

Neoliberalism and parks: the urban political ecology of green public space in Mexico City

Background/Problem statement

Decades of research confirms that urban green spaces in the form of parks, gardens, and urban forests provide many environmental services within cities including cleaner air and water, microclimate regulation, noise reduction, rainwater drainage and energy savings. In a megacity such as Mexico City—facing perilous levels of air, soil and water pollution—it is utterly important to study and manage urban ecosystems providing environmental services capable to ameliorate such conditions.

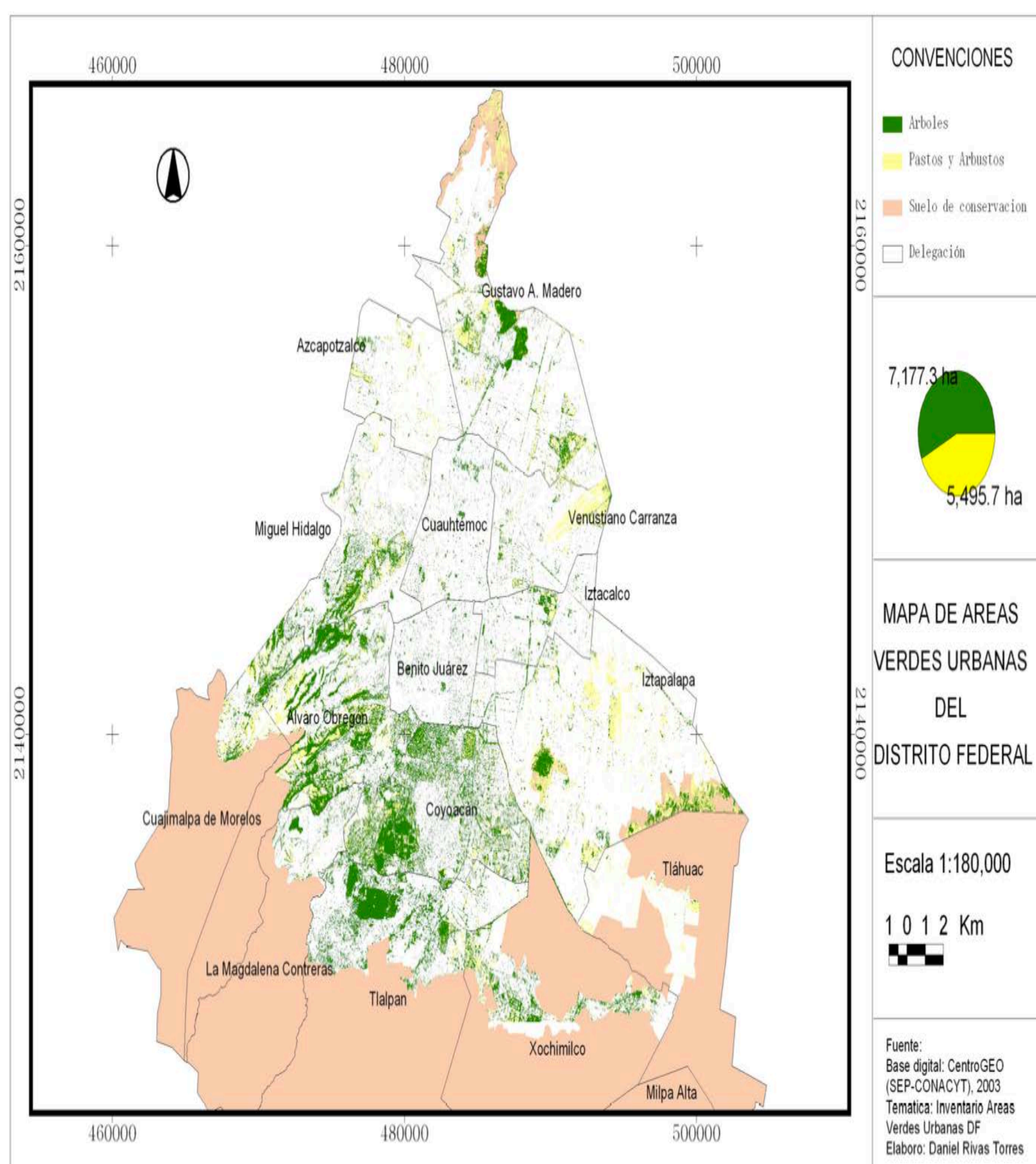
According to a report by the Mexican Ministry of Environment created in conjunction with the Inter-American Development Bank, in the year 2000, 5.66 m² of green public space were available per inhabitant in Mexico City (*Gobierno del Distrito Federal*, 2000), a figure below the United Nations recommendation of 16 m²/hab, and also lower than the international minimum standard of 9 m²/hab suggested by the World Health Organization (Sorensen et al., 1998). Moreover, Mexico City has a distinctly uneven distribution of urban green areas across different boroughs; for example, the boroughs of *Miguel Hidalgo* (12.6 m²/hab) and *Gustavo A. Madero* (8.8 m²/hab) hold a disproportionately higher distribution of green space compared to *Iztapalapa* (1 m²/hab) and *Cuajimalpa* (1.5 m²/hab) (Flores Xolocotz & González-Guillén, 2012). Although these numbers do not reflect important details as accessibility, patterns of use or physical conditions of green public spaces, they are indicative of flagrant unequal distribution and point to a general deficit of green public space in Mexico City.

