



Nature in the City

How Informal Settlements Live With and Mobilise Against Water-related Risks

Practices of Constructive Statecraft in Mexico City and Asunción

Master in Governing the Large
Metropolis

Jeanne Gounot
Jeanne Lussot
Anupama Suresh
Adrian Stein



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URBAN SCHOOL

THE PARTNER

We would like to give our thanks to Gerard B. Lambert Foundation for its generous support of this programme "the Nature in the City project" and the Rachel L. Lambert Post-Doctoral Fellowship.

In 1976, Rachel Lambert 'Bunny' Mellon (1910-2014) established a foundation intended to honor her father, Gerard Barnes Lambert (1886-1967), for his lifetime achievements in business and the arts. The Gerard B. Lambert Foundation was central in the development of the Oak Spring Garden Library and its contents. The Gérard B Lambert Foundation supported the transformation of the Saint Thomas campus by financing the hanging garden. The garden is now called Rachel Lambert Mellon Garden, in honor of the American philanthropist, patron of the gardens of Georgetown University and the White House.



ISSUES

Approximately one billion people currently live in informal settlements, a figure projected to rise substantially as urbanisation accelerates across the Global South (UN-Habitat, 2003). A disproportionate share of these communities have settled environmentally fragile land like floodplains, volcanic hillsides, and former lakebeds, where the exposure to climate-related risk is both severe and chronically under-addressed (Sandoval & Sarmiento, 2020; Pereira et al., 2024). As climate change intensifies rainfall variability, extends flood and drought cycles, and raises urban temperatures, these conditions are unlikely to improve without meaningful changes to the governance arrangements through which risk is managed.

What makes the problem theoretically and politically significant, however, is that risk exposure in informal settlements is rarely reducible to environmental factors alone. It is produced and reproduced through the intersection of inadequate infrastructure, insecure land tenure, existing socio-economic vulnerabilities, and weak governance (Hardoy & Pandiella, 2009). Risk management frameworks, where they exist, tend to focus on hazard mapping and emergency response rather than tackling the social and political structures that make certain populations persistently vulnerable (Fraser, 2017). The consequence is what the literature describes as a *risk trap*: a self-reinforcing cycle in which social exclusion compounds hazard vulnerability, and vulnerability in turn deepens exclusion (Allen et al., 2024; Pereira Santos et al., 2022).

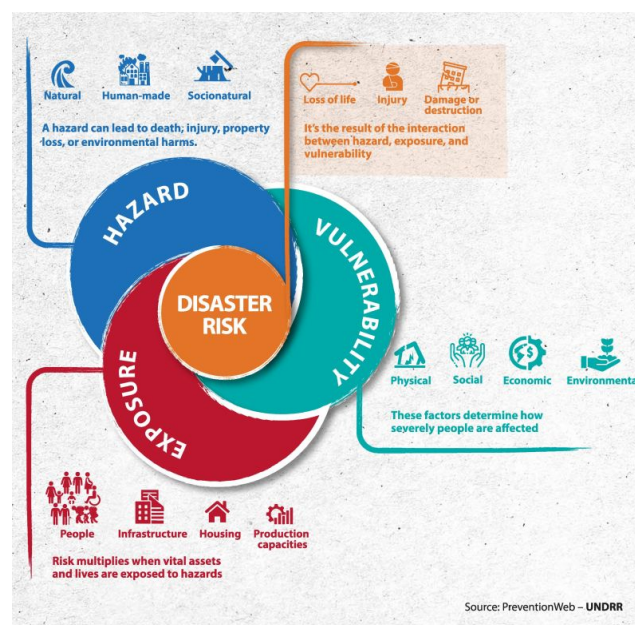


Fig. 1: The different dimensions of disaster risk (Source: UNDRR).

In Mexico City and Asunción, informality takes a specific historical form. Rapid rural-to-urban migration from the mid-twentieth century onwards produced large-scale informal urbanisation on the only land available to low-income migrants: peripheral, legally ambiguous, and exposed to flooding, volcanic runoff, and subsidence. Dominant political parties in both cities managed these settlement populations through clientelism, i.e., the selective distribution of water

connections, regularisation, and emergency aid in exchange for political loyalty (Lombard, 2013; Coates & Nygren, 2020). This arrangement tolerated and in some cases facilitated the formation of informal settlements while systematically withholding the structural investment that would have reduced their vulnerability. Decades later, the effects of this governance model remain legible in the built environment in the form of inadequate drainage infrastructure, insecure land tenure, and limited access to formal risk management. These conditions persist despite the existence, in both countries, of sophisticated legal frameworks for disaster risk reduction that are formally aligned with international standards such as the Sendai Framework.

