

**TUC PROFILE NO. 6** 

## BARRIO 20, BUENOS AIRES, ARGENTINA

March 2024

**BUFNOS AIRFS** 

# About TUC Urban Lab Profiles

TUC Profiles is a series of short reports developed as part of the Transformative Urban Coalitions (TUC) project. They disseminate insights into the existing challenges and opportunities to address cross-cutting urban sustainability transformation and development issues through inclusive climate action in five cities in Latin America.

The first edition, TUC City Profiles, presented each city and the contextual factors that may enable or hinder urban sustainability transformations. This second edition, TUC Urban Lab Profiles, showcases the progress achieved by project partners and members of the labs in each of these cities since 2021.

Urban Labs (ULs) are the core approach of TUC. They consist of regular gatherings of a diverse range of stakeholders who collaborate and exchange knowledge to collectively co-create innovative solutions for complex urban challenges in a way that is participatory, cross-sectoral and inclusive. While UL approaches have gained global attention, there is still limited information on their implementation. These reports aim to fill a gap in practical knowledge about living labs. The series illustrates how ULs contribute to more climate-friendly and socially just communities and cities.

The following short report was co-produced by UL members, local as well as international project staff and researchers. It provides a summary of the steps taken, challenges encountered and key achievements to date by the UL Barrio 20, established in Buenos Aires, Argentina, with support of TUC. It concludes with lessons learned for catalysing transformative change towards sustainability.

This TUC Urban Lab Profile was developed by the United Nations University Institute for Environment and Human Security (UNU-EHS) in collaboration with the German Institute of Development and Sustainability (IDOS), the Instituto Internacional de Medio Ambiente y Desarrollo, IIED – América Latina, and the participants of the UL Barrio 20. It draws on original data from ethnographic observations and interviews carried out between 2021 and 2023, as well as critical reflections on the experiences of all people involved.

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Cover image: Drone view of Barrio 20, Buenos Aires, Argentina. © IVC

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Drone view of Barrio 20. © IVC



## The Urban Lab: Barrio 20

## **UL context**

The TUC Urban Lab (UL) in Buenos Aires, Argentina, builds on a larger process of participatory and integrated upgrading in Barrio 20 which began in 2016.

Barrio 20, also known as Villa 20, is an informal settlement located in Commune 8 in the south of the city of Buenos Aires (Figure 1). The southern area of Buenos Aires faces significant socio-spatial inequalities compared to the northern and central zones. This disparity encompasses higher unemployment rates and lower household incomes, next to a significant housing deficit and a substantial increase of people living in informal settlements since the 1980s. Poor or inexistent urban planning and the absence of green spaces exacerbate the risks posed by climate change and natural hazards in these territories, including heatwaves and floods. Addressing these challenges requires

holistic strategies that integrate climate change adaptation and mitigation while prioritizing the needs of highly vulnerable communities (Guerra et al. 2022).

According to a census led by the Housing Institute of Buenos Aires City (Instituto de Vivienda de la Ciudad (IVC), 2016), Barrio 20 covers 48 hectares and is home to almost 28,000 people living in just over 4,500 housing units. In 2016, 14 per cent of these housing units presented critical overcrowding and 45 per cent were in fair or poor condition. Moreover, essential services were lacking, with only 14 per cent having formal access to electricity, 25 per cent connected to the sewage system, and 95 per cent reliant on informal water connections.

## **Barrio 20**



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FIGURE 1: LOCATION OF BARRIO 20 IN BUENOS AIRES, ARGENTINA. © HED-AL AND UNU-EHS WITH DATA FROM THE BUENOS AIRES CITY GOVERNMENT AND IGN (INSTITUTO GEOGRÁFICO NACIONAL).

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In response to these challenges, Buenos Aires City enacted Law 5705/2016, signalling the beginning of a social and urban integration process in Barrio 20. This legislation ensures active participation of the residents at every stage of the neighbourhood's upgrading process. Coordinated by the IVC, the Integral Upgrading Process (*Proyecto Integral de Re-Urbanización*, *PIRU*) of Barrio 20 has three dimensions:

(1) construction of new housing units and improvement of existing ones; (2) provision of public services and infrastructure, including green spaces, parks and streets; and (3) recognition and strengthening of the popular economy.

