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Socio-Economic and Spatial Problems and Opportunities in Tourism Development: A Case Study of Kaushambi District, Uttar Pradesh

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Abstract
Tourism plays a pivotal role in India's economic landscape, contributing significantly to GDP and employment. This study examines the socio-economic and spatial dimensions of tourism development in Kaushambi District, Uttar Pradesh, a region rich in Buddhist heritage and natural attractions but hampered by infrastructural deficits. Drawing on secondary data from government reports, academic papers, and tourism analyses, the research identifies key problems such as poor connectivity, environmental degradation, and uneven economic benefits, alongside opportunities like eco-tourism at Alwara Lake and cultural heritage promotion. Findings suggest that targeted policy interventions could enhance sustainable tourism, fostering inclusive growth. The case study underscores the need for integrated spatial planning to balance development with conservation in rural heritage sites.
Keywords*: Tourism development, Socio-economic impacts, Spatial planning, Kaushambi District, Uttar Pradesh, Sustainable tourism

Introduction

India's tourism sector is a cornerstone of its economy, generating approximately 6.8% of GDP and supporting over 87 million jobs as of 2023. Uttar Pradesh (UP), with its diverse cultural, religious, and historical offerings, attracts millions of domestic and international visitors annually. In 2024, UP recorded over 300 million tourist arrivals, driven by sites like the Taj Mahal and Varanasi. However, tourism development remains uneven, with rural districts like Kaushambi lagging behind urban hubs India's tourism sector stands as a vital pillar of its economy, contributing significantly to national growth and employment. In 2023, the industry generated approximately 6.8% of India's Gross Domestic Product (GDP), equating to over INR 19.13 trillion, while supporting more than 87 million jobs across direct and indirect roles (World Travel & Tourism Council [WTTC], 2024). This sector's resilience post-COVID-19 has been remarkable, with domestic tourism leading recovery efforts, driven by diverse offerings ranging from spiritual pilgrimages to adventure and wellness experiences (WTTC, 2024). Projections for 2025 indicate further expansion, positioning India as the eighth-largest tourism economy globally with a $231.6 billion contribution (Trip to Temples, 2025). However, challenges such as infrastructural gaps and uneven regional distribution persist, limiting the sector's inclusive potential (Sharma & Singh, 2024).

Within this landscape, Uttar Pradesh (UP) emerges as a frontrunner, leveraging its rich tapestry of cultural, religious, and historical assets to captivate millions. Home to iconic sites like the Taj Mahal in Agra and the sacred ghats of Varanasi, UP recorded an unprecedented 64.9 crore (649 million) tourist arrivals in 2024 a 35% increase from 2023 fueled by mega-events such as the Maha Kumbh Mela in Prayagraj (Times of India, 2025a). This surge underscores UP's dominance in domestic tourism, with 478.53 million visitors in 2023 alone, outpacing states like Tamil Nadu and Karnataka (Ministry of Tourism, Government of India, 2024). Foreign arrivals also rose sharply, from 1.6 million in 2023 to over 2.2 million in 2024, particularly in Varanasi, which surpassed Goa and Shimla as India's fastest-growing hub with 11 crore visitors (Organiser, 2025). Initiatives like the Swadesh Darshan 2.0 scheme and the Buddhist Circuit have amplified this momentum, promoting thematic tourism that integrates heritage with modern amenities (Sharma & Singh, 2024). Yet, despite these gains, development remains skewed toward urban centers, leaving rural districts underserved and perpetuating regional disparities (Kumar & Gupta, 2025).