Yet communities have organised. Some settlements, facing comparable hazards and comparable histories of political marginalisation, have managed to translate collective action into education facilities, community water systems, participatory planning instruments, and risk reduction programmes that have shaped metropolitan-level policy. Others, under broadly similar structural conditions, remain characterised by fragmented action and persistent clientelistic dependency. The proximity of such divergent outcomes raises a question that standard accounts of urban vulnerability, which look at hazard exposure, poverty, and infrastructural deficit do not adequately answer. Material deprivation and hazard exposure, on their own, do not determine whether communities can convert collective grievance into durable governance change. This study strives to unveil what does through the following guiding question: **what makes political mobilisation and collective action around water-related risks capable of producing policy change in informal settlements in Mexico City and Asunción?**

The governance of climate risk in informal settlements is, at its core, a question about the terms on which marginalised urban populations can participate in the ecological transition and about whether that transition is designed by, with or for the communities most exposed to climate impacts. Understanding the conditions that enable or obstruct this process, including organisational structure, leadership, political context, and the nature of hazard exposure, is directly relevant to how cities in the Global South approach disaster risk reduction, climate adaptation, and the governance of large metropolitan areas.

METHODOLOGY

The study used a qualitative, comparative design combining ethnographic fieldwork with a desk-based literature review and document analysis to examine how water-related risks are produced and governed in informal settlements. It draws on 50 semi-structured interviews with 65 interviewees including local grassroots organisation leaders, residents, public officials and academics from local universities. 10-day fieldwork activities in both cities also included transect walks, site visits, and observations across three informal settlements, alongside policy, legal, project, and academic document analysis. Interview coding and process tracing were used to reconstruct settlement histories, organizational trajectories, and risk-governance mechanisms, with careful attention to the political opportunity structures that determine when and how community proposals become actionable for state institutions. Observations and mechanisms were compared systematically across cases, building up the analytical depth for a shared explanatory framework for political organising around risk reduction in informal settlements.

FIELDS STUDIED

The cities studied in this research, Mexico City and Asunción, are Latin American capitals where rapid informal urbanisation has occurred on environmental hazard-exposed land. Over the course of half a century, dense and politically active communities have settled there. These communities' relationship with flood risk, water scarcity, and state governance defines the central questions of this study.

The case studies were purposefully selected to capture contrasting but comparable configurations of informality, hazard exposure, and state-community relations. In Mexico City, the neighbourhood analysis was conducted in a consolidated hillside *colonia popular*¹ with five decades of sustained collective organisation. In Asunción, the study looked at two adjacent riverbank settlements, or *bañados*². Though they share a common history of flood exposure, the two communities have mobilised and organised differently, leading them to develop distinct relationships with local governance. Together, they allow the study to trace what comparable structural conditions produce when the political and organisational responses to those conditions differ.



Fig. 2: Location of San Miguel Teotongo in Mexico City. Source: Google Earth, 2026.



Fig. 3: Location of Bañado Tacumbú and the wider Bañado Sur in the city of Asunción. Source: Google Earth, 2026.

Mexico City is one of the largest metropolitan areas in the world, home to nearly 23 million people, and its relationship to water is as old as the city itself. Built atop the former lakebed of Lake Texcoco in the closed hydrological basin of the Valley of Mexico, it bears the legacy of centuries of drainage works and groundwater extraction that have fundamentally altered the region's natural water flows (de Alba, 2017; Eakin et al., 2016). What remains is a hybrid urban hydrology in which flooding, land subsidence, and chronic water scarcity do not occur in sequence but simultaneously, each compounding the other (Chahim, 2022; Eakin et al., 2016).

¹ Tr.: *Colonia popular* translates to “popular colony/neighbourhood” and is used in Mexico to describe informal settlements.

² *Bañado* translates to “wetland” but is used to describe the informal settlements of Asunción because the majority of them are in riverside wetlands.