Barrio 20's PIRU is often presented as an alternative to conventional technocratic urban planning (Almansi and Motta, 2017). It does not adhere to a predefined blueprint but instead represents an evolving project-process. This approach places a strong emphasis on collaboration between government agencies and residents. Participation and dialogue are firmly rooted as tools for community-driven urban development. In this context, multiple management instruments were developed prior to TUC. These include the Participatory Management Board (Mesa de Gestión Participativa) and the Technical Board of Participatory Management (Mesa Técnica de Gestión Participativa), where PIRU's overall progress and specific technical actions are discussed among diverse stakeholders. Additional participatory mechanisms cover specific topics in Barrio 20, such as public space (Talleres de Espacio Público) and environment (Mesa Ambiental).

Given their deep involvement in Barrio 20's PIRU from its inception, the IIED-AL team knows the context well, has trustful relationships with the governmental and non-governmental organizations involved, and is acknowledged as a legitimate local actor. This enabled them to drive the integration of TUC and the UL Barrio 20 with PIRU, together with the IVC. The integration process significantly benefited from the receptive and collaborative nature of PIRU's coordination

team at the IVC, strengthening the sustainability potential of both projects.

In 2022, the UL therefore did not emerge in isolation but rather within the framework of the participatory mechanisms instituted by Barrio 20's PIRU, particularly under the purview of the Environmental Board (Mesa Ambiental) (Hardoy et al. 2022; Roll et al. 2024). This Environmental Board was established in 2018 by request of the community, bringing together representatives from neighbourhood organizations, community health centres and government agencies such as the IVC, the Environmental Protection Agency (APrA) and others. Its initial goal was to address waste management, pest control and zoonosis in Barrio 20. In 2022, as a response to the growing number of internationally funded projects like TUC, the Environmental Board broadened its mandate to incorporate environmental sustainability and climate change.

Since 2016, significant progress has been made within Barrio 20's PIRU. By December 2023, nearly 1,700 housing units had been built, with a similar number of property deeds issued. The community celebrated the inauguration of a school, a primary care health centre and five public green spaces. Moreover, over 170 housing improvement projects were completed. Approximately 85 per cent of the planned infrastructure was finished, providing public water supply to 237 housing units. Infrastructure development also included the opening of five streets, 16 passages, and over 300 new courtyards within blocks to enhance natural lighting and ventilation in houses. Also, 40 commercial premises within Barrio 20's Papa Francisco housing complex have been handed over, further contributing to the area's vibrant growth and functionality.

Although most of these actions predate the launch of TUC, the process has been ongoing. Over the past two years, UL initiatives have stimulated the integration of environmental and climate considerations into PIRU's advances (Figure 2).

Implementation of small-scale initiatives

Planning and adapting small-scale initiatives

Participatory mapping and design workshops

Definition of priorities and site selection

Constitution of the Urban Lab

2021 Coalition building

Creation of the Environmental Board

FIGURE 2: URBAN LAB TIMELINE,
INCLUDING KEY PHASES AND ACTIVITIES

Learning exchanges with other neighbourhoods and cities

Implementation of small- and large-scale initiatives

Planning and adapting small-and large-scale initiatives

2022 Urban Lab definition

Mobilization and strengthening of the coalition of actors

<2016>
Pre-existing upgrading process

1 The term 're-urbanización' in Spanish acknowledges that Barrio 20 was already urbanized while signaling a broader integrated process of physical, social, economic and environmental transformation. As such, PIRU encompasses more than simple infrastructure improvement or upgrading. This meaning deviates from a literal translation in English. 'Reurbanization' generally refers to the revitalization of urban areas through redevelopment or urban renewal projects aimed at attracting residents and investments back to these areas.

<sup>2023</sup>Urban Lab implementation

## Operation of the UL

Between the start of TUC in late 2021 and 2023, seventeen UL meetings were held in Buenos Aires, usually once a month, with an average of 22 participants. Most meetings took place in Barrio 20, at the offices that the IVC maintains in the territory. The original UL members and most frequent participants are representatives from the IVC, particularly PIRU's coordination team and community leaders from various neighbourhood organizations. The main neighbourhood organizations involved in the UL are Mesa Activa por la Reurbanización de Villa 20, Frente por la Inclusión Social, Equipo de Unidad Territorial, and Frente Amplio Radical (Box 1).

The Environmental Protection Agency (APrA)<sup>2</sup> and the Office of Data Generation of the Directorate General of Urban Anthropology (Secretariat of Urban Development) joined the UL in early 2022, although neither are typically involved in participatory governance processes. Initially, their participation was sporadic and focused on providing technical data related to Barrio 20's physical attributes, including its morphology, flood risk, green spaces and solar radiation. However, from mid-2023, they became active UL members collaborating on the implementation of a temperature and humidity measurement system in Barrio 20.

