

# Solutions for Sustainability Through Peri- Urbanization Processes

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Published in the United States of America by  
IGI Global Scientific Publishing  
701 East Chocolate Avenue  
Hershey, PA, 17033, USA  
Tel: 717-533-8845  
Fax: 717-533-7115  
Website: <https://www.igi-global.com> E-mail: [cust@igi-global.com](mailto:cust@igi-global.com)

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#### Library of Congress Cataloging-in-Publication Data

LCCN: 2024053577 (CIP Data Pending)  
ISBN13: 9798369360897  
Isbn13Softcover: 9798369360903  
EISBN13: 9798369360910

#### British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material.

The views expressed in this book are those of the authors, but not necessarily of the publisher.

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*Oscar Bragos, Universidad Nacional de Rosario, Argentina*

*Yolanda Fernández Martínez, Universidad Autónoma de Yucatán, Mexico*

The aim of this chapter is to compare two case studies, that of Mérida in Mexico and that of Rosario in Argentina, based on the legal instruments that regulate real estate developments owned by condominium regime, as well as their impacts on the urban form. This interest arises every time that the city of Mérida is experiencing a boom in private developments, preferably in the northern periphery, while in Rosario a municipal by-law that prohibits them has been in force since 2010. Both the cities of Rosario and Mérida have common points regarding the temporality of legal instruments, although their positions regarding condominium property have been opposite.

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This study intends to analyze the conceptual, theoretical and empirical interconnections between the sustainable innovation and the new urban green innovation agenda. It departs from the assumption that sustainable innovation is at the core of the new urban green innovation agenda. The method employed is the meta-analytical, reflective and descriptive based on the conceptual, theoretical and empirical literature review.

The study concludes that there are clear evidences that sustainable innovation is at the center of the new urban green innovation agenda.

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This chapter focuses on how Brazil's national urban policy has affected peri-urbanization in São Paulo. Since the Federal Constitution of 1988, the idea of property social function was established, leading to the development of the City Statute. This law includes instruments related to informal settlements, such as collective adverse possession. The REURB Law of 2017 further modified this instrument and guaranteed security of tenure through the formal possession of properties. Within the city of São Paulo, the chapter aims to highlight how the 2014 Master Plan implemented these policies. For this purpose, the research relies on a case study design, employing an inductive and qualitative approach supported by bibliographic and documentary research. The chapter emphasizes some critical issues related to the application of the REURB Law in peri-urban areas, thus identifying pathways to enhance policy implementation through community-driven actions. Additionally, it seeks to provide a theoretical framework that can serve as a panoramic basis for future scientific research in the field.

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The northern metropolitan area of Bogotá is characterized by a dispersed urban growth, caused primarily by processes of decentralization of the population and economic activities relocated from the metropolitan center. This chapter reviews the case of the Chicú River basin — in the north of the city — in accordance with the hypothesis that the processes of anthropization of the non-urbanized metropolitan territory — caused by patterns of dispersed urban growth and changes in land use into productive economic activities — are transforming the ecosystem services provided by the area and putting the environmental sustainability of the region at risk. Using GIS tools, satellite images, and census data from 2005 and 2018, changes in land

use cover were analyzed. The results allowed us to generate scenarios informed by public policy decision-making that are useful to harmonize territorial growth processes and to mitigate negative externalities, in order to safeguard the existing ecosystem services.

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Women's political and community action, particularly in informal urban-rural border territories sustained from processes of social reproduction, offer other dimensions from intersectional feminisms to rethink wellbeing and sustainability. Intersectionality accounts for the intertwined action between capitalism, patriarchy and colonialism in the construction of an extractivist relationship with the land and women's bodies, feminized and racialized, reproducing impoverishment, subordination and naturalization of violence. Other dimensions of welfare and sustainability are related both to the extractivist logics of the land and bodies, as well as to the *agenciamientos* (agency) motivated by the personal, political and community desire to defend the territory-body-land. In this context, this chapter discusses the processes of social reproduction in informal or popular urbanization and the search for wellbeing and sustainability from intersectionality, taking as a case study the Alto Fucha Ecoterritory, an urban-rural border territory in Bogotá

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The phenomena of peri-urbanization in the cities of the Global South are closely linked to the implementation of transport infrastructures, which facilitate urban expansion beyond the limits of consolidated areas. This study aims to assess how the dynamics of transport infrastructures contribute to socio-spatial fragmentation, generating exclusion and inequality in peripheral areas. For this purpose, the locality of Suba has been selected, one of the largest peripheral areas of Bogotá, where approximately 1.2 million people live and where different economic strata coexist, with an unequal

supply of infrastructure and transportation. The 2023 mobility survey conducted by the District Mobility Secretariat of Bogota was used to evaluate economic, time, accessibility and transportation mode indicators, as well as the characteristics of the transportation infrastructure. A composite indicator was obtained by applying an entropy model. The results reveal that economic inequality is the main cause of spatial fragmentation in the Suba locality.

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*Çağlanur Köse, Politecnico di Milano, Italy*

The act of walking is becoming not just a means of transportation but a crucial to creation of sustainable cities. This transformation is significant in cities that are more vulnerable to impacts of climate change. The study focuses on pedestrian mobility in peri-urban areas so, increasing pedestrian mobility in these areas is an important role as climate change impacts will gradually increase in cities. Also, it focuses on importance of pedestrian mobility to develop sustainable urban areas. This micro-scale model, which can use the proposed quantitative and qualitative urban design factors to measure walkability, offers a different approach to sustainability for the peri-urbans. Furthermore, it provides an opportunity for spatial evaluation to increase the sustainability of peri-urban areas. As a case study, it focuses on the urban margin: Gratosoglio which is located south of Milan, a major Italian city. The main conclusion illustrate how walkability is affected by urban design elements and the importance of walkability in developing sustainable and climate-sensitive areas.

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*Edith G. Manchego-Huaquipaco, Universidad Nacional de San Agustín, Peru*

Interpreting the benefits derived from urban ecosystem services is crucial for managing lake landscapes, enabling the simultaneous achievement of multiple objectives in urban landscape conservation. This study focuses on the assessment of the capacity of the ecological infrastructure of the San José de Uzúña dam in Arequipa, Peru. This assessment uses the zoning criteria proposed by the ECOTERR environmental

tool, complemented by semi-structured interviews with users of the dam. The methodological-logical framework developed constitutes a valuable resource in the urban discourse on eco-system services and the management of urban landscapes. Consequently, this research provides significant data that can be used for specific interventions to improve ecosystem services in similar contexts.