Informal settlements, concentrated on the volcanic slopes of the south and the flat lacustrine soils of the east, stand in two of the most environmentally precarious zones in this configuration. From the mid-twentieth century onwards, low-income migrants excluded from formal housing markets settled on *ejido*³ and communal land that lay beyond the reach of official planning. This was often driven by the reality that there was simply ‘nowhere else to go’ (Burns, 1989). The borough of Iztapalapa concentrates multiple risk factors: lacustrine soils subject to ongoing subsidence, intermittent water supply shaped by decades of aquifer overexploitation, and seasonal surface flooding intensified by drainage infrastructure that was never designed for the density it now serves (Chahim, 2022).

It is within this context that San Miguel Teotongo, spread across approximately 300 hectares of rugged volcanic terrain on the slopes of the Sierra de Santa Catarina, must be understood. Housing an estimated 80,000 residents, the settlement emerged from the 1970s onwards as migrants, primarily from rural Oaxaca, self-built the neighbourhood on what one early resident described as ‘nothing but tiny squares of hard, abandoned farmland’ without water, electricity, or roads (Burns, 1989). Its topography channels stormwater runoff into concentrated downhill flows during the rainy season, producing recurring inundations in the lower zones. Yet the same volcanic substrate that generates this risk also functions as a critical groundwater recharge zone for the wider metropolitan area, giving the neighbourhood an ecological significance that extends well beyond its boundaries.

Water-related risks here are not reducible to a single hazard or scale. Slope morphology, legacy drainage deficits accumulated over decades of unplanned construction, and the progressive encroachment of housing onto upper infiltration surfaces operate together and reinforce one another. What distinguishes San Miguel Teotongo from comparable cases, however, is that its sustained collective organisation over five decades constitutes a notable example of community-led urban development recognised internationally (Njoh, 2009). Several neighbourhood practices, including the *UTOPÍAS* model of social infrastructure⁴, were locally generated and have been absorbed into metropolitan-level public policy.

Asunción presents a different but structurally resonant geography of risk. The capital and primary metropolitan centre of Paraguay, home to approximately 2.3 million people, it is surrounded on three sides by the Paraguay River marking a relationship that makes water simultaneously the city's economic lifeline and a persistent structural hazard for a substantial share of its population (Canese et al., 2019). With a historically constrained fiscal capacity, the city has never extended adequate infrastructure across its full territory. Between 100,000 and 150,000 people, up to a quarter of the core city's population, live in the *bañados* (Allende, 2025). These are informal riverside settlements built incrementally on land that floods regularly, driven by regional water cycles in the Amazon and Pantanal ecosystems. Floods can persist for over a year, compelling large-scale evacuations (Canese et al., 2019).

³ *Ejid*os are communal agricultural properties created under post-revolutionary land reform under Mexican law.

⁴ The *UTOPÍAS* model is a multi-service community facility integrating social, cultural and sports infrastructure with an explicit gender perspective, built on experimental community centres developed by UCSMT since the 1990s and is currently scaling across Mexico City.

The *bañados* grew in successive waves of rural-to-urban migration from the late 1930s onwards. Newcomers converted uninhabitable wetlands into liveable neighborhoods through small-scale landfilling and self-construction. This process has been described by residents as turning a ‘*no lugar*’ into a ‘*lugar de sobrevivencia*’, a non-place into a place of survival. That the state designates these areas as legally unfit for permanent resident use has limited infrastructure provision for the communities that have lived there for generations. The *bañados* remain outside the formal sewerage network, have extremely limited paved road access, and are structurally excluded from property regularisation precisely because of the flood risk to which their residents are most exposed (Sagüi et al., 2020).

Bañado Tacumbú and the wider Bañado Sur, settled on the southern edge of Asunción's riverfront, share this foundational history and it is their parallel trajectories and geographic proximity that makes them productive terrain for comparison. Bañado Tacumbú sits directly on the riverbank, facing acute exposure to the Paraguay River's cyclical rises. It is also, at present, the most active laboratory for risk mitigation policy in urban contexts in the country. The *Nuevo Barrio Bañado Tacumbú*⁵ (NBBT), the largest in-situ resettlement programme in Paraguayan history, financed by the Inter-American Development Bank (IDB) and currently under construction, is reshaping both the physical landscape and the governance relationships of the neighbourhood.

The wider Bañado Sur, encompassing San Cayetano, Santa Ana, and Cateura, shares the same history of exposure but has developed a distinct and in some respects more complex risk profile. Residents report that the partial construction of the Costanera Sur highway along the riverfront has paradoxically introduced a new drainage problem, trapping rainfall within the settlement during heavy rain events and generating pluvial flooding that occurs independently of the river's behaviour. Meanwhile, the proximity of the Cateura landfill adds fire risk and chronic environmental contamination as further hazard layers. Despite settling in adjoining territory and sharing a common origin, these two communities have followed markedly different organisational trajectories and it is precisely that divergence, under conditions that are otherwise so structurally similar, that sits at the heart of this study's comparative ambition.