Table 1. Mexico's City Green Urban Areas by Borough (INEGI, 2002).

Borough	Area km ² (*)	Total green Areas km ²	Green Areas % sup. Borough	% Forested Areas	% Zones with grass and bushes	Green areas per inhabitant M2	Forested zones per inhabitant M2	Population % (Year 2000)
Álvaro Obregón	61.12	24.59	40.2	64.5	35.5	35.8	23.1	8.1
Azacapatzalco	33.51	4.28	12.8	54.7	45.3	9.7	5.3	5.2
Benito Juárez	26.51	1.19	4.5	99.0	1.0	3.3	3.3	4.2
Coyoacán	54.01	20.13	37.3	76.7	23.3	31.4	24.1	7.5
Cuajimalpa	15.08	5.55	36.8	46.4	53.6	36.7	17.0	1.8
Cuauhtémoc	32.67	1.81	5.5	74.0	26.0	3.5	2.6	6.1
G. A. Madero	87.29	14.26	16.3	47.3	52.7	11.5	5.4	14.5
Iztacalco	23.12	2.25	9.7	54.7	45.3	5.5	3.0	4.8
Iztapalapa	113.37	18.32	16.2	27.1	72.9	10.3	2.8	20.8
Mag. Contreras	14.08	1.82	16.2	27.1	72.9	10.3	2.8	20.8
Miguel Hidalgo	47.69	8.89	18.6	57.3	42.7	25.2	5.7	2.6
Tláhuac	19.17	2.27	11.8	4.4	95.6	7.5	0.3	3.6
Tlalpan	48.29	11.80	24.4	88.9	11.1	20.3	18.0	6.8
V. Carranza	33.87	5.23	15.4	23.5	76.5	11.3	2.7	5.4
Xochimilco	22.90	5.89	25.7	60.8	39.2	15.9	9.7	4.3
Distrito Federal	632.66	128.28	20.4	55.9	44.1	15.1	8.4	100

Note: the borough of Milpa Alta is not considered as due to the fact that it is located entirely within "Conservation Land" (sic.)

Map 1. Mexico's City Green Urban Areas (INEGI, 2003).



Research Question

According to the Mexico City inventory of green public space created by the Directorate of Urban Reforestation, Parks and Bike Paths, there has been a significant reduction in the availability of green public space in Mexico City accompanied with a systematic increase of uneven distribution of this essential urban amenity in the past decade:

- 1) What are the main driving forces and actors responsible of the current green public space deficit and uneven distribution?
- 2) Is it plausible to characterize the current distribution of green public space in Mexico city as "inequitable" and as a result a case of environmental injustice?