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Indoor air quality (IAQ) in peri-urban areas of a fast-developing South Indian metropolis, Hyderabad, has deteriorated due to growth in urbanization, industrialization, and emissions from vehicular traffic. This paper examines the effectiveness of green infrastructure (GI) measures on IAQ in Hyderabad, particularly emphasizing urban design strategies and low-VOC paints for reducing indoor pollution. A literature review was conducted on previous IAQ research in Hyderabad, emphasizing urban design and VOC emissions from paints. The chapter also evaluated interventions concerning GI in peri-urban Hyderabad to determine their efficiency in enhancing IAQ. It has been found that poor urban design and the use of high-VOC paints are two primary causes of indoor air pollution in Hyderabad. Some interventions, like urban forests, green roofs, and green walls, have demonstrated the capability of improving IAQ by controlling particulate matter, volatile organic compounds, and carbon dioxide.

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Ensuring access to potable water, basic sanitation, and hygiene (WASH) in Latin America, particularly in rural areas, remains challenging. In 2022, 8.4% of the population lacked safe drinking water, while 74.6% had basic sanitation. Regulatory approaches vary but are generally nascent, facing significant water quality challenges from agricultural runoff, industrial discharges, and mining activities. Inadequate wastewater treatment leads to bacteriological pollution. Over-extraction of groundwater, unplanned urban growth, and limited resources exacerbate pollution and water stress. Monitoring and enforcement are hindered by outdated infrastructure and inadequate training. Critical water quality parameters are inconsistently measured,

and delayed sample processing compromises microbiological analyses. Education and training in water management, infrastructure improvements, and investment are imperative to address climate change impacts and social inequalities. Additionally, unplanned urban expansion puts further pressure on water resources in peri-urban areas.

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The chapter examines urban resilience as a proactive strategy linking climate adaptation with sustainable urban planning. Cities are both major contributors to and highly affected by climate change, requiring integrated responses. The study reviews key approaches such as heat island mitigation, green infrastructure, adaptive planning, and decentralized governance. Technical solutions like cool roofs, permeable surfaces, and urban greening are highlighted. Barriers including institutional gaps, cultural resistance, and challenges in measuring resilience are also discussed. The findings emphasize the need for flexible, multi-level planning models that embed resilience into long-term urban development frameworks.

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# Chapter 1

## Legal Framework of Urban Expansion in Two Latin American Cities: The Cases of Mérida in México and Rosario in Argentina

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### **ABSTRACT**

*The aim of this chapter is to compare two case studies, that of Mérida in Mexico and that of Rosario in Argentina, based on the legal instruments that regulate real estate developments owned by condominium regime, as well as their impacts on the urban form. This interest arises every time that the city of Mérida is experiencing a boom in private developments, preferably in the northern periphery, while in Rosario a municipal by-law that prohibits them has been in force since 2010. Both the cities of Rosario and Mérida have common points regarding the temporality of legal instruments, although their positions regarding condominium property have been opposite.*

DOI: 10.4018/979-8-3693-6089-7.ch001

## THE TEMPORAL CONTEXT OF THE CASE STUDIES

In the case of Mérida, we have slightly over a decade of data to evaluate the impacts of legal instruments on the territory. This period began in December 2010 with the enactment of the *Ley de Desarrollos Inmobiliarios del Estado de Yucatán* (Real Estate Development Law of the State of Yucatán) and its corresponding regulations introduced in May 2012. Additionally, it includes the publication of the new *Ley sobre el Régimen de Propiedad en Condominio del Estado de Yucatán* (Law on the Condominium Property Regime of the State of Yucatán), as well as the subsequent amendment of the Real Estate Development Law in October 2014.

It is important to highlight that in 2023, Yucatán underwent significant reforms regarding regulatory instruments associated with real estate development. Therefore, conducting a comparative analysis between these newer instruments and the earlier ones becomes essential, especially considering that the timing of the earlier regulations coincides precisely with the enactment of Ordinance No. 8725 by the Municipal Council of Rosario in December 2010.

In the case of Rosario (Santa Fe Province), the Ordinance *Supresión de la figura de barrio privado o cerrado en todo el suelo del ejido municipal de la ciudad de Rosario* (Suppression of the figure of private or gated neighborhood for all the land in the municipal ejido of the city of Rosario) marks an intermediate point in the most recent expansion process of the urbanized areas. Process that begins to arise from the middle of the last decade of the 20<sup>th</sup> Century and continues to the present. A period of changes in the provincial government's requirements for the approval of new development projects and changes in the national government's housing policy. The policies of the three states (nation, province, municipality), initiatives without a comprehensive vision of planning in a metropolitan area, affect the territorial transformation process of those last decades. More recently, the COVID pandemic also influenced the consolidation of this expansive process of urbanized areas in peri-urban territories.

In relation to the figure of gated community, it is interesting to highlight in the case of Rosario two different and contemporary processes that take place in the central city, on the one hand, and in the localities of the metropolitan region, on the other.

## THEORETICAL AND METHODOLOGICAL APPROACH

The theoretical approach for this comparative study is precisely grounded in the arguments underpinning the Rosario Ordinance. These arguments align with the principles later articulated, in 2016, within the New Urban Agenda and the Right to the City—central themes of the UN-Habitat III Summit held in Quito, Ecuador.

Moreover, this vision of the city forms part of a broader set of rights (access to infrastructure land and to affordable housing, among others) that should be guaranteed to the population, yet it contrasts with the current urban situation resulting from land consumption and real estate activities.

In this sense, Gilles Lipovetsky's (2014) perspective on *Los tiempos hipermodernos* (Hypermodern Times) enables us to approach this emerging urban phenomenon, which is driven more by lifestyle and patterns of land consumption than by the city's long-term needs. Consequently, addressing the Right to the City remains a priority for analyzing current urban manifestations, as well as generating critical and alternative interpretations of legal instruments that theoretically emphasize the primacy of collective interests.

Likewise, it is relevant to address the emergence of a city model about which international organizations and academia were already warning. The configuration of a diffuse, dispersed, and extensive city, of mono-functional fragments united by the main routes that link the central city with the nearby towns, results in a model far from a sustainable urban development. The waste of land resource and the use of the private automobile as a practically exclusive mean of mobility are the main features of this model. The "fading" of the concept of the traditional city as proposed at the time by Oriol Nel-lo (1998) is complemented by the critical vision of Javier Monclús (1998), focused on the economic, social, and ecological costs of the from then "new suburbanization" that continues today. A territory with conditions of inequity and inequality that latter was summarized by Bernardo Secchi (2015) in his book *Città dei ricchi, città dei poveri* (City of the rich, city of the poor).

