

RE-ROUTING DEVOTION

A PRACTICAL APPROACH TO MANAGING HOLY WASTE ON THE VARANASI GHATS

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RSD15
SHADES OF SYSTEMIC DESIGN
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UNDERSTANDING

Varanasi, an ancient city living on the ghats of the holy Ganges for hundreds of years, is a place where deep-rooted spiritual traditions and a changing material world converge. Most sanitation projects here fail because they apply Western urban frameworks to a city where the relationship with matter and purity is theologically unique.

The people are not failing to be clean, they are succeeding at being holy. By mapping the "holy waste" journey, from floral offerings to harmful plastics, this project moves beyond broken trash systems to understand the faith-driven routines of pilgrims.

Our two-part, human-centered solution replaces "trash cans" with culturally resonant deposit stations and utilizes gravity-fed chutes to move waste down to floating river barges, bypassing congested alleys. This creates a circular economy where organic waste is transformed into sustainable packaging, reducing plastic reliance and honoring the sacred nature of the Ganges.

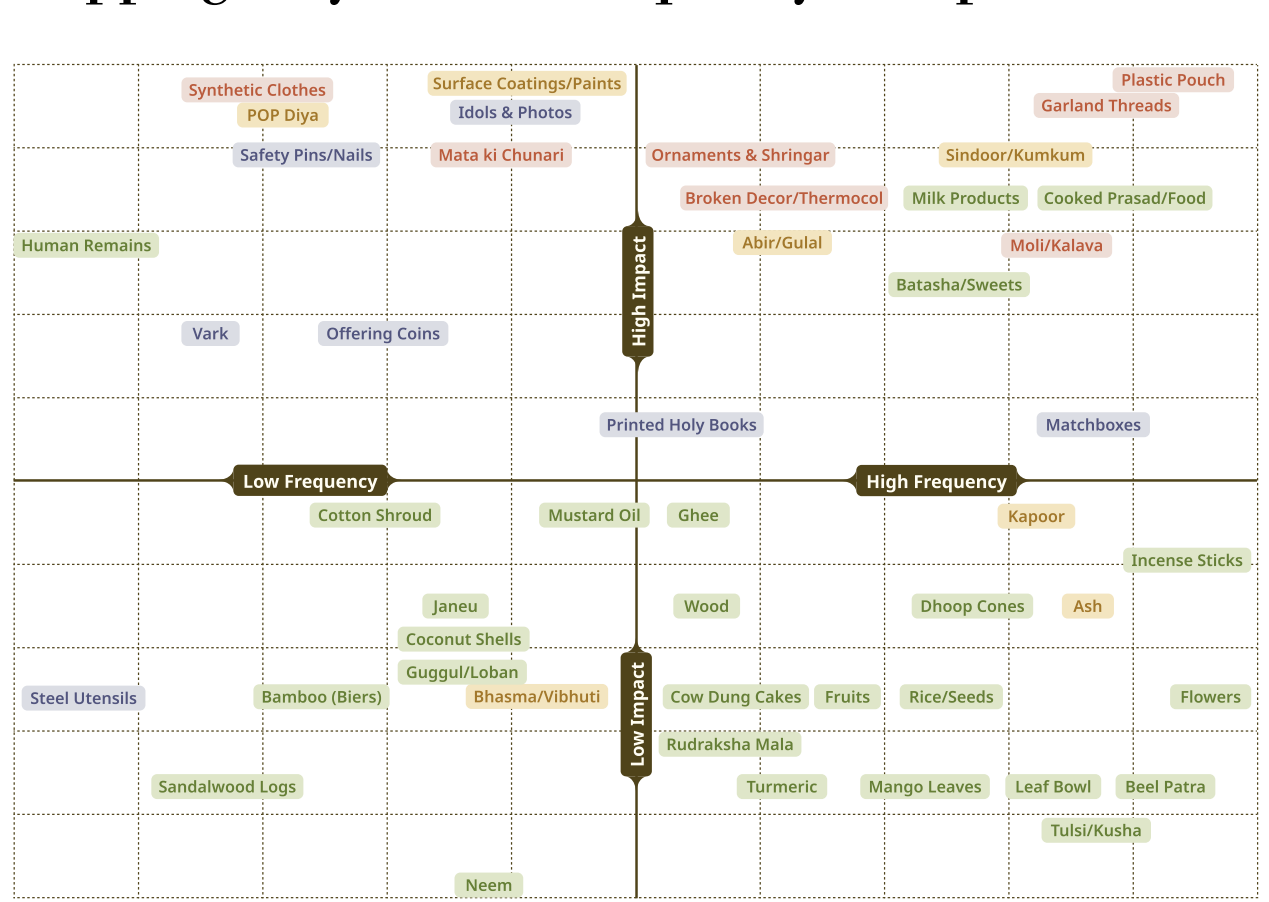
Stakeholder Dimensions

Understanding frequency of interaction, degree of influence, and ecological impact among the stakeholders.

