
- + Public health outcomes
- + Private-Public-NGO partnership and collaboration building

Key weaknesses

- Slow progression due to many and diverse stakeholders.

Project strengths

The strength of the Quito Agrifood Pact lies in its capacity to bring together civil society, private sector and public sector stakeholders operating at a regional scale to provide healthy and affordable food to Quito's residents in a more inclusive urban governance format. The project's success became visible during the Covid-19 pandemic when the Quito Agrifood Pact was able to rapidly gather residents' food needs and address them with concrete solutions. Importantly, the mapping efforts revealed inequality and insufficiency spatially and specifically identified areas not covered by food distribution. Addressing the gender dimension of food distribution, the initiative empowers women to become more self-sufficient in their food supplies through the development of local urban gardens. Throughout, the project is based on an extensive and diverse participatory effort which includes surveys and mapping exercises. These diverse participatory tools engage both qualitative and quantitative data gathering to relate personal experiences with distribution patterns. The combination of teaching agricultural and entrepreneurship skills and setting up urban gardens has insofar been successful and has led to the production of 1,350,000 kg of organic food per year by 2021.¹²

Project weaknesses

While setting up the new food governance structure is an ongoing effort, the Quito Agrifood Pact has insofar successfully implemented immediate crisis-response projects to the Covid-19 pandemic's impacts on food security, but whether the agricultural and entrepreneurship skills will support economic independence and resilience will be determined in the long term.



Large volumes of food delivered on repurposed city buses in Wuhan. Quito has also adopted this approach to facilitate food access. Source: C40 Knowledge Hub, 'Food and Covid-19: How cities are feeding residents today and building a better tomorrow', 05/2020.



Source: Rikolto Online, Nataly Pinto Alvaro, 'Quite: A food system put to the test in the pandemic', 26/02/2021, accessed in May 2021: <https://congo.rikolto.org/en/news/quito-food-system-put-test-pandemic>



Source CGIAR, Research Program on Water, Land and ecosystems, René van Veenhuizen, 'Resilient and participatory: How Quito's setting the standard on urban food systems', accessed in May 2021: <https://wle.cgiar.org/news/resilient-and-participatory-how-quito-s-setting-standard-urban-food-systems>

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Case Study 2
The Minimes Baracks and the 15-Minute City

Paris, France



Key stats

Area = 32.000 sqm
 Project Dates = 2020 - ongoing

Key terms

- Affordable housing
- Community-oriented programming
- Pedestrianization
- Public realm improvements
- Green areas

Key project financing sources

- City of Paris
- Region of Ile de France



Project Description

In July 2020, the C40 Mayors' Agenda for a Green and Just Recovery presented 'creating 15-minute cities' as a key action for the post-Covid-19-pandemic recovery, agreed on by the mayors of 97 cities that represent one-twelfth of the world population. The central idea of the 15-minute city, a term coined by the Franco-Colombian scientist Carlo Moreno, is that a resident's core needs are met within a 15-minute walk, bike-ride or public transit-ride with the aim of reducing carbon emissions.

This urban concept reimagines the city into one where home, workplace, stores, healthcare and public amenities are brought within closer reach from one another and into neighbourhoods physically connected by green circulation arteries and digitally through the online public provision of services. Further implications of the 15-minute city are providing neighbourhood-level variety in housing types, sizes and affordability, ensuring clean air and green public open space, and accommodating flexible working conditions. Additionally, the reduction in car dependency would reduce street parking by 72%¹ - this would greatly improve the public realm with the widening of sidewalks, city-wide bike networks and outdoor dining programming. This urban concept also hinges on equitable access to public amenities, services and green space for all and on participatory planning practices to identify local community needs.

Taken holistically, the 15-minute city is a city-scale strategy of urban regeneration which seeks to revitalise urban environments heavily impacted by traffic and pollution. It is also a highly attractive approach for urban regeneration in a post-Covid-19 pandemic era of building back better where the preconditions of flexible work arrangements and the need for more localised amenities already exist.

The City of Paris is one of several cities around the world which has implemented specific projects towards becoming a 15-minute city². As this urban concept presupposes providing



Illustration by Nick Bascon for Paris en Commun.
 Source: Press release, Le Paris du Quart d'heure, Anne Hidalgo, Paris en Commun, 2020.



Illustration by Micael for Paris en Commun.
 Source: Medium, Zung Nguyen Vu, 'The key to 15-minute cities? Neighbourhood service design', 19/11/2020, accessed in 05/2021: <https://medium.com/strategicdesign/the-key-to-building-15-minute-cities-good-neighbourhood-services-48d5bf14a7f1>.

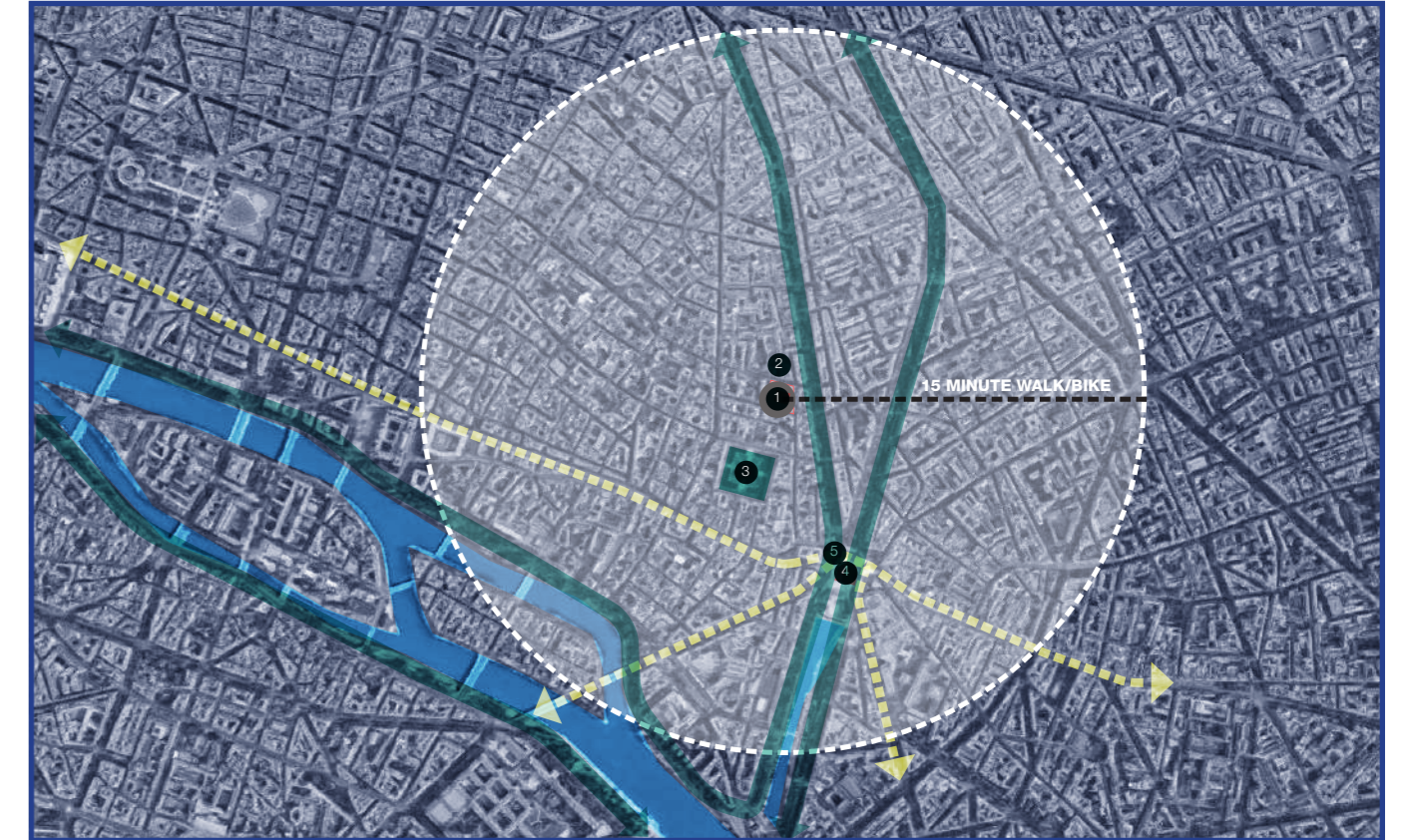
Paris, France



essential needs closer to where people live, housing provision is central to the 15-minute city. The Minimes Barracks is an urban block in the centre of Paris where living, working and playing are brought in close proximity. The former military barracks buildings have been transformed into a mixed-use housing complex with 70 social housing units.³ The ground floor is occupied by a nursery, a community restaurant, nine maker spaces, an office space and an art gallery, all surrounding a central green public space with a playground. By programming affordable housing at the city centre, the project thus aims to provide equitable access to urban amenities to city dwellers of all income levels. It also embodies a model for an inclusive compact mixed-use programming development with ample open space which brings together people of different ages, abilities and income-levels.