Over time, UL meetings have also been attended by representatives from additional areas of the IVC, residents of Barrio 20 affected by UL initiatives, the director of Barrio 20's School No. 11 as well as various local researchers. Additionally, experts from other projects being implemented in Barrio 20 have also joined the UL, namely from the Environmental Sustainability Project (*Proyecto* de Sostenibilidad Ambiental, PSA) financed by the Development Bank of Latin America and the Caribbean (CAF) and the French Development Agency (AFD)'s Technical Cooperation Project. The CAF project aims to strengthen the environmental sustainability dimension of IVC-led upgrading processes of informal settlements, while the AFD project supports the articulation between city government departments for the development of green spaces and sustainable urban mobility policies.

Beyond PIRU's coordination team, additional areas of the IVC joined the UL Barrio 20 in late 2022, with the launch of the first small-scale UL initiatives. They provide technical support, especially related to the initiatives' compliance with urban regulations. In 2023, the large-scale initiative took shape and attracted additional UL members, including Barrio 20's School No. 11. In addition, representatives from the private sector got involved in the execution of UL initiatives, namely the Mitre Construction Company, responsible for construction works in the neighbourhood. Although these organizations had a presence in the territory prior to the establishment of the UL Barrio 20, it was through the opportunities created by UL initiatives that they recognized the lack of green spaces as a problem and began working with the community

In general, UL meetings have higher attendance of women than men and individuals of other gender identities. The greater presence of women in participatory spaces is a historical trend in Barrio 20's upgrading process. One possible explanation is that, in informal settlements like Barrio 20, responsibilities related to housework and caregiving, which typically fall within the purview of women, are highly connected with the maintenance of public spaces, access to basic services and other urbanization-related tasks (Observatorio de Géneros y Políticas Públicas, 2023). The large presence of women and their gender-specific experiences enriched discussions surrounding the design and maintenance of UL initiatives. Other typically marginalized voices were also included in UL activities, namely the families living under more vulnerable conditions in the densest areas of Barrio 20 (macizo), children, migrants, illiterate residents, former convicts and the elderly. This was done through tailored interventions, workshops, multilingual materials and recreational elements.



Participatory design workshop of the UL Barrio 20, August 2022.

## Community organization and leadership in Barrio 20

Informal settlements often possess a strong political dimension, requiring collective efforts for land occupation, housing construction and basic service provision. Barrio 20 is no exception. Since its establishment in the 1940s, Barrio 20 residents have united through neighbourhood assemblies, cooperatives, mutual aid societies, civil associations, soup kitchens and other communal spaces, offering crucial support to the most vulnerable families.

In 2014, Barrio 20 families lacking adequate housing occupied nearby land designated for the upgrading process of the neighbourhood under Law No. 1770/2005. Despite negotiations, they were eventually evicted by the police. This event catalysed the creation of PIRU and prompted various local organizations to form coalitions (*frentes*).

Mesa Activa por la Reurbanización de la Villa 20 (MAXU) emerged first, comprising Polo Obrero, La Dignidad, Izquierda Latinoamericana, Central de Trabajadores Argentinos, La Poderosa, Frente de Organizaciones en Lucha, La Soberana, La Corriente, La Barriada, Centro Educativo La Gota, and independent residents. Subsequently, Equipo de Unidad Territorial por el Urbanismo e Inclusión Social (EUT) was established within PIRU's framework. Presently, it includes La Esquina Hace Arte, Mutual Futuro para Todos, and independent residents. Established in 2019, Frente por la Inclusión Social (FIS) is an offshoot of some MAXU groups, including Nuevo Espacio de Participación, La Cámpora, Peronismo en Marcha, and Peronismo por la Ciudad. Frente Amplio Radical (FAR) was the last to be formed. While some coalitions focus on specific sectors within the neighbourhood, all maintain representation throughout Barrio 20.

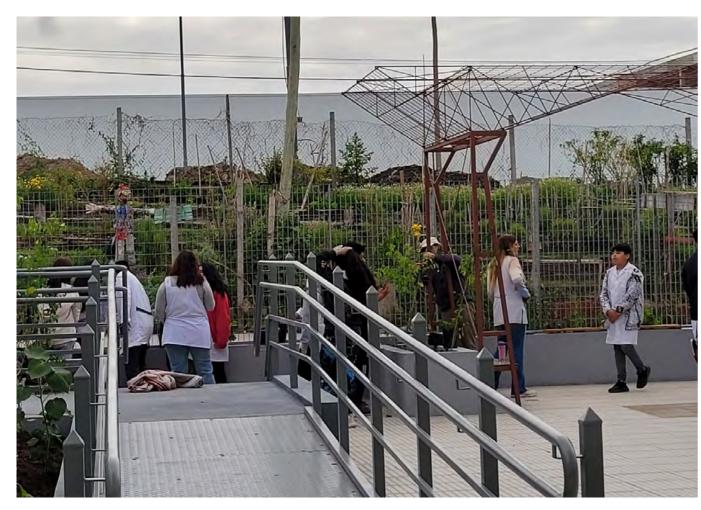
Despite differing political alignments – MAXU and FIS oppose the city government, while EUT and FAR are more aligned – collaboration endures. **Grecia Guzman** (MAXU) emphasizes: "We fight for the neighbourhood's common go

