

## TERMS OF REFERENCE (TOR)

for inviting

Expression of Interest for the

Socio Cultural/Economic Survey Consultancy (SCSC)

## "IPSA-Kumbh: Mapping Impact of Floating Population on Sewerage during Maha Kumbh 2025"

Project Code: 2024SE02

## PROJECT PROPONENT

TERI School of Advanced Studies

Plot No. 10, Institutional Area, Vasant Kunj,

New Delhi - 110 070, India.

### **Background of the proposed Project:**

The study of the floating population during the Kumbh Mela is crucial for understanding its socio-cultural dynamics related to water. This festival unites diverse groups, creating a melting pot of traditions and rituals that reinforce cultural identities. However, the influx of millions of pilgrims strains local water resources and ecosystems, necessitating the development of sustainable practices to maintain water quality. Public health concerns arise from sanitation issues, underscoring the need for effective waste management and water safety measures to protect both pilgrims and local communities. Additionally, the Kumbh Mela fosters social cohesion, making it essential to explore how water rituals contribute to communal ties. The research aims to inform policymakers about balancing the festival's spiritual significance with practical management challenges, promoting sustainable event planning. By systematically identifying these issues, the research team seeks to develop data-driven solutions in collaboration with Mela authorities, enhancing participant safety and satisfaction while ensuring event sustainability. The study will also examine the cultural practices of pilgrims and their impact on water use and waste generation, ultimately providing valuable insights and strategies applicable to large-scale religious and cultural events globally. The socio-cultural analysis dimension shall focus on the following aspects:

### **Objectives**

- To analyze floating population demographics and migration patterns
- To examine the pilgrims' cultural practices water use, waste management, hygiene and sanitation practices.
- To analyse socio-cultural impacts with various stakeholders on water, waste, hygiene and sanitation perception.
- To develop data-driven framework and strategies to improve water, waste, and sanitation and hygiene.

### 1. Introduction

The Maha Kumbh Mela 2025, one of the largest religious gatherings in the world, will take place in Prayagraj, India, from January 2025 to March 2025. This event will attract millions of pilgrims, also known as the floating population, who will engage in water-related rituals that hold significant cultural, religious, and social importance. The convergence of such a large group of people in a short period places immense pressure on local water resources, sanitation systems, and the environment. Consequently, there is an urgent need to analyze the impact of the floating population on water use, waste generation, sanitation practices, hygiene practices and the socio-cultural dynamics that evolve around the event. The Social-Cultural Impact Assessment aims to assess the socio-cultural dimensions of the Mela, particularly in relation to water, waste, sanitation and hygiene. This study will also guide the development of effective, culturally appropriate, and sustainable practices for managing water resources and sanitation during the Mela.

## 2. Objectives of the Study

The key objectives of the Social-Cultural Impact Assessment are as follows:

- 1. Floating Population Demographics and Migration Patterns:
  - To assess the demographic characteristics of the floating population.
  - To analyze the migration and movement patterns of the pilgrims during the Mela, focusing on their arrival, departure, and density at key sites.
- 2. Pilgrims' Cultural Practices, Water Use, Waste Generation, Sanitation and Hygiene:

- To examine the religious and cultural practices related to water, including bathing, rituals, and water purification.
- To analyze how these practices influence water consumption and waste generation, sanitation and hygiene especially in relation to sanitation and sewage systems.

## 3. Socio-Cultural Impacts on Water, Waste, Hygiene and Sanitation Perception:

- To evaluate how pilgrims and local communities perceive the importance of water for religious rituals and its implications for local water resources.
- To analyze local and pilgrim attitudes towards sanitation, hygiene, and waste disposal practices during the Mela.

## 4. Development of a Data-Driven Framework and Strategies:

- To develop actionable strategies for improving water, waste, sanitation, and hygiene management, while ensuring that cultural practices are respected and incorporated into event planning.
- To provide data-driven insights for policymakers, ensuring that water, waste, sanitation, and hygiene management strategies are both effective and culturally sensitive.

### 3. Scope of Work

The assessment will be divided into three distinct phases:

## 1. Pre-Event Phase (05 January to 12 January 2025)

This phase focuses on the preparation and planning for the event, which includes baseline data collection, stakeholder engagement, and setting up monitoring systems.

