

Research Article



Smart urbanism and the politics of redevelopment in urban peripheries in India

January 21, 2022

Issue: [Imagining / Doing Smart Cities](#).

Syeda Jenifa Zahan

Introduction

Smart urbanisation projects have taken a centre stage in contemporary urban development in India. India's experimentation with smart urbanisation focuses on five key aspects: wide-spread use of Information and technology (ICT), use of clean technologies, smart governance, involvement of private sector companies such as Accenture and McKinsey, and citizen participation (Engasser and Saunders, 2015). These five aspects are expected to introduce efficient management, governance and delivery of services in Indian cities with "world-classness", an imaginary actively promoted by the Indian state (Das, 2020). Smart urbanisation is thus marketed as a contemporary process of urban restructuring, redevelopment, governance, social engineering as well as of capital accumulation (Klauser, Paasche, and Söderström, 2014). With 100+ smart cities in the making under the Smart City Mission of the Government of India since 2015, these cities are often represented as solutions to long-standing urban problems such as rapid and unplanned urbanisation, overpopulation, unsustainability, and inadequate governance with much "urgency" (Datta, 2015). At the same time, smart city projects also claim to be inclusive, sustainable and participatory in nature and in their implementation (Vanolo, 2014; van Gils and Bailey, 2021). In turn, smart cities are often represented as the "ideal city" (Marongiu, 2021) of the "future" India (Datta, 2019).

In this article, I focus on how these claims of inclusive, sustainable, and participatory urban development hold up especially in the context of urban peripheries. I explore the politics of smart urbanisation in urban peripheries and its role in the production of social-spatial inequalities in India. Here, I present tentative findings based on initial explorations in the Guwahati Smart City located in India's Northeastern region. Specifically, I focus on the possible reconfigurations of socio-spatial power relations engendered through smart redevelopments at the rural and semi-urban peripheries of Guwahati Smart City.

Smart urbanisation in India focuses predominantly on area-based developments at city-centres which are already well serviced with strong infrastructures (van Gils and Bailey, 2021). The significant absence of infrastructural development, such as water and sanitation in the urban peripheries and, simultaneously, their instrumentalisation as socio-spatialities in service of the developed urban core are intensified by smart city plans. These processes, in turn, produce unequal configurations of power relations between the smart city cores and its rural/semi-urban peripheries. While there has been considerable research on Indian smart cities (see for instance Datta, 2015; Das, 2020; van Gils and Bailey, 2021), there has been little understanding of how smart cities affect urban peripheries which undergo significant changes under smart development agendas.

Urban peripheries are integral and vibrant parts of all Indian cities. These peripheries provide critical spatial, social, ecological, and economic resources for urban growth and continued change (Narain, Anand and Banerjee 2013; Mondal and Banerjee, 2021). Places and people peripheral to metropolitan/large urban centres are societies with diverse socio-economic activities, innovations, residential development, economic growth and shifting governance in India (Sood 2019; Gururani 2020; Mukhopadhyay, Zérah and Denis, 2020). Yet, in the discourses of smart urbanisation, these peripheries are either neglected

or treated as *tabula rasa* waiting to be redeveloped in the service of the smart city. In turn, by focusing on the peripheries of Guwahati Smart City, I aim to make these peripheries intelligible to our understanding of smart urbanisation.

“Smartisation” of urban peripheries in the Guwahati Smart City

Guwahati, with a population of approx. 1.1 million (Census of India, 2011), is one of the first 100 smart cities under development in India. Guwahati is the capital city of Assam, a state in the Northeastern region of India. The Guwahati Smart City plans are implemented by the Guwahati Smart City Limited. It is a Special Purpose Vehicle (SPV, hereafter) institution established specifically for the implementation of smart city plans and exists outside of traditional institutional frameworks of local urban governance and planning, such as master plans and municipal authorities. The initial plans for smartisation of the Guwahati city were developed by the Guwahati Municipal Corporation, an elected body for local urban governance, in consultation with private companies, such as Wapcos Limited and Oasis Design Inc. Once the Government of India approved these initial plans, the SPV was formed for the implementation of the approved plans. The smart city plans are financed partially by the Government of India with a matching contribution by the State Government of Assam following the federal system of governance in India. The remaining funds are stipulated to be generated through private sector investments under public-private partnership models, monetisation of land, financial mechanisms such as municipal bonds and loans, other central government schemes, and taxation, fees and charges from users and beneficiaries of smart cities (Ministry of Housing and Urban Affairs, undated).