**Nidia Molina** (EUT) highlights that when PIRU started: "We set a common objective, which was to achieve the best quality for the neighbourhood and its residents." Amid the COVID-19 pandemic, all coalitions collaborated closely with the city government's strategy: "COVID was what united us the most, we were all in constant communication. Since then, there is no longer a coalition that is against another or hinders processes."

Community leaders from these coalitions, known as referentes sociales, are fundamental for understanding the dynamics of participation in Barrio 20. They advocate, organize protests and bridge gaps between residents and political entities. Representing their community carries immense responsibility, as noted by **Grecia Guzman** and **Nidia Molina** above. **Marcelo Urquiza** (FIS) and **Noelia Maruani** (FAR), both also community leaders involved in the UL, reinforce the importance of empathizing with others, setting aside personal agendas for collective progress and being a voice for the entire neighbourhood, not just one's own reality.

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<sup>2</sup> APrA was a founding member of the Environmental Board. However, as time passed, the organization's involvement dwindled. It was the introduction of TUC and other similar projects that rekindled their involvement in Barrio 20's PIRU.



Planting day and inauguration of the large-scale UL initiatives at Barrio 20's School N°11, October 2023. © Florencia Almansi / IIED-AL

The format of the monthly UL meetings, all conducted in person, has been adapted to local demands and project needs. It typically alternates between lecture-style presentations with subsequent discussions and workshops focused on the participatory co-design of initiatives. These workshops feature a range of tools, including objective trees, didactic cards, collages and renderings, which are selected and used considering criteria of accessibility and inclusion. The use of digital tools was minimized since many residents lack access to computers or mobile phones. However, Whatsapp is utilized for communication and mobilization of UL members. TUC not only provides these tools, along with related capacity development courses, but also evaluates their effectiveness in aiding the process.

The UL Barrio 20 operates with a rhizomatic structure. This means that, in addition to monthly meetings involving the entire UL group, the UL also includes intermediary meetings between IIED-AL, government agencies, neighbourhood organizations and the community. Decisions are typically reached through these intermediary meetings where opinions are exchanged, compromises are negotiated and consensus is sought. When all UL members meet in the monthly meetings, these decisions are approved and legitimized. As the UL advanced into the implementation phase, there has been growing interest in organizing learning exchanges with other cities.



## **UL initiatives**

ULs represent fertile ground for testing innovative solutions or experiments aimed at addressing complex urban challenges. In 2022, members of the UL Barrio 20 presented several options for such interventions, which were grouped into two clusters: smaller, targeted initiatives and larger, more complex initiatives. These encompassed physical transformation, awareness-raising and data generation. Each small-scale initiative was spearheaded by a different UL member organization, while large-scale initiatives involved collaboration among all UL members (Figure 3, page 14).

Small-scale physical transformations were implemented in specific areas of Barrio 20 that had been previously intervened in the context of PIRU. The focus was on enhancing public streets within the Papa Francisco housing complex and blocks 19 and 20. Led by different neighbourhood organizations, these efforts fostered new ways of

for the community to implement nature-based

solutions to address extreme heat in Barrio 20.

The complex initiatives involved the physical transformation of a larger area within Barrio 20, including the Risas Square (*Plaza de las Risas*) and the School No. 11. This space was divided into sections and specific organizations were assigned to each section to collectively design and execute actions, with emphasis on nature-based solutions. Meanwhile, UL members collaborated on other initiatives coordinated by the PSA, including Barrio 20's Planting Plan. Over 100 planting sites were identified by different neighbourhood organizations. Trees and shrubs of native species, donated by APrA, were then planted in these locations with the help of MAXU, FAR, and the Mitre Construction Company. All physical interventions were incorporated into Barrio 20's Environmental Circuit, another joint effort between the UL and the PSA. Inaugurated on 7 October 2023, coinciding with World Habitat Day, the circuit links all the intervened points and areas of environmental significance within the neighbourhood through a designated path. Each point along the trail is adorned with informational posters.

