

CONFRONTING ENVIRONMENTAL DISPLACEMENT IN SÃO PAULO

BRAZIL'S SMART MEGACITY

CRICKET EMI KAYA

THE UNIVERSITY OF OKLAHOMA
IAS 3003, ENVIRONMENTAL JUSTICE AND GLOBAL CITIES
DR. EMMA COLVEN
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SKYLINE IMAGE OF SÃO PAULO, BRAZIL | ADOBE STOCK

INTRODUCTION



SKYLINE IMAGE OF SAO PAULO, BRAZIL | ADOBE STOCK

The impacts of climate change continue to intensify existing human rights crises. While reports show that climate change and rising sea levels create displacement, a lack of inclusive planning and existing mechanisms of migration bolster this phenomenon. A natural hazard only becomes a natural disaster when the state fails to mitigate risks—where they already experience a deficiency in preventative measures [Crncevic 107].

The Brazilian city of Sao Paulo is at the center of this conclusion. From 2008 to 2016, floods and storms displaced over 1.5 million people in the state of Brazil alone [Brown, 71]. Sao Paulo, regarded internationally as a smart mega-city, will

face an exponential threat of climate change unless it takes action to solve its persisting cycle of citizen displacement. Sao Paulo follows strong commitments with the World Bank and the UNDP SDG (United Nations Development Program Sustainable Development Goals) to combat climate change and reduce carbon emissions. Yet as the city takes steps towards important changes, Sao Paulo continues to grow through unsustainable methods. Global praise of the perception of modernity contrasts with the reality that most of the city's growth is through the expansion of a sprawling periphery of displaced favelas, which are “self-built housing erected on illegally occupied land” [UN-HABITAT xi].

As of 2010, nearly 20% of the city's population lives in favelas [Gutberlet and Hunter, 4]. Social exclusion, inequality, economic hardship, and corrupt political leadership create an environment for displacement that persists today. Recent projects promoting sustainability continue this trend and fail to communicate the risky implications of new policies imposed on communities of favelas. If the goal of the city is to maintain its status as a smart megacity, work towards sustainability must acknowledge its history of displacement and commit to climate action that advocates for explicit inclusivity. In their study of displacement and climate change, Tijana Crncevic and Violeta Orlovic Lovren find that

Based on growing trends in projections of climate change as a result of induced natural disasters for the region in the future and international trends in coping with these issues, it is necessary to improve the implementation of the planning policy framework and the capacities of professionals and citizens, to reduce future displacement and increase community resilience to climate change [Crncevic and Lovren 105].

This paper will expand on Sao Paulo's relationship with these findings, by assessing the city's history of displacement and disaster mitigation attempts. It will advocate for the importance of inclusion in climate change policy through a multidimensional lens.

PART 1: LIFE IN THE PERIPHERY

Welcome to the city of Sao Paulo. Sitting southwest of Rio, Sao Paulo is the capital of the state of the same name and is the largest city in Brazil. It is a dynamic city known internationally for its enormous Pride and Carnaval celebrations combined with a diverse cultural intersection between Indigenous peoples and migrants from nearly every continent [World Population Review]. As one of

the newer cities in Brazil, Sao Paulo contains little colonial influence compared to other cities. It is an urban center of new technology and innovation, generally referred to as a place to work and earn money [Britannica]. Sao Paulo is home to over 12 million people growing at an exponential rate of 0.88% [Macrotrends]. Yet, with such rapid growth comes the increased challenge of equality. In contrast with the popular image of opportunity, Sao Paulo struggles to approach sustainable growth and climate change policy while acknowledging the importance of inclusion in this transition.

Housing insecurity is a recurring issue for Sao Paulo. Homes are marked by enclaves and walls that segregate the middle and upper classes from the poor. The wealthy live in the urban center, while lower-income families live at the periphery made up of favelas on the fringe of the city. Like the shape of a bullseye, Sao Paulo visually demonstrates a growing wealth inequality through its urban geography [Caldeira 304]. [see Figure 1]

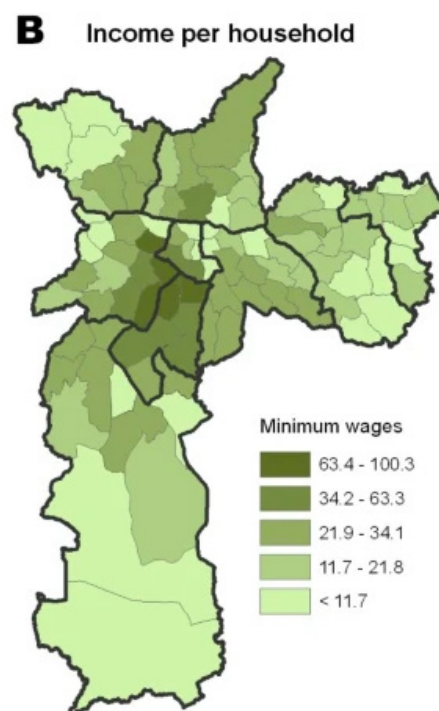


FIGURE 1: INCOME PER HOUSEHOLD IN SAO PAULO (BANDO)