Starting from a first theoretical discussion that arises from that the same regulatory instruments declare; we move on to the urban analysis of the study areas where condominium ownership takes place. The main variables to establish the comparative analysis between Rosario and Mérida are divided into three groups. The first group refers to the external conditions of the condominium property such as accessibility, proximity, and urban structure. The second group refers to their internal conditions, such as their morphology, typology, and soil values. The third group refers to establishing the relationship between the total real estate developments owned by condominium regime with respect to each of the cities and determining the impacts on the efficiency of the urban structure and on the transformation of that portion of the territory that begins to be identified as peri-urban land.

According with the above, it is relevant to establish relationships on these two cities, where the legal framework of Rosario could become a starting point for Mérida to take the pertinent measures to evaluate the impacts that the fragmented urban structure is having on efficiency and quality of life, from the perspective of the New Urban Agenda and the Right to the City.

Likewise, it should be noted that the arguments that support the normative action carried out in Rosario in 2010 were anticipatory of what was proclaimed in the New Urban Agenda of the UN-Habitat III Summit six years later. And according to this, it will be a priority to analyze the foundations that gave rise to the recent modifications in the regulatory instruments of Mérida in terms of condominium property. That is, to what extent matters relating to the Right to the City have been decisive for reformulating these regulatory instruments.

## **MEXICO. URBAN PLANS BY MARIO PANI AND CONDOMINIUM PROPERTY IN THE SECOND HALF OF THE 20<sup>TH</sup> CENTURY**

Institutional planning in Mexico can be understood from two perspectives. The first relates to the visions of prominent academics who, since the mid-20th century, have driven legal reforms and developed planning instruments that shaped Mexican cities in response to the specific needs and contexts of their time—a chronotopic reflection. The second perspective corresponds to the governmental stance, through which national-level institutions influenced urban public policies at state and municipal levels.

In the first case, we refer to the architect Mario Pani (1953), who stood out prominently in two aspects directly relevant to this study. Firstly, he was a pioneer in urban planning in Mexico, thus being responsible for developing Mérida's first urban plan. Secondly, he actively promoted Mexico's Condominium Property Law, approved in 1954 (Cebey, 2014, para. 2), which subsequently led to the enactment of a corresponding law in the State of Yucatán in 1962 (Government of the State of Yucatán, 1962).

Regarding the government's role in urban development in Mexico, four key aspects should be contextualized to better explain the contemporary phenomenon of condominium property and its impacts on processes of urban expansion, fragmentation, segregation, and polarization. These four aspects relate to the establishment of two governmental structures: one dedicated to promoting workers' housing, and another focused on land tenure regularization. The remaining two aspects concern land management practices aimed at providing urban infrastructure and services.

As mentioned earlier, urban planning in Mexico was strongly influenced by regulatory plans, in which architect Mario Pani played a significant role, both nationally and specifically within the state of Yucatán. His principal contribution to Mérida was the formulation of the city's first regulatory plan in 1953. Notably, the Ninth Proposition titled "Regulating the Growth of the City" (Pani et al., 1953, p. 39) includes the following key aspects:

**Land Speculation and Urban Expansion:** Pani identified land speculation occurring on the urban periphery and highlighted the associated challenges of regulating city expansion. He anticipated what is currently known as "land banking," emphasizing the necessity for the city itself to benefit from the strategic location of these lands. He advocated for acquiring such plots before private owners could resell them exclusively for profit, thus safeguarding broader urban interests.

**Land Acquisition for Urban Growth Control:** Consequently, Pani proposed to state and municipal governments the essential strategy of acquiring land reserves to manage and control urban growth effectively. Such acquisitions should carefully consider population needs, strategic location, and appropriate distances aligned with different residential typologies.

**Autonomous Future Cities:** Finally, Pani clearly stated that "future neighboring cities or satellite cities would have an autonomous regime for their services and would not impose additional burdens on the local municipality" (Pani et al., 1953, p. 39).

Through his forward-looking approach to the city's future via the concept of satellite cities operating autonomously—thereby avoiding overloading municipal governance—Pani set the foundational ideas that now characterize Mérida's northern periphery, particularly in the form of gated communities. This development will be analyzed further in the forthcoming section concerning urban planning and condominium property in Mérida. Reflecting on the evolution and lasting impacts of this urban model conceptualization over the 70 years since its introduction in Mexico remains crucial.

However, it is important to highlight that Pani's vision was aimed at equipping the municipality with effective tools to manage land use, thereby addressing two critical issues: speculation and uncontrolled, unnecessary urban expansion. Additionally, he prioritized the urban structure to guarantee continuity in the hierarchical road network and to encourage the "transformation and regeneration of specific areas into a system of 'superblocks,' featuring differentiated circulation systems, zoning, educational facilities, and sports parks" (Pani et al., 1953, p. 34).

In this respect, Pani's proposal from the early part of the second half of the 20th century established a clear relationship among the fundamental components of urban settlements, such as housing, educational, and recreational facilities. From this perspective, the road network was consolidated as the foundational element for structuring human activities, and superblocks were conceived as autonomous units interconnected within the broader urban system.

It is also noteworthy that, a year after his contribution to Mérida's urban planning, Mexico's National Condominium Law (*Ley Nacional de Condominios*, Secretaría de Gobernación, 1954)—also actively promoted by architect Mario Pani—was enacted. This legislation facilitated some of the era's most significant housing developments in Mexico City, strongly influenced by the Modern Movement and Le Corbusier's architectural principles, such as the Miguel Alemán Multifamily Complex and the Nonoalco Tlatelolco housing complex. Additionally, Pani collaborated with other architects on emblematic and influential projects both for Mexico City and for the country, including Ciudad Universitaria (University City), home to the National Autonomous University of Mexico (UNAM), and Ciudad Satélite (Levi & Guzmán, 2019, p. 9).

The social context and urban complexity that emerged in Mexico City during the mid-20th century corresponded to a significant period of urban expansion from the 1940s through the 1970s, aligning with the economic phase known as the "stabilizing development." During this period, the population of the Federal District—now Mexico City—increased dramatically, growing from 1.2 million inhabitants in 1930 to approximately 6.9 million in 1970 (Levi & Guzmán, 2019, p. 8). In response to this substantial migratory phenomenon, Pani (1957) articulated a vision that led to the development of Ciudad Satélite:

*"We are already many who think that, until the supreme decision of statesmen provides a remedy for the formidable migratory phenomenon causing these issues, the problems of the modern city have only one solution capable of successfully confronting them. That solution has a name: the city outside the city" (Pani, 1957, p. 211).*

Thus, the concept of Ciudad Satélite as "a city outside the city" emerged as an appealing alternative for Mexico's middle classes (Alcantar García, 2020). On January 9, 1957, construction of Ciudad Satélite in Naucalpan, State of Mexico, was approved, driven by private-sector initiatives aligned with Pani's Master Plan. This plan was pioneering, as it was the first in Mexico to implement advanced functionalist urban planning techniques for the design of commercial subdivisions (Garay, 2010, p. 18).