* Inequitable: Unfair or unjust considering 3 variables (i.e. income per household, education levels or age)

Methods

- 1) Participant observation with a grass roots contesting the loss of public parkland.
- 2) Interviews with local and federal actors responsible of decision making processes related to green public space creation and management.
- 3) Spatial analysis using a park pressure indicator (Boone et al, 2009) in a single borough (Miguel Hidalgo) to identify current socioenvironmental conditions in relation to accessible public spaces.

4 Case Studies

1) The first case study is the partial privatization of Chapultepec Park—located within one of the largest urban forest in Latin America, the Chapultepec Forest (686 hectares) in the borough of Miguel Hidalgo. In November 2012, after twenty years of litigation against the administration of Mexico City accused of a "process of illegal expropriation", *Trepi* (real estate and constructing company) became the owner of 8950 m² of Chapultepec Park (Supreme Court of the Nation, case 1321/2007). *Trepi* immediately fenced the perimeter of the area with constructing wire-mesh impeding park users to walk through that part of the park. This event effectively deprived the population of Mexico City from a considerably large area declared "of high environmental value" (Expropriation Decree, Federal Mexican Government, 1992) to a foreign firm that intends to offer luxury residences with Chapultepec Park as their backyard.



2) The second case is *Reforma Social* Park, also located in *Miguel Hidalgo*, which served as a park for 33 years. In 1977, the land located at the Hacienda de Los Morales—currently the *Reforma Social* neighborhood—was expropriated to create a residential area and a public park. A long and irregular legal process (La Jornada, 2012) concluded in 2008 when the Supreme Court of the Nation ruled in favor of the Cuevas-Lascrain family—owners of the land before the expropriation—transforming the Social Reform neighborhood's park in private property. A sizable amount of green public space (34, 000 m²) that served 400 mid-income families—was lost to construct a gated apartment complex (Defensa Ciudadana del Parque, personal communication, 2012). As a result, neighbors of the area and people claiming to use the park on a regular basis organized to protest against the decision of the judge; the *Reforma Social* Park was "occupied" during the weekends of several months as demonstrations against the "unfair disposition of the people's park"(personal communication with Adriana Bermeo, leader of the Defensa Ciudadana del Parque organization, 2013).

3) The *Bicentenario* Park—located in the borough of Miguel Hidalgo as well—is one of the most interesting parks to study in Mexico City due to the fact that it was constructed over brownfield land. In March 1991 the *Refinería 18 de Marzo* (March 18th Refinery)—operated by *El Águila* oil Mexican company—was closed with the purpose to reduce air pollution in Mexico City and to preserve the health of citizens dwelling in the city (according to official statements). Recent reports presented by the UNAM stated that the "soil and subsoil contamination in the site was notably beyond expectations" (*Libro Blanco*, 2012, p. 28). Against this historical background, fifteen years later in May 2007, president Felipe Calderon (2006-2012) announced the ambitious project of *Parque Bicentenario* to be constructed upon the lands that occupied the old refinery. Calderon also stressed that the purpose of the project was to create one of the greatest parks in Mexico City useful to ameliorate contamination and to improve the overall urban health of Mexico City's inhabitants. The project had an estimated total cost of \$ 1,847,718,668.00 (mx pesos), an unprecedented investment on green urban space infrastructure in the history of Mexico City.