## 2. During-Event Phase (13 January – 26 February 2025)

This phase involves real-time monitoring of the event's socio-cultural and environmental impacts, with a focus on water use, waste generation, hygiene and the effectiveness of sanitation measures.

### 3. Post-Event Phase (27 February -31 March 2025)

The post-event phase involves data analysis, reporting, and providing recommendations for future events. This includes a comprehensive evaluation of the event's impact on water, waste, sanitation, and hygiene.

**Total Number of Surveys**: The total number of surveys to be conducted collectively across all stakeholders is to be between **385-400 surveys per day**. (Pre Kumbh, During Kumbh, Post Kumbh).**Stakeholder-Specific Requirements**: Each stakeholder is required to conduct **65-70 surveys per day**.

## 4. Pre-Event Phase (08 January to 12 January 2025)

### **4.1 Baseline Data Collection**

### • Demographic Analysis:

- Conduct surveys to understand the floating population's demographic characteristics, including age, gender, geographical origins, and socioeconomic background.
- Study past Kumbh Mela data to predict migration patterns, including arrival times, duration of stay, and areas of congregation.

### • Water and Sanitation Infrastructure Assessment:

• Assess the existing water supply, sewage, and waste management infrastructure at key sites of the Mela.

• Identify areas where water, waste, sanitation and hygiene facilities are insufficient or need improvement.

### 4.2 Stakeholder Consultation and Engagement

## • Engagement with Local Authorities and Mela Organizers:

- Meet with local government authorities, water resource managers, public health experts, and Mela organizers to understand their current strategies for water, waste, sanitation and hygiene management/practices.
- Understand the local authorities' expectations, challenges, and resources for handling the influx of pilgrims.

## • Engagement with Pilgrims and Local Communities:

- Conduct focus group discussions (FGDs) and interviews with pilgrims, local residents, and religious leaders to understand cultural practices around water use, hygiene, and sanitation during the Mela.
- Assess pilgrims' awareness of water, waste, hygiene and sanitation issues.

## **4.3** Cultural Sensitivity and Impact Framework

## • Cultural Mapping:

- Identify water-related cultural rituals and practices that will take place during the Mela (e.g., bathing in the river, sacred water purification).
- Engage cultural experts to evaluate the impact of these rituals on water resources and sanitation.

## • Health and Hygiene Behavior Assessment:

• Conduct surveys to assess hygiene practices and public health concerns related to sanitation among pilgrims and local residents.

### 4.4 Risk Assessment

### • Public Health and Environmental Risks:

- Identify potential public health risks due to poor sanitation, water contamination, and overcrowding.
- Evaluate risks to water resources and the local ecosystem, particularly in the Ganga River.

# <u>List of Stakeholders as shown in table: Yellow are the major stakeholders for Maha</u> Kumbh\*\*

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Semi-Structured Interviews
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Infrastructure and Service Providers Construction and Engineering Firms, Power and Water Supply Companies, Telecommunications Providers	Semi-Structured Interviews		
Researchers and Academic Institutions Universities and Research Institutes, Sociologists, and Public Health Experts	Structured Interviews (one-on-one interviews)		
Environmental and Social Organizations NGO	Focus Groups (NGO volunteers)		
Tourism and Hospitality Sector Hotel and Lodging Providers, Travel Agencies and Transport Companies, Catering and Food Service Providers	Structured Interviews (one-on-one interviews)		
Media and Communication Agencies National and Regional Media, Social Media Influencers and Content Creators	Structured Interviews (one-on-one interviews)		
International Stakeholders International Tourists and Pilgrims, Foreign Embassies and Consulates	Semi-Structured Interviews		
Sponsors and Commercial Partners Corporate Sponsors, Corporate Social Responsibility (CSR) Initiatives (Small businesses)	Structured Interviews (one-on-one interviews)		
Cultural and Artistic Groups	Semi-Structured Interviews		
Legal and Regulatory Bodies Legal Authorities, Environmental Regulators	Structured Interviews (one-on-one interviews)		

<u>List of Government Agencies and Authorities (Prayagraj District Administration,</u> Prayagraj Mela Authority (PMA), Uttar Pradesh Government)