This urban proposal, located on Mexico City's northwestern periphery, encompassed approximately 800 hectares (Pani, 1957, p. 216). It featured a superblock layout, and a road network explicitly designed to accommodate automobile use. Pani (1957) emphasized the following point clearly: "The most advanced contemporary road organization distinguishes three forms of access: communication arteries, penetration arteries, and distribution arteries" (p. 222).

In this way, the peri-urban vision that emerged in Mexico during the second half of the 20th century promoted the development of autonomous suburban areas. In one of his early proposals, architect Mario Pani envisioned combining multifamily

housing with single-family lots, thereby implying higher density and greater building heights. However, the commercial interests of investors were primarily focused on the idea of a "residential suburb." To support this model, a standardized lot size was established to prevent two specific outcomes: the purchase of large land parcels and the subsequent subdivision of these lots for resale (Alcantar García, 2020, p. 184).

Within the city, the Miguel Alemán Multifamily Complex and the Nonoalco Tlatelolco Housing Unit represented key manifestations of condominium property as tools for urban regeneration, increased residential density, and the strategic use of internal infrastructure. The Tlatelolco Housing Unit, inaugurated in 1964, was developed on a 100-hectare site to accommodate 102 buildings and 12,016 apartments, with a planned density of 1,000 inhabitants per hectare and 75% designated as green space. The project included "sports centers, clinics, schools, nurseries, offices, and theaters, enabling residents to meet their basic needs within the complex and fostering an environment of constant interaction and internal circulation" (Martínez & Reza, 2020).

Mario Pani's vision involved the use of regulatory plans as instruments to guide urban development, ensuring that essential services and facilities were fully integrated into the urban fabric. His concept of *superblocks*—which combined residential, educational, recreational, and commercial functions within a clearly defined area—was intended to foster self-sufficient communities. This approach aimed to reduce travel distances, enhance quality of life, and encourage social interaction.

Pani's urban planning principles emphasize the following core ideas:

**Functionalist Zoning:** Dividing urban space into distinct zones—residential, commercial, industrial, and recreational—to ensure the orderly, efficient, and purposeful use of land.

**Strategic Location:** Locating urban infrastructure and facilities where accessibility and utility for the population would be maximized, based on comprehensive and forward-looking regulatory plans.

**State Ownership:** Preserving state ownership of key urban facilities to guarantee their long-term availability and accessibility for public use.

**Integration of Services:** Designing urban areas so that essential services—such as schools, markets, and parks—are within proximity to residential neighborhoods, thereby fostering community cohesion and minimizing the need for long-distance commuting.

## Deep Reforms in Mexico

In this section, we contextualize the final three decades of the 20th century by examining four key governmental actions in Mexico that significantly shaped urban expansion and were particularly decisive for land management. These include the establishment of two governmental institutions, the formulation of a regulatory guide for the provision of urban infrastructure, its subsequent transformation into an Official Mexican Standard, and the implementation of Agrarian Reform.

The first institutional action was the creation of the Institute of the National Housing Fund for Workers (INFONAVIT) in 1972 (*Historia del Infonavit*, n.d.; Cerdán, 2006), an institution that remains active to this day. INFONAVIT has been one of the most influential forces driving both the expansion and consolidation of urban areas in Mexico. Over the past five decades, it has played a central role in mass housing production, and land management has often depended on the federal government's ability to acquire land and respond to housing demands.

As a result, INFONAVIT emerged as an alternative financing institution for populations excluded from conventional banking systems, primarily by channeling subsidies to construction companies. However, in recent years, this support has declined, contributing to the bankruptcy of several major construction firms during the 2012–2018 federal administration (Salinas Arreortua, 2022, p. 8).

These developments reveal two fundamental challenges in the processes of urban growth. On one hand, strategic land management is essential for guiding housing development in both intra-urban and peri-urban areas. On the other hand, effective subsidy programs are critical for financing the infrastructure, urban facilities, and housing required to ensure accessibility for underserved populations.

The other governmental institution that played a significant role in Mexico's urban development was the Commission for the Regularization of Land Tenure (CORETT), established on November 8, 1974. Its purpose was to “contribute to reducing patrimonial poverty by providing legal certainty, incorporating human settlements into territorial planning and sustainable urban development through land tenure regularization” (INSUS, 2023, p. 3).

After nearly four decades, CORETT was transformed—by presidential decree on December 16, 2016—into the National Institute of Sustainable Land (INSUS). This new entity was tasked with “planning, designing, directing, promoting, coordinating, and implementing programs, projects, strategies, actions, works, and investments related to land management and regulation, following principles of planned and sustainable territorial development” (Ídem).

A critical aspect of these urban transformation processes is the implementation of public policy aimed at the strategic distribution of spaces designated for infrastructure. Housing provision and land management are closely linked to securing the

legal certainty of citizens' assets through land tenure regularization. Accordingly, a broader planning vision became necessary—one in which schools, health clinics, sports areas, and marketplaces, among other facilities, were allocated based on service scale and the size of the population they would serve.

Beginning in 1981, the Secretariat of Human Settlements and Public Works (SAHOP) designed and published the *Urban Equipment Normative System: Basic Norms* (SAHOP, 1981). This regulatory guide was later adopted and adapted by successive federal agencies overseeing territorial matters: first by the Secretariat of Urban Development and Ecology (SEDUE) starting in 1985 (*Diario Oficial de la Federación*, 1985); then by the Secretariat of Social Development (SEDESOL) in 1999; and finally, by the Secretariat of Agrarian, Territorial, and Urban Development (SEDATU), established on January 2, 2013.

The original guide later evolved into an Official Mexican Standard, becoming NOM-002-SEDATU-2022, titled “*Urban Facilities in the Instruments that Make Up the General System of Territorial Planning: Classification, Terminology, and Application*”. This standard is directly linked to NOM-001-SEDATU-2021, titled “*Public Spaces in Human Settlements*”, both published in the *Official Journal of the Federation* on February 22, 2022 (SEDATU, 2022).

According to NOM-002-SEDATU-2022, Urban Facility is defined as: “*the set of buildings, installations, constructions, and furniture used to provide urban services to the population for the development of economic, social, cultural, sports, educational, transport, and supply activities*” (Ídem).

The conceptual foundation of Urban Facility originated from two fundamental criteria: first, its location was determined by a regulatory plan; and second, the facilities were built on state-owned land. Therefore, cities were expected to strategically and hierarchically allocate land for urban functions that complemented and supported daily life.