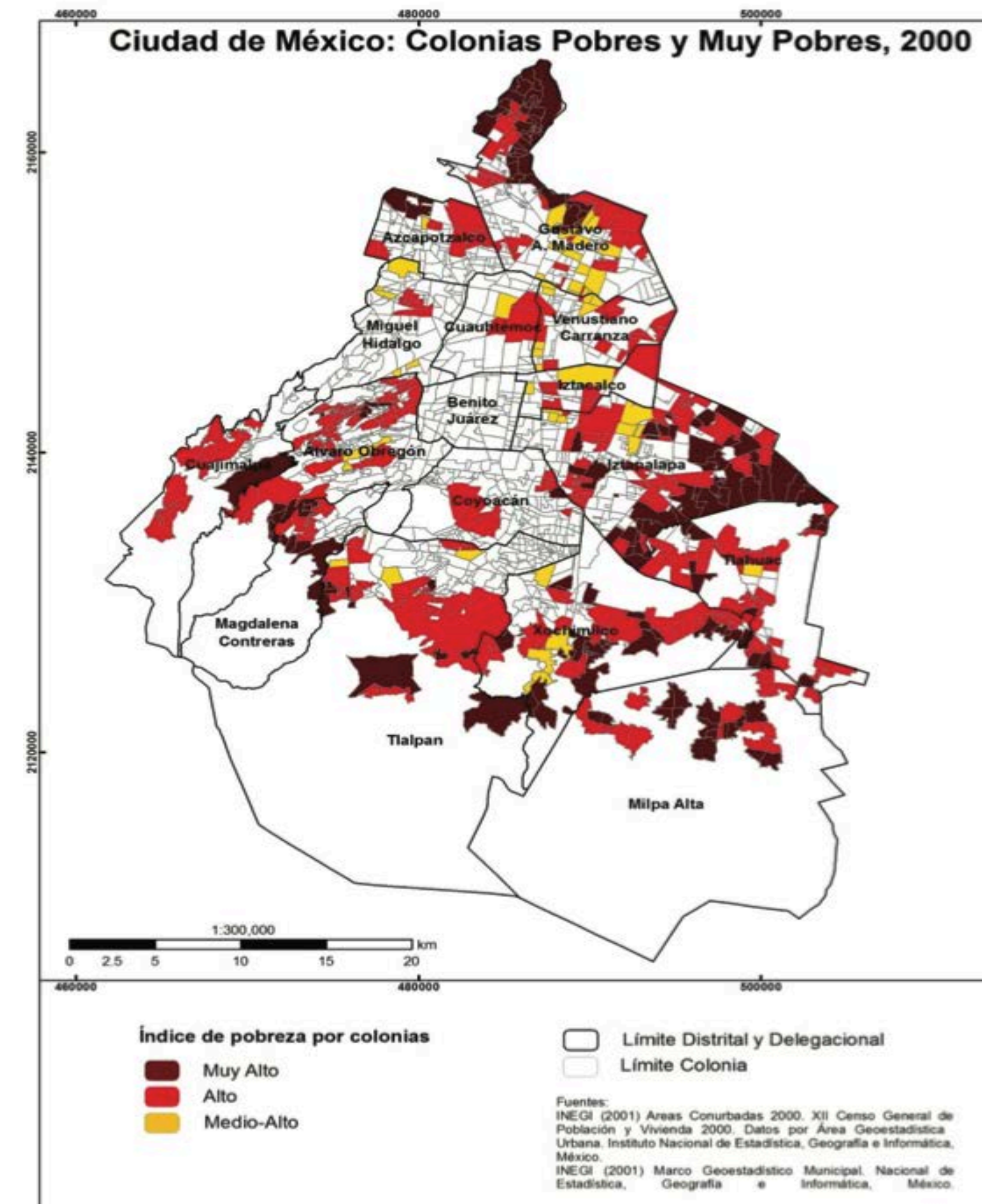


4) *Cuitlahuac* Park is located in the borough of *Iztapalapa* in the southwest of Mexico City. The borough of *Iztapalapa* is one of the most marginalized in the city (Mier y Terán et al., 2012); the levels of violence, unemployment, irregular housing, water scarcity and transportation deficiencies are the highest in the entire Distrito Federal (Trexler, 2003; Vergara, 2009). *Iztapalapa* is also a demographically super dense borough with the highest amount of children and the urban area with least available green space per inhabitant. *Iztapalapa's* environmental, social, economic, and political characteristics are the antipode of *Miguel Hidalgo*, hence, this borough serves perfectly as a case study to contrast opposite green public space conditions in Mexico City. *Cuitlahuac* Park is a very peculiar case, it was constructed over the former *Santa Cruz Meyehualco* landfill. This landfill functioned for over forty years as one of the principal recipients of solid waste from Mexico City until the early 1980s; the landfilled received daily an average of 6400 tons of waste and 800 families of scavengers in the site clandestinely undertook recycling operations. According to Mexico City's government calculations, in its entire working life the landfill captured 44, 712, 500 tons of waste that today serve as the foundation for *Cuitlahuac* Park. Notwithstanding the history of the site, the administration of *Iztapalapa* decided to start the project and the park was open to the public in 2003.

