

# Student Thesis Competition (STC) Season 5 on “Re-imagining Urban Rivers”

Re-imagining Godavari River through the lens of ecosystem services, focusing on sustainable development of Nashik

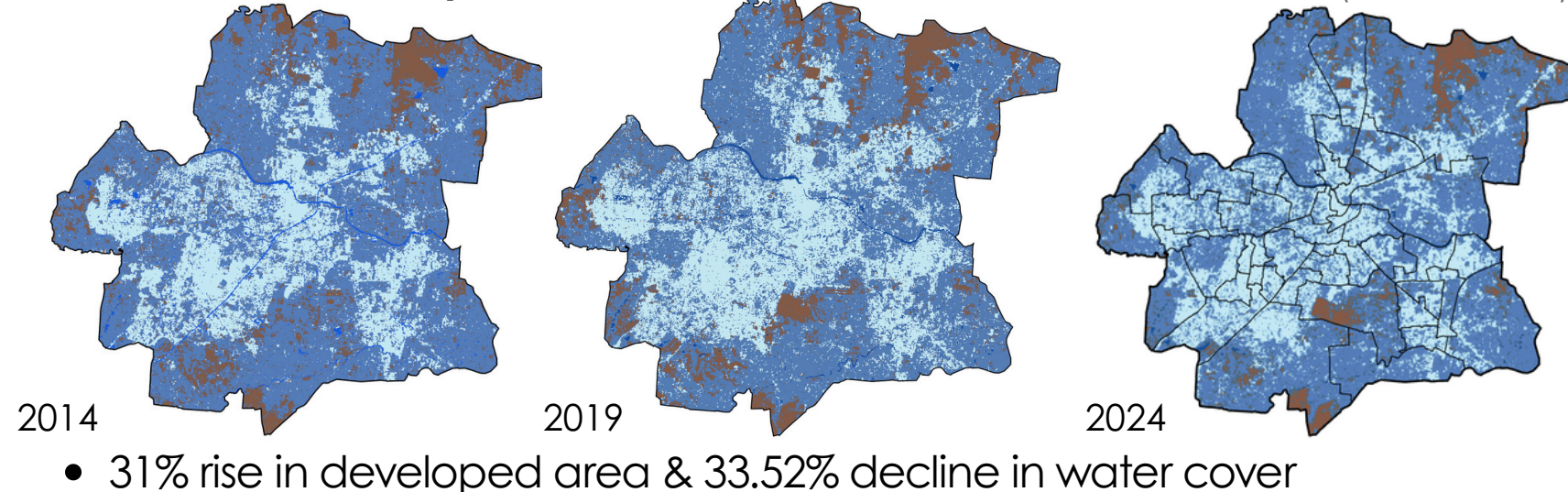
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Course Discipline: Masters in Urban Planning

## 01 PROLOGUE

“The healthy rivers underpin economies” with this seed idea, the project is envisioned to integrate a conservatory approach for water-related ecosystem services in a holistic manner of urban development, capitalising on their synergies to achieve long-term water security and resilience. Using a mixed-method approach—combining spatial LULC analysis, stakeholder surveys, and multi-criteria valuation—key ecosystem services (provisioning, regulating, and cultural) were mapped and assessed.