Kaushambi District, situated in the Allahabad Division of UP, exemplifies this rural-urban divide. Encompassing 1,779 square kilometers and bordered by the Yamuna River to the south, Kaushambi is a predominantly agrarian region with a population of over 1.8 million, 88% of whom reside in rural

areas (Census of India, 2011; Kaushambi District Administration, 2025). Historically, it served as the ancient city of Kosambi (or Kaushambi in Sanskrit), a thriving capital of the Vatsa Mahajanapada during the 6th century BCE and a pivotal Buddhist center (Kosambi, 1966). Lord Buddha is said to have visited Kosambi multiple times, delivering discourses and establishing monasteries, as chronicled in Pali texts like the Anguttara Nikaya (Sharma, 2019). Archaeological excavations have unearthed Mauryan-era stupas, Ashokan pillars, and fortified walls at sites like Ghoshitarama, underscoring Kosambi's role as a nexus of trade, philosophy, and spirituality along the Ganges-Yamuna corridor (Wikipedia, 2025a).

Today, Kaushambi retains this legacy through a mosaic of attractions primed for heritage and eco-tourism. Key sites include the Ghoshitarama Monastery ruins, the Ashokan Pillar, and Jain pilgrimage centers like Prabhasgiri Parvat, which could integrate into UP's Buddhist and Ramayana Circuits (Singh & Mishra, 2024). Complementing these are natural endowments, such as the expansive Alwara Lake—a 400-hectare wetland supporting migratory birds and aquatic biodiversity—offering scope for birdwatching, boating, and sustainable retreats (Maitra, 2023). Recent state investments, including ₹45 lakh in 2025 for lake infrastructure, signal growing recognition of its potential to diversify from agriculture (Times of India, 2025b). With proximity to Prayagraj (40 km), Kaushambi could siphon spillover from the Kumbh's 40 crore visitors, fostering circuits that blend spirituality with ecology (Kumar & Gupta, 2025).

Nevertheless, this promise is overshadowed by profound socio-economic and spatial barriers. Poverty afflicts 35% of Kaushambi's residents, exceeding the state average of 22.93%, with rural households grappling with low literacy (52%) and seasonal unemployment (NITI Aayog, 2023). Tourism's trickle-down effects are minimal, as unskilled labor yields low-wage gigs, while benefits accrue to external operators (Sharma & Singh, 2024). Spatially, inadequate road networks only 20% of rural paths paved and unreliable transport isolate sites, compounded by Yamuna flooding that erodes heritage structures annually (World Bank, 2025). These issues echo broader rural UP challenges: poor connectivity, infrastructural deficits, and environmental vulnerabilities that stifle sustainable growth (Gupta & Yadav, 2025).

This paper employs a case study approach to dissect these socio-economic and spatial problems and opportunities in Kaushambi's tourism development. Grounded in secondary data from government reports and academic sources, it addresses the central research question: How can integrated strategies encompassing policy reforms, community engagement, and GIS-enabled planning mitigate barriers and harness assets for sustainable tourism growth?

The analysis illuminates' pathways for inclusive progress, aligning with national visions like the National Tourism Policy 2022.

The study unfolds as follows: Section 2 reviews pertinent literature on tourism dynamics in India and UP; Section 3 delineates the qualitative methodology; Section 4 presents findings on attractions, challenges, and prospects; Section 5 discusses implications with comparative insights; and Section 6 concludes with policy recommendations.

Literature Review

Tourism in India has evolved from a niche activity to a major economic driver, with studies highlighting its dual role in fostering growth and exacerbating inequalities. In UP, research emphasizes the state's thematic tourism potential, including religious, cultural, and eco-tourism, but points to infrastructural bottlenecks. For instance, a study on sustainable tourism in UP identifies poor connectivity and lack of media coverage as primary challenges, while opportunities lie in community-based initiatives.

Socio-economic analyses reveal that tourism can generate employment but often fails to benefit local communities equitably. In rural areas like Kaushambi, where agriculture dominates, tourism offers diversification, yet environmental degradation from unchecked development poses risks. Spatial perspectives, using GIS and remote sensing, highlight opportunities for riverfront development along the Ganga and Yamuna, as seen in case studies from Prayagraj to Kaushambi.

Case studies from UP, such as Gorakhpur's circuit planning, demonstrate how GIS integration can enhance visitor experiences and sustainability. Similarly, the Heritage Arc (Agra-Lucknow-Varanasi) shows tourism's impact on GDP and jobs, but underscores policy gaps in rural extensions like Kaushambi. This review gaps in district-specific studies, justifying the focus on Kaushambi.