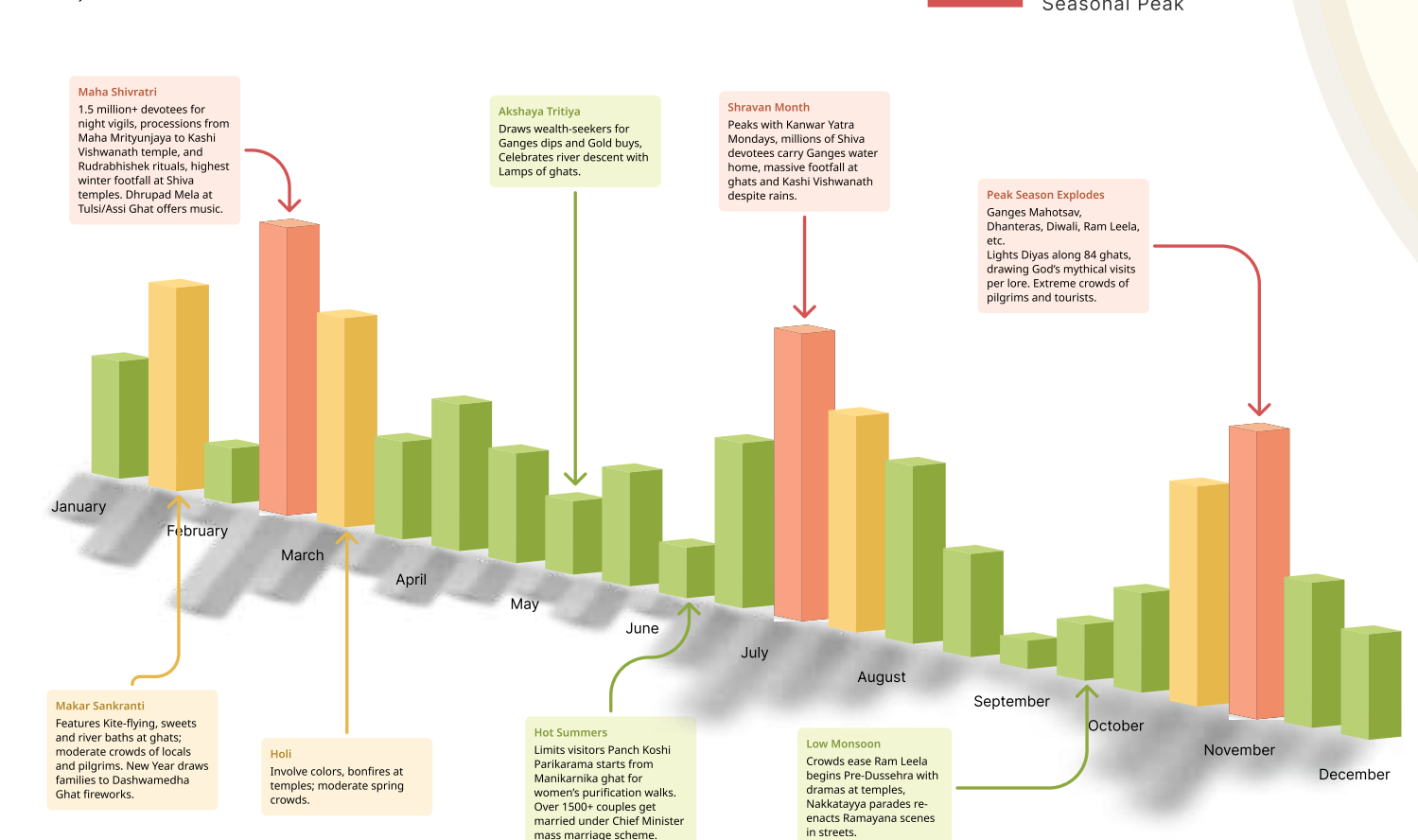


01 · THE RITUAL

Mapping Holy Waste - Frequency vs Impact



How Holy Waste Changes Through the Year - Low, Mid and Peak



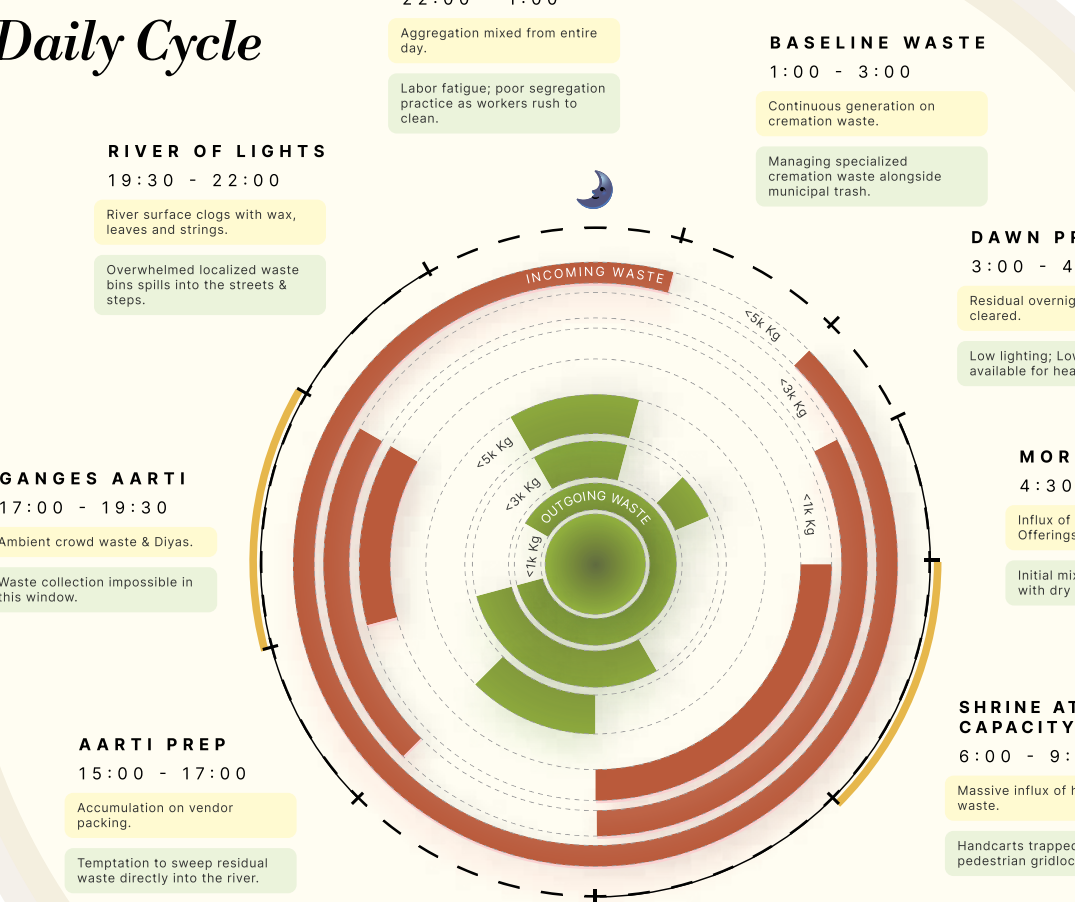
Overall Insight

Research conducted in Varanasi is not a barren one; it is a tapestry of an environmental story told by the hands of the city's inhabitants. The problem is not the waste itself, but the system that fails to manage it. The waste is a symptom of a larger issue: the inability of the city's infrastructure to handle the volume of waste generated by its population. The waste is a symptom of a larger issue: the inability of the city's infrastructure to handle the volume of waste generated by its population.