Similar projects are underway across the city and many have been accelerated by urgent needs during the Covid-19 pandemic. For example, a 5-minute walk away from the Minimes Barracks is the Place de la Bastille, a partially pedestrianised area with reduced access for motorised vehicles. Cutting through the Place de la Bastille are a series of "corona pistes", cycling lanes set up to encourage cycling across the city during the Covid-19 pandemic. These cycling lanes will become permanent as the City of Paris has secured a large-scale investment from the regional government for the project.

By proposing to bring urban functions closer to one another, the urban regeneration process also depends on increasing the flexibility of uses in public buildings. For example, the City of Paris is proposing to offer school spaces to local community needs during weekends and school breaks. It is also aiming to make the city more child-friendly by revitalising streets around schools into 'childrens' streets', i.e. temporary playgrounds during school opening times. In this context, the urban regeneration process can encompass a holistic city-wide strategy with specific locally implemented projects as catalysers of inclusive and vibrant cities.⁴



Legend

- | | | |
|---|----------------------|------------------|
| 1 | Jardin Beltrame | Green Network |
| 2 | Nursery | Blue Network |
| 3 | Place des Vosges | Pop-Up Bike Lane |
| 4 | Place de la Bastille | |
| 5 | Pop-Up Bike Lane | |

1:25.000



Key project outputs

- ✓ Adaptive reuse of former military barracks into affordable housing with mixed-use amenities
- ✓ Providing affordable housing in urban core
- ✓ Mixing income-levels in urban core
- ✓ Mixing uses in compact urban block
- ✓ Increasing share of green open space
- ✓ Improving pedestrian and cycling infrastructure
- ✓ Decreasing car dependency
- ✓ Improving air quality

Covid-19 Implications for Project

With proximity as a guiding principle for urban programming, the 15-minute city reduces the need to travel long distances for work, shopping and leisure, while it increases the amount of walkable and recreational space in dense urban environments. This contributes to resilience in the face of potential future urban disruptions. In many cities, the Covid-19 pandemic lockdowns exposed a series of insufficiencies in the urban network, including remoteness to food supplies and other essentials, insufficient or inadequate green space, underdeveloped cycling and walking infrastructure, inefficient public transportation networks, among others. In this context, the mixing of varied uses and the availability of essential public services within a 15-minute walking, cycling or public transit radius addresses the specific insufficiencies experienced by urban populations during lockdown periods.

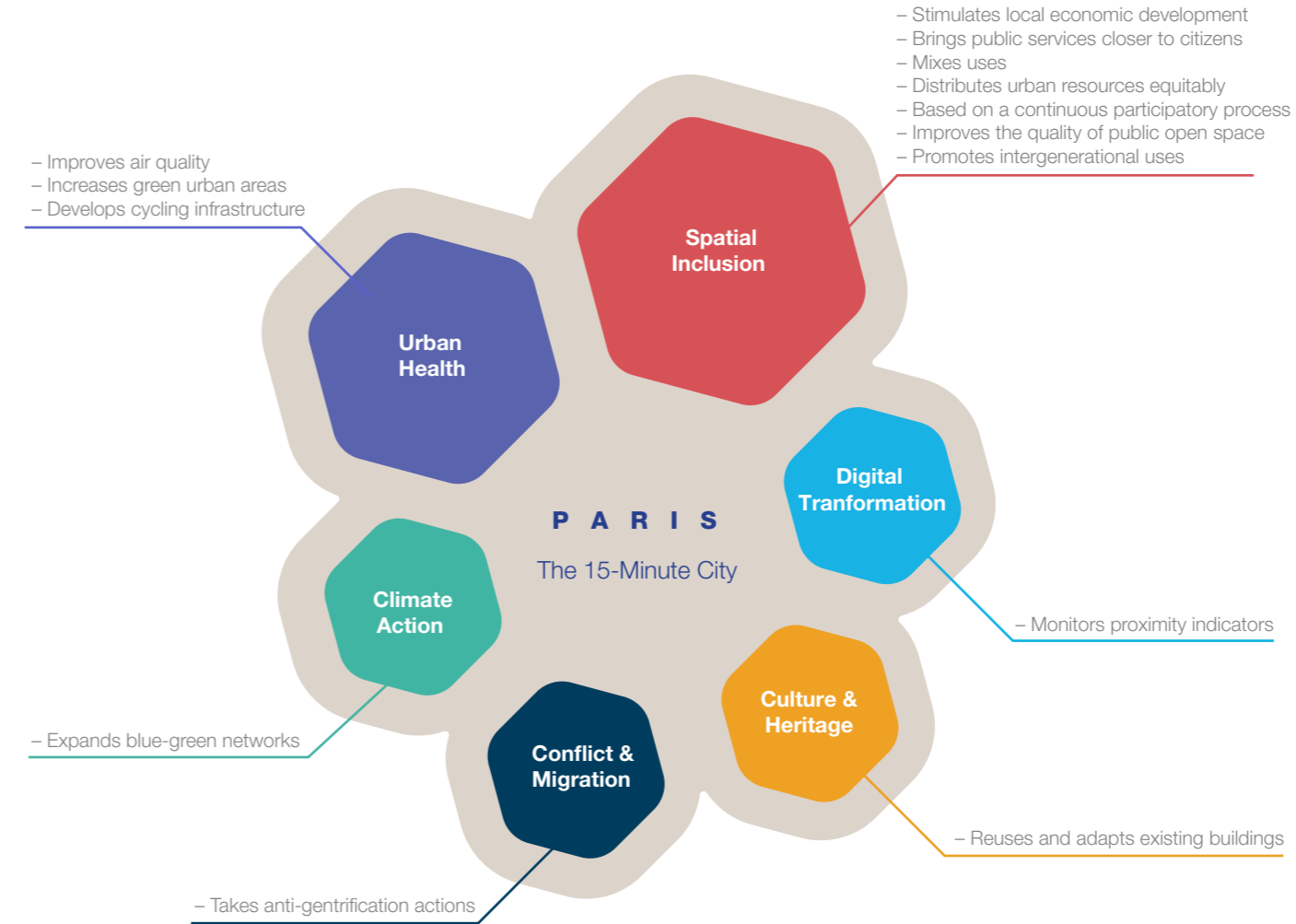


Source: Samuel Boivin/NurPhoto. Vivienne Walt, The Time Online, 'We Heard Birds.' Paris Mayor Anne Hidalgo on How Lockdown Offered a Glimpse at a Greener City', 09/07/2020



Courtyard of Minimes barracks. Source: Dmitry Kosyukov for Bloomberg Business Week. Feargus O'Sullivan, Laura Bliss, 'The 15-Minute City—No Cars Required—Is Urban Planning's New Utopia', 12/11/2020

In addition, the 15-minute city connects the urban environment through extensive blue-green networks that increase the amount of trees, tree cover and water bodies. The former improve urban air quality and the latter reduce overheating, thus mitigating the impacts of climate change in urban areas.⁵ Coupled with an increase in recreational areas and accommodating cycling and pedestrian infrastructure which stimulate physical activity, the 15-minute city has strong urban health outcomes.