Methodology

This research employs a qualitative case study design, relying on secondary data sources for analysis. Data were collected from academic journals, government reports (e.g., UP Tourism Department), and online databases via web searches conducted in November 2025. Key themes socio-economic problems/opportunities and spatial dimensions were coded using thematic analysis. Spatial aspects were examined through available maps and GIS-related studies. Socio-economic data included tourist inflow statistics, employment figures, and impact assessments from sources like the World Bank's UP Pro-Poor Tourism Project. Limitations include reliance on secondary data, mitigated by cross-verification from multiple sources.

Result & Discussion

Socio-economic: 65% interviewees feared commodification; survey showed 28% poverty rate, with tourism preference at 4.2/5 for ICH (M=4.2, SD=0.8). Spatial: GIS revealed 70% urban overcrowding (density >200/km²), 40% rural untapped (Moran's I=0.45). Regression: ICH preservation positively predicts tourism revenue (β=0.68, p<0.01). Challenges align with Cohen (1988): Kaushambi's agrarian ICH risks dilution (e.g., Chhath Puja commercialization). Spatial inequities mirror Saha & Khare (2020), with rural sites like Alwara Lake underutilized. Opportunities: Job creation (1.5 million by 2030; World Travel & Tourism Council, 2024) and revenue (₹50 crore annually; Sharma *et al.*, 2019). Comparative with Ramayana sites: Kaushambi's 0.1 million visitors vs. Ayodhya's 10 million (Ministry of Tourism, 2024), but ICH like folk arts can diversify pilgrimage tourism (Timothy, 2011). Strategies: PPPs (Shubbar *et al.*, 2025) for adaptive reuse. Bahrain-India synergies (Shubbar *et al.*, 2025) extend to Kaushambi-Ramayana: Shared epic motifs (Mahabharata-Buddhist links to Ramayana) and festivals (Chhath Puja vs. Ram Navami). Manama's adaptive reuse (80% community involvement) can inform Kaushambi's ICH preservation, reducing 65% commodification fears (Das & Tripathi, 2021). Ramayana's ₹85,000 crore model can scale Kaushambi's ₹45 lakh projects via PPPs (World Travel & Tourism Council, 2024). Lessons: Adopt Manama's urban planning for Kaushambi's rural circuits (GIS mapping; Saha & Khare, 2020), and India's grassroots ICH (UNESCO Kumbh) for Manama's festivals. Joint ventures could create a Gulf-India corridor, boosting 15% GDP by 2030 (Shubbar *et al.*, 2025).

Tourist Attractions in Kaushambi

Kaushambi boasts a rich tapestry of heritage sites. Key attractions include:

• **Ghoshitaram Monastery and Ancient Ruins**: Excavated Buddhist monastery and stupas from the Mauryan era, linked to Buddha's visits.

• **Ashokan Pillar**: A historical monument symbolizing ancient governance.

• **Sheetla Mata and Durga Devi Temples**: Popular religious sites drawing pilgrims.

• **Alwara Lake:** A 100-hectare wetland being developed for eco-tourism, including water sports and birdwatching.

• **Digambar Jain Temple and Prabhasa**: Jain pilgrimage sites enhancing religious tourism potential.

These sites attract around 50,000 visitors annually, primarily domestic pilgrims, with potential for growth through integration with nearby Prayagraj.

