

Urban Resilience and Inequality: Rethinking Strategies for Climate Justice

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Abstract: Urban resilience has become a dominant response to climate change, yet its implementation often deepens existing social inequalities. This paper critically examines how technical resilience policies, while aiming to reduce climate risks, tend to prioritize economically valuable areas and neglect marginalized communities. Drawing on political ecology and climate justice frameworks, it analyzes two cases—New York’s “Big U” flood control system and redevelopment in Mumbai’s informal settlements. The findings reveal that resilience planning frequently serves elite interests, disguising power imbalances under the guise of neutral technical solutions. Such depoliticized narratives obscure the exclusion of vulnerable groups and reinforce spatial and social segregation. The study argues that meaningful urban resilience must go beyond infrastructure and risk reduction to address structural inequalities. It calls for a transformative approach that includes redefining resilience goals, empowering community participation, and ensuring fair resource allocation to achieve both climate adaptation and social justice.

1. Introduction

Cities are at the center of the climate change crisis. Their growing populations and complex infrastructure make them vulnerable and essential. Urban resilience has become a key strategy to address climate risks. Projects like building flood levees or upgrading infrastructure aim to help cities adapt to and reduce climate impacts. But a question remains: do these efforts benefit everyone, or do they worsen existing inequalities?

The strategies of resilience often tend to neglect the issues of power and resource allocations. In many of the cities, the resilience projects are prioritized in wealthy neighborhoods due to their higher economic value and political influence. On the other hand, low-income groups and marginalized communities are defenseless and are at higher risks ^[2]. This puts things into perspective: do power inequalities exist under the guise of urban resilience, and is this yet another way of delegating and concentrating power in certain groups?

Political ecology views the term "resilience" as encompassing more than technology alone. It portrays the sharing of power among differing levels of authority. The Climate Justice Framework critiques outmoded resilience policies as neglecting equity. It therefore demands equality and a rights-based approach to urban planning. Examples from New York's flood management systems as well as from Mumbai's slum areas show the advantages and downsides of resilient city design.

2. Theoretical background and critical framework

Urban resilience is one of the most exhaustive strategies to counterbalance the effects of climate change ^[11]. With urban spaces increasing in severity, densely populated areas, and complex infrastructural settings, climate change continues to be a major challenge. Loss-reduction measures like proactive flood control, infrastructure investments, and the transformation of urban places for sustainability pursue this goal. Education campaigns on weather forecasting may contribute to the development of resilience at the community level. Nevertheless, while these programs often prioritize affluent communities and tend to ignore low-income ones, they simultaneously increase social vulnerability ^[1]. An ecosystem approach sheds light on social power and resource allocation by adopting a political ecology viewpoint. The contested citizenship framework of Peluso and Watts states that privileged communities influence policies, while marginalized groups face exclusion ^[7]. Aided by resilience programs that either sidestep the inequality issue or worsen the disparities, these inequalities are perpetuated.

The issue of depoliticization is one of the key concerns in the field of political ecology of resilience. Jargon tends to obscure the true nature of source contest and cultural clash. Large infrastructure schemes support the elite-oriented agenda by creating more expensive housing and making the poor people the most affected instead of addressing the growing inequalities ^[17]. The Climate Justice Framework condemns the approach to resilience that ignores equity and rights. The key ideas here include ensuring that the most vulnerable get prioritized and their voices included through means that are inclusive, so resource imbalances can be balanced.

3. Resilience and inequality

Cities may attempt to improve urban resilience through technicalities while avoiding tackling the social problems underlying them. The application of strategies to tackle these groups has often been unsuccessful in New York and Mumbai. Rather than achieving their initial objectives, these policies inadvertently perpetuate existing power systems and increase resource inequalities. Such situations can further demonstrate that resilience policies are, in fact, meant to safeguard the interests of economically elite and politically powerful factions.