Spatial Density Map of the City

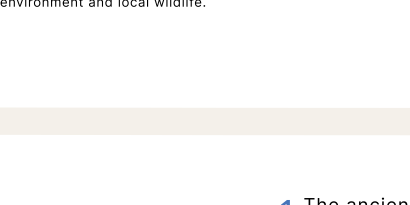


The Ghat's Daily Cycle

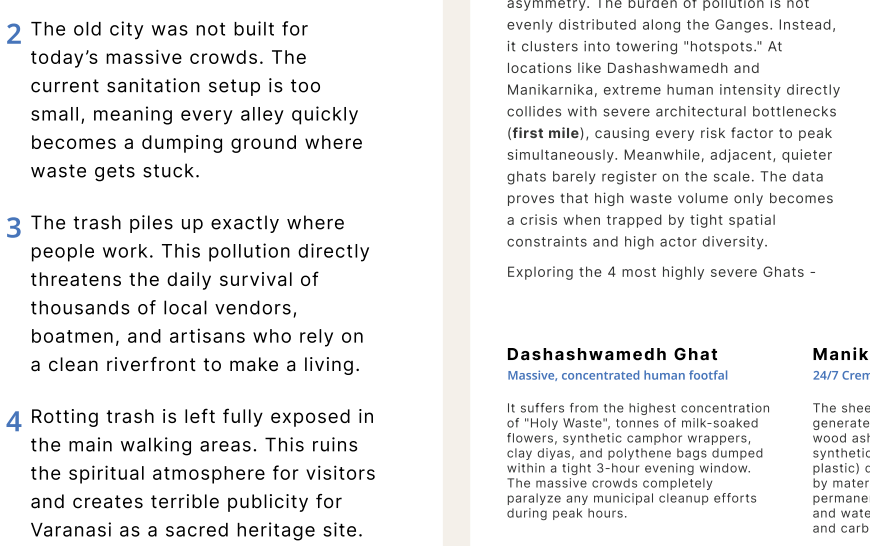


Cascade of Consequences

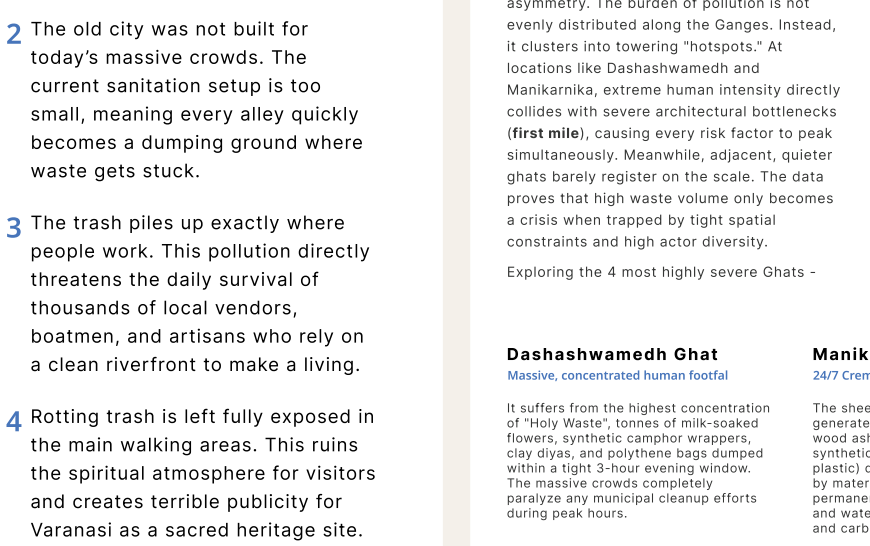
This systems map illustrates the cascading consequences of Varanasi's unmanaged waste. From the initial waste generation, the cascade leads to environmental degradation, health issues, and economic losses. The waste is a symptom of a larger issue: the inability of the city's infrastructure to handle the volume of waste generated by its population.



Ghat Analysis



Layered Analysis



First Mile Analysis

The Transit Blockade: Ancient, narrow temple alleys completely prevent access for standard municipal trucks. The Stop Privately: Waste generated on the lower riverfront steps must be manually hauled up steep inclines by workers. The Density Squeeze: High urban congestion clusters exactly where the waste is generated, leaving no physical space for temporary storage or sorting.



Scale of Waste

But the real bottleneck happens down to the riverfront. The city's infrastructure is not designed to handle the volume of waste generated by its population. The waste is a symptom of a larger issue: the inability of the city's infrastructure to handle the volume of waste generated by its population.



Contamination Composition



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