



(RESEARCH ARTICLE)



A comprehensive analysis of the multifaceted significance of the Kumbh mela in India: An emerging epicenter of global Hindu religious tourism

Ashok Kumar Kanaujiya * and Vineet Tiwari

Department of Management Studies, Indian Institute of Information Technology Allahabad, Prayagraj, Uttar Pradesh, India.

World Journal of Advanced Research and Reviews, 2025, 25(02), 561-569

Publication history: Received on 23 December 2024; revised on 02 February 2025; accepted on 05 February 2025

Article DOI: <https://doi.org/10.30574/wjarr.2025.25.2.0339>

Abstract

The Kumbh Mela holds a unique position in the global landscape of religious tourism. In 2019, approximately 240 million pilgrims worldwide attended the Kumbh Mela in Prayagraj, India. In recent years, the Kumbh Mela has also emerged as a major tourism event, attracting visitors not only for its spiritual significance but also for its cultural, social, and economic appeal. Rooted in ancient mythology and Hindu scriptures, the Kumbh Mela is a sacred pilgrimage that draws millions of devotees from around the world. This study delves into the transformative nature of the Kumbh Mela, evolving beyond its religious roots into a significant epicenter of global Hindu religious tourism. It also focuses on the historical, cultural, socio-economic, and religious dimensions of the Kumbh Mela, examining its significance as a spiritual pilgrimage, a cultural phenomenon, and a major tourism event

Keywords: Religious Tourism; Spiritual Pilgrimage; Socio-Cultural Impact; Socio-Economic Impact

1. Introduction

Kumbh Mela stands as a testament to the richness and diversity of India's cultural and religious heritage. Every religion has its sacred foci to which men of faith periodically converge (Bhardwaj, 1973). In recent years, there has been a noticeable increase in international tourists attending the event, highlighting its growing significance in the global religious tourism market. Pilgrimages have powerful political, economic, social and cultural implications, and even affect global trade and health (Collins-Kreiner, 2010). Kumbh Mela is the world's biggest gathering of people at any given time (Baranwal et al., 2015). Over decades, it has drawn millions from all over the world, regardless of their faith, caste, creed, or gender. Around one million foreign visitors attended the 2019 Kumbh Mela, marking a 35% increase in foreign visitor arrivals (Times of India, 2019). The scale of the event posed a challenge to the maintenance of public health security and safety (Dwivedi and Cariappa, 2015). The analysis of the Kumbh Mela in Allahabad (2013) and Nashik (2003, 2015) indicates the changing pattern of expenditure and planning for the event over the years (Bansal et al., 2013). The Kumbh Mela holds profound significance within Hinduism. Through a comprehensive analysis of historical, socio-cultural, and economic dimensions, this research elucidates the factors contributing to its emergence as a pivotal tourist destination. Examining the historical origins of the Kumbh Mela reveals its deep-seated roots in Hindu mythology and tradition, dating back millennia. A planned travel with a specific objective decided by the heart and accomplished with the help of the feet is called a pilgrimage. One such pilgrimage festival, known as the "Kumbh Mela" in Hindu mythology, takes place in the towns of Prayagraj, Ujjain, Nashik, and Haridwar (Memish et al., 2019, Raghav et al., 2020). The research conducted by Ruback, Pandey, and Kohli extends the literature on the perception of places by focusing on a site sacred to Hindus, which hosts an annual pilgrimage (Ruback et al., 2008). The concept of place relies on the interaction between individuals, physical settings, and the activities taking place at those locations (Smaldone et al., 2005). Certain places hold greater significance due to their physical attributes and the nature of activities conducted therein. The confluence of sacred rivers—Ganga, Yamuna, Saraswati, and Godavari—at designated

* Corresponding author: Ashok Kumar Kanaujiya

intervals forms the cornerstone of this sacred pilgrimage. During this festival, participants bathe in a sacred river (UNESCO, 2017). Over time, the Mela has transcended its religious essence to become a symbol of cultural heritage and communal identity, fostering a sense of unity among diverse Hindu sects and followers worldwide. Socio-cultural dynamics play a pivotal role in shaping the magnitude and scope of the Kumbh Mela as a global tourist attraction. The inclusive ethos of Hinduism, coupled with India's diverse cultural landscape, enhances the Mela's appeal to a broad spectrum of domestic and international tourists. Ritualistic practices, spiritual discourses, and vibrant cultural events during the Mela offer immersive experiences, fostering cross-cultural dialogue and understanding among participants. The economic ramifications of the Kumbh Mela extend beyond religious significance, catalyzing substantial growth in regional economies and tourism infrastructure. Host cities witness a surge in employment opportunities, hospitality services, and infrastructure development, bolstering local economies and livelihoods. Moreover, the Mela serves as a platform for promoting tourism initiatives, fostering collaboration between public and private sectors to harness its potential as a sustainable tourism destination. However, the burgeoning scale of the Kumbh Mela poses formidable challenges, ranging from logistical constraints to environmental sustainability. Ensuring the safety and well-being of millions of pilgrims necessitates robust infrastructure, crowd management strategies, and emergency response mechanisms. Furthermore, mitigating the environmental impact of mass gatherings on water resources, sanitation, and ecological conservation remains imperative for the long-term sustainability of the Mela. Its transformative influence transcends religious boundaries, fostering intercultural dialogue, economic development, and sustainable tourism practices. The predominantly theoretical paradigm framing pilgrimage as a tourism phenomenon might be limited and downplays the complexity of the pilgrims' experience nowadays (Damari and Mansfeld, 2016). Certain scholars investigate the traits and experiences of pilgrims through the perspective of consumerism. Previous research on the subject concentrated on contrasting the experiences of pilgrims and tourists, contending that they can be represented as being on opposite ends of a continuum, with the former occupying the sacred end and the latter the secular end (Cohen, 1992; Collins-Kreiner and Kliot, 2000; Raj and Morpeth, 2007; Smith, 1992). Research, like that done in 1992 by Hudman and Jackson, shows that pilgrimage travel frequently mixes religious observance with touristic activities (Hudman and Jackson, 1992). It is important to note that current literature indicates that the dichotomy that existed until the early 2000s no longer exists (Collins-Kreiner, 2010). The Kumbh Mela in India has emerged as a dynamic epicenter of global Hindu religious tourism, embodying the rich tapestry of India's cultural heritage and spiritual ethos. By addressing inherent challenges and leveraging its inherent potential, the Kumbh Mela continues to resonate as a beacon of spiritual enlightenment and cultural harmony on the global stage.