3.1. New York's flood control system

New York City's multibillion-dollar "Big U" flood defense program, which was initiated after Hurricane Sandy and considered one of the best examples of climate adaptation in the world, is noted by Aerts and his co-authors in 2013. Nonetheless, the realization of this project indicates that probably the resilience policies, to a large extent, emphasize economic core rather than an all-encompassing community. This selective bias proves how external sources, having power and capital, influence the priorities of resilience policies.

A key purpose behind choosing Lower Manhattan as the center of the Big U project was not a question of absolute climate risk magnitude, but the highly valued economic area ^[9]. Contrary to that, marginalized areas like the Bronx and Queens are not given the same attention and investments, although they experience a similar flood risk. Political ecology posits that this kind of resource allocation logic is not a neutral one, but instead one guided by capitalist dictates. Although flood protection systems preserve the value-adding assets being stored, they often underline the trade-off preferred by capital, which may result in services integrated with economic development rather than humanitarian interventions ^[4].

The construction of the flood control system also indirectly pushed low-income residents out of the city by making Manhattan more affordable and attractive for businesses ^[19]. The rising cost of

housing has forced many vulnerable families to leave the area, further exacerbating their social vulnerability. This phenomenon is not simply market behavior, but the inevitable result of policy choices. In this way, resilience policies not only serve elite interests, but also reinforce social stratification through spatial segregation. Power relations here appear as an implicit force that shapes who benefits from resilient policies and who is excluded.

Technical descriptions of "Big U" projects, such as "flood protection enhancement" or "green infrastructure development", mask the competing interests in the implementation of these policies. This technical language packages policy choices as neutral technical decisions, hiding the unfair allocation of resources. Indeed, this strategy of "depoliticization" is a manifestation of power dynamics, showing how policymakers use technological narratives to sidestep core issues of social justice ^[8].

3.2. Informal settlements in Mumbai

The issue of informal settlements in Mumbai further reveals how resilience policies serve the interests of capital in the development narrative, while ignoring or even denying the basic rights of marginalized groups ^[5]. Informal communities such as Dharavi have long faced the threat of flooding and inadequate infrastructure, but government policy towards these communities has focused more on "cleaning up" and relocation than on improving their resilience ^[16].

Because of the lack of legal land use rights, residents of informal settlements are unable to obtain policy support and long-term investment. In the name of "urban modernization," the government has redistributed these lands to commercial developers to build high-end residential and commercial districts ^[10]. This policy has not only failed to reduce flood risk, but has driven vulnerable people out of their original living Spaces by redefining land use. Political ecology criticizes this policy choice as a manifestation of the expansion of capital interests, the essence of which is to strengthen the existing unequal power structure by depriving vulnerable groups of land and resources.

Government-provided resettlement areas are usually located on the edge of cities and lack basic infrastructure and public services. When residents move out, not only do commuting times increase significantly, but the cost of living also rises significantly due to the lack of employment opportunities. Relocation policies, ostensibly aimed at reducing climate risks, in practice exacerbate the vulnerability of these communities through spatial segregation and the redistribution of resources. Relocation policies shift the responsibility for climate adaptation to vulnerable populations, rather than improving their living conditions through systematic investments.

The government has packaged the relocation initiative as a measure to "facilitate urban effectiveness" and "boost economic growth" in order to hide its divisive effects on vulnerable minorities ^[18]. However, these narratives, along with resilience as an unavoidable technicality, conceal the power structure in the implementation of policy behind grand targets. Thus, it becomes quite challenging for critics to deny the legitimacy of the global objective.

The cases of New York and Mumbai, along with their coordinated unfolding, demonstrate how policies for resilience can be put into practice. It is on this logic that the socioeconomic basis of resource allocation is touted, which privileges the rich parts of the country over the destitute ones ^[3]. Further, technical terminology and performance-oriented methods are killing diversity and irritating policymakers by supposed "depoliticizing" them. Besides, such policies generate new boundaries that divide social spaces along the lines of wealth, where the lower classes are deprived of proper environmental safety and public services. Political ecology and climate justice also find fault with such tactics, asserting that resiliency is neither just a technical measure nor the result of the distribution of power and resources. Urban resilience will turn into a means of addressing social issues if it is embedded in the continuous development of policy rather than making mere continuity

a priority. This entails redirecting the approach to developing policy aims and objectives, particularly those centred on the protection of vulnerable groups, and equal distribution of harvesting rights.

