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Speculative Designs - Rethink Mumbai Flooding



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SDRMF

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Speculative Designs - Rethink Mumbai Flooding (SDRMF) Book is a special issue publication that brings together projects from around the world to address Mumbai's flooding challenges. The book serves as a source of inspiration and motivation for cities facing similar issues, encouraging them to take the first step toward crisis management and resilience. It is dedicated to all the participants, contributors - winners, those shortlisted in the competition – students, mentors, the jury, the support team – and, most importantly, to the people of Mumbai, India.

Notes from the Editor

Resilience: A Call for Collective Action

The world is at a crossroads. Climate change is no longer a distant threat—it is unfolding in real-time, reshaping our cities, societies, and ecosystems. Among the many crises we face, urban flooding has become one of the most urgent. In cities like Mumbai, where rapid urbanization, inadequate infrastructure, and ecological degradation converge, flooding is not just an environmental issue but a social and economic crisis demanding immediate action.

Santosh Kumar Ketham and his team embarked on this journey through my practice at Kethams Atelier Architects, focusing on climate, cities, communities, and cultural heritage. Simultaneously, our organization, Thinking Hand NGO, has been educating students and communities on these pressing issues. We began by documenting flooding in Hyderabad's slums, eventually expanding to Mumbai's urban challenges.

This research has shaped my teaching and work at Innsbruck University's Institute of Experimental Architecture, Hochbau, since 2019. Recognizing the urgency of Mumbai's flooding crisis, we launched an international competition and exhibition on 15 August 2024, inviting global experts to propose solutions. The Rethink Mumbai Flooding initiative was created to bring together professionals, students, and local stakeholders to collectively envision sustainable solutions. This competition is not just about generating ideas—it is about creating real impact.

This book, *Rethink Mumbai Flooding*, is the culmination of an international effort to address this crisis through design, dialogue, and innovation. More than a collection of ideas, it is a manifesto for resilience, inclusivity, and sustainability in urban development. The goal is not just to mitigate flooding but to embrace water as an integral part of urban life, transforming it from a threat into an opportunity.

Santosh Kumar Ketham

The Urgency of the Mumbai Flooding Crisis

Mumbai's flooding problem is not new. For decades, monsoons have brought the city to a standstill, submerging roads, halting transportation, displacing thousands and inflicting economic losses in the billions. The reasons for this are multifaceted: a fragile and outdated drainage system, the loss of natural water-absorbing ecosystems like mangroves and wetlands, unregulated urban sprawl, a climate change-driven sea level rise and extreme weather events.

Yet, despite its recurrence and severity, the response to Mumbai's flooding has remained largely reactive, focusing on short-term solutions rather than long-term resilience. Infrastructure projects such as stormwater drains, pumping stations and embankments, while necessary, are often designed in isolation, without considering their socio-ecological impact or their integration within broader urban systems.

What is needed is a shift in mindset – one that goes beyond controlling or resisting water to working with it. Can we design cities that absorb, store and channel water intelligently rather than simply trying to drain it away? Can we create adaptable housing typologies that float rather than sink? Can we transform urban landscapes into flood-resilient ecosystems rather than impermeable concrete jungles? These are the questions that *Rethink Mumbai Flooding* seeks to explore. The competition invited participants to move beyond conventional flood management strategies and envision bold, transformative solutions that embrace water as an asset rather than a threat.

A Collaborative and Interdisciplinary Approach

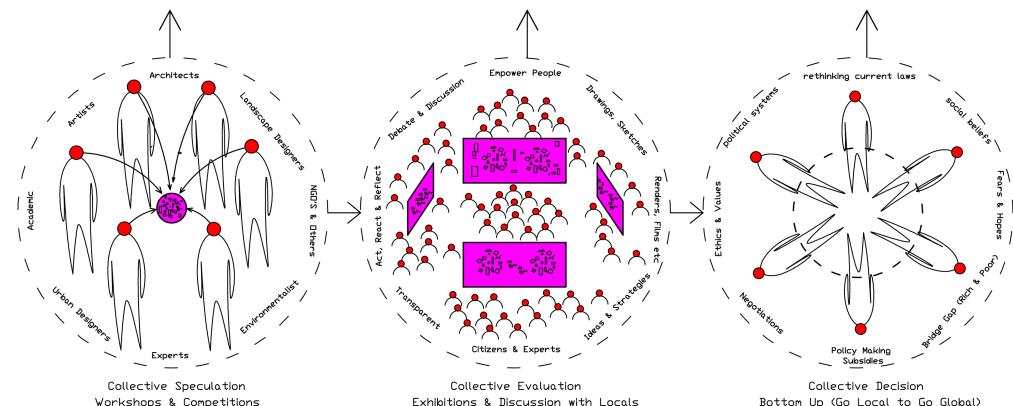
The strength of this initiative lies in its collaborative and interdisciplinary nature. Flooding is not just an architectural or engineering problem – it is deeply intertwined with issues of governance, social equity, ecology, and urban economics. Addressing it requires diverse perspectives, expertise, and experiences.

This competition and publication brought together experts and practitioners from multiple fields, including architecture, urban design, landscape architecture, civil engineering, policy-making, environmental sciences, disaster management and social sciences. It also engaged the most crucial stakeholders – local communities who experience the direct consequences of flooding every year.

The jury panel, consisting of professionals from across disciplines, played a pivotal role in shaping the discourse. Their evaluation of the submissions was not solely based on aesthetic or technical merit but on the real-world applicability, sustainability and socio-economic impact of the proposed solutions. The selected projects reflect a range of approaches – from large-scale ecological interventions to community-driven adaptive housing models, from data-driven smart infrastructure to culturally rooted place-based solutions.

Additionally, the competition served as a platform for young designers, students and emerging voices to engage with pressing urban challenges. Often, architectural and urban design competitions are dominated by well-established firms, but Rethink Mumbai Flooding consciously sought to include fresh perspectives, valuing speculative and radical thinking as much as feasibility and practicality.

Collective Approach –
Drawing by Editor.
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Architects.



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