MAIN RESULTS

The comparative analysis of San Miguel Teotongo, Bañado Tacumbú, and Bañado Sur reveals that the capacity of informal settlement communities to escape risk traps is determined by the organisational structures communities build and sustain over time. This results of this study are organised around six interconnected findings, drawing on the specific cases of *Unión de Colonos de San Miguel Teotongo*⁶ (UCSMT) in Mexico City and *Centro de Ayuda Mútua - Salud para Todos*⁷ (CAMSAT) in the Bañado Tacumbú of Asuncion, two organisations who have effectively mobilised to generate policy shifts, sometimes in contrast with the fragmented organisational context of Bañado Sur.

⁵ Tr.: “New Neighbourhood Bañado Tacumbú”

⁶ Tr.: “Union of Settlers/Residents of San Miguel Teotongo”

⁷ Tr.: “Mutual Aid Centre - Health for All”



Fig. 4: Entrance to the CAMSAT educational and health centre with its main slogans. Credit: Authors, April 2026.



Fig. 5: Nopal cultivation of the Union de San Miguel Teotongo community. Credit: Authors, April 2026.

1. Vulnerability is Socially Constructed

Across both cities, informal settlements are exposed to water-related hazards by geography. However, this geographical vulnerability is further embedded through social and political mechanisms. The pressures of clientelism and lacking measures to tackle vulnerability are key drivers that lead to the persistence of disaster risks in San Miguel Teotongo and Asunción's *bañados* today. Concretely, examples such as the presence of the privatised *pipa*⁸ water trucks in San Miguel Teotongo and the role of *politiqueros*⁹ who mediate the provisioning of temporary shelter materials after flood evacuation in Asunción showcase how sociopolitical arrangements in both neighbourhoods continue to reproduce risk through vulnerability. The ability of private and political actors to capture influence and power within responses to both chronic and rapid on-set disasters demonstrates the importance of addressing underlying social structures to effectively establish community resilience, reflecting Wisner's (2016) insights on the social reproduction of risk.

In both cities, hazard exposure is compounded by inadequate sanitation infrastructure, insecure land tenure, and governance arrangements marked by political clientelism. Both Mexico and Paraguay had effective one-party rule for much of the 20th century - through the PRI and Partido Colorado respectively - and these parties implemented systems of dependence of informal settlement communities on clientelistic aid through local brokers - *politiqueros* - while neglecting structural change. Under clientelistic frameworks, access to land and services remained conditioned upon political support for ruling parties, reflecting the intentional dependency identified by Coates & Nygren (2020). The Mexican political system has since evolved and become more competitive, while Paraguay is still dominated by the Partido Colorado, with the exception of a brief interlude in the 2010s. Nevertheless, clientelism persists in the Mexican political landscape and continues to be a complicating force that local community organisations have to negotiate and contend with when attempting to establish local power.



Fig. 6: Weekly water delivery by pipa truck in San Miguel Teotongo. Credit: Authors, April 2026.



Fig. 7: Flood caused by rainfall in Bañado Tacumbú. Credit: Authors, April 2026.

⁸ *Pipa* (Mexican Spanish): A large tanker truck that delivers potable water to homes and neighborhoods that are not consistently served by the regular piped water network.

⁹ *Politiquero*: Term used in Latin America for political operatives who serve as frontpersons for political organisations in neighbourhoods and often facilitate clientelistic exchange of favours for vote banks.

2. Hazard-Centric Technocratic Risk Governance Exacerbates Vulnerabilities

Another relevant aspect of both countries' political systems in relation to risk in informal settlements is a technocratic approach to hazard management. Mexico City and Asunción both possess, at least on paper, risk management and emergency alert systems. Among these, the Mexican *Atlas de Riesgos* stands as a more advanced technical tool compared to available systems in Paraguay. For instance, settlement residents report that the National Emergency Secretary (SEN) in Paraguay only responds substantively once floodwaters are already high, leaving communities to manage the preceding and prolonged periods of exposure on their own. However, the formulation of the governance of risk, as observed in existing policy documents and approaches in both cities, consistently features hazard-centric views focusing on identifying high-risk areas and responding to singular hazard events.