## 02 PROBLEM & PURPOSE

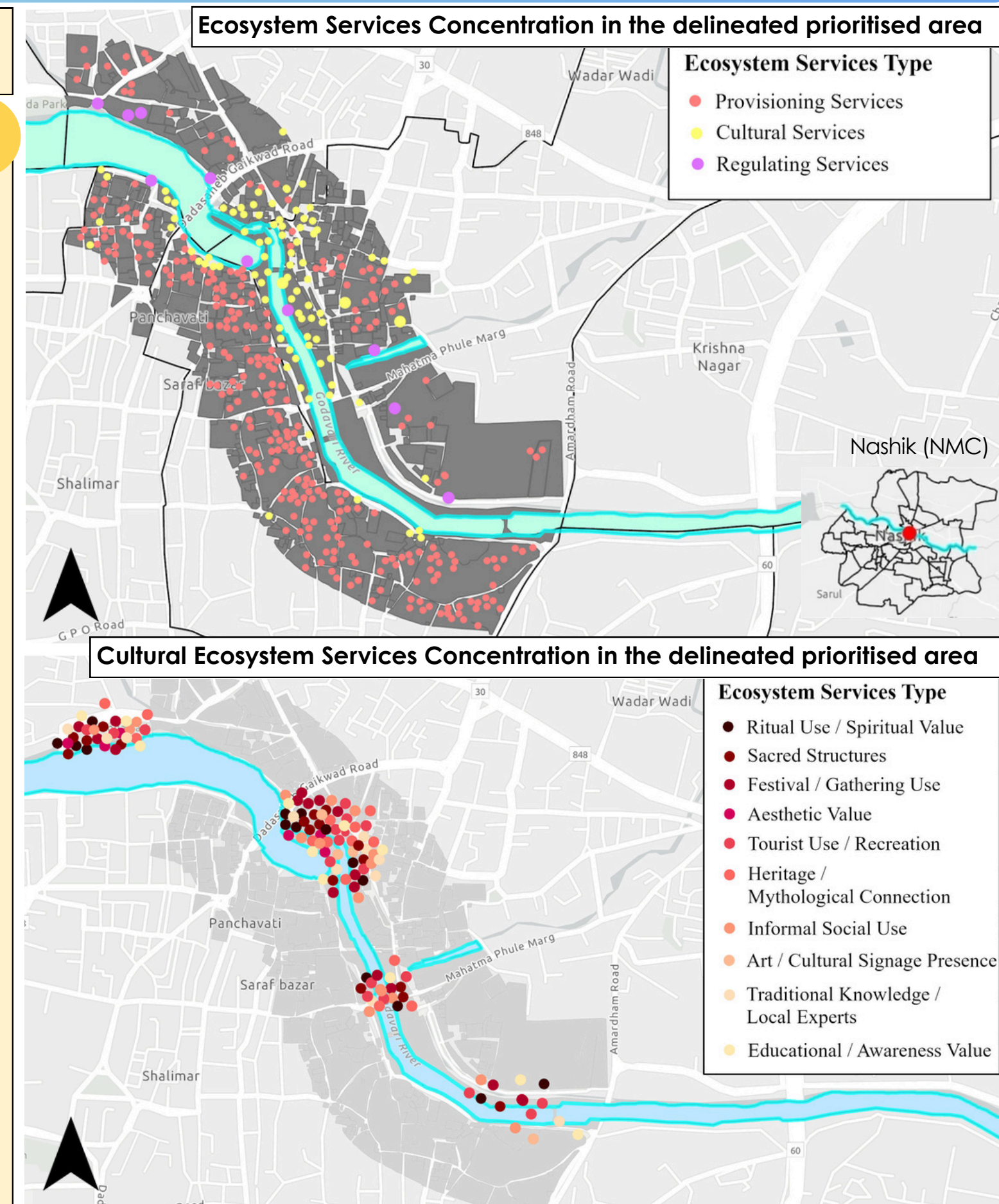
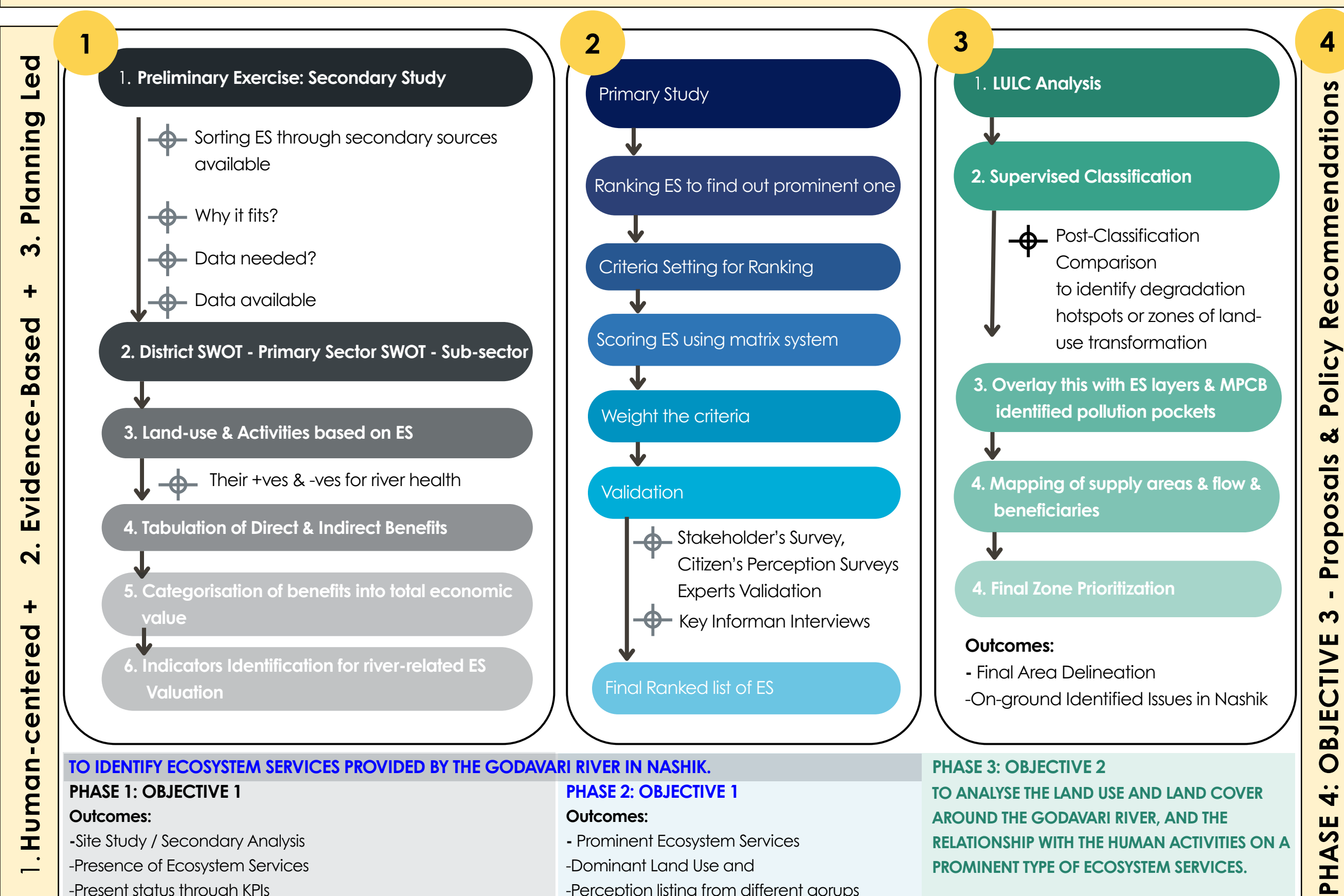
### Land Cover Analysis