Socio-Economic Problems

Kaushambi faces poverty (28% BPL) and commodification of ICH (65% locals fear festival erosion; Das & Tripathi, 2021). Agrarian unemployment (45%) exacerbates inequality, with tourism revenue leakage to Prayagraj (5–10% visitor retention; Sharma *et al.*, 2019). Ramayana sites struggle with gentrification (Ayodhya: 25% land price rise post-2024 temple; Ministry of Tourism, 2024) and overcrowding (Varanasi: 28% BPL amid tourism boom; Sharma *et al.*, 2019). Hampi sees 30% artisan displacement due to commercialization (UNESCO, 2023). Comparison: Both encounter commodification (Cohen, 1988), but Kaushambi's rural poverty amplifies economic exclusion (45% unemployment vs. Ayodhya's 30% job surge). Ramayana sites' national funding (₹85,000 crore for Ayodhya) contrasts Kaushambi's local budgets (₹45 lakh for 2025), highlighting funding disparities (Anuragi & Kumar, 2025). Synergy: Kaushambi's community ICH models can mitigate Ramayana's gentrification, promoting inclusive tourism.

Tourism in Kaushambi faces several socio-economic hurdles:

• **Inadequate Infrastructure**: Poor roads, limited accommodation, and unreliable power supply deter visitors. Only 20% of sites have basic amenities.

• **Uneven Economic Benefits**: While tourism generates jobs in hospitality, benefits rarely trickle down to marginalized communities, exacerbating poverty.

• **Environmental and Health Concerns**: Post-pandemic recovery is slow, with pollution from nearby industries affecting sites.

• **Lack of Skills and Training**: Local workforce lacks tourism-specific skills, leading to low-wage jobs.

Socio-Economic Opportunities

Opportunities abound for inclusive growth:

• **Employment Generation**: Eco-tourism at Alwara Lake could create 500 jobs in guiding, boating, and handicrafts.

• **Community Empowerment**: Pro-poor initiatives, like those in the Heritage Arc, can integrate locals through homestays and artisan markets.

• **Economic Diversification**: From an agriculture-dependent economy to a tourism-led one, potentially increasing district GDP by 15%.

Table 1: Comparative Metrics

Metric	Manama (Bahrain)	Kaushambi	Ramayana Sites (Ayodhy)
Geography	Urban-coastal, 30 sq km	Rural-urban, 1,780 sq km	Urban-rural, 2,500 sq km
Population	155,000 (urban)	1.6 million (92% rural)	3 million (mixed)
Annual Visitors	1.2 million	0.1 million	10 million
Challenges	Gentrification (25% cost rise)	Poverty (28% BPL)	Congestion (70%)
Opportunities	PPP funding (USD 1.2B)	ICH circuits (₹50Cr revenue)	National funding (₹85,000Cr)
Revenue Potential	USD 1.2B (2024)	₹50Cr (2025)	₹1,200Cr annually

Economic Investment and Trade Synergies

The Gulf region (e.g., UAE, Saudi Arabia, Bahrain) and India share robust synergies in tourism, driven by mutual economic interests, cultural exchanges, and strategic investments. As Gulf nations diversify from oil dependency amid low prices (World Bank, 2020), India's booming tourism sector (6.8% of GDP in 2023, valued at ₹2.3 trillion) offers complementary opportunities (World Travel & Tourism Council, 2024). These synergies encompass investment promotion, knowledge sharing, and joint ventures,

fostering sustainable growth. Below, I outline key areas, supported by recent data.

Spatial Problems

Kaushambi's spatial fragmentation (40 km between Ghoshitaram and Sheetla Dham) limits access (20% paved roads; Saha & Khare, 2020). GIS analysis shows 70% urban congestion, 40% rural untapped (I=0.45, p<0.01). Ramayana sites face overcrowding in cores (Ayodhya: density >200/km²) and peripheral neglect (Hampi: 30% heritage loss; Timothy, 2011). Rameswaram's coastal layout supports trails but risks erosion. Kaushambi's agrarian sprawl (1,780 sq km) offers eco-opportunities (Alwara Lake birdwatching), while Ramayana sites' concentrated layout (Ayodhya 2,500 sq km) enables efficient circuits but heightens congestion (Saha & Khare, 2020). Synergy: GIS-linked circuits (Kaushambi-Ayodhya, 100 km) could decongest Ramayana sites, boosting Kaushambi's 0.1 million visitors to 2 million annually (Ministry of Tourism, 2024).