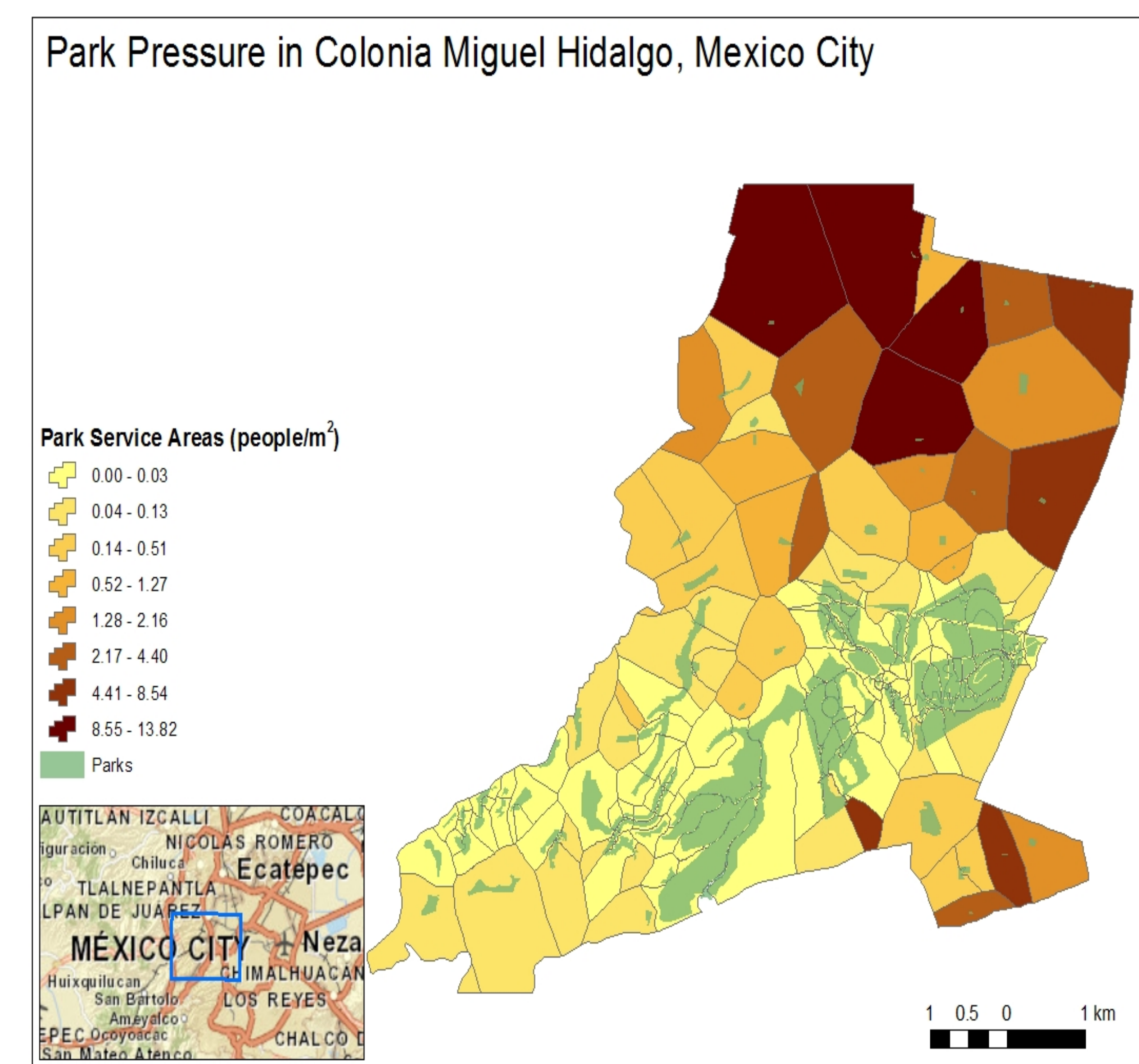
Key Findings

- 1) Mexico City has one of the lowest green public space availability rates within the group of the 10 largest megacities on earth with only 5.66 m² of green public space per person. Moreover, there are no peer reviewed reliable research inclusive of social, demographic nor ecological indicators to assess the correlation between the current green public space deficit and human and non human populations in Mexico City.
- 2) Given the fact that the fiscal structure in Mexico's capital is deficient—resources are often times not enough to create or manage urban infrastructure—along with ubiquitous corruption, current institutions in charge of Mexico City's green public space, flora and fauna, water, soil and general urban environments are circumscribed to economic pressures that can only be alleviated with private capital.
- 3) Although it could appear that creation of green public spaces (usually in the form of public parks) is a socially and environmentally responsible initiative, the recent creation of parks in Mexico City proved to be politically relevant only for the first 2 years. As of now most of the parks, particularly in marginalized areas are abandoned and pose an environmental risk for populations.
- 4) The current economic neoliberalization of Mexico City has resulted in two clearly observable socioenvironmental phenomena: A) Urban infrastructure is, in the large majority of cases, planned and developed to generate capital accumulation. Concomitantly, social and environmental needs are relegated and often times ignored. B) Green public spaces, particularly parks, have been commoditized in two senses. In one hand public parkland, protected by the Mexican Constitution, has been sold to private foreign firms—this is a blatant case of environmental injustice in the form of green public space dispossession. Actual neoliberal capitalism emerges in Mexico City as a force capable to exploit public goods for the sake of profit for a few. Secondly, green public space has become a common political currency used to simulate institutional efforts to create a green, just and sustainable areas for a small period of time. Ultimately, parks have been serving as populists mechanism to subdue marginal populations in great need of much more than a park that will be eventually abandoned.