- Gap Between Cultural Significance & Planning Response**
- Acc to MPCB - Over the past decade (2011–2023), the WQI declined from 133.44 to 35.01, as observed at key ghats in Nashik city (MPCB data).
- High Stress–Low Intervention Zone**

## 03 PROCESS & PROOF

AIM: TO FACILITATE RIVER-SENSITIVE URBAN PLANNING OF THE GODAVARI RIVER INFLUENCED ZONE IN NASHIK THROUGH WATER-RELATED ECOSYSTEM SERVICES.



## 04 PRIORITY ISSUE IDENTIFIED

### OVERCROWDING CRISIS AT KUMBH MELA SITE - PANCHAVATI

- No pre-registration or crowd control mechanism
- Lack of resting zones/temporary infrastructure
- Infrastructure damage
- Poor traffic management
- No designated parking & vendor zones



### PILGRIM PROJECTION FROM KUMBH MELA

Daily average attendance:

10,000,000 pilgrims / 73 days = 137,000 PILGRIMS/DAY = 166,700 PILGRIMS/HOUR (Bathing occurs 6 am - 6 pm)

- Prayagraj = 30 lakhs
- Nashik = 20 lakhs

Scaling to Ramkund zone: Ramkund precinct may handle 10% of overall pilgrimage crowd (others spread across satellite sites).

17,000 PILGRIMS/ HOUR MAY ARRIVE FOR RITUALS AT THE RAMKUND STRETCH.

Total Required Area:  $17,000 \times 2 = 34,000 \text{ sq.m}$

## 05 PROPOSALS & RECOMMENDATIONS

### MANAGEMENT STRATEGIES FOR PILGRIM FLOW AND ACTIVITY ZONES