The diagram maps the contribution to the six crosscutting areas linked to urban regeneration processes in the current context.

Considerations for Inclusion and Sustainability

The 15-Minute City specifically addresses the challenges exposed by the Covid-19 pandemic with a focus on urban health as a central departure point for city-wide urban regeneration ambitions. By bringing essential needs within walking or cycling distance, this urban regeneration process sees **health as an investment**. It also justifies **climate action**: through intensified **blue-green networks** and an increase in urban biodiversity, the 15-Minute City protects health and promotes sustainable economy, while protecting environmental resources. To achieve its proximity goals, the process looks to **adaptive reuse** as a tool to bring diverse uses together in compact building envelopes, where possible. This enhances **local cultural heritage** and preserves urban identity, while pursuing development without the associated CO₂ emissions. With a **polycentric urban approach**, the process also aims at reducing spatial inequality, notably that generated by monocentric urban models that favour investments in the urban core to the detriment of the periphery. The core aim of the 15-Minute City – access – needs to be measured through context-specific indicators throughout the urban regeneration process. To that end, digital transformation of local governance is essential to collecting **quantifiable data** efficiently and reliably.



Strengths

- + Public open space creation
- + Adaptive reuse of unused lots and buildings in urban core
- + Anti-poverty action
- + Increasing community self-sufficiency
- + Extensive public participation
- + Reducing carbon emissions

Weaknesses

- Small-scale and insular development

Project Strengths

The 15-minute city's greatest strength is the provision of a bold vision for a car-free or car-poor environment where living, working and leisure are in close proximity. The project improves urban air quality through car-use reduction, stimulates physical activity through the expansion of pedestrian and cycling infrastructure and reduces the impacts of climate change by strengthening blue-green networks, resulting in an improved urban health. It also fundamentally proposes an intelligent housing strategy which promotes social inclusion through mixed income-levels, multi-generational living and equitable access to urban amenities. While the vision is city-wide, its implementation is project-based and determined through extensive localised public engagement processes. Through its application in a dense historic urban fabric, the project demonstrates how the adaptive reuse of buildings can lead to more sustainable construction practices and more equitable housing policies in the urban core.

Project Weaknesses

The urban regeneration process requires insular development which, if done unevenly, may weaken the city-wide vision. The public and private amenities on offer in a given neighbourhood can differ greatly in quantity and quality across the city depending on local resources, community engagement and local economic conditions. Defining and ensuring a minimum standard for proximity, housing quality and essential uses is currently lacking, which may lead to exacerbated spatial inequality. Without minimum standards and strong urban networks, the urban regeneration project is susceptible to creating siloed areas. For its success, the project relies heavily both on large-scale municipal, regional and national investments and coordination for the achievement of city-wide circulation and public space networks and on small-scale neighbourhood-level community initiative, neither of which are guaranteed.⁶



Courtyard of Minimes barracks. Source: Dmitry Kosyukov for Bloomberg Business Week. Feargus O'Sullivan, Laura Bliss, 'The 15-Minute City—No Cars Required—Is Urban Planning's New Utopia', 12/11/2020



Source: Samuel Boivin/NurPhoto. Vivienne Walt, The Time Online, 'We Heard Birds.' Paris Mayor Anne Hidalgo on How Lockdown Offered a Glimpse at a Greener City', 09/07/2020



Place de la Nation, one of seven transformed squares. Source: Dmitry Kosyukov for Bloomberg Business Week

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Case Study 3
Chang Mai Urban Farm

Key stats

Area = 4,500 sqm
 Project Dates = 2020 - ongoing

Key project terms

Food security
 Underused lots
 Community building
 Economic development and resilience
 Urban farming
 Poverty alleviation

Key project financing sources

Community Organizations Development Institute (financial)
 Chiang Mai City Administration (bulldozers and equipment for clearing landfill)
 Chiang Mai Province Governorship (planning-related support)
 Various small community donations (seeds)



Project Description

Chiang Mai is a city counting 130,000 inhabitants and has a metropolitan population of 1 million being the largest city in northern Thailand. Its economy is heavily dependent on the tourism industry with the city registering a 15% growth in visitors from year to year since 2011 and counting over 7 million visitors in 2015.¹ In this context, given global travel restrictions starting in the spring of 2020, the Covid-19 pandemic has severely impacted many residents' sources of income. These restrictions have disproportionately affected Chiang Mai's low-income workers who abruptly lost their jobs in the tourism and service sectors. Because Chiang Mai's low-income residents spend more than half their incomes on food², the loss of their source of revenue and lack of access to affordable food generated mass food insecurity as residents struggled to feed their families. This is further exacerbated by pandemic-related global food supply disruptions which have caused food prices to rise by 38% worldwide and basic food prices such as those of maize to increase by 80%.³

2,500 low-income families live in informal settlements along the Mae Kha canal, a highly polluted urban canal that nevertheless supports an ecosystem of trees that runs through the city's historic district. The architectural firm Jaaiban Studio pursued community mapping to identify Chiang Mai's unused lots as potential places for planting trees to mitigate the city's heavy air pollution. However, when the impacts of the pandemic made it difficult for thousands of Chiang Mai families to access food, Jaaiban Studio identified a landfill site within the Mae Kha canal district that could be cleared and used as an urban farm where community residents could practise urban agriculture for basic foods to increase the low-income community's food security throughout the pandemic and beyond. The Mae Kha canal community had been at the forefront of Chiang Mai's community organising, pooling resources to upgrade the neighbourhood's housing stock, clear the polluted canal and improve the neighbourhood's overall quality of life. Faced with

Chang Mai, Thailand



Source: Chiang Mai Urban Farm

Urban Regeneration Worldwide | Case study 3 | Chiang Mai Urban Farm

Chang Mai, Thailand



increased food insecurity and led by Jaaiban Studio, the Mae Kha canal community came together in March 2020 to lobby local and provincial authorities to let the residents transform the landfill into a 4,800 sqm urban farm. Chiang Mai's Province Governorship supported the initiative with planning approvals and the city's administration provided bulldozers, equipment and manpower to clear the landfill. After clearing the site, the project organisers added a 1-metre thick soil layer for the gardening beds. Community members then started planting with seeds and gardening tools received from private donations.

By June 2020, fruit and vegetables were growing in the newly created urban farm of the Mae Kha canal neighbourhood and the most vulnerable community members were supported in feeding their families. After receiving a grant from the Community Organisations Development Institute, Jaaibar Studio designed and built a bamboo-structure market where Chiang Mai urban farmers sell excess produce. In the long-term, the farm is also a motor for neighbourhood economic development.

The Chiang Mai Urban Farm project is an unconventional urban regeneration plan where an informal local leader engaged the community to leverage an underused lot for socio-economic development. With modest private donations and support from provincial authorities, the rapid implementation of the project reduced food insecurity and alleviated poverty while revitalising a former landfill into an economic community driver in both the short- and long-term. Additionally, the active engagement of the local community with the project implementation has given Mae Kha canal's most vulnerable residents a sense of ownership and belonging, a valuable project feature for building trust and raising consent for future urban regeneration initiatives within the community.



Legend

- Chiang Mai Urban Farm
- Mae Kha Canal and Communities

1:5000



Key project outputs

- ✓ **Productive farm** set up in urban core
- ✓ Food production brought within reach to **2,500 low-income families**
- ✓ Increase in disadvantaged community **food security**
- ✓ Public health outcomes in terms of **improved nutrition**
- ✓ **Economic development** through set up of market

Covid-19 Implications for Project

Chiang Mai Urban Farm project is a direct response to the hardships experienced by low-income communities due to the impacts of the Covid-19 pandemic. Food insecurity is a specific affliction of Chiang Mai's Mae Kha canal low-income community who saw its incomes slashed after the fall in the tourism and service sectors in the spring of 2020.