As a result, Urban Facility served both public and social functions, precisely because it was situated on public land. This condition guaranteed both legal and social certainty, ensuring that such facilities would remain part of the city's public patrimony. Consequently, residents of any neighborhood or subdivision would always have access to basic services such as schools, markets, or parks—facilities that, as public property, could not be transferred to private ownership.

This concept of state participation in the formation of community life was clearly articulated by Mario Pani in his regulatory plans and superblock proposals, both within central urban areas and on their outskirts. His approach was grounded in the basic principles of functionalist zoning, emphasizing the relationship between land use, spatial distance, and the provision of infrastructure to support the population's fundamental activities.

However, the new NOM-002-SEDATU-2022 establishes that Urban Facilities may be either public or private, making it essential to critically examine this perspective, particularly in relation to condominium property within both intra-urban and peri-urban contexts. Urban planning must prioritize the common good over private interests, land speculation, and the monopolization of strategic areas, as these practices undermine urban continuity, permeability, and equitable access to services.

The distinction between public and private Urban Facility in NOM-002-SEDATU-2022 underscores the need to assess their respective impacts on urban dynamics. Public infrastructure ensures accessibility, inclusivity, and collective benefit, whereas private amenities often cater to closed or exclusive communities, potentially reinforcing patterns of social segregation. In contrast, Mario Pani's vision emphasized public ownership and the strategic distribution of urban facilities as essential to strengthening community life and preventing speculative land practices.

The implementation of these foundational principles has been reflected in a range of urban development policies and regulatory frameworks over the past decades. The adoption of standards such as NOM-002-SEDATU-2022 codifies these principles into actionable planning guidelines, ensuring that contemporary urban development adheres to the strategic and hierarchical allocation of land for public functions. This planning approach not only preserves the public character of essential services, but also fosters sustainable urban growth by integrating social, economic, and environmental considerations into territorial decision-making.

The strategic distribution of Urban Facilities, as envisioned by Mario Pani and formalized through regulatory frameworks such as NOM-002-SEDATU-2022, plays a crucial role in shaping Mexico's urban landscape. By ensuring that essential services are accessible, well-located, and publicly owned, these policies contribute to the development of livable, equitable, and sustainable urban environments. The foundational principles of functionalist zoning, strategic location, state ownership, and integration of services continue to guide urban development, enabling cities to meet the evolving needs of their populations while advancing social equity and environmental sustainability.

Furthermore, the structured distribution of infrastructure through coherent public policies and normative guidelines has been instrumental in molding Mexico's urban development over recent decades. By ensuring that infrastructure is systematically planned and implemented, these instruments have promoted legal certainty, spatial order, and equitable access to essential services. The evolution of technical guides into Official Mexican Standards reflects the state's ongoing commitment to organized, inclusive, and sustainable urban growth, aligned with a broader vision of integrated territorial planning.

In the state of Yucatán, however, investors developing condominium properties are not required to allocate land for public facilities. Instead, they design private common areas, or so-called “amenities,” within the gated perimeters of their developments. These are marketed as secure, exclusive, and high-value environments for residents, offering communal spaces and experiences that are often inaccessible outside these private enclaves. This scenario calls for a deeper examination of the impact of condominium property on the city, particularly the balance between public and private spaces. Such analysis is especially relevant considering Mario Pani’s 1953 Regulatory Plan for Mérida, which proposed state land reservation as a tool to control urban growth and guarantee the equitable distribution of infrastructure and services.

The establishment of SEDATU in 2013—through the merger of the Secretariat of Agrarian Reform and the Secretariat of Social Development—marked the institutionalization of a comprehensive territorial vision that integrates both urban and rural dimensions (Meyer Falcón, 2023). Understanding the historical background of Agrarian Reform is essential, particularly the constitutional amendments of December 1991, which brought an end to agrarian land redistribution and opened the door to the privatization of ejido and indigenous community lands (Mackinlay, 1993, p. 99). This reform enabled peasants to gain land ownership through both social and private property mechanisms (Ídem).

The impacts of the 1992 Agrarian Reform led to the reformulation of the General Law of Human Settlements, published on July 21, 1993. In the case of Mérida, urban effects began to materialize in the early 21st century, indicating that the 1990s were a transitional period in which land ownership shifted from ejido to private property. Although *ejidatarios* were granted ownership rights, the value of their land increased significantly once it entered the real estate market, which in turn accelerated processes of urban expansion.

In summary, the reforms and institutional actions undertaken by the Mexican government during the final three decades of the 20th century had a profound influence on urban expansion and land management. The creation of INFONAVIT and CORETT, the formulation of regulatory frameworks for urban infrastructure, and the implementation of Agrarian Reform were pivotal in reshaping the urban landscape and responding to the housing demands of the Mexican population.

## **The Delayed Institutionalization of Urban Planning in Mexico: From Curitiba to León and Mérida**

The institutionalization of urban planning in Mexico through decentralized public bodies with citizen participation has been notably delayed. It was not until 1994 that the first Municipal Planning Institute (IMPLAN) was established in León, Guana-

juato. Its objective is “to generate and establish the foundations of urban planning that guide and advise the Municipality of León in its short-, medium-, and long-term development” (IMPLAN León, n.d.).

This Institute was inspired by the Institute for Urban Planning and Research of Curitiba (IPPUC), founded in 1965 to implement the Curitiba Master Plan. The plan focused on “land use, road systems, public transport,” and integrated environmental, economic, and social considerations (Fukuda-Hayakawa, 2010, pp. 56–57).

In the case of Mérida, on August 4, 2014, the City Council officially approved the creation of its own Municipal Planning Institute (IMPLAN) (Municipality of Mérida, 2014). A decade has since passed with this institution dedicated exclusively to the municipality’s planning processes. Two of the most significant outcomes include:

The update of the Urban Development Program in August 2017, following the previous version from September 2012.

The creation of the Strategic-Level Comprehensive Urban Mobility Plan, Vision 2040 (PIMUS), which aims:

*“(...) to meet the mobility needs of people, goods, and services in cities and their surroundings. It is based on planning methodologies and practices to improve the quality of life, considering the principles of integration, participation, and evaluation.” (IMPLAN Mérida, 2019)*

However, it is important to note that while Mérida now has these two instruments for urban planning and mobility, they are not legally binding or interdependent. In other words, mobility strategies do not condition or influence territorial planning strategies, which limit integrated decision-making.

Furthermore, condominium ownership (*propiedad en condominio*) is not incorporated into the strategic components of the municipal planning instruments. This means that no specific public policies exist to regulate or guide the urban expansion process as it relates to gated communities. As a result, this form of urban development continues to grow without clear integration into the city’s broader planning framework.