The Guwahati Smart City proposal focuses on two development strategies: area-based planning for retrofitting, redevelopment and greenfield development; and pan-city projects. The area-based development plans, which make up the major portion of investment, aim to reinvigorate the city’s riverine system anchored by the river Brahmaputra and its tributaries, lakes and wetlands which has been gradually degraded by unplanned urban growth over the years, and to formalise the city centre into planned spaces that are flood resilient (flooding is a big problem in the city), decongested and improved with various public amenities. The pan-city plans focus on improvement of urban infrastructures such as the installation of smart streetlights, bus stops, toilets, parking spaces, drain edge developments, upgrading of vendor markets, CCTV surveillance and smart flood monitoring and warning systems. In addition to these strategies the smart city proposal aims to strengthen eco-tourism prospects of the city by incorporating social, cultural and heritage aspects into the economic models of development (Guwahati Smart City Limited, undated). The peripheries of Guwahati Smart City are also slated for redevelopment using area-based plans that focus on specific, manageable and replicable areas. These plans aim to develop peripheral areas for revenue generation and relocate hazardous urban activities such as waste management.

Here, I specifically draw attention to Deepor Beel wetland situated at the southwest

periphery of the Guwahati Smart City. Deepor Beel is a UNESCO Ramsar designated wetland which expands to approximately 40 square kms (Figure 1). It is part of the ecosystem of hills, mountains, river Brahmaputra and water bodies that feed from and into the river spread across the Guwahati Smart City. Historically, marginalised communities living around the Beel, such as the Keot fishing community living in approximately fourteen villages around the Beel, depend on the aquatic resources of the Beel for food, herbs and medicines, drinking water, livelihoods and spiritual life (Singh, 2021). The Beel also serves as a recreational space for urban dwellers by providing opportunities for activities like New Year picnics, community fishing and bird watching. In a way, Deepor Beel is an urban common or a common pool resources that provides the city with food, water, livelihoods and recreation while continuing to balance the urban ecosystem.



Figure 1- A landscape photo of Deepor Beel. Source: Author

Yet, the Beel, along with its entire ecosystem of rivers, hills, plants, animals and communities that depend on it, is defined in the Guwahati smart city proposal as a “constraint for the development of the Guwahati Smart City”, and by extension, it is provisioned to be “utilised as [an] anchor for development in the city” (Guwahati Smart City Limited, undated). The Guwahati Smart City Limited also recognises only 13 to 15 sq. km of the total area of the wetland as Deepor Beel (Talukdar, 2021), exposing the rest of the areas to redevelopment plans. This definition of Deepor Beel as a constraint and the arbitrariness in its territorial demarcation by the smart city SPV have significant impacts on the ways in which policies and plans regarding the usage, development and conservation of the Beel are articulated. Under the smart urbanisation plans, the Beel is being redeveloped to suit the contemporary needs of smart urbanisation. In this article, I refer to this process as *Redevelopmentalism*. I use the notion of *redevelopmentalism* to produce a problem-space which allows us to interrogate the processes of reorientation of spatial, social, economic, and political lives in the urban peripheries in the service of smart cities and capital accumulation. In the case of Deepor Beel and its surroundings, redevelopment takes the form of multiple extractive processes and practices that

leverage logics of development and monetisation of natural resources. Problems such as ‘underdevelopment’, poverty and degradation and loss of biodiversity in the wetland serve as easy and compelling grounds for redevelopment interventions in the peripheries.

Following these logics, the Beel is slated for redevelopment as an eco-tourism park for tourism related revenue generation; a waste management site to treat the waste produced by the Guwahati Smart City; and the renovation of an existing railway corridor. Recent calls for tender from private developers by the Guwahati Smart City Limited SPV focus on the construction of parking spaces, cafeterias, bio-toilets, assembly areas, viewing platforms, watch towers, artificial aquariums for indigenous and ornamental fish varieties connected to the natural areas through pumps, floating bridges and pathways, lounge areas, boating arrangements, waste disposal systems, and cycling lanes connecting the Beel to its neighbourhood areas (Figure 2). Taken together these new developments aim to transform Deepor Beel from a wetland with historical communities to a site of eco-tourism, monetisation, and ‘smart’ consumption. At the same time, encroachment of land, waste-dumping and unapproved concretisation along the Beel by private developers also continue to go unhindered (Dewani, 2014).