By leveraging a government-owned landfill within the Mae Kha canal neighbourhood, the community-initiated project set up a highly productive farm at the centre of the city where local residents affected by unemployment and the rise in food prices could grow produce. Since opening in June 2020, the Chiang Mai Urban Farm has improved nutrition, lowered food expenses and built greater self-sufficiency among some of the city's most vulnerable people. In the short-term, the project



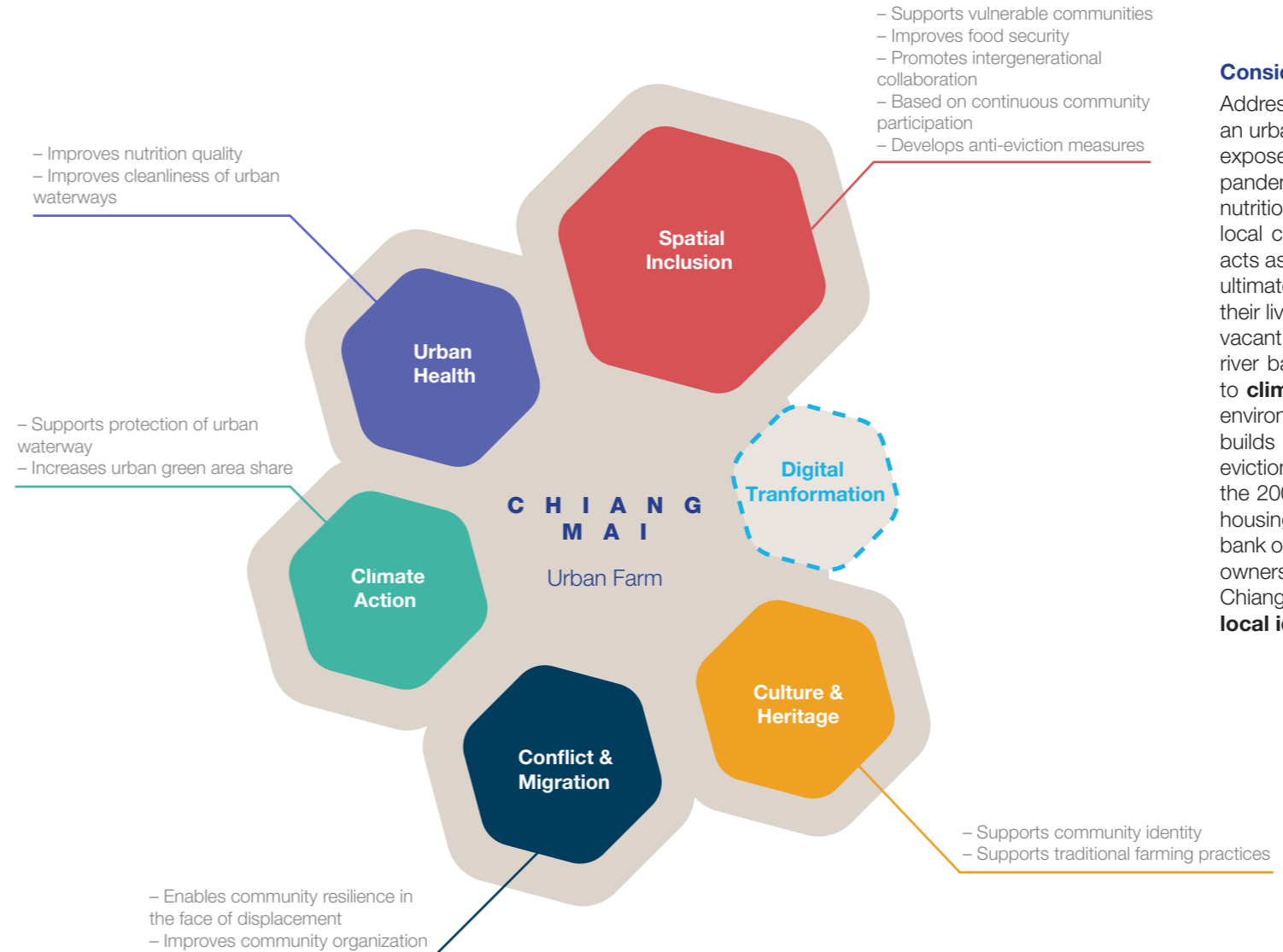
Children cultivating their own fruit and vegetables. Source: Chiang Mai Urban Farm, as seen in International Institute for Environment and Development, "Rubbish dump turned lush urban farm", 2020.

has directly provided Mae Kha canal neighbourhood families with food. In the long-term, the project has increased awareness about urban farming and spread specific knowledge on how to grow food. It has also contributed to local economic development via the physical market space where local producers can sell their excess produce and fruit. Taken together, these accomplishments contribute to the community's resilience in the face of future urban crises. Additionally, Chiang Mai Urban Farm has also improved the nutritional quality of the food consumed by Mae Kha canal community families which has clear public health outcomes in the long-term.

On the whole, the urban farm is part of wider community-led efforts to clean the canal and to plant trees with the aims of preserving the urban canal and improving quality of life and urban health.



The farm's multipurpose public space hosting a socially-distanced public event. Source: Chiang Mai Urban Farm, as seen in International Institute for Environment and Development, "Rubbish dump turned lush urban farm", 2020.



The diagram maps the contribution to the six crosscutting areas linked to urban regeneration processes in the current context. Digital transformation was not identified as a key thematic area of the initiative.

Considerations for Inclusion and Sustainability

Addressing SDG 2, Chiang Mai Urban Farm emerged as an urban regeneration process to address spatial inequality exposed by rising food prices during the Covid-19 pandemic. By increasing access to locally-grown nutritious food and by developing programmes to educate local communities on **urban agriculture**, the urban farm acts as a bridge to **community-led processes** that would ultimately enable residents to become more self-sufficient in their livelihoods. Prior to the urban farm, the initiative flipped vacant lots into tree-planted gardens along a neglected river bank, thus improving local urban health, contributing to **climate change mitigation efforts** and protecting an environmental resource. The urban regeneration process builds up on community-led efforts to specifically address evictions of residents of informal settlements that started in the 2000s. Then, local communities connected to support housing upgrading, clean the canal and preserve the river bank of the Mae Kha canal in an effort to enforce community ownership and to avoid displacement.⁴ In this context, the Chiang Mai Urban Farm contributes to the **preservation of local identity** and to the **enforcement of human rights**.



Strengths

- + Community-initiated and -run project;
- + Multi-stakeholder engagement;
- + Leveraging underused lots;
- + Increasing food security;
- + Alleviating poverty;
- + Crisis response.

Weaknesses

- Centralised site risks reducing access for most Mae Kha communities who live along the canal's entire length;
- Receiving support from city administration to use unused city-owned landfill lot for urban farm was difficult.

Project Strengths

By being community-initiated and -run, Chiang Mai Urban Farm's biggest strength is that it addresses and adapts to the neighbourhood's specific needs, both during and beyond the conditions imposed by the Covid-19 pandemic. It is also a model for transforming an underused lot in the urban core into a highly productive site with economic and social benefits. The adjacency of food production and farmers' market bring the urban regeneration project to the scale of the neighbourhood, activating the public realm in its immediate vicinity, while improving the quality of life of all the neighbourhood's residents. The project succeeded in alleviating poverty and food insecurity by teaching the local community gardening and entrepreneurial skills and by applying them onto a real-world project. The successful combination of educational tools and applied outputs led to the community's sense of ownership over the urban farm and its market, serving as a model for bottom-up urban regeneration.