- 5) Green public space is inequitable distributed in Mexico City based on the vulnerable populations principle—which dictates that children, the elder and marginalized populations are priorities while planning and developing urban infrastructure. If compared, maps 1 and 2, it is observable that the levels of marginalization in Mexico City are closely related to the availability of green public space. Moreover, the spatial analysis for the borough of Miguel Hidalgo (Map 3), shows a clear concentration of green public space in the southeast area of the borough, where fewer wealthier people live. In contrast, in the northern part of the borough were more low-income people live, the availability to park service areas is much more modest.

Map 2. Mexico's City poor and very poor boroughs (INEGI, 2000).



Map 3. Park Pressure in Colonia Miguel Hidalgo



Next steps towards understanding the political ecology of green public space in Mexico City

- 1) A nuanced needs-based assessment of distribution, accessibility and quality of green public spaces in all 16 delegations of Mexico City is needed. The park pressure indicator could work as a basic dataset to start with.
- 2) It is also important to determine what is the real capacity of green public space to perform as a social and environmental equalizer. Deeper theoretical insights regarding the ontology of urban equality, for this particular case in developing countries, is needed.
- 3) Revisit the actual social, economic and ecological outcomes that resulted after engaging with capitalist neoliberal global forces. It has been established that the NAFTA agreement can function as a time marker, given the fact that in the mid 90s actual neoliberalization disrupted the Mexican environment (Delgado, 1997, 2007). Based on current data, the most urgent question to answer to address is: What are the actual effects of the current capitalistic neoliberal political economy in Mexico City, is it perpetuating social, economic and environmental injustice?

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