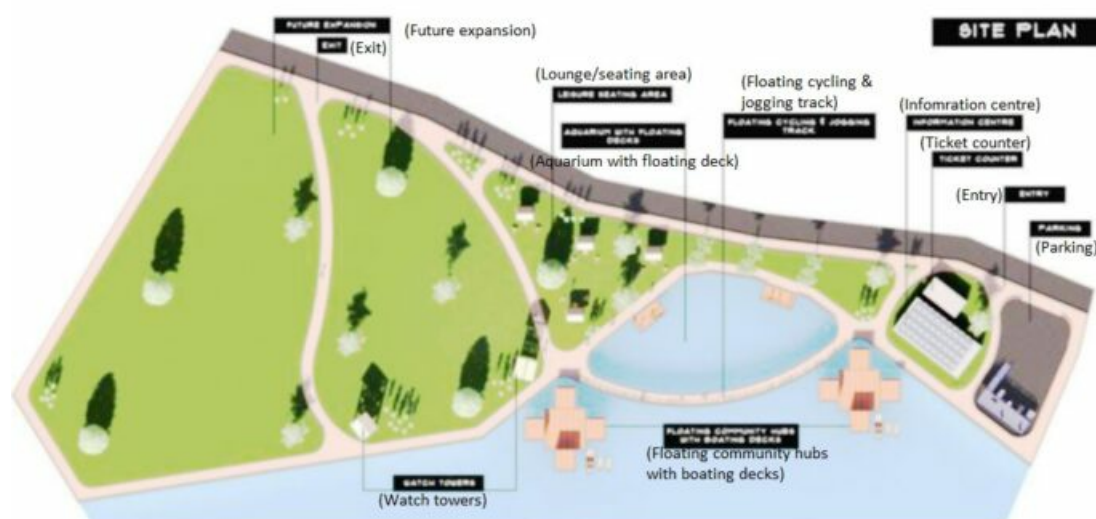


Figure 2- Proposed developments along the Deepor Beel. Source: Guwahati Smart City Limited, 2021. (Edited for clarity)

Simultaneously, these redevelopment plans redefine marginalised communities’ links to the Beel whose historical dependence on its resources for food, water, livelihood and spirituality is reframed in the context of the smart city. While redevelopment of the Beel is carried out in the name of smart urbanisation, the communities are systematically delinked from the wetland in the name of ‘conservation’ and protection of its dwindling ecological diversity owing to practices such as fishing by these communities (Dewani, 2014). In 2009, the Kamrup District (Metro) administration of which Guwahati is a part, banned community fishing and other associated activities to conserve the diversity of fish of the Beel under the Wildlife (Protection) Act 1972 (The Times of India, 1 January 2016). Contrary to such restrictions, redevelopment plans for the Beel under the smart city plans continue unhindered despite the potential damage incurred to the Beel’s biodiversity. This delinking of communities from its resources has potential to lead to their

dispossession forcing them to engage with alternative livelihood and socio-cultural practices. Many of the communities who depended on the Beel are currently waiting for rehabilitation in alternative livelihoods practices (The Sentinel, 2021).

What is at stake here is not only these communities' socio-economic and political positions within the urban space, but also the ways in which smart urbanisation leads to uncritical implementation of redevelopment practices that do not account for the historical and contemporary context of the spaces it aims to redevelop and how these redevelopment practices affect these spaces and the people who inhabit them. Uncritical and apolitical understanding of urban peripheries also has the potential to further deepen the marginalisation of these communities within gender, class, caste, and religious hierarchies in India. In other words, smart redevelopments at the peripheries are intimately connected to socio-economic and environmental inequalities faced by marginalised communities, for whom the smart city conceivably remains inaccessible. In turn, communities and spaces constructed as 'peripheral' and 'constraints' to the smart urbanisation policies and practices not only remain excluded from visions of smart urbanisation but also undergo over-exploitation, disenfranchisement and exclusion from and by smart urbanisation. And the cost incurred by peripheralised spaces and communities remains largely invisible in smart city plans, discourses and imaginaries.