Project Weaknesses

Chiang Mai Urban Farm's centralised site risks reducing access to many Mae Kha communities who live further away along the canal or to other vulnerable groups in the city. Leveraging the mapping exercise through which Jaaiban Studio identified underused lots across the city to extend the urban farming benefits to all Mae Kha community members would improve food security across all the neighbourhood's vulnerable groups and would provide a model for scaling up a successful urban regeneration pandemic response. While the project brought together a wide variety of stakeholders, the organisers initially struggled to get support from local public authorities who should be prime partners to the project as they own the land. The initiators succeeded in implementing the project with material support and pressure from regional authorities.



Members of the Chiang Mai Homeless People's Network. Source: Chiang Mai Urban Farm, as seen in International Institute for Environment and Development, "Rubbish dump turned lush urban farm", 2020.



Source: Chiang Mai Urban Farm, as seen in International Institute for Environment and Development, "Rubbish dump turned lush urban farm", 2020.



Zoning of the urban farm. Source: Chiang Mai Urban Farm, as seen in International Institute for Environment and Development, "Rubbish dump turned lush urban farm", 2020.

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Case Study 4
Chinatown Economic Recovery Project

New York City, USA



Key stats

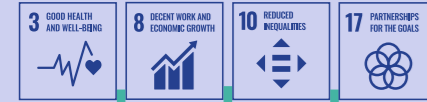
Area = 50.000 sqm
 Project Dates = 2020 - ongoing

Key project terms

Public realm activation
 Local economic development
 Open space pedestrianization

Key project financing sources

Small local businesses
 The Rockwell Group
 New York City Hospitality Alliance
 Think Chinatown
 The Chinatown Partnership



Project Description

Chinatown is a 100,000-inhabitant neighbourhood in Manhattan, New York City, USA, whose main economic drivers are tourism and the restaurant industry. When the Covid-19 pandemic hit and New York City banned on-premise dining in March 2020, the neighbourhood's many small shops and restaurants had to close. While many restaurant businesses in the rest of the city shifted to delivery and takeaway services, the small businesses of Chinatown lost their sources of revenue as they lacked the financial and digital resources to shift their business online. 90% of Chinatown businesses ceased operations as a consequence.¹ The area's small business owners took an economic hit after business had already slowed down in early spring 2020 due to prejudice against the predominantly ethnically Chinese community of the neighbourhood.² Within a few months, an economically and culturally vibrant neighbourhood became economically precarious and unsafe to many residents facing prejudice.

By the summer of 2020, New York City's Department of Transportation launched its **Open Streets/Open Restaurants programme**^{3,4} which eased restrictions on on-premise dining to permit restaurants to service customers outdoors on the sidewalk and/or on the roadway. The programme mapped out which streets would close to vehicular traffic to provide space for temporary seating and table structures where customers could be served in safe environments. While many restaurants took advantage of the new open streets, Chinatown's businesses struggled to invest resources in setting up temporary structures, made difficult by the neighbourhood's narrow sidewalks and streets, as well as its many restricted parking spaces.

With the aim of revitalising the local neighbourhood economy and activating the streetscape as early as May 2020, an Asian/Pacific Islander women-led group of Chinatown architects from three associations (A+A+A, Chaos Built, Think!Chinatown) developed a series of prototypes for



Source: Think!Chinatown. Assembly for China Town. A+A+A Studio. Accessed May 26, 2022. <https://www.thinkchinatown.org/assembly>.



Source: Lynch, Scott. Outdoor Dining in Chinatown, 2020. March 5, 2021. Gothamist. <https://gothamist.com/news/as-chinatown-remains-on-life-support-how-will-the-next-councilmember-tackle-post-pandemic-recovery>.

Urban Regeneration Worldwide | Case study 4 | Chinatown Economy Recovery Project

New York City, USA



affordable physical structures for outdoor dining which would help small local businesses operate anew. To finance their efforts, the community organisation set up ThinkChinaTown.org to gather donations to build the affordable structures. This community initiative expanded to propose the neighbourhood-specific Chinatown Economic Recovery Project that would bring together local communities, architects, businesses and the City in a formal capacity to find affordable, quick and tangible solutions to extend economic activity in the public realm beyond the neighbourhood's central streets.



In July 2020, The Chinatown Partnership, a local development corporation originally set up to support the neighbourhood's rebuilding after the impact of 9/11, and the Rockwell Group, an architecture firm focused on restaurant design, partnered up to develop, finance and build a 120-seat outdoor dining structure on Mott Street, a formerly vehicular street now pedestrianised at the centre of the neighbourhood. This permitted many businesses along this central neighbourhood artery to restart operations after months of inactivity and to increase footfall in the neighbourhood. The extension of restaurants into outdoor dining on sidewalks and roadways has been accompanied by a series of public programming actions, including Mott Street Public Art Engagement, Outdoor Dining Initiative and DineOutNYC.⁵

Collectively, the efforts of the local community, local authorities, private companies and community organisations led to the successful revitalization of the neighbourhood following the immediate impacts of the Covid-19 pandemic.



Legend

- Hard Open Space
- Soft Open Space
- 1** Mott Street
- 2** Bayard Street
- 3** Columbus Park

1:2500



Key project outputs

- ✓ Construction of physical structures to permit **outdoor economic activity**
- ✓ **Pedestrianisation** of **neighbourhood streets**
- ✓ **Cultural programming** of streets in increase footfall

In the Context of the Covid-19 Pandemic

This project is a direct response to the economically devastating impact of the Covid-19 pandemic on small businesses, and especially eateries, restaurants, cafes and bars, which all largely depend on indoor activity. The challenges faced by these businesses during the Covid-19 pandemic have been exacerbated in Chinatown by the businesses' lack of resources to invest in digital and takeaway platforms and by increased prejudice against the neighbourhood's ethnic makeup. The intervention at Mott Street showcases how the coming together of resources made available by local authorities, changes in zoning regulations, private investment and the capacity raised by community organisations can act as an urban regeneration plan to revitalise an economically-struggling area and an inactive public realm.



Source: Andrews, Emily. Outdoor Dining in New York's Chinatown. Dezeen. Danish media group JP/Politiken Media Group, September 29, 2020. accessed in May 2021. <https://www.dezeen.com/2020/09/29/open-restaurants-program-new-york-city-outdoor-dining-coronavirus/#>.