Ministry of Home Affairs Ministry of Health and Family Fire and Emergency Services (MHA) Welfare and the Uttar Pradesh Health Department Uttar Pradesh Government National Health Mission (NHM) Non-governmental organizations (State Administration) (NGOs) and volunteers Indian Army (disaster response, Uttar Pradesh Police Ambulance and Emergency crowd control, and providing Services logistical support.) Uttar Pradesh Power Ministry of Tourism (GoI) The Kumbh Mela Committee Corporation (UPPCL) (Prayagraj) Uttar Pradesh Irrigation Indian Meteorological Department National Mission for Clean Ganga (NMCG) and the Uttar Pradesh Jal Department (IMD) Nigam District Administration of Central Pollution Control Board National Disaster Management (CPCB) and Uttar Pradesh Prayagraj (district collector Authority (NDMA) and other officials) Pollution Control Board (UPPCB)

<u>List of Researchers and Academic Institutions (Universities and Research Institutes, Sociologists, and Public Health Experts)</u>

Allahabad State University	Govind Ballabh Pant Social Science	University of Allahabad
	Institute	
Indian Institute of Information	Motilal Nehru National Institute of	U.P.Rajarshi Tandon Open
Technology (IIIT-A), Allahabad	Technology (MNNIT), Allahabad	University (UPRTOU)
CMP Degree College	Nehru Gram Bharati	Dr. Rajendra Prasad National Law
	University, Prayagraj	University
Sam Higginbottom University	Botanical Survey of India (Central	Centre for Social Forestry and
of Agriculture, Technology and	Regional Centre), Prayagraj	Eco-Rehabilitation
Sciences		

## 5. During-Event Phase (13 January – 26 February 2025)

### **5.1 Real-Time Data Collection**

## • Floating Population Monitoring:

- Track the movement and congregation of the floating population using GPS-based tracking, mobile apps, and field surveys.
- Document the number of pilgrims at various locations, migration patterns, and density of crowds.

## • Water Use, Hygiene and Sanitation Practices:

- Observe and document the cultural practices related to water use, hygiene and waste generation.
- Monitor the use of public sanitation facilities, water quality, hygiene and waste disposal practices.

## • Waste Generation and Management:

- Track waste generation patterns, including solid waste and wastewater, and assess the effectiveness of waste management strategies.
- Monitor the performance of sanitation facilities, including public toilets, waste collection systems, and sewage treatment plants.

### 5.2 Feedback and Adjustment

## Daily Reports and Stakeholder Briefings:

- Provide real-time data analysis and feedback to local authorities, Mela organizers, and sanitation teams.
- Conduct daily meetings to identify challenges and adjust strategies based on real-time data and feedback from pilgrims and stakeholders.

### • Pilgrim Feedback:

Collect feedback from pilgrims on the availability, accessibility, and cleanliness
of water, waste, hygiene and sanitation facilities through surveys and mobile
apps.

### 6. Post-Event Phase (27 February -31 March 2025)

### **6.1 Data Analysis and Impact Evaluation**

## • Analysis of Collected Data:

- Analyze demographic data, water usage patterns, waste generation, hygiene and sanitation practices.
- Assess the socio-cultural impact of water-related rituals and their effect on local water resources, sanitation, and the environment.

## • Socio-Cultural Impact Report:

- Document the relationship between the pilgrims' cultural practices and the local community's water, waste, hygiene and sanitation systems.
- Evaluate the overall effectiveness of water, waste, hygiene and sanitation management during the Mela, including areas of success and failure.

### **6.2 Final Report and Recommendations**

## Detailed Final Report:

- Prepare a comprehensive report outlining the findings of the study, with particular attention to water use, waste management, and cultural practices.
- Offer actionable recommendations for improving water management, sanitation, and hygiene practices during future events.

### • Strategic Recommendations for Future Events:

- Propose strategies for incorporating cultural practices into water, waste, hygiene and sanitation management systems while maintaining environmental and public health standards.
- Develop policy recommendations for enhancing sustainability and resilience for future large-scale religious gatherings.