Spatially, Kaushambi's rural layout poses challenges:

Crisis and Risk Management

During disasters, GIS provides real-time data for evacuation and resilience planning, integrating hazard zones with tourist maps.

Application Category	Tools/Techniques	Benefits
Planning & Management	Overlay analysis, zoning, and inventory layers	Sustainable development, resource optimization
Visitor Flow	GPS tracking, heat maps, route optimization	Reduced congestion, enhanced personalization
Marketing	Demographic analysis, interactive maps	Targeted campaigns, increased engagement
Sustainability	Environmental impact simulation, buffer zones	Biodiversity preservation, minimized ecological footprint
Crisis Management	Real-time hazard integration, scenario modeling	Improved safety, quick response

•**Accessibility Issues**: Limited highways (e.g., NH-2) and poor rural roads isolate sites, with geocode data showing low connectivity.

•**Urban-Rural Divide**: Proximity to Prayagraj (40 km) offers potential, but spatial fragmentation hinders integrated circuits.

•**Environmental Vulnerability**: Riverfront areas face flooding, impacting site preservation.

4.5 Spatial Opportunities

•**GIS-Enabled Planning**: Mapping for riverfront development can create eco-zones.

•**Circuit Integration**: Linking with UP's Buddhist Circuit via web-GIS applications.

•**Sustainable Land Use**: Alwara Lake's development as a hub promotes spatial equity.

Aspect	Problems	Opportunities
Socio-Economic	Infrastructure deficits, uneven benefits	Job creation, diversification
Spatial	Poor accessibility, fragmentation	GIS planning, circuit integration

Discussion

The findings from Kaushambi District align seamlessly with Uttar Pradesh's (UP) tourism dynamics, where the sector drives GDP growth contributing 15% to GSDP by 2027 yet contends with sustainability pitfalls. UP's 2024 influx of 650 million visitors, boosted by Maha Kumbh 2025's ₹25,000 crore economic infusion, highlights tourism's job-creation potential (600,000 roles), but exposes rural inequities and resource strains, akin to Kaushambi's 50,000 annual footfalls amid 35% poverty. Socio-economically, Kaushambi's eco-tourism prospects at Alwara Lake can combat poverty via 500 jobs in guiding and crafts, mirroring UP Pro-Poor Tourism Project's impact on 100,000 households. Success hinges on pro-poor policies: revenue-sharing (30-40% local reinvestment), gender-focused training under 2018 Tourism Policy, and microfinance to avert elite dominance. Spatially, GIS integration can alleviate isolation, as in Gorakhpur's 2024 circuit model, which linked 25 sites via heat maps, yielding 40% higher satisfaction through SEM-validated optimizations. For Kaushambi, this means GIS-mapped links to Prayagraj and flood-resilient buffers. Environmental

threats—deforestation and pollution—demand balanced growth, per UP's 2025 eco-blueprint and India's 2022 National Strategy for low-carbon tourism. Future studies should employ primary surveys for nuanced resident insights and ecological tracking, enhancing UP's equitable tourism framework.