The hazard-focused technocratic risk governance can exacerbate vulnerabilities by withholding adaptation resources and legal security from residents, while long-term resilience building strategies that address structural vulnerability factors are not central parts of disaster risk reduction mandates. The observed phenomena are consistent with Fraser's (2017) observations of technocratic risk management, which undermines coordinated, holistic responses to the extensive disaster risks present in the studied neighbourhoods. They further exemplify a structural mismatch between disaster risk management expectations of formalised, coherent community structures and the fragmented lived realities in informal settlements, also identified by Allen et al. (2024).

3. Community Unity and Organisational Power as an Escape Route from Risk Traps

One of the most crucial findings of this research is that organisational robustness and unity are preconditions for community influence over policy shifts to escape risk traps. Hegemonic organisations allow communities to actively shape how governance acts upon their context, thanks to their contestation and negotiation of the terms on which the state engages with them. Where fragmentation prevails, that capacity is limited, leaving residents more exposed to clientelistic incorporations and passive neglect, thereby reproducing vulnerability over time. The two Asunción cases contrast in that sense. Both Bañado Tacumbú and Bañado Sur face comparable flood risks and similar socioeconomic conditions. However, the presence of hegemonic CAMSAT in Bañado Tacumbú produces capacities for negotiation with the state and international organisations that are absent without a unified organisational structure in the wider Bañado Sur.

The community organisations CAMSAT and UCSMT resolve the mismatch between governance actors' expectations and fragmented informal settlement realities by presenting the state and international institutions with exactly what those institutions require to act: a reliable, transparent, and administratively legible partner. Public Works Ministry officials in Paraguay acknowledge that the NBBT resettlement project would not have been possible without a well-organised local entity like CAMSAT, and the grassroots organisation has strongly influenced the project's planning. UCSMT's participatory territorial ordering plan, described by its own members as "a tool of struggle" and the organisation's primary instrument of negotiation with the

government, performs the same function. It renders the neighbourhood legible to state institutions in a manner those institutions can act upon while keeping control within the community. In Bañado Sur, even genuine and sophisticated local knowledge such as risk mapping undertaken by the feminist *Rebeldes del Sur* collective has not been translated into sustained institutional engagement. Observations suggest that no consolidated organisation exists to carry negotiations forward. This results in the continuous isolation of projects, unstable relationships with state institutions and the persistence of risk traps.

4. Charismatic Leadership Embedded in Women-Centred Networks as Organising Principles

Even though outcomes differ, two structural elements are present across all three cases regarding the internal dynamics that make sustained collective action and mobilisation possible. Across all observed neighbourhoods, grassroots organisations feature charismatic leadership authority and strong women's mutual aid networks. Interviews reveal the importance of both factors for enabling organisations to build sustainable social cohesion and political capacity, which are necessary to address the multiple dimensions of vulnerability and resist the feedback loops of risk traps. In particular, the observed organisations do not simply celebrate individual leaders but show an understanding of leadership as a distributed capacity, rooted in the sustained work of community members, primarily women. Their commitment to collective mobilisation and institutional continuity remains the true foundation of organizational resilience.

All three communities have shown an ability to form, endure, and adapt relying on leaders who possess a certain degree of charisma. This is understood not merely as personal “magnetism”, but as the capacity to embody moral authority and translate community grievances into politically legible claims to negotiate with state authorities. This observation illustrates what Lomnitz (2014) identifies as the critical function of community leaders, emerging as intermediaries between settlers and bureaucratic authorities. This dimension of leadership is essential for establishing the credibility through which community demands become legible to bureaucratic systems.

On a second, equally essential level, women's networks form the sustainable institutional infrastructure through which charismatic leadership is maintained and passed down over time in all three neighbourhoods. Women's daily work, whether it involves meetings, caregiving, or community organizing, anchors leadership within organizational structures that endure beyond individual leaders and resist both the fragmentation caused by vulnerability and the political co-optation resulting from clientelism. It is this female-led leadership structure that enables institutions to weather crises and cope with leadership transitions. In this sense, women's leadership constitutes the sustainable foundation of organizational effectiveness. This network of relationships and daily commitments, maintained through regular meetings and community support work, transforms individual charisma into sustainable and institutional capacity.