#### 7. Deliverables

Expected Report: The analysis aims to explore the perceptions, attitudes, knowledge, behaviors, and beliefs of various stakeholders involved in managing and participating in large-scale events such as the Kumbh Mela. These insights will guide the development of strategies for improving water, waste, sanitation, and hygiene management (WASH) in future events.

- **Pre-Event Phase Report:** Baseline data, stakeholder engagement findings, and cultural assessment.
- **During-Event Phase Updates:** Weekly progress reports, field observations, and adjustments to strategies.
- **Post-Event Report:** Final analysis, impact assessment, and recommendations for future improvements.
- **Data-Driven Framework for Sustainable Management:** A strategic framework for managing water, waste, hygiene and sanitation during large-scale cultural events.

### 8. Timeline and Milestones

Phase	Activities	Duration	Key Milestones
Pre-Event	Data collection, stakeholder	(08 January to 12	Baseline report, data
Phase	engagement, risk assessment	January 2025)	collection tools
<b>During-Event</b>	Real-time monitoring, feedback	(13 January – 29	Weekly reports, stakeholder
Phase	gathering	February 2025)	consultation
Post-Event	Data analysis, report preparation	(27 February -31	Final report submission,
Phase		March 2025)	recommendations

## 9. Team Composition and Roles

- **Project Lead:** Oversee the entire project, coordinate activities, and liaise with stakeholders (Summary of inference given by project lead person).
- **Cultural Experts:** Research cultural and religious practices related to water and sanitation.
- **Public Health Experts:** Monitor sanitation, hygiene, and public health risks.
- **Field Researchers:** Conduct surveys, interviews, and observations on-site.
- **Data Analysts:** Analyze the collected data and produce reports.
- Local Liaison Officers: Coordinate with local communities and authorities.

### 10. Budget and Resources

The **total maximum budget** allocated for the socio-cultural/economic survey is **INR 8,00,000/-** where an **organization** is hired to carry out the survey, the budget must be allocated efficiently across all aspects of the project. A detailed budget will be developed for the project, including costs for data collection tools, field research, staff salaries, travel, stakeholder consultations, and report production.

### 11. Approval

This TOR is subject to the approval of the project steering committee and Mela authorities.

We kindly request that you submit the necessary documentation as outlined below. Please ensure that all details are filled out as per the table, and submit your complete proposal in single PDF by **07**January 2025 to the following email address: <a href="mailto:emerson@terisas.ac.in">emerson@terisas.ac.in</a>

## **Checklist:**

Category	Details		
1. Technical Proposal	- Understanding of the project objectives and goals		
	- Approach and methodology for project execution		
	- Work plan/timeline with milestones and deadlines		
	- Team structure and roles with qualifications of key		
	personnel		
	- Previous experience and case studies from similar		
	projects		
	- Risk management plan		
2. Financial Proposal	- Detailed cost breakdown (labor, materials,		
	equipment, travel, etc.)		
	- Payment schedule (linked to milestones or		
	deliverables)		
	- Total bid price		
3. Qualifications and Experience	- Company profile (background, mission, expertise)		
	- Relevant qualifications (certifications, licenses, etc.)		
	- Relevant project experience (list of similar projects		
	completed)		
	- References (contact details of previous clients for		
	feedback)		
4. Legal and Contractual	- Confirmation of compliance with TOR conditions		
Documents	Signed agreement (aggentance of TOP and		
	- Signed agreement (acceptance of TOR and commitment to requirements)		
	- Non-disclosure agreement (NDA), if applicable		
	- Proof of insurance or bonding (if required)		
5. Proposal Format	- Proposal should follow the specified format or		
3. I Toposai Format	template		
	- Clarity and completeness (ensure all sections of		
	TOR are addressed)		
6. Additional Documentation (If	- Sample deliverables (e.g., reports, designs, or		
Required)	prototypes)		
•	- Technical specifications (if the project is technical)		
	- Monitoring and evaluation methodology (if		
	applicable)		
	- Sustainability plan (if applicable)		
7. Confidentiality and Ethical	- Data privacy and confidentiality statement		
Compliance			
	- Ethical conduct declaration (e.g., anti-bribery,		
	conflict of interest)		
8. Timeline for Submission	- Bid submission deadline		
	- Clarifications and queries deadline		