## **URBAN PLANNING AND CONDOMINIUM PROPERTY IN MÉRIDA: 1962-2014, HYPERMODERNITY, REAL ESTATE BOOM, AND THE 2024 REAL ESTATE REFORM**

What is the main problem with gated communities? They represent a significant trend in Latin American urban development. While the reasons for their rise may vary, Pfannenstein (2019) argues that it primarily stems from “(...) the increasing

sense of insecurity within the urban environment, which motivated the real estate sector to offer fortified housing as a response to the public administration's inability to address urban problems." (p. 1088)



However, Mérida presents a different urban phenomenon. Known as one of the safest cities in the country—and internationally recognized as a desirable place to live and invest—the prevalence of gated communities in Mérida is not necessarily a response to security concerns, but rather to aspirations related to status, exclusivity, and privacy. These features are characteristic of what can be described as spaces of hypermodernity, linked to lifestyles and consumption patterns that give rise to hyperreal urban spaces (Lipovetsky & Sébastien, 2006). This sociological lens invites an inquiry into why residents of one of Mexico's safest cities choose to live in enclosed communities on the urban periphery.

From a legal perspective, condominium property in Yucatán began to be regulated in 1962, through the *Law on the Regime of Property and Condominium Real Estate* (*Gobierno del Estado de Yucatán, 1962*). However, this law was not updated to reflect the growing urban complexity that emerged after the year 2000. It was not until 2014 that the 1962 legislation was repealed and replaced by the *Law on the Regime of Property in Condominiums* (*Gobierno del Estado de Yucatán, 2014*).

This new law was enacted in a context shaped by two significant regulatory moments. The first corresponds to the renewal of legal instruments governing the real estate sector, particularly in relation to housing development. In this context, the Law of Subdivisions of 1985 (*Gobierno del Estado de Yucatán, 1985*) was repealed and replaced by the Law of Real Estate Developments in 2010 (*Gobierno del Estado de Yucatán, 2010*), followed by the publication of its regulatory provisions in 2012 (*Gobierno del Estado de Yucatán, 2012*).

The second phase corresponds to the emergence of gated communities on the northern periphery of Mérida. It is particularly noteworthy that in the Fourth Explanatory Statement of the new *Law on the Condominium Property Regime*, one of its key objectives is explicitly stated as promoting increased urban density, preventing urban sprawl, and encouraging vertical real estate development (pp. 7–8). This is especially relevant given that the law’s stated purpose is to “regulate the establishment, modification, and termination of the condominium property regime, and to lay the foundation for its organization and operation” (p. 13).

However, over the past decade, since the enactment of this new condominium law, Mérida has lacked an integrated legal framework, as the law has not been binding with the *Real Estate Development Law* or with the *Municipal Urban Development Program of Mérida* (2017). This disconnect is critical, as the law fails to specify key planning criteria—such as the maximum surface area permitted for gated communities or the requirements for connectivity and continuity with the broader urban structure. This omission is particularly significant given the prevalence of this real estate model in peripheral areas of the city. Moreover, under the current regulatory framework, developers are not required to allocate a portion of their land for public facilities, such as parks, schools, or community centers, further weakening the capacity of public planning instruments to shape inclusive and connected urban environments.

It is important to note that on January 3, 2024, a set of real estate reforms was published (UN-Habitat, 2023). Among the most notable changes is the amendment to the *Real Estate Development Law*, which now formally recognizes both Public and Private Real Estate Developments. In the case of private developments, these are now classified into vertical, horizontal, and mixed-use typologies. One of the most significant advances in this reform is the following provision: “For private horizontal real estate developments, the area to be ceded for public use shall be 7% of the gross area.” (*Government of the State of Yucatán*, 2024, p. 19).

Within this new legal framework, there is now an opportunity for municipal governments to acquire land from each new private horizontal development in order to equip it with public facilities and infrastructure. However, it remains essential to evaluate whether 7% of the gross area is sufficient to meet the requirements established in Official Mexican Standards regarding public space and urban equipment.

Balancing public and private urban infrastructure require a nuanced, context-sensitive approach that considers broader social, spatial, and equity-based implications. By revisiting Mario Pani’s regulatory principles and understanding the long-term effects of agrarian and real estate reforms, urban planners and policymakers can work toward building inclusive and sustainable urban environments. Ensuring public ownership and the strategic distribution of urban equipment is key to promoting equitable urban development and preventing the harmful consequences of privatization, exclusion, and land speculation.

The evolving legal framework and sociocultural dynamics in Mérida highlights a complex interplay between legal reforms, societal perceptions of safety and exclusivity, and the practical realities of urban development. This interplay shapes not only the physical landscape of the city but also its social fabric and governance, emphasizing the need for ongoing evaluation and adjustment of policies to address in a better way, the unique urban challenges faced by Mérida and similar cities in Latin America.

## **ARGENTINA. ROSARIO PLANS AND TOOLS TO GUIDE URBAN GROWTH**

This section will address the emergence of the figure of the urban plan (*plan regulador*), the concern for environmental issues in urban planning and the emergence of peri urban as a theme of urban plans. For this purpose, three issues are considered: planning in the city of Rosario, the provisions of the provincial government regarding rules to be fulfilled by the new urbanization projects and the planning proposals for the metropolitan territory. The first and second issue of legal force, the third only indicative.

In Argentina, there is no national framework law regarding general issues on land use planning, and planning tools. This missing law could have served the provinces as a base to define their own laws on the matter. This absence explains why not all provinces yet have a specific law on these issues. Santa Fe is one of those provinces where the lack of such legislation is significant. Although there is no comprehensive law at the provincial level, there are a series of tools that define rules regarding land use planning. It is a set of laws and regulations from ministries and other agencies that must be observed when planning the territory.

### **Planning Tools. The Institutionalization of the Urban Plan**

At the origins of Urbanism in Argentina, urban plans were proposed as the appropriated tools to get a harmonious city development. Along with it, the urban code was the most widespread and used tool by local governments. A tool that, in simple terms, established the organization of the city by identifying the structural road network and the different internal zones as the basic and necessary components for such organization.

The purpose of the plan was to solve present problems and anticipate future needs, according to a city model with a time horizon (the city within fifty years) or a dimensional horizon (the city of one million inhabitants). In those times, Urbanism was understood as the discipline that analyzes the city, diagnoses its problems,

and proposes a solution. A solution that was none other than the urban plan or *plan regulador*. At that time, during the first three decades of the 20<sup>th</sup> Century, several cities had already proposed their urban plans since it was understood that a great and modern city had to have its urban plan.