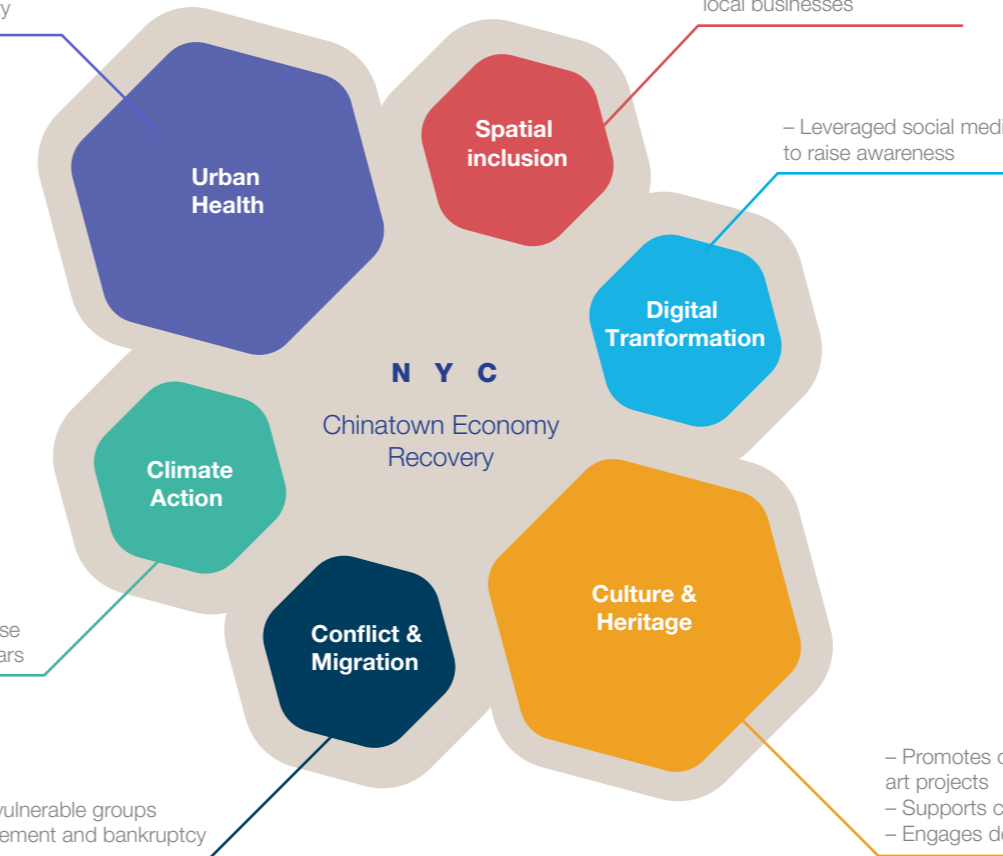


Source: Think!Chinatown. Assembly for China Town. A+A+A Studio. Accessed May 26, 2022. <https://www.thinkchinatown.org/assembly>.

The project also includes specific public health components which address pandemic-specific concerns. The Open Streets programme developed by NYC's Department of Transportation permits the safe operation of restaurant services outdoors where Covid-19 transmission is lower. In addition, by closing off Mott street to vehicular access, the project encourages and increases pedestrianisation, a healthier alternative to the use of the car. Furthermore, with community organisations and private companies activating Mott Street through public art and other cultural events, the project also provides the neighbourhood with new child-friendly public open spaces which encourage outdoor activities for children and families.



- Enables safe food consumption
- Increases pedestrian and cycling activities
- Improves local air quality



The diagram maps the contribution to the six crosscutting areas linked to urban regeneration processes in the current context.

Considerations for Inclusion and Sustainability

The Chinatown Economic Recovery Project is an urban regeneration process that addresses urban health and **pandemic recovery** with **social, economic and environmental benefits**. Starting from providing basic support in the form of physical infrastructure to small minority-owned businesses, the project addresses challenges that go beyond economic resilience and aim for **long-term positive transformation** for Chinatown. Affected by plunging numbers of customers as a consequence of the Covid-19 pandemic and of prejudice against the local community, small businesses in Chinatown suffered unevenly. In this context, the project addresses spatial inequality by enabling small businesses to leverage the easing of restrictions to reactivate economically. The pedestrianisation of streets where eateries extended service contributes to an inclusive approach to regeneration and involves **health gains** through the promotion of walking and cycling. The public art interventions supported increasing footfall, improving **street vibrancy** and intergenerational programming, while enhancing **local cultural heritage**.⁶



Strengths

- + Multi-stakeholder collaboration;
- + Community empowerment;
- + Public realm reprogramming;
- + Inclusive urban design;

Weaknesses

- Small-scale strategy cannot be replicated

Project Strengths

The biggest strength of the Chinatown Economic Recovery Project is its community-anchored approach which empowered it to act early on to respond to the negative economic impact of the Covid-19 pandemic. By focusing on the immediate neighbourhood and fostering relationships of trust with local business owners, it was able to immediately identify needs. Their initial efforts then attracted larger-scale developments which led to the construction of generous outdoor dining facilities. Furthermore, the specific focus on a single street in the neighbourhood established the project's success. Due to sparse resources, the initiators focused their efforts along a single street which, through programming, became a catalyst for reactivating the neighbourhood as a whole. Importantly, this Chinatown Economic Recovery Project is not a conventional urban regeneration plan - it is initiated and authored by community organisations which seek to pool resources made available by local authorities and private investment in the neighbourhood with the aim of revitalising the social, economic and physical environment of a neighbourhood street. NYC's revitalisation programmes also helped support action at the neighbourhood scale. In addition to identifying areas where street closures could benefit local businesses, the Open Streets / Open Restaurants programme of NYC's Department of Transportation also permitted multiple adjacent businesses to pool resources together to establish a more expansive dining area along the street, thus fostering local partnerships and solidarity.

Project Weaknesses

Throughout the summer of 2020, similar autonomous projects emerged in the neighbourhood. A farther-reaching revitalization project would have come about if the stakeholders behind the various small-scale recovery projects pooled their resources - financial, social and cultural - to amplify their voice and address the comprehensive needs of the neighbourhood as whole.



Source: Think!Chinatown. Assembly for China Town. A+A+A Studio. Accessed May 26, 2022. <https://www.thinkchinatown.org/assembly>.



Source: Think!Chinatown. Assembly for China Town. A+A+A Studio. Accessed May 26, 2022. <https://www.thinkchinatown.org/assembly>.



Source: Emily Andrews for Rockwell Group via Secret NYC.

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Case Study 5
The al-Dharb al-Ahmar Housing Rehabilitation Programme

Cairo, Egypt



Key stats

Area = 1.2 sqkm
 Inhabitants = 100,000 (UCLG, 2010)
 Project Dates = 1998 - 2009 (incomplete)

Key project terms

Housing tenure
 Housing quality
 Historic preservation
 Innovative finance
 Participatory Planning

Key project financing sources

Egyptian-Swiss Development Fund
 Ford Foundation
 World Monuments Fund
 Aga Khan Trust for Culture
 Canadian International Development Agency
 Social Fund for Development



Project Description

Al-Darb al-Ahmar is a 100,000 inhabitant historic neighbourhood in eastern Cairo, Egypt, which experienced a deterioration of its housing stock and public open space throughout the 1990s. This deterioration implied safety concerns for residents and pedestrians and it impeded local economic development and reduced the neighbourhood's quality of life in one of Cairo's low-income areas. Bounded on the east by Al-Azhar Park, a 32-ha-large park completed in 2004, the project focused on housing rehabilitation to revitalise the urban area as a whole while supporting local residents in securing tenure. Launched in 1998 by the Aga Khan Trust for Culture, the al-Darb al-Ahmar Housing Rehabilitation Programme brought together local authorities, international organisations and international donors to develop an urban regeneration project for the neighbourhood whose object of intervention is the building.

The plan started off with an extensive participatory process and expert studies to identify the state of the neighbourhood's housing stock, the specific interventions needed to restore structurally precarious buildings and the best ways to include local residents in taking ownership over the rehabilitation works¹ in an effort to avoid gentrification and displacement. Beyond understanding what the community's needs are, the intensive inclusion of residents in all project phases aimed at preventing the eviction of the buildings' residents, at increasing their housing tenure and at raising consent in both the financial and technical components of the project.

The al-Darb al-Ahmar Community Development Company was set up by the Aga Khan Trust for Culture and the Egyptian State's Social Fund for Development to implement the rehabilitation works once contracts and individual financing processes were set up by residents and the project stakeholders. Importantly, the Rehabilitation Programme depended on individual tenants and owners approaching the project organisers to initiate the rehabilitation process for their



Before



After

Source: TADAMUN, 'Al-Darb al-Ahmar Housing Rehabilitation Programme: Housing Rehabilitation beyond Physical Upgrading', 30/03/2017, accessed in 05/2021.

Urban Regeneration Worldwide | Case study 5 | The al-Dharb al-Ahmar Housing Rehabilitation Project

Cairo, Egypt



building. In this sense, raising awareness, building trust and actively involving the local community were key to the project outcomes.

In this context, the urban regeneration project is deeply innovative in at least two ways. Firstly, the Rehabilitation Programme diverted from conventional conservation projects which zero in on individual historic monuments and focused instead on the preservation of an entire neighbourhood. Secondly, the Rehabilitation Programme is a fine example in innovative finance with long-lasting positive impact beyond the project timeframe.² Because the majority of the neighbourhood's inhabitants are low-income residents, they had been excluded from accessing loans to maintain a safe and healthy building condition. The project is unique in that it empowers local residents, both tenants and owners, to take ownership of the rehabilitation works.