Consequently, these smart redevelopments on peripheries can be understood as forms of "slow violence" (Nixon, 2011) against already marginalised spaces and people. Slow violence, according to Nixon (2011), "occurs gradually and out of sight, a violence of delayed destruction...dispersed across time and space, an attritional violence that is typically not viewed as violence at all". It is a process that produces every day, repetitive, invisible and yet ubiquitous forms of violations and vulnerabilities for the marginalised and disenfranchised people and places who are viewed as mere instruments of various forms of development. Slow violence is hidden in plain sight and decontextualises, depoliticises and dehistoricises issues of inequalities and change in urban peripheries which are treated as a *tabula rasa* i.e., devoid of social, cultural, economic, and political relationships.

Public opinion and dissent, especially from environmental groups and local communities have long focused on key issues faced by the Beel due to various human activities and development plans. The key issues raised by these groups include the loss of biodiversity, pollution, dumping of waste and human-animal conflict arising due to loss of natural habitat to development. These public communities also demand swift actions from the government and judicial environmental bodies such as the National Green Tribunal (NGT) regarding these issues faced by the Beel. As a result, actions such as the banning of community fishing in the Beel find support from these groups (The Times of India, 1 January 2016). While these voices of dissent and protest continue, the redevelopment plans under Guwahati Smart City Limited have not paid any cognisance to these issues. Instead, the smart city plans replicate and reintroduce old development agendas in new forms and vigour. In turn, I argue that the Guwahati Smart City risks privileging the powerful at the cost of marginal communities' knowledge, livelihoods and their fundamental needs.

Concluding thoughts

The empirical realities in the peripheries of Guwahati Smart City demonstrate that despite the aims and claims to solve key urban issues, smart cities engender “economic, sociocultural, architectural, ecological and political changes” that produce new forms of inequalities (Listerborn and de Neergaard, 2021). While smart city plans include elements of inclusivity and citizen participation in India, “actually existing smart cities” (Shelton, Zook, and Wiig, 2015) are productive of inequalities that predominantly benefit the already privileged and powerful (Holland, 2015; Listerborn and de Neergaard, 2021). Yet, these inequalities are not-so-new in the historical context of uneven distribution of power and resources in Indian cities. Following Shelton, Zook, and Wiig (2015), I argue that smart urbanism interventions in Guwahati are “outcomes of, and integrated into, existing social and spatial constellations of urban governance and the built environment” (p. 14). Smart cities latch on to already existing divides and inequalities, such as the divide between city and urban peripheries, and produce newer matrices of power, new institutional settings and promote the entry of new actors into the power geometry (Clark, 2020). Consequently, smart cities are emerging as yet another system of domination deeply embedded in existing power structures and relations that find new forms and actors of operation and circulation. While Indian smart cities are imagined as postcolonial “future time” wherein “technology” is the key to the future, this smart future is seemingly “unevenly distributed” (Datta, 2018).

References

- Clark, J. (2020). *Uneven innovation: The work of smart cities*. Columbia University Press.
- Das, D. (2020). In pursuit of being smart? A critical analysis of India’s smart cities endeavor *Urban Geography*, 41(1), 55–78.
- Datta, A (2015). A 100 smart cities, a 100 utopias *Dialogues in Human Geography*, 5(1), 49–53
- Datta, A. (2019). Postcolonial urban futures: Imagining and governing India’s smart urban age. *Environment and Planning D: Society and Space*, 37(3), 393–410.
- Dewani, U. (2014). Deepor Beel: entangled in a net of dangers. *India Water Portal*, 25 March. Retrieved online from <https://www.indiawaterportal.org/articles/deepor-beel-entangled-net-dangers>
- Engasser, F. & Saunders, T. (November 3, 2015). Role of citizens in India’s smart cities challenges. *World Policy*. Available online at <http://worldpolicy.org/2015/11/03/role-of-citizens-in-indias-smart-cities-challenge/>
- Gururani, S. (2020). Cities in a world of villages: Agrarian urbanism and the making of India’s urbanizing frontiers. *Urban Geography*, 41(7), 971–989.
- Guwahati Smart City Limited (undated). Smart City Challenge Stage 2: Smart city proposal Guwahati, Housing and Urban Affairs, Government of India. <https://gscl.assam.gov.in/documents/approved-proposal-of-guwahati-smart-city>.
- Guwahati Smart City Limited (2021). Request for Proposal of Design and Development of Deepor Beel on EPC Mode at Jalukbari in Guwahati, Assam, Volume II: Scope of Works, Technical Specifications and Drawings. Available online at <https://gscl.assam.gov.in/>. Accessed on 10 January 2022.
- Hollands, R. G. (2015). Critical interventions into the corporate smart city. *Cambridge Journal of Regions, Economy and Society*, 8(1), 61–77.