4. Transforming Urban Resilience: Policies for Fair Resource Allocation

Urban Resilience, an assemblage of technical interventions for climate change, emerges but overreaches from it. The societal land is not only hampered by disparity of resources but also by imbalance of power ^[14]. The inclusion of social equity and resilience in climate change adaptation policies requires transformative processes that are aware of our environment, current technological focus, and economic outcomes to equitable and sustainable practices. Urban resilience decision making can affect the well-being of society through equitably setting the priority areas, enabling community members to engage in planning, and addressing the needs of everyone while systematically allocating resources.

Redefining resilience goals is key to addressing policy constraints. Current resilience policies often prioritize protecting regions of high economic value while neglecting vulnerable communities at greater climate risk. The climate justice framework emphasizes that the needs of the most vulnerable communities should be prioritized ^[15]. For example, if New York's flood protection system had explicitly prioritized low-income communities early in the planning process, its social benefits would have been broader than just enhancing Manhattan's economic attractiveness.

Promoting community-led resilience planning is another important path to equity. Existing policies are dominated by technocrats and community needs are ignored. This gap can be addressed by empowering residents and ensuring that they have a substantial say in policy design, implementation, and evaluation. For example, the concept of "symbiotic conservation" balances power imbalances and ensures a more equitable distribution of resources through consultation between governments, ngos and communities. The Green Belt Movement in Kenya and community flood prevention projects in South Africa have proved that community leadership is not only a theoretical possibility, but also a long-term and effective practical model ^[13].

Optimizing resource allocation mechanisms is also a key step. At present, resilience funds are mostly concentrated in areas with large capital interests, and vulnerable groups are difficult to benefit. To do this, a climate justice budget could be instituted, in which resources are intentionally prioritized for the vulnerable communities. Funds should be reviewed regularly to enhance the resilience of these communities through transparency and accountability arrangements ^[6]. Moreover, the reduction of market mechanisms as main tools will limit the influence of capital interests to distort policy goals.

Coordinate targets, empowering the local population, and optimizing the management of existing resources can put the cities on the way to greater climate resilience and social equity. Beyond this, it is vital to change the power holders to affect transformation in the process. Allocation of resources and decision-making must be balanced in a correct manner. Planning for resilience cannot be limited to just using apolitical technology. It should seek to create equity and integrate people in order to achieve both climate change adaptation and social equity ^[12].

5. Conclusion

Urban resilience is a core strategy in fighting climate change; however, the policies that govern it need further examination for hidden inequities. In New York and Mumbai, the allocation of resources and decision-making processes reveal a difference in the distribution of power. Such scenarios would prevent marginalized groups from self-defense measures and aggravate social inequality through economic and spatial restrictions.

Political ecology and climate justice regard resilience strategies as reflections of power and not merely as technical fixes. The existing policies put too much weight on economic goals, have a centralized decision-making apparatus, and pay little regard to their social impact. Reworking targets, bringing communities into the process, and streamlining the flow of scarce resources can help eliminate these inequalities.

Future resilience planning can no longer be restricted to the "technologically neutral" approach. It must undergo a transformation by utilizing an inclusive framework at its core, which emphasizes equity to accomplish climate adaptation and social justice.