Private enclosed neighborhoods in the center contain autonomous zones for leisure, security, and commerce for the wealthy [Caldeira 303]. As a result, the surrounding low-income neighborhoods are physically separated from the rich. This divergence demonstrates a barrier of different lifestyles and levels of segregation between the urban core and the low-income periphery.

Furthermore, low-income housing is commonly situated along rivers and in precarious flood plains [Millington 864]. As climate change makes flooding more frequent, families on the periphery face disproportionate risk. Ironically, despite widespread housing insecurity, thousands of habitable dwellings in the wealthy core sit vacant [Millington 867]. Segregation is unsustainable not only because space is far from being equally accessible, but social exclusion of the periphery creates conditions that bolster the impact of climate change.

While life in the periphery is diverse, and conditions change from neighborhood to neighborhood, low-income communities consistently suffer from the consequences of social exclusion. Exclusion is defined as a “state of detachment, where individuals are restrained from or not enabled access to public services, goods, activities, or resources, which are essential for a life with dignity” [Gutberlet and Hunter 4].

From a climate perspective, social exclusion and displacement means that impacted communities are not protected by environmental conservation legislation. In Sao Paulo, this leads to a lack of access to resources like clean water, energy, electricity, and sewage. Little emphasis on conservation can cause environmental degradation and contamination, creating loss of capital and

increased public health risks [Gutberlet and Hunter 6]. Furthermore, favelas rarely contain green spaces, which improve air quality and prevent urban heat islands and flooding incidents [Carbone 196]. Therefore, the impacts of exclusion in Sao Paulo provide little protection from the advancing threats of climate change.

PART 2: ORIGINS OF DISPLACEMENT

How did these conditions come to be? Why is social exclusion so clearly defined and persisting? In order to prevent its growth among future climate change policy, this history must be acknowledged, and repetition of past actions avoided. There are three main categories of blame: geopolitical tension, historical systems of inequality, and socioeconomic marginalization.

Years of political challenges, colonial development, and clientelism created the conditions for such explicit segregation [Gutberlet and Hunter 5]. As a more recent example, in the 1980s, the state merged into a democratic system after two decades of military jurisdiction. This led to a growing number of political parties, and a legitimization of the politics for the working class.

Pressure from these groups created a consolidated political effort to invest in infrastructural projects hoping to grow capital value and economic incentive for the periphery. However, most favelas and auto-constructed housing remained outside of the municipal bureaucracy– they were not formalized within the state, which delayed investment projects.

To open up opportunity for capital growth, the state integrated the favelas into fully accounted-for properties within the government. As a result, rents increased, and low-income families could no longer



afford to live in their communities in the periphery. Without prioritizing affordability and inclusion, the government displaced thousands of people. Income inequality is not the only problem plaguing inclusion in Sao Paulo; gender and race-based violence also contribute to lingering social exclusion.

According to Human Rights Watch, Brazilian women earn about 23% less than men, despite a higher rate of education in women (HWR 1). Women are also victims of femicide and domestic violence, one of the larger political issues throughout the past decade. Further, police brutality disproportionately affects Black people and people of African ancestry. In Brazil, 6,357 people were killed by police in the year 2019, and 80% of the victims were Black (World-Report 2021). Such events create heightened fear and the desire to protect oneself from society in Sao Paulo.

With the perception of increased risk of violence, barriers and walls are constructed around wealthy enclaves, heavily

guarded with security systems and armed men [Caldeira 307]. Segregation further separates the poor from the rich and creates social exclusion and lack of equal access to a sustainable life.

Finally, one of the most influential reasons for segregation is a continued effort to contain poverty and enforce socio-economic marginalization. Following a recession in the 1980s combined with a series of political projects to formalize the periphery, land became too expensive, and families moved outwards to improvise dwellings (Gutberlet and Hunter 9). New projects began to expand tertiary activities throughout the city, and areas that were deteriorating or housed squatter settlements began to face gentrification.

In this cycle of gentrification, abandonment, and infrastructural renewal, the city is continuously re-arranging itself and displacing marginalized groups, creating gaps in opportunity.

If future climate-oriented policy continues this trend, implementation would inhibit equal opportunity to a sustainable life while promoting urban development that emits further pollutants and emissions.