Managed by the Aga Khan Agency for Microfinance, the microcredit scheme granted access to affordable loans to the building's inhabitants who could otherwise not access classic loans due to their low incomes. Concomitantly with an educational programme to increase residents' knowledge of financial tools, the microcredit schemes were tailored to individual financial needs. While the scheme required an affordable minimum downpayment, the length and share of repayment was agreed by the resident and the Aga Khan Agency for Microfinance on a case-by-case basis. For every building project, the Aga Khan Agency for Microfinance worked with architects to determine the extent of the rehabilitation works in order to fairly estimate the project cost and the size of the loan.



Legend

- Neighborhood
- Action Areas
- Key Open Space

1:15.000



Key project outputs⁴

- ✓ Rehabilitation of 110 buildings between 2002 and 2010
- ✓ 99.6% of microcredit loan repayment rate
- ✓ Reduction of evictions through Supreme Council of Antiquities demolition policy shift

Covid-19 Implications for Project

Although a decade old, the al-Darb al-Ahmar Housing Rehabilitation Programme presents valuable lessons in urban regeneration and public health planning in its notable relationship to housing design. Based on findings from the 2003 neighbourhood report compiled by the Aga Khan Cultural Services Egypt for the project's second phase, 22% of al-Darb al-Ahmar's housing stock did not have a bathroom and 32% had rooms that lacked any form of ventilation.³ Concomitantly, the survey also found that over a third of residents interviewed suffered from rheumatism and chest diseases. Given the survey findings, the Programme responded by partnering up with architects to leverage the rehabilitation works as an opportunity to improve the quality of the housing stock. The rehabilitation works thus had to include the layout of a kitchen and a toilet and the inclusion of ventilation mechanisms for each dwelling room. This approach showcases how urban regeneration projects can be leveraged to improve long-term public health outcomes and the general quality of life for local inhabitants and, implicitly, to render local communities more resilient in the face of public health crises.

Importantly, the Rehabilitation Programme was one of five parallel programmes that holistically addressed housing rehabilitation, infrastructure/open space, employment, social services and micro-finance. Taken together, specific projects in these areas of focus lead to sustainable neighbourhood conservation and, implicitly, to long-term resilience in the face of crises. Essential to the project's long-term viability, all Programmes aimed at building institutional capacity through community organising, educational workshops and by setting up legal and financial processes developed with local authorities and communities with the goal that these would outlive the project timeframe.



Before



After

Sources: TADAMUN, 'Al-Darb al-Ahmar Housing Rehabilitation Programme: Housing Rehabilitation beyond Physical Upgrading', 30/03/2017.



The diagram maps the contribution to the six crosscutting areas linked to urban regeneration processes in the current context. Digital transformation was not identified as a key feature of the initiative.

Considerations for Inclusion and Sustainability

The al-Dharb al-Ahmar Housing Rehabilitation Programme is an urban regeneration process that sought to reduce **social inequality** in Cairo by improving the deteriorated building stock in a low-income community. By pursuing an **inclusive approach** in which residents were trained through a series of household finance workshops the programme involved residents to drive the rehabilitation of their homes. The programme also supported residents to own the rehabilitation works in full by providing realistic micro-loans and supporting residents with the financial skills to repay the loans. The programme brings together international organisations and donors, residents and beneficiaries, local experts in finance, architecture and engineering, and local authorities in a **participatory approach** that expanded over a decade through meaningful and diversified engagement. Having gathered quantitative and qualitative data on health indicators and building features, the rehabilitation process modified interior layouts to improve airflow and sanitation and presents positive **urban health** outcomes. Through the rehabilitation works, the urban regeneration process preserves **local cultural heritage** and the urban experience, while protecting residents and visitors from structural damage. Through its participatory and inclusive process, the project leverages the building as a **bridge to community-led processes** in the long-term.



Strengths

- + Multi-stakeholder participatory planning practices;
- + Improved housing tenure;
- + Data-driven planning practices;
- + Improved institutional collaboration;

Weaknesses

- Weak engagement from local community after data-gathering phase;
- Slow financing and implementation phases;
- Large-scale building code violations and historic building demolitions after project end

Strengths

The project's strengths are its extensive years-long qualitative and quantitative participatory exercises and its focus on raising ownership of the project scope by the residents who were ultimately impacted by the urban regeneration project. By bringing together public institutions, international organisations and the local community, the Rehabilitation Programme leveraged critical expertise for the improvement of people's housing safety, quality and broader needs. Importantly, by financing the rehabilitation works through microloans taken by the project beneficiaries, the revitalization project extended financial literacy, a positive long-term impact. In this context, the Rehabilitation Programme is an urban regeneration project which is focused on establishing a strong regeneration process that could outlive the project timeframe.

Weaknesses

The project's weaknesses derive from the lengthy bureaucratic processes due to the fact that the project initiators received weak institutional support from local authorities before the rehabilitation works took off. The project also saw lengthy negotiations between owners, tenants and local authorities on the rehabilitation process for individual buildings. The rehabilitation works required significant initiative on part of the building inhabitants who would have to commit to lengthy processes of financing, design and implementation. Hence the active engagement from local residents took time to pick up. While the financing and implementation processes set in place by the project were intended to outlive the project timeframe, in 2010, after the Programme's initiators concluded the project, the rehabilitation works stopped. The project thus did not achieve the long-term independence the initiators had hoped for early on.



Before



After

Sources: TADAMUN, 'Al-Darb al-Ahmar Housing Rehabilitation Programme: Housing Rehabilitation beyond Physical Upgrading', 30/03/2017.



Source: Otte, Gary. Conservation and Revitalisation of Darb Al-Ahmar, Cairo, Egypt. Aga Khan Development Network. Accessed May 26, 2022. <https://www.akdn.org/where-we-work/middle-east/egypt/cultural-development-egypt>.

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“The ‘right to the city’ includes the right to access spaces that promote social cohesion, support healthy lifestyles and deliver economic benefits as well as the right to transform the city by legitimizing leadership from within the community. Considering health impacts can promote fuller participation in urban decision-making by various stakeholders and members of different communities.”

Maimunah Mohd Sharif, October 2020



Conclusions



Conclusions

Across the historic case studies responding to previous public health crises and ongoing responses to disruptions caused by the Covid-19 pandemic, urban planning and urban regeneration are at the core of recovery policies. The Influenza pandemics of 1918 and 1957 respectively elicited specific responses in the form of large-scale investments in physical infrastructure. Improving mobility and developing new technologies were the planning tools that enabled recovery, stimulating economic activity, integrating multi-level authorities and enhancing quality of life. The experience of the Covid-19 pandemic demonstrates that urban regeneration is necessary for recovery efforts as it is able to integrate social, economic, physical and environmental aspects into concrete projects that have direct positive impacts on people's lives. Our case studies show that the process of urban regeneration can take place at multiple scales and hone in on specific urban issues, all while tackling interconnected challenges and opportunities. Whether this means addressing food insecurity, climate change mitigation, inclusive urban governance, economic resilience or urban health, urban regeneration is a holistic and integrative process and an effective tool for inclusive and sustainable recovery.



Source: Jeenah Moon for the New York Times.

Conclusions

Approaches to urban regeneration

Covering a variety of areas of urban life from food security to historic preservation, the case studies in urban regeneration evince how the tool can be used to address specific issues from the scale of the singular building to the systems and processes of entire urban regions in both large and medium-sized cities.

The case studies presented in this document approach urban regeneration with a focus on specific urban challenges. However, due to urban regeneration's holistic and integrative nature, the specific challenges are addressed through actions that tackle spatial inequality, climate change, urban health, digital transformation and culture and heritage.