2. Materials and Methods

We searched various databases for journals with key words like Kumbh mela, mass gathering, spiritual pilgrimage, pilgrimage, religious tourism, spiritual gathering, socio-economic impact, socio-cultural impact etc. We explored Google scholar, PubMed, ReserchGate etc. and focused only on the peer reviewed literature. This study examined previous Kumbh Mela reports released by the Prayagraj Mela Authority as well as reports published by other departments. News related to Kumbh mela, Magh mela and others mass gatherings were used as information and data sources.

3. Result and Discussion

3.1. The Kumbh Mela as a Spiritual Pilgrimage

The Kumbh Mela holds profound symbolism and sacredness for millions of Hindus worldwide. It is seen as an opportunity for spiritual renewal, purification, and redemption. The act of taking a holy dip in the sacred rivers is believed to wash away one's sins and bestow blessings and divine grace. For many pilgrims, the Kumbh Mela represents an once-in-a-lifetime opportunity to fulfill their religious duties and connect with the divine in a sacred and auspicious setting. The motivations and behaviors are varied and multi-faceted, and include mainly religious and tourist factors, but are also related to cultural heritage tourism, recreation, social/family life, and additional factors (Liro, 2021). Blackwell in his study discussed the discourses on content theories vis-à-vis process theories, highlighting Maslow's 'hierarchy of needs' and Herzberg's 'two-factor theory' to underpin the analysis of motivations for religious tourism and pilgrimage (Blackwell, 2007). Pilgrims travel from far and wide to participate in the Kumbh Mela, often embarking on long and arduous journeys to reach the holy sites. Pilgrimage routes are established, connecting towns and villages with the Kumbh Mela venues, and providing logistical support and amenities to travelers. The study conducted by Maheshwari and Singh has shown a positive correlation between religion, happiness, and life satisfaction. The findings indicated that, in the case of pilgrims, gender had no discernible influence on these relationships (Maheshwari and Singh, 2009). The timing of the Kumbh Mela is determined by the positions of celestial bodies and astrological calculations, with specific dates earmarked for the *shahi snan* or royal bath, which is considered the most auspicious and significant event of the festival. During the Kumbh Mela, pilgrims engage in a variety of spiritual practices and rituals

aimed at seeking blessings, guidance, and enlightenment. Many pilgrims perform *puja* (worship) at makeshift temples and shrines set up along the riverbanks, offering prayers, flowers, and offerings to the deities. Others participate in religious discourses, *bhajans* (devotional songs), and *satsangs* (spiritual gatherings) led by saints, *gurus*, and religious leaders. In the study done by Buzinde et al., the findings indicate that motives comprise a need for *spiritual connectivity* (devotion) and *spiritual knowledge attainment* (from saints) (Buzinde et al., 2014). The atmosphere is charged with devotion and piety, as pilgrims immerse themselves in the sacred ambiance of the Kumbh Mela.

3.2. Socio-economic Impact of the Kumbh Mela

The Kumbh Mela generates significant economic activity and livelihood opportunities for various sectors, including tourism, hospitality, transportation, and handicrafts. The influx of millions of pilgrims and tourists stimulates demand for goods and services, leading to increased sales, employment, and income generation. Local businesses, vendors, and artisans benefit from the surge in demand for religious items, souvenirs, and traditional crafts. The Kumbh Mela also provides a platform for entrepreneurs and startups to showcase their products and innovations to a global audience. The Kumbh Mela serves as a major source of employment and livelihoods for thousands of people involved in its organization and execution. From construction workers and sanitation workers to security personnel and hospitality staff, the Kumbh Mela provides temporary employment opportunities for a diverse range of workers. Local communities also benefit from the influx of pilgrims and tourists, as they offer accommodation, food, transportation, and other services to cater to their needs. In 2013's Kumbh Mela, income generation from capital investment was at least ten times greater, including both permanent and temporary investments (Saraswat, 2013). In contrast, during the 2019 Kumbh Mela, it was projected to increase by 1200000 million rupees, exceeding the government spending of 42000 million rupees. The event expected to create a total of approximately 60000 million jobs, with a significant portion of 25000 million coming from the hospitality sector alone. Additionally, the medical and ecotourism industries were forecasted to provide over 8500 million employment opportunities (Kanaujiya and Tiwari, 2023a). The