Several small-scale initiatives focused on raising awareness of environmental and climate issues within the community. These encompassed recycling and planting workshops, recycled home gardens, hydroponics<sup>3</sup>, thematic murals, a guidebook for climate resilient construction, and the creation of an environmental memory archive of Barrio 20.

The home gardens, made from recycled plastic bottles and wood pallets and tailored to Barrio 20's houses, engaged families in food production. This initiative entered its second phase in 2023, with gardens being co-developed with the local school. The hydroponics project originated from the School No. 11 and became an integral part of the curriculum for the latter half of 2023. It involved different grade levels in exploring biodiversity, sustainable gardening, water use and renewable energy applications.

In parallel, the UL established partnerships with local and international universities. With the Pereyra Chair of Morphology at the University of Buenos Aires, UL members collaborated with 170 students and 14 teachers to develop 50 climate action-themed mural proposals. The community chose two to be painted in the neighbourhood. With the University of Sheffield's postgraduate Live Project, UL members collaborated with 14 students working (as shown in Box 2), building local capacity on a manual offering climate solutions for common housing issues in Barrio 20.

> Still on the topic of awareness-raising, TUC is supporting the development of Barrio 20's environmental memory archive (Archivo de la Memoria Popular Villa 20, AMPV20). The AMPV20 (2023) cultivates spaces for exchange among residents where memory is approached as a collective practice woven from everyone's stories and fragments of the past and present. It serves as a live repository of the neighbourhood's history and ongoing transformation. Even though the AMPV20 was established in 2018, more recently, partly due to TUC, it garnered greater recognition within the neighbourhood, culminating in the creation of the Environmental Memory Board (Mesa de Memoria Ambiental). This board is connected to the Environmental Board, engaging UL members and progressively the wider Barrio 20 community in environmental and climate debates.

For the **data generation** initiative, government entities participating in the UL, specifically the Office of Data Generation and APrA, recognized the opportunity to tackle the lack of climate data in historically neglected areas like Barrio 20. In collaboration with the IIED-AL, the IVC and residents, they are installing thermometers to measure temperature and humidity across the neighbourhood. This initiative aims to close data gaps and enable informed community participation in decisions concerning Barrio 20.

## New ways of working in Barrio 20

The UL Barrio 20 collectively decided to have its initiatives executed by the community. This approach not only strengthened connections among diverse groups but also enabled neighbourhood organizations and local work cooperatives to professionalize their tasks and create job opportunities within Barrio 20.

According to Marcelo Urquiza (FIS): "We were able to work with the educational community, neighbours in solidarity, and meal centres." For both Marcelo and Matías Sanchez (EUT), employing local labourers provided job prospects for individuals excluded from the formal labour market, including former convicts and those dealing with substance use disorder: "We work for inclusion, prioritizing skill development for these boys. While we could have done it better and faster by hiring professional labourers, we chose to empower individuals who otherwise would not have a chance."

Grecia Guzman (MAXU) conveyed a sense of collective accomplishment: "We wanted to generate a new way of working (...), set aside the individual flags of our organizations and collaborate. By doing this, we proved that we don't need a major company; we require support and responsibility."

This community-driven approach presented many challenges and lessons. Neighbourhood organizations had to navigate budgeting, work plans and suppliers, while coordinating with architects and other experts. Simultaneously, architects had to adapt to the dynamics, timeline and distinct characteristics of the territory.

For **Noelia Murani** (FAR), the implementation of UL initiatives was "both an opportunity to learn from professionals and a chance for neighbours to contribute their knowledge." Landscape consultant, Gabriel Burgueño, added: "I felt a lot of goodwill from all sides, especially from the city government. I expected less commitment and less willingness to align with the ideas of diverse actors. (...) This work challenged us as professionals, with other disciplines, and other types of knowledge. The most profound thing that this journey has left us are the bridges of dialogue."

Barbara Pasik, manager of the Office of Data Generation, reflected on her team's first-time engagement with community participation: "I found it very interesting to see how they made a different cartographic reading, noting what wasn't visible on the map, but came from their history and own experiences." She added: "The beauty of this experience is seeing how residents take ownership of scientific tools. Now, the requests and claims are no longer subjective but substantiated by evidence and rooted in scientific knowledge."





UL initiatives being implemented in a street within the Papa Francisco housing complex, March 202 © Fernando Almansi / IIED-AL

UL initiatives being implemented in a street © Fernando Almansi / IIFD-Al

<sup>3</sup> Hydroponics refers to the cultivation of plants without soil, utilizing nutrient-rich water solutions to deliver nutrients directly to the plant roots.