As written by urban ecologist Teresa Caldeira, enclaves “help to ensure that different social worlds meet as infrequently as possible in city space, i.e. that they belong to different spaces” (Caldeira 319). Social exclusion in this way is a form of enforcing hegemonic structures and maintaining power (Gutberlet and Hunter 4). By creating situations of inequality and targeted pressure, the state is limiting the opportunity for lower classes to enjoy the freedom to express themselves politically. If the city of Sao Paulo is dedicated to creating a sustainable city that will outlive the impacts of climate change, it must root further policy in this history of displacement and emphasize inclusive action from the bottom up.

PART 3: MUNICIPAL MANAGEMENT MISHAPS

Given this history of segregation, the municipal leadership has taken on multiple projects to re-integrate and include the periphery in modernity and address the threats of climate change.

Every couple of years, the city of Sao Paulo writes a Strategic Master Plan (aka Law 16,050/ 2014). The last master plan was written in 2014, with the intent to “make the city more inclusive, environmentally responsible, productive, and above all, to improve peoples’ quality of life.” In a review of the plan in March 2021, the city invited civil society organizations to participate in further discussions (Gestao Urbana SP). Additionally, the city has historically offered economic mechanisms to

promote environmental sustainability. Municipal Laws offer monetary incentives for property with trees and maintained ecosystems, as well as compensation for licensing projects that may impact the environment such as parks and green spaces (Carbone 198).

Sao Paulo also receives substantial support and praise from international institutions. UNDP Sustainable Development established an office in Sao Paulo to have more of a hand in development. The city and the UNDP have worked together to create frameworks towards sustainability (UNDP Sustainable Development). The city council works extensively with global institutions such as the Global Platform for Sustainable Cities (GPSC), the Global Environment Facility (GEF), the Sustainable Cities Program, and the World Bank to host conferences and set goals towards sustainability (World Bank). An example is the Catalyzing Sustainable Urban Futures Global Conference in Sao Paolo in 2019.

However, quick political turnover often leads to a loss of technical expertise, stagnation of projects, and lack of communication (Carbone 199). Development projects creating green spaces continue to be geared towards corporate creation and privatization of urban spaces, rather than emphasizing the value of environmental preservation and local interests (Carbone 201; 203). Due to muddy policymaking, poor communities at the edge of the city are continuously uprooted and displaced into deeper conditions of poverty.

What follows is a case study that exemplifies this trend.

CASE STUDY: TIETE RIVER VALLEY PARK

The Tiete River is an urbanized river that runs straight through Sao Paulo (pictured below). Recently, the city has begun a project to build a linear park alongside the river to naturalize the concrete, which cannot be deepened any further to prevent flooding (Millington 870).

The three main goals of the project are 1: to protect floodplains and varzeas (seasonal forests), 2: to regulate flooding, 3: to create green spaces and a leisure area for the surrounding community (Millington 869). However, due to segregation and displacement, many low-income families have settled along the river in auto-constructed housing and favelas. These communities are therefore at a higher risk for flooding, which will only grow stronger as sea levels rise. The full construction plan calls for the removal of about 40,000 people who reside along the river. (Millington 866).

Urban geographer Nate Millington argues that this removal would do more harm

than good, due to a history of unfulfilled promises by the city during past removals. Following a flood in 2009, 2,661 families were displaced by the state and given a monthly stipend of \$78 and the promise of state housing. Yet only 450 of the 2,661 families were given the housing (Millington 872). Many of these houses were far away from the urban core, and relocation proved to be too expensive following an inflated rent price. Therefore, many of these families ended up returning to the area (Millington 873). With this history, the Tiete River Valley Park's similar narrative is not well-received from the community or from local activists. In turn, the actors in charge are tasked with democratizing the project and working with consistent inclusion.

The Tiete River Valley Park is a perfect example of climate policy that creates riskier lives for families impacted by social exclusion and displacement. Logically, the project's goal is to prevent further flooding and displacement. However, its implementation strategy mimics the mistakes of past development projects to improve conditions in the periphery.



CONCLUSION: TOWARDS INCLUSIVE CLIMATE ACTION

With climate change on the rise, it is more important than ever that urban environmental policy copy the urgency of global climate action. But with a long history of exclusion, displacement, and segregation, Sao Paulo must make changes to prioritize absolute inclusion of affected communities and grow apart from corporate interest. It is clear through the literature that there exists an intimate relationship between the sustainability of the city and the consequences of inequality. Further displacement aggravates any collective action to confront hot-topic environmental issues, such as contamination and flooding. Despite a strong base for climate action backed up by institutions and international praise, it is pertinent that Sao Paulo leads its sustainability policy away from corporate top-down management, and into community-led efforts that prioritize the well-being of those most at risk.

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