As also observed by Dobree (2018) in Asunción, women's broader care responsibilities orient them toward a more holistic view of household and community needs, making them more suited to sustain community organisations over time. In both Bañado Tacumbú and Bañado Sur,

women are described as the pillars of organisational life. In CAMSAT, most central administrative and coordinating roles are held by women. The importance of women's participation is a founding principle of the organisation. The same pattern holds in the different organisations in the Bañado Sur, where women's sustained involvement has allowed for continued support for the population despite the organisational fragmentation of the neighbourhood, particularly through soup kitchens and feminist associations. Similarly, in San Miguel Teotongo, the "gendered geography" of initial mobilisation played a decisive role: during daytime hours, when the first collective actions were organised, women were disproportionately present in the neighbourhood, as their male counterparts were more engaged in commuting to jobs elsewhere in the city. The original material grievances - access to water, sanitation, schools and basic healthcare - primarily affected those who bore the main burden of domestic work and child care.



Fig. 8: The words "Mujeres Unidas" ("united women") painted on a wall in Bañado Sur, Asunción. Credit: Authors, April 2026.

5. The Policy Shift Process: A Compounding Logic

Although UCSMT and CAMSAT adopt opposing strategies regarding political ideology, they have both built organisational hegemony through similar processes. The ideological contrast is stark: UCSMT leverages a cohesive leftist identity as a driver of collective action and negotiated governance, while CAMSAT positions itself as apolitical and focuses on a rights-based engagement with the state. The two organisations face varying hazard profiles, and evolved in highly distinct cities with different sizes and political systems. Nevertheless, they have followed a similar process to translate community grievances into concrete policy outcomes, being perceived as capable agents in the eyes of their fellow residents as well as those of state institutions. This research has identified a common mechanism which operates across six steps

(see Fig. 9), regardless of the organisations' different ideological orientations and means of sustaining themselves internally.

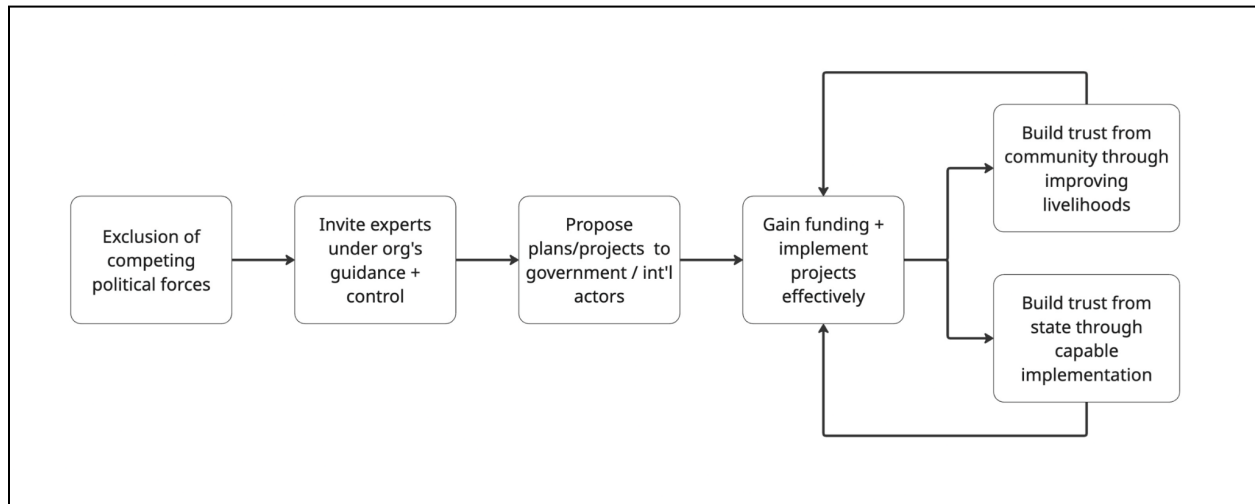


Fig. 9: The common core logic of mobilisation and policy impact to UCSMT and CAMSAT. Credit: Authors.

The first step consists in the historical exclusion of external political forces that are not grounded in the community, especially political brokers part of clientelist networks. Both UCSMT and CAMSAT put organisational autonomy forth as a precondition. Members of UCSMT cannot work for the municipality, setting a clear boundary between their organisation and the institutional bodies to protect their independence from co-optation. CAMSAT makes the exclusion of party operatives a priority as a protective mechanism, advertising themselves as “*apolíticos partidarios*”¹⁰. Both organisations are refusing the passive legibility offered by clientelistic incorporation (Zeiderman, 2013). In Bañado Sur, this boundary is absent, and its absence is one of the main reasons for organisational fragmentation in the neighbourhood.