- Physical transformationAwareness-raisingData generation





Note: The figure shows identified thermometer locations; three have been installed, seven are pending installation. Accuracy depends on completion, pending verification and insurance approval in progress.

FIGURE 3: MAP OF UL INITIATIVES IN BARRIO 20, BUENOS AIRES, ARGENTINA. © IIED- AL AND UNU-EHS.

		Initiatives	Lead implementing organizations
SMALL-SCALE	1	Installation of flowerbeds, protective fencing and pergola with native plants and irrigation system	FAR
	2	Installation of flowerbeds and vertical gardens with native plants and use of permeable floor solutions	EUT
	3	Preliminary project: Installation of flowerbeds, vertical gardens and a rain garden, all with native plants; and, use of permeable floor solutions	FIS
		Planting Plan 2023 (107 planting beds)	PSA/IVC, in collaboration with APrA, City Tree Department, IIED-AL, Mitre Construction Company and community representatives
	••	Environmental Circuit Barrio 20	PSA/IVC and IIED-AL
	4	Recycling and planting workshops for children	FAR
	5	Recycled home gardens	MAXU; School Nº11
	6	Hydroponics	School Nº11
	7	Climate action thematic murals	Cátedra de Morfolología ex-Pereyra, FADU-UBA, in collaboration with IIED-AL and community representatives
		Practical Guidebook for Climate Resilient Construction (Manual Práctico de Construcción Sensible al Cambio Climático)	University of Sheffield, IVC, IIED-AL and community representatives
		Audiovisual recording for the environmental memory archive	AMPV20
	8	Temperature and humidity monitoring system (10 thermometers)	Office of Territorial Data Generation, APrA, IIED-AL and IVC
LARGE-SCALE	9	Installation of flowerbeds and pergolas with native vegetation with irrigation system	MAXU; School Nº11
	10	Construction of a rain garden, installation of flowerbeds, pergolas with native vegetation and irrigation systems, and use of permeable flooring solutions, ecological bricks and recovered sleepers	UL Barrio 20



# Challenges and Key Achievements from the UL Barrio 20

After two years in operation, the challenges and key achievements of the UL Barrio 20 provide valuable lessons for sustaining ongoing activities, accelerating broader transformations in Buenos Aires and guiding similar efforts elsewhere:

#### 1. INTEGRATING CLIMATE ACTION WITH EXISTING PARTICIPATORY PROCESSES

The UL Barrio 20 quickly integrated into the neighbourhood's upgrading process through the Environmental Board, an established space for participatory governance. This fostered commitment and ownership among UL members, particularly those engaged with PIRU, including the IVC and neighbourhood organizations. Leveraging these structures and networks led to swift implementation of TUC. The first small-scale UL initiatives in Barrio 20 were implemented in 2022. However, it was not without challenges.

The first UL initiatives in Barrio 20 developed in a decentralized manner, following the way that residents are organized and had already been working within PIRU. This approach facilitated rapid progress, ensuring equal access to project

resources among neighbourhood groups. To maintain coherence, each monthly UL meeting started with an overview of activities conducted under the project framework. Yet, not all UL members fully understood or took ownership of ongoing activities. When closer collaboration was proposed to neighbourhood organizations, there was resistance at first due to different political ideologies and working methods. Despite these differences, there is growing recognition among these organizations regarding the fundamental roles they each play in such processes. Furthermore, as UL activities advance, there have been more collective actions involving several neighbourhood organizations, including the large-scale initiatives.

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The UL Barrio 20 also faced the challenge of harmonizing its activities and schedules with PIRU's agenda and coordinating with other ongoing projects in the territory to maximize systemic impact. Some intervention sites chosen by UL members were deemed unfeasible by the IVC due to timing or technical concerns. In some instances, the initiatives had to undergo redesigns by indication of public service companies responsible for water and electricity supply, which are not part of the UL. Adjustments in urban interventions were to be expected, yet they occasionally caused tensions within the UL group. These tensions stemmed from diverging perspectives between neighbourhood organizations, which advocate for prioritizing residents' needs, and the technical constraints imposed by government agencies and public service companies. This discrepancy sometimes fostered a perceived power imbalance among

residents. Complicating matters, Barrio 20 hosts various simultaneous projects discussed within the Environmental Board, including the PSA. To navigate this complexity, coordination and flexibility from all sides have been crucial, including adapting timelines, pooling resources and collaborating on local initiatives to amplify sustainability outcomes within and beyond Barrio 20

LESSON: The UL Barrio 20 took off relatively fast by capitalizing on pre-existing structures and political buy-in, fostering collaboration and maintaining flexibility, especially in the face of differing perspectives. Leveraging the established participatory governance framework of the ongoing PIRU facilitated the introduction of a climate lens.