In 1935, Law No. 2,439 -Organic Law of Communes- was enacted in Santa Fe Province, establishing the obligation for communal governments (localities with less than ten thousand inhabitants) to prepare an urban plan indicating the urban and suburban or orchard zones along with simple and basic criteria to be taken into account in the internal organization of a small locality (layouts and minimum street widths, types of blocks, bypass roads, location of squares and parks, and towpaths for towns located on the banks of navigable rivers).

Four years later, in 1939, Law No. 2,756 -Organic Law of Municipalities- was enacted, referring to local governments of towns with more than ten thousand inhabitants. It established that municipalities had to prepare their urban plans, which would contain the necessary provisions for the organization and future development of the city, including indications regarding public works, construction, protection of public buildings, conditions for social housing, regulation of public transport, among other issues.

Thirty years later, in 1967, concerns about urban planning were revisited by the provincial government. The then *de facto* military government issued Decree No. 7,317, referring to the "Norms for Preliminary Projects of Structural Urban Development Plans," known as "minimum norms." Its purpose was to protect land, water, landscape, and the health of the inhabitants from pollution. To this end, it established the conditions to be considered in planning the extension of urbanized areas (land uses classification, standard regulations for new urbanizations, minimum construction regulations, and banning urbanization in flood areas).

Years later, in 1978, under another *de facto* military government, the provincial government issued Decree No. 0563, establishing the conditions to be considered in the preparation of urban plans: a) local authorities must adhere to the guidelines established by the General Secretariat of Communal Action, which, once completed, had to be approved by the provincial government; b) local governments that did not had their urban plans should use the indications of the "minimum norms" Decree.

### **Urban-Territorial Planning, Environmental Issues, And the Control of New Urban Developments**

It was only in the late 20<sup>th</sup> and early 21<sup>st</sup> Centuries that the provincial government began to pay more attention to territorial planning issues. In 1999, Law No. 11,717 on "environment and sustainable development" was enacted, with the purpose of preserving, conserving, improving, and recovering the environment. This law in-

cluded urbanization rules, economic decentralization, and sustainable development. It also mandates the coordination between different public agencies, communes, and municipalities for the implementation of norms related to urban sustainable development.

This law is regulated by Decree No. 0101/03, which establishes, among other things, the ranking of urbanization projects according to their environmental impact (low or negligible impact, medium impact, high impact). Projects with medium and high impact must submit an environmental impact study -EIS- along with an environmental suitability certificate. Development projects (gated communities, private neighborhoods, simple subdivisions, residential / sports / educational complexes, cemeteries, botanical gardens, zoos, ecological reserves, shopping centers) are considered to have medium impact. On the other hand, those categorized as having a high impact include industrial parks and areas.

Considering the accelerated process of expansion of urbanized areas in the Rosario metropolitan region registered at the end of the 20<sup>th</sup> century and the beginning of the 21<sup>st</sup> century, the provincial government decided to launch new initiatives aimed to a greater control of the urban expansion processes. In 2014, through Decree No. 638, the Interministerial Committee on Territorial Planning (CIOT, Spanish acronym for *Comité Interministerial de Ordenamiento Territorial*) was created as a "cross-sectoral coordinating body for actions related to the Territorial Planning process." This decree establishes that the provincial government must maintain a registry of Territorial Planning Plans in the province, training municipalities and communes on territorial planning issues to be able to do the plans.

In 2017, the Ministry of Environment of Santa Fe Province advanced in the classification of new urbanization projects, with the purpose of establishing the mandatory requirement for an environmental impact assessment study. Through Resolution No. 350, two types of new urbanization projects are considered: simple urbanization subdivisions (within the urbanized area) and real estate complexes (residential enclaves: country clubs, gated communities).

In Annex II of Resolution No. 350/17, a "Categorization Formula for land subdivisions and subdivisions for simple urbanization and real estate complexes" was established. The results of the formula determine which category the new urbanization project belongs to (null/low impact, medium impact) or if the project is considered unfeasible, categorizing it as "non-urbanized." This new categorization considers various aspects (location and dimensions of the new development, flood risk, and available services).



## Metropolitan Territory Planning

Since 2012, the Rosario Metropolitan Coordination Authority Rosario -ECOM- (Spanish acronym of Ente de Coordinación Metropolitana), has been operating, considering the metropolitan territory: the city of Rosario and about twenty-six neighboring towns. This organization was later recognized as a non-state public entity by Provincial Law No. 13,532 of 2016. Regarding territorial policies, the first task of ECOM was to develop the Territorial Planning Guidelines -DOTs- (Spanish acronym of *Directrices de Ordenamiento Territorial*) between 2012 and 2014. The DOTs were developed during the peak of new urbanization initiatives in the metropolitan area localities, so they arrived too late to contain the uncontrolled process of urban expansion in the metropolitan region.

These guidelines are “common organizing principles, agreed upon by the set of communes and municipalities of the Rosario Metropolitan Area, that facilitate and guide the drafting of local urban plans.” The first of the seven DOTs aim for the “definition of sustainable urbanization and land use patterns.”

Subsequently (between 2016 and 2019), planning for each of the twenty-six localities integrated into the ECOM was carried out: the local urban plans -PULs- (Spanish acronym of *Plan Urbano Local*). Although these plans were jointly developed with local technical teams, the central idea of organizing the PULs, their contents, and many of the projects were conceived from the planning approach that then prevailed in Rosario. Two documents were prepared for each locality: proposals and preliminary diagnosis, and the corresponding local urban plan.

Some of the innovations proposed, those to manage of new urban land, are related to defining the category of “peri-urban area” differentiating it from “rural” land (policy of “promotion of peri-urban spaces”), “urban expansion land and special projects” (policy of “integration of local structure”), and “riverfronts” (policy of “reevaluation of watercourses”).

The recognition of peri-urban areas goes hand in hand with the ordinances regulating the application of phytosanitary products that many of the towns in Santa Fe have been approving in recent years, establishing restriction areas for the aerial and terrestrial application of highly toxic products.

### **Urban Planning In the City of Rosario**

During the period when minimum urbanization standards were in effect, some cities and towns in the province developed their own urban plans (also known as *planes reguladores* or master plans, depending on the time). For example, Rosario has a *Plan Regulador* from 1968 approved by municipal and provincial decrees. In 1991, a new plan, known as the Master Plan (*Plan Director*), was submitted to the Municipal Council for approval, but it was never addressed by that governing body. The same fate befell the 2001 plan (Rosario Master Plan: Bases for Agreement – *Plan Director Rosario: bases para el acuerdo*) and the 2008 plan (Rosario Plan 2007 – 2017). The 1991, 2001, and 2008 plans were all presented to the Municipal Council for consideration and subsequent approval, but they were not addressed and, therefore, not approved. Despite this these plans became the reference for urban regulation and for public works in the city. On the other hand, urban regulation in Rosario (land subdivision, building, and land use and density zoning) are considered by the Urban Planning Standards (formerly the Urban Code).