The second step, bringing in external technical expertise to build a concrete and actionable plan, and the third one of presenting that plan to government or international bodies, go hand in hand. The UCSMT applied this strategy by partnering with the architecture faculty. The most recent example is the participatory territorial ordering plan, legible by officials, built through more than thirty workshops, covering 67 reserved plots and including a detailed diagnostic mapping. CAMSAT followed a similar process, welcoming architects, engineers and researchers as collaborators to elaborate the NBBT plan. The organisation calls for outside knowledge and instrumentalises it to serve the goals previously defined by the community. Thanks to this process, the community can choose the way it engages with governance bodies by presenting a technically tangible plan rather than voicing a political demand.

The fourth and fifth steps, respectively providing services for the community and building trust towards the community as well as the government, also go together. Implementation builds trust, bringing political influence. The project delivery record of UCSMT has converted into a

¹⁰ Tr.: “*apolitical partisans*” - taking the side of the local community without being party politicians.

real asset that the community can draw on today to sustain its political leverage. In the NBBT project in Asuncion, the Ministry has acknowledged that working with the community was key in the elaboration of the project. Such political influence results from the operationalisation of trust into concrete influence over urban policy implementation. When community leaders successfully negotiate recognition, they strengthen place attachment and willingness to invest in community life (Rivera, 2020). Moreover, effective project implementation allows local leaders to emerge as mediators between residents and local authorities, converting political capital into administrative credibility (Lomnitz, 2014).

The sixth step transforms one policy win into a genuine escape from the risk trap. With each successful project, the credibility of the organisation increases, both within the community and towards the state, lowering the threshold for the next project. This can be related to the question of resilience by whom (Allen et al. 2024). The compounding logic is the answer to the concern of constant self-responsibility for adaptation eroding community capacity over time. UCSMT and CAMSAT demonstrate that the risk trap cycle can be broken when a project succeeds and external trust is established with state actors, shifting the burden partially onto institutions. The community is no longer entirely responsible for its own resilience against risk, as it pushes the state to assume its responsibility.

This process of policy shift and its compounding logic ultimately show that communities can progressively gain control over how they are governed. With each efficient project building, they control their legibility more effectively. The community proves that it can be a co-producer of governance instead of a passive object in the scope of risk management.

6. Constructive Statecraft: Organisations Establish Hegemony Beyond Biopolitics

The sixth and most theoretically significant finding revolves around the overall character of the organising model observed in UCSMT and CAMSAT. Building upon Gramsci's (1971) conceptualisation of hegemony, the central dynamic of organisation-building for UCSMT and CAMSAT can be described as practicing what can be called "*constructive statecraft*" at community level. Firstly, both organisations act within local civil society by uplifting their disadvantaged communities through long-term social work, seeing themselves as uniting agents for their communities - *no elegimos la pobreza, trabajamos para superarla*¹¹. Secondly, in the sphere of politics, even while embracing some combative tactics such as protests at strategic moments, the organisations position themselves as capable project implementation agents in the eyes of the state or international actors and build trust through successful service delivery. The continued practice of constructively proposing and executing new plans and policies, such as urban zoning, street naming, social infrastructure, and full settlement upgrading, becomes core to the reproduction of hegemony, both within local civil society by advancing residents' prosperity and opportunities and maintaining legitimacy towards their communities, and towards the state by projecting technical capabilities.

¹¹ Central CAMSAT slogan, which means: "*We do not choose poverty, we work to overcome it.*"

Strikingly, both a decidedly ideological organisation like UCSMT and a self-declared apolitical one like CAMSAT have produced significant policy impacts. Both organisations highlight the need to uplift the material conditions of local inhabitants but they differ markedly in their approaches to organisation building. UCSMT's socialism and Zapatista values contrast with CAMSAT's focus on education and social community work. Hence, *constructive statecraft* emerges as a transferable logic across community organisations.