#### 2. SHIFTING MINDSETS AND GOVERNANCE APPROACHES

Considering Barrio 20's experience with participatory approaches, the UL's transformative potential primarily lies in challenging preconceptions about incorporating climate change into the urban development agenda.

In early UL meetings, Barrio 20 residents perceived the environmental and climate agenda as unfamiliar and detached from their reality, associating these issues predominantly with more privileged segments of society. Similarly, other UL members like the IVC regarded such issues as secondary to the fundamental needs that residents and PIRU grappled with daily. A few individuals, especially those whose basic needs remain unresolved and those not directly involved in the UL, continue to associate climate action with aesthetic, green practices like adding plants solely for visual appeal. However, the incorporation of an environmental and climate perspective into the neighbourhood's upgrading process is gradually reshaping these perceptions.

UL activities are leading Barrio 20 residents to gradually embrace a functional awareness of environmental and climate action, specifically recognizing the tangible benefits of nature-based solutions that address immediate community needs. These include enhancing public areas, providing recreational space, access to food, natural shade

and temperature regulation, fostering safer environments and promoting emotional well-being. Together, these efforts significantly improve quality of life within the neighbourhood. This shift in mindset became evident during discussions throughout 2023 concerning the large-scale initiatives for the Risas Square and the School No. 11. Drawing from experiences with small-scale initiatives, residents proposed interventions such as native vegetation flowerbeds, pergolas and a rain garden to reduce the impact of frequent heatwaves and floods. These actions are not only expected to raise public awareness, but also serve as replicable models for the neighbourhood and potentially other areas. Achieving this transformation required the localization of the climate agenda. It was necessary to co-create an understanding of climate action rooted in local priorities and concrete challenges. TUC's capacity development courses and the Environmental Memory Board have both been instrumental for this, helping to bridge expert knowledge and the personal experiences of Barrio 20 residents. Moreover, the involvement of the School No. 11, the Early Childhood Centre Nuestra Semilla and other educational institutions in UL initiatives has not only contributed to changing perceptions about the environment and climate change, but also encouraged engagement and ownership among children and their families.





TUC and other externally funded projects also informed the implementation of the IVC's Sustainable Housing and Habitat Strategy. UL activities played a pivotal role in the integration of an environmental and climate perspective into the IVC's work programme, spanning beyond Barrio 20. As a result, environmental and climate considerations, such as allocating space for trees and vegetation in new streets, have been integrated into the IVC's public tenders for construction. Additionally, more environmentally friendly practices like the use of light roof and wall colours and optimizing house orientation for heat absorption reduction became part of housing improvement projects across multiple informal settlements. There is also a growing interest among the IVC's workers in training on innovative sustainable solutions,

informing both TUC's and the PSA's capacity development strategies.

LESSON: The transformative potential of integrating climate action and urban development, particularly in informal settlements like Barrio 20, hinges on localizing the climate agenda and co-creating an understanding rooted in local priorities. Shifting climate change-related mindsets and governance approaches requires acknowledging and bridging different knowledge types and experiences, and fostering an awareness around benefits that resonate with the community.

#### 3. SUSTAINING AND SCALING TRANSFORMATIVE PROCESSES AND OUTCOMES

The UL Barrio 20 has significantly contributed to transforming the Environmental Board into a hub for climate discussions and action. For instance, empowering community groups to craft and execute nature-based solutions has established a lasting capacity for climate action in the territory, ripe for replication. This participatory approach has sparked a shift in community leaders' perspectives on collaboration and environmental and climate issues. Also, the IVC's ways of working within Barrio 20's PIRU and similar processes in other informal settlements are evolving.

Sharing these successes is crucial to promote similar transformations elsewhere. A visit by UL members to the WRI Ross Prize winner city of Rosario, as well as a learning exchange workshop organized by UL members at the University of Buenos Aires demonstrated the potential for knowledge-sharing between cities. The participation of members of the UL Barrio 20 in various global events has also expanded networks, empowering new leaderships within and beyond the community (Box 3, page 22).