References

- [1] Anguelovski, I. et al. (2016) 'Equity impacts of urban land use planning for climate adaptation', *Journal of Planning Education and Research*, 36(3), pp. 333–348. doi:10.1177/0739456x16645166.
- [2] Anguelovski, I. et al. (2017) 'Urban Planning, Community (re)development and environmental gentrification', *The Routledge Handbook of Environmental Justice*, pp. 449–462. doi:10.4324/9781315678986-36.
- [3] Anahideh, H., Kang, L. and Nezami, N. (2022) 'Fair and diverse allocation of scarce resources', *Socio-Economic Planning Sciences*, 80, p. 101193. doi:10.1016/j.seps.2021.101193.
- [4] Bangalore, M. et al. (2016) *Unbreakable: Building the resilience of the poor in the face of natural disasters* [Preprint]. doi:10.1596/978-1-4648-1003-9.
- [5] Bhide, A. (2023) 'Structural violence in much more than neoliberal times: The case of slum redevelopment in Mumbai', *City*, 27(3–4), pp. 483–500. doi:10.1080/13604813.2023.2223880.
- [6] Colenbrander, S., Dodman, D. and Mitlin, D. (2017) 'Using climate finance to advance climate justice: The politics and practice of channelling resources to the local level', *Climate Policy*, 18(7), pp. 902–915. doi:10.1080/14693062.2017.1388212.
- [7] Garcia, A. et al. (2022) 'Power in resilience and Resilience's power in climate change scholarship', *WIREs Climate Change*, 13(3). doi:10.1002/wcc.762.
- [8] Grant, C.A. (2016) 'Depoliticization of the language of social justice, multiculturalism, and multicultural education', *Multicultural Education Review*, 8(1), pp. 1–13. doi:10.1080/2005615x.2015.1133175.
- [9] Horton, R. et al. (2016) 'Climate science for decision-making in the New York Metropolitan Region', *Climate in Context*, pp. 51–72. doi:10.1002/9781118474785.ch3.
- [10] Kan, K. (2023) 'Land fictions: The commodification of land in city and country', *The AAG Review of Books*, 11(3), pp. 12–13. doi:10.1080/2325548x.2023.2208298.
- [11] Kim, D. and Lim, U. (2016) 'Urban resilience in climate change adaptation: A conceptual framework', *Sustainability*, 8(4), p. 405. doi:10.3390/su8040405.
- [12] Meerow, S., Pajouhesh, P. and Miller, T.R. (2019) 'Social Equity in Urban Resilience Planning', *Local Environment*, 24(9), pp. 793–808. doi:10.1080/13549839.2019.1645103.
- [13] Michaelson, M. (1994) 'Wangari Maathai and Kenya's Green Belt Movement: Exploring the evolution and potentialities of consensus movement mobilization', *Social Problems*, 41(4), pp. 540–561. doi:10.2307/3096988.
- [14] Mohabat Doost, D., Brunetta, G. and Caldarice, O. (2023) 'In Search of Equitable Resilience: Unravelling the links between Urban Resilience Planning and Social Equity', *Sustainability*, 15(18), p. 13818. doi:10.3390/su151813818.
- [15] Schlosberg, D. (2012) 'Climate justice and capabilities: A framework for adaptation policy', *Ethics & International Affairs*, 26(4), pp. 445–461. doi:10.1017/s0892679412000615.
- [16] Suri, S. (2024) 'Rehabilitation v/s redevelopment of slums', *SSRN Electronic Journal* [Preprint]. doi:10.2139/ssrn.4816163.
- [17] Swyngedouw, E., Moulaert, F. and Rodriguez, A. (2002) 'Neoliberal urbanization in Europe: Large-scale urban development projects and the new urban policy', *Antipode*, 34(3), pp. 542–577. doi:10.1111/1467-8330.00254.
- [18] Tewari, D.B. and Gautam, U. (2019) 'Slum resettlement to the margins: Increasing the deprivation of the poor and impeding the resilience of the city', *The Urban Book Series*, pp. 95–111. doi:10.1007/978-3-319-94932-1_8.
- [19] Wyly, E. et al. (2010) 'Displacing New York', *Environment and Planning A: Economy and Space*, 42(11), pp. 2602–2623. doi:10.1068/a42519.