The organising mechanisms observed on the field also add a new dimension to Zeiderman's (2013) observations on the "biopolitics of risk." While Zeiderman's evidence from Bogotá suggests that vulnerable populations highlight their own legibility towards the state as fragile lives at risk, both UCSMT and CAMSAT project significant power towards the state, and make themselves legible as implementation agents. Thus, both in San Miguel Teotongo and Bañado Tacumbú, it is building local power rather than the presentation of vulnerability that leads to influence over policies that can effectively reduce disaster risks for residents of informal settlements. The organisations understand their political contexts correctly, navigating the demands of the city-level technocratic approach to risk management (Fraser, 2017), and infusing it with their own planning proposals that crucially incorporate social and environmental aspects. An interesting difference to the biopolitics in Bogotá is also the role of women: while Zeiderman (2013) observes a framing of female lives "at risk" as a central aspect for justifying inclusion in risk reduction programs, women play a central role in mobilising for community mobilisation and practicing *constructive statecraft* in San Miguel Teotongo and Bañado Tacumbú.

LEARNINGS

Future Directions

This research has sought to understand the conditions under which community organisations in informal settlements can translate persistent hazard exposure into durable policy change, and the findings point toward several open research questions that future work would benefit from pursuing. The most immediate question concerns the transferability and durability of the *constructive statecraft* dynamic identified in San Miguel Teotongo and Bañado Tacumbú: longitudinal observation of both organisations will be useful to test whether the mechanisms identified in this report hold as the organisations evolve and as political alignments shift. Moreover, the threats that originally forged collective action are partially addressed by the very policy changes those organisations secured. At the same time, however, as climate change accelerates and increases the threats faced by precarious settlements, new challenges to organisational hegemony may arise. Beyond the neighbourhoods studied, systematic comparison with other community organisations across Mexico City, Asunción, and the wider Latin American urban context would allow researchers, policymakers and community leaders to assess whether *constructive statecraft* constitutes a transferable model. Testing the model in other circumstances can illustrate whether specific contextual factors, including the presence of an embedded symbolic leader, a particular history of state-community relations, or a specific hazard chronology, are necessary conditions that limit its replicability.

Across both cities, this investigation identified innovative policy interventions, for which targeted longitudinal studies rigorously evaluating their impact would be valuable for planners, policymakers and community leaders elsewhere. In Mexico City, crucial future research questions include assessing whether rainwater harvesting and environmental education interventions have produced measurable changes in drought and flood outcomes for residents of San Miguel Teotongo relative to comparable settlements, and tracking the UTOPIÁS model as it scales across city districts, examining rates of service uptake, risk and socioeconomic outcomes in recipient neighbourhoods, and whether the policy produces comparable results in communities that lack the organisational embedding which characterised its origins in San Miguel Teotongo.

In Asunción, the *Nuevo Barrio Bañado Tacumbú* project presents a rare opportunity for a natural experiment in community-negotiated urban resettlement. Establishing a rigorous baseline of risk exposure and socioeconomic conditions across the *bañados* today and tracking outcomes over time for households that move to the new barrio against those that do not, including whether residents are able to remain in the new neighbourhood over the long term, would generate evidence of considerable value for risk-related resettlement policy. Insights from impact evaluation can inform future projects by international funders like the IDB, national ministries as well as CAMSAT and other community organisations. Taken together, these questions reflect a broader invitation to move from documenting the mechanisms of community resilience to evaluating their outcomes at scale, through comparative and longitudinal designs that would allow the conditions and outcomes of *constructive statecraft* to be specified with greater precision.

Methodological Reflections

Conducting this research constituted a formative step in our development as urban practitioners and researchers. Carrying out fifty semi-structured interviews across a diverse stakeholder landscape, ranging from community leaders, municipal officials, international development project managers, local academics, to residents, required us to adapt tone and analytical framing in real time. We held multiple institutional accounts of the same projects bringing in different narratives. Learning to treat that tension as analytically productive was one of the more durable methodological lessons of the process. During fieldwork, our interview frameworks were substantially rebuilt after the first days on the ground, as conceptual categories developed within a European academic context met local understandings of risk, informality, and state-community relations that did not map neatly onto them. We experimented and learnt that rigorous urban research begins with a willingness to let the research on the field revise the initial framing. Furthermore, working as a four-person international team across two research sites with distinct governance logics, much of it conducted in a second or third language, added further complexity. It sharpened our ability to coordinate, communicate across different disciplinary and cultural sensibilities, and to produce coherent joint analysis from data collected on distinct fieldwork cases. Taken together, the Capstone deepened our understanding of what careful, situated urban research actually demands. We did not only develop technical competence, but also the patience to listen and adapt, the rigour to revise under pressure, and the ability to think differently when the evidence was asking us to.

FIND OUT MORE

On Mexico City

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