- Klauser, F., Paasche, T., & Söderström, O. (2014). Michel Foucault and the Smart City: Power Dynamics Inherent in Contemporary Governing through Code. *Environment and Planning D*, 32(5), 869–885.
- Listerborn, C., & de Neergaard, M. (2021). Uncovering the ‘Cracks’?. *ACME: An International Journal for Critical Geographies*, 20(3), 294–311.
- Marongiu, D. (2021). The Ideal City: Space and Time (from the Renaissance to Smart Cities). *European Review of Digital Administration & Law – Erdal*, 2(1), 9–17.
- Ministry of Housing and Urban Affairs. (2022) *Financing of Smart Cities*. Available online at <https://smartcities.gov.in/financing>. Accessed on 12 January 2022.
- Mondal, D., & Banerjee, A. (2021). Exploring peri-urban dynamism in India: evidence from Kolkata Metropolis. *Journal of Urban Management*, 10(4), 382–392.
- Mukhopadhyay, P., Zerah, M., & Denis, É. (2020). Subaltern Urbanization: Indian Insights for Urban Theory. *International Journal of Urban and Regional Research*, 44, 582–598.
- Narain, V., Anand, P., & Banerjee, P. (2013). Periurbanisation in India: A review of the literature and evidence: report of the project – rural to urban transitions and the peri-urban interface. *SaciWATERS*. India.
- Nixon, R. (2011). *Slow Violence and the Environmentalism of the Poor*. USA: Harvard University Press.
- Sadowski, J. (2021). Who owns the future city? Phases of technological urbanism and shifts in sovereignty. *Urban studies*, 58(8), 1732–1744.
- Shelton, T., Zook, M., & Wiig, A. (2015). The ‘actually existing smart city’. *Cambridge Journal of Regions, Economy and Society*, 8(1), 13–25.
- Singh, G. (2021). How Assam’s Deepor Beel is perishing from concretisation, waste dumping. *Down to Earth*, 7 September, retrieved from <https://www.downtoearth.org.in/news/water/how-assam-s-deepor-beel-is-perishing-from-concretisation-waste-dumping-78870>
- Sood, A. (2019). Speculative urbanism. *The Wiley Blackwell Encyclopedia of Urban and Regional Studies* London: Blackwell.
- Talukdar, S. (2021). Deepor Beel, the riverine wetland in lower Brahmaputra valley, on the brink. *The Frontline*, March 26. Available online at <https://frontline.thehindu.com/environment/deepor-beel-the-riverine-wetland-in-lower-brahmaputra-valley-on-the-brink/article34108353.ece>
- The Sentinel. (24 August, 2021). Rehabilitate affected fishermen around Deepor Beel. Retrieved online from <https://www.sentinelassam.com/guwahati-city/rehabilitate-affected-fishermen-around-deepor-beel-551666>.
- The Times of India (1 January, 2016). *Locals angry at ban on Fishing at Deepor Beel*. Available online at http://timesofindia.indiatimes.com/articleshow/50401789.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst.
- van Gils, B. A. M., & Bailey, A. (2021). Revisiting inclusion in smart cities: infrastructural hybridization and the institutionalization of citizen participation in Bengaluru’s peripheries. *International Journal of Urban Sciences*, DOI: 10.1080/12265934.2021.1938640
- Vanolo, A. (2014). Smartmentality: The smart city as disciplinary strategy. *Urban Studies*, 51(5), 883–898.

COVER IMAGE: Author.

Authors



Syeda Jenifa Zahan

Researcher » DIST, Politecnico di Torino, Italy

Syeda Jenifa Zahan is a feminist and postcolonial urban studies scholar whose work focuses on intersectional relations of power, practices and politics of urban dwelling and structural violence of urbanisation in the Global South. Since the award of her PhD from the National University of Singapore in 2020, Jenifa has undertaken a unique intellectual practice that contributes to theory building, grassroots organizing and to the development of innovative research methodologies. Jenifa's research draws on longitudinal, community engaged and creative ethnographies of urban processes and structures as well as everyday life and embodied knowledge, focusing mostly on Indian cities. Jenifa is currently a Researcher at DIST, Politecnico di Torino, Italy.