In **Quito's Agrifood Pact**, the main approach is to restructure the **governance of urban food systems** and integrate participatory tools within the decision-making process to increase food security. In **Paris's 15-Minute City**, the central approach to city-wide urban regeneration is shifting zoning uses to **increase mix use**, notably that of affordable housing, and facilitate **adaptive reuse in the city centre**. In



A Quito resident buys vegetables from a local farmer in a bioferia.
Source: AGRUPAR via Open Edition Journal.

Chiang Mai's Urban Farm, the urban regeneration project centres on **leveraging underused lots** to accommodate urban farming and food market activities. In New York's Chinatown Economic Recovery Project, the main approach is to reprogramme public open space from vehicular-centred uses to **pedestrian-centred uses** to support **economic development** and cultural activities. In Cairo's Al-dharb Al-ahmar Housing Rehabilitation Programme, the initiators implemented rehabilitation works of privately-owned buildings by approaching the urban regeneration project with **innovative financing processes** which increased ownership of the plan by the beneficiaries and brought a variety of stakeholders to the same table.

Across the investigated case studies, an inclusive participatory approach underpins the effectiveness of the urban regeneration project outcomes and outputs. Participatory processes deployed in the document's case studies present varied approaches, adapted correspondingly to the urban regeneration project aims and size. The participatory processes deployed in the case studies at hand range from community mapping exercises and surveys (Quito Agrifood Pact) to community financial ownership of urban regeneration works (Cairo's Al-dharb Al-ahmar Housing Rehabilitation Programme). Many participatory tools are investigated across UN-Habitat's publications and synthesised notably in UN-Habitat's Our City Plans.

As a central tool for the execution of post-disruption recovery plans, urban regeneration presents opportunities to bring together multiple stakeholders in innovative finance processes. The case studies in this document present urban regeneration financing schemes that range from multi-scalar public authority investments to public-private partnerships to microloans for community ownership. These demonstrate the capacity of urban regeneration processes to engage diverse interests for improving urban environments.



Left: Our City Plans (publication). To the [digital platform](#).
Right: Tactical Urbanism Master Plan for San Nicolás de los Garza

The Municipality of San Nicolás de los Garza (Mexico) applied the participatory process of Our City Plans to develop its 2030 Vision (SNG2030 City Vision). Tactical urbanism was identified as a process with great potential to trigger positive change on local level. In collaboration with UN-Habitat, the municipality developed a Tactical Urbanism Master Plan, aligned with the themes of the SNG 2030 Vision.

Recommendations

Multi-Level Coordination
Think Big, Apply Locally

The experience of the Covid-19 pandemic and of urban disruptions explored in the historic precedents reveals the important role public institutions play in effectively managing the immediate effects of urban disruptions and in developing and implementing successful socio-economic recovery plans. Public institutions provide irreplaceable basic services and public goods throughout and beyond disruptions. It is important to differentiate between the roles institutions at different scales play in implementing successful responses to urban disruptions. As the historical case studies of Chapter 2 demonstrate, national governments are able to mobilise significant budgets and to provide research for **evidence-based policy** in the context of evolving disruptive situations. With human activity concentrated in urban areas, local authorities play a key role in addressing local and community needs, delivering services and implementing socio-economic recovery plans set out by national governments. **Multi-level coordination** among tiers of government is thus essential in potent crisis management, successful socio-economic recovery and effective prevention of and resilience in the face of future crises.



Participatory Mapping in Bubaque, Guinea Bissau. Source: UN-Habitat.

Inclusive Participatory Planning
Engage Many, Meaningfully

To achieve long-term community support, urban regeneration must be developed alongside a continuous, meaningful and inclusive process of community engagement. Here, community must be defined according to the specific context and scope of the project, but should include a **variety of stakeholders**: government institutions, the private sector, community associations, NGOs, displaced communities, migrants etc.¹ For example, in Quito’s Agrifood Pact, a series of communities ranging from local farmers and low-income families to academic researchers and big food vendors were consulted as part of the project’s engagement. The engagement processes also materialised in specific **tangible outputs** with a map of the city’s food distribution networks being the most consequential. In the beginning of the Covid-19 pandemic, the map was used to distribute food to areas which lacked supply and was an essential tool in poverty alleviation and improving food security. This case study demonstrates how, when done right, **community engagement can be the urban regeneration process itself** and result in transformation that improves quality of life and avoids displacement.



Participatory activities for the project Parque de la Equidad, Cancun, Mexico. The initiative managed to successfully incorporate digital tools for public engagement during Covid-19. Source: UN-Habitat.

Innovative Finance
Leverage Private-Public Partnerships and Think Long-Term

While participatory planning and community organisation are key, financing is a crucial component of long-term urban regeneration thinking. While the implementation of an urban regeneration project has a specific timeline, planning for costs beyond the time frame ensures its resilience. This requires **project-specific creative financing**. For example, the al-Dharb al-Ahmar Housing Rehabilitation Programme brings together international philanthropic funds and an affordable loan scheme accessed by the beneficiaries. The combination of the two led to the rehabilitation projects’ **community-ownership**. However, the Programme’s main weakness stems from the halting of the rehabilitation works when the international philanthropic community ended the project funding. Here, the resilience of the Programme beyond the presence of the international donor and initiator would have been possible if local and national authorities had been involved in the rehabilitation organisation, financing and maintenance process. In this context, financing for urban regeneration needs to lead to both community ownership or involvement and to diverse and nimble financing sources that are not dependent on a sole sponsor.



Ouseburn Valley, Newcastle. Igloo (UK) established a community fund to support collaborative community activities, managed by the residents and businesses in each phase. Source: Skyscraper City.

Technological Investment
Improve Quality of Life and Well-being

Historically, investments in technological advancement in post-disruption recovery packages led to the expansion of the electric network in the United States through the 1920s and of the motorway and roads network in the United Kingdom in the 1960s. The ensuing increased quality of life and mobility stimulated industry and job-creation which reduced unemployment over a short period of time. Some argue that the equivalent recovery of the post-Covid-19 pandemic must include the deployment of **5G broadband and large-scale investments in physical infrastructure**.² These would stimulate the economy, create new jobs and improve quality of life and well-being. Many cities and countries are already pursuing such policies, some within the context of national large-scale investments and others on their own. Paris’s 15-minute city concept reorganises **urban infrastructure for multimodal transportation**, cycling and walking, and situates it within extensive blue-green networks. The reframing of urban infrastructure with a focus on pedestrians requires extensive investments in the city’s physical fabric, improving mobility, equity and well-being in the urban environment.



Source: Emilie Koefoed for the Obel Award.

Conclusion

The case studies presented in this document reveal how the tool of urban regeneration is deployed in various approaches to mitigate the immediate impacts of urban disruptions and to ensure cities become more inclusive, well-planned and regionally-integrated. Historic precedents of urban disruptions also hint to the importance of **urban regeneration** in the **socio-economic recovery process**. Notably following public health crises, urban regeneration has proved to be an effective tool to improve urban living conditions, particularly in the areas of housing quality, tenure and access, public open space quality and provision, basic service provision and food security, and to prevent similar disruptions from reoccurring. However, given past urban regeneration experiences leading to gentrification and displacement, specific actions must be taken today to ensure existing communities are positively impacted by the process. Of importance to the effectiveness of the urban regeneration process is the approach taken to implement it. The case studies explored in this document point to the **essential inclusion** of the following elements in the urban regeneration process: **inclusive participatory processes, multi-level coordination structures, public open space strategy, innovative and inclusive financing schemes, anti-gentrification actions**.

Collectively, the case studies in **crisis-responsive urban regeneration** projects present models for the world. From the international perspective of the global case studies which hones in on diverse urban regeneration processes across cultural boundaries, the formats urban regeneration can take to improve a multitude of aspects of urban life, demonstrate the effectiveness of urban regeneration in creating more inclusive and vibrant communities.

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Chiang Mai Urban Farm

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