Yet, sustaining and scaling the achievements of the UL Barrio 20 present challenges. A primary concern revolves around maintaining and caring for the nature-based solutions implemented by the UL. Beyond their involvement in project design, implementation and upkeep, UL members also engage in outreach activities to showcase project outcomes and contribute to research efforts for

replication. However, all these efforts lack financial compensation and compete with other responsibilities, including work, education and household responsibilities. This places significant time constraints, especially on community representatives. The burden on women is evident within the UL Barrio 20 and should be addressed. Leveraging participatory spaces to build new capacities can help to generate local economies and alternative funding for more inclusive and climate-resilient development within vulnerable communities. Furthermore, securing political commitment amid administrative turnovers and navigating rigid regulatory frameworks remain significant hurdles. The UL Barrio 20 continues efforts to reform urban planning instruments collaboratively, aiming to streamline the integration of nature-based and broader climate solutions in this transformative journey.

LESSON: Efforts to initiate, sustain and scale transformation must recognize and address the multifaceted and burdensome nature of participation, cultivate new capacities and leaderships and promote policy reforms with systemic impact. Sharing successes within and beyond Barrio 20 is vital, as is securing financial compensation for the community and navigating administrative turnovers to ensure the long-term sustainability of these initiatives.

## Events and exchanges led by members of the UL Barrio 20

Since 2021, UL members have actively participated in and led on disseminating learnings from Barrio 20 to diverse audiences in over 20 national and global events. These events include major gatherings such as the United Nations Climate Change Conference, International Mayors Forum, Cumbre Internacional del Hábitat de América Latina y el Caribe, Encuentro de la Red Argentina de Municipios Contra el Cambio Climático, Transformations Conference, and Climate Academy. They were also involved in the World Urban Forum, Congreso Internacional de Integración y Desarrollo, and various meetings organized by the Inter-American Development Bank, Lincoln Institute of Land Policy, Habitat International Coalition Latin America, Instituto de Investigaciones Gino Germani, Sustentabilidad sin Fronteras, Ecohouse, Conexus, Centro de Implementación de Políticas Públicas para la Equidad y el Crecimiento, among others.

Additionally, UL members organized exchanges with other cities, such as a field trip to Rosario in May 2023, where they immersed themselves in the city's Urban Agriculture Program. This visit allowed representatives from Rosario and Buenos Aires to forge connections, exchange experiences, and strategize for future actions. **Anabella Ullo** from the IVC stated: "I carry these experiences with me (...), to rethink the way I perform my duties and articulate them in more transversal ways to respond to different problems with the least amount of resources possible while ensuring long-term sustainability."

Building on this success, UL members organized the first Encuentro de Acción Climática Urbana on 14 and 15 September 2023, at the Faculty of Architecture, Design and Urbanism of the University of Buenos Aires. The event drew over 60 participants from various areas of the IVC, municipal ministries, national government bodies, the National Council for Scientific and Technical Research, universities, civil society organizations, and community representatives from Buenos Aires and beyond. Marcela Costello from the IVC highlighted: "Typically, academia finds it challenging to engage with the community directly, and social representatives don't often have many opportunities to interact with academia. (...) There was a synergy in this meeting, where we mutually contributed and where both sides benefited."

During these two intensive days, attendees shared their experiences of climate action within urban poverty contexts from all over Argentina, including testimonies from the cities of Buenos Aires, Claypole (Almirante Brown municipality), San Miguel de Tucumán, Rosario and Santa Fe. The event facilitated the exchange of lessons learned, as well as the identification of common barriers and opportunities for addressing climate change within informal settlements. **Nidia Molina** (EUT) added: "What stands out are the intentions. It's not always the lack of resources but rather the will and commitment. It doesn't matter who starts it, but who will continue these initiatives."



Members of the UL Barrio 20 visit the City of Rosario, May 2023.  $\ @$  Laura Arévalos / MAXU

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**ABOUT** 

# Transformative Urban Coalitions

Transformative Urban Coalitions (TUC) is implemented by the United Nations University Institute for Environment and Human Security (UNU-EHS), the World Resources Institute (WRI) together with its national offices in Brazil and Mexico, the International Institute for Environment and Development (IIED) together with IIED – América Latina in Argentina, and the German Institute of Development and Sustainability (IDOS), with support from the German Federal Ministry for Economic Affairs and Climate Action under its International Climate Initiative (IKI).

TUC seeks to shift the sustainability trajectory of cities towards zero carbon emissions by 2050 by altering the deeper social, technological and political structures and systems that are currently reinforcing high-carbon, resource-intensive urbanization. To achieve this goal, TUC facilitates the establishment of transformative urban coalitions in five Latin American cities to develop new strategies for addressing local challenges in urban development and inequality while at the same time reducing carbon emissions.

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