### **Gated Communities and Country Clubs**

The concept of residential enclaves, which in Argentine cities are gated communities and country clubs, first appeared in Rosario in 1997 with the enactment of Ordinance No. 6,492, which modified the Third Section of the then Urban Code and with Decree No. 1,542 of 2000. The Article 3 of Ordinance No. 6,492 established the figure of “Urban Agreement Programs on Urbanized Land,” which are urbanization or land subdivision operations carried out by public, private, or mixed entities. This article sets the minimum area of the development according to the location, the percentage of land to be ceded to the Municipality, conditions

regarding access to public roads, and internal common areas. These developments had to be exclusively for family housing.

Finally, three years later, the Municipality issued Decree No. 1,542 of 2000, which regulates Article 3 of Ordinance No. 6,492. For the first time in a document of urban planning regulation, this decree introduced the figure of "private neighborhood," indicating the conditions to carry out such a project: dimensions of the development according to location, integration with the urban environment, complementary works, access, infrastructure, continuity of the urban and traffic grid, minimum accesses from public roads, perimeter fencing, cession of the perimeter streets to the Municipality, location of for green spaces and equipment outside the project area.

Ten years later, in 2010, the Municipal Council passed Ordinance No. 8,727, which eliminates the figure of private or gated neighborhood throughout the municipal area of Rosario (Article 1) and prohibits the figure of country club (Article 2). This ordinance prohibiting the figure of a gated neighborhood wanted to avoid the problems of the expansive process of urbanized areas in the metropolitan region: insufficient provision of services, increased car mobility (use of private cars), soil impermeabilization that hinders the free drainage of water in the basins of the two streams, Saladillo and Ludueña.

Ordinance No. 8,727 of 2010 is the result of a long conflict between developing companies and land occupants in the northwestern sector of the city known as Nuevo Alberdi Oeste. The group GIROS played a prominent role in organizing and defending the residents of the area. This group became later the party *Ciudad Futura*, which today has representatives at City Council.

## **Real Estate Complexes**

On August 1, 2015, the new Civil and Commercial Code of the Nation came into effect. It includes the figure of "real estate complex," which particularly refers to a type of urbanization, closed enclaves such as "country clubs, gated or private neighborhoods, industrial, business, or nautical parks, or any other urban development regardless of its residential, labor, commercial or business purpose, including those that contemplate mixed uses, in accordance with the provisions of local administrative regulations." (Article No. 2073)

The figure of "real estate complexes" thus represents recognition from the Civil and Commercial Code of these types of "residential enclave" developments that were already recognized in the urban regulations of cities or provincial legislation. In Rosario's case, the impact was felt more by the inability to continue such developments than by the recognition of the real estate complex figure. This impact is particularly felt in neighboring localities, where various types of urbanizations,

"open" or "closed," appear to satisfy a demand originated in Rosario and that could not find offers in its city.

The effect of Rosario's urban regulations on neighboring localities has been significant: on one hand, the regulation banning gated neighborhoods accelerated the supply of this type of urbanization in other locations in the region. On the other hand, the introduction of the figure of Integrated Housing Park in the city determined that this type of urbanization was carried out only by large real estate companies. Consequently, the available land for urbanization and building family housing became scarce and expensive. The demand originating from Rosario was then met in other neighboring localities.

With the launch of national government's ProCreAr Program, which consisted of providing mortgage loans for the construction of housing to families who already owned a lot, the demands for land to access credit skyrocketed. Rosario had practically all the developable land divided into different Integrated Housing Parks -PHI- (Spanish Acronym of *Parque Habitacional Integrado*), based on an agreement established between the large developers and the municipal government. This policy of the local authorities failed, making it impossible for new urbanization projects to appear to satisfy the growing demand for land for the construction of family housing.

## CONCLUSIONS

Considering all the above, this represents an initial exploration of urban extension processes related to regulatory planning visions, land management methods, and the ways in which condominium ownership has been addressed in both Mérida and Rosario. This sets the groundwork for further research and enables a deeper analysis of the urban impacts in terms of spatial efficiency and fragmentation, as well as the comparison of indicators of urban fragmentation and socio-spatial segregation.

In this context, and emphasizing the role of regulatory tools, it is evident that Rosario has developed a robust and consolidated legal framework for managing gated communities and private real estate developments. Since 1997, these typologies have been recognized in municipal ordinances, and by 2010, they were formally banned due to their impact on urban expansion, automobile dependency, and—most notably—their implications for the Right to the City.

In contrast, Mérida's trajectory unfolded differently. Precisely during the period when Rosario acknowledged and later abolished gated communities (1997–2010), Mérida began to experience urban expansion because of the 1992 Agrarian Reform. From 2010 onwards, adjustments to real estate and condominium legislation sought to justify densification and discourage urban sprawl, but without establishing clear guidelines—such as maximum surface areas—for gated communities. Although the

2024 real estate reform introduced a requirement for developers to donate 7% of the gross area for public facilities, the law still does not address the critical issue of limiting the total area that horizontal private real estate developments may occupy.

This leads to a pressing question: What is the maximum area that gated communities should occupy to ensure urban efficiency and quality of life, in alignment with the principles of the New Urban Agenda and the Right to the City? Rosario's response was to prohibit such developments outright while partially displacing the problem to other jurisdictions. In contrast, Mexico has a historical precedent: 70 years ago, Mario Pani proposed the concept of superblocks—autonomous yet integrated units within the urban system—as a visionary alternative to unregulated suburbanization.

From this perspective, Mérida appears to be attempting to justify the continued expansion of gated communities by requiring a 7% land donation, rather than confronting their structural implications. It is therefore urgent and relevant to deepen the understanding of horizontal condominium models and to analyze their urban, social, and environmental impacts more comprehensively.

Urban land development, and the tools used to regulate it, are not only local matters but are deeply embedded in the dynamics of metropolitan regions. In conclusion, while the Real Estate Development Law in Mérida facilitated the proliferation of new horizontal and vertical developments outside the urban core, Rosario's prohibition of gated enclaves during the same period also contributed to the displacement of urban growth to peripheral areas—albeit through a different legal rationale. Both trajectories raise critical questions about how to balance regulation, inclusion, and sustainability in the governance of urban expansion.

## ACKNOWLEDGMENTS

The authors wish to express their gratitude to the project “Guidelines, plans, actions in peri-urban areas: ecosystems in equitable development” (DPAAPU – CYTED) for its support in undertaking the writing of this chapter.

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