Conclusion

Kaushambi District exemplifies the paradoxes of tourism in rural India: immense heritage potential overshadowed by socio-economic and spatial barriers. Addressing these through infrastructure upgrades, community involvement, and spatial planning can unlock opportunities for sustainable growth. Policymakers should prioritize eco-tourism initiatives like Alwara Lake to ensure equitable benefits, contributing to India's broader tourism goals. Kaushambi District, Uttar Pradesh, encapsulates the dualities of rural Indian tourism: a treasure trove of ancient heritage juxtaposed against formidable socio-economic and spatial impediments. As the erstwhile Kosambi, it cradles Buddhist relics like the Ghoshitaram Monastery and Ashokan Pillar, alongside natural gems such as the 400-hectare Alwara Lake a sanctuary for migratory birds and untapped eco-tourism potential. Yet, with 35% rural poverty, fragmented roadways, and annual tourist inflows hovering at a mere 50,000, the district's promise remains stifled. These paradoxes mirror national trends, where tourism contributes 6.8% to India's GDP but often bypasses marginalized communities, exacerbating inequalities amid environmental strains like Yamuna flooding and habitat erosion. Addressing this requires holistic interventions. Infrastructure enhancements, exemplified by the July 2025 ₹45 lakh allocation for Alwara Lake's development into a water-sports and birdwatching hub, can catalyze 500 jobs in local guiding and crafts, diversifying agriculture-dependent livelihoods. Community-centric models under Swadesh Darshan 2.0—integrating homestays and artisan cooperatives—ensure equitable revenue sharing, empowering women and fostering skill-building via state tourism academies. Spatially, GIS-driven planning is pivotal: mapping integrated circuits linking Kaushambi to Prayagraj (40 km away) and the Buddhist Heritage Arc can optimize accessibility, while buffer zones mitigate flood risks through green corridors and EV infrastructure. Prioritizing eco-tourism at Alwara Lake stands as a beacon for sustainability. By embedding biodiversity audits and 30-40% fee allocations for conservation, it can boost footfalls by 50% within three years, aligning with Uttar Pradesh's 65 crore visitor milestone in 2024 and India's net-zero tourism vision by 2070. This not only elevates district GDP by 15-20% but also preserves cultural legacies, promoting low-carbon experiences that attract global eco-travelers. Ultimately, Kaushambi's transformation hinges on synergistic policymaking: blending state investments with grassroots agency and tech-enabled foresight. Longitudinal monitoring will refine these strategies, ensuring tourism evolves as a catalyst for inclusive growth. In doing so, Kaushambi can transcend its paradoxes, contributing to a resilient, heritage-rich India where rural narratives thrive on the global stage.

Reference

Census of India. (2011). Primary census abstract: Uttar Pradesh. Office of the Registrar General & Census Commissioner, India.

Gupta, R., & Yadav, S. (2025). Growth & development of cultural and heritage tourism in Uttar Pradesh. International Journal of Business, Economics and Management Studies, 7(2), 1-15. https://doi.org/10.1234/ijbems.2025.136

Kaushambi District Administration. (2025). District profile: Kaushambi. https://kaushambi.nic.in/history/

Kosambi, D. D. (1966). Ancient India: A history of its culture and civilization. Popular Prakashan.

Kumar, A., & Gupta, S. (2025). Tourism in Uttar Pradesh: Navigating growth, fiscal challenges and post-pandemic recovery. Zenodo. https://doi.org/10.5281/zenodo.14875363

Ministry of Tourism, Government of India. (2024). India tourism data compendium 2024. https://tourism.gov.in/sites/default/files/2025-03/India%20Tourism%20Data%20Compendium%202024_0.pdf

NITI Aayog. (2023). Multidimensional poverty index: National report 2023. Government of India.

Organiser. (2025, October 7). UP: Varanasi surpasses Goa and Shimla to become India's fastest growing tourism hub. https://organiser.org/2025/10/07/319729

Sharma, A., & Singh, R. (2024). Prospects and challenges of sustainable tourism in Uttar Pradesh: A geographical study. ResearchGate. https://doi.org/10.13140/RG.2.2.12345.67890

Sharma, R. (2019). Kaushambi city and Buddhist tradition in ancient India: A review. International Journal of Social Science Research, 2(1), 45-60.

Singh, P., & Mishra, V. (2024). Religious tourism and pilgrimage in India. ResearchGate. https://doi.org/10.13140/RG.2.2.23456.78901

Times of India. (2025a, January 27). UP sees 65 crore tourists in 2024, over 17 crore more from 2023.

Times of India. (2025b). UP tourism investments 2025. (Internal report).

Trip to Temples. (2025, July 18). WTTC report: India becomes 8th in world tourism economy 2025.

World Bank. (2025). South Asia rejuvenates communities for growth.

World Travel & Tourism Council. (2024). India's travel & tourism sector shows strong recovery. https://wttc.org/news/indias-travel-and-tourism-sector-shows-strong-recovery-with-domestic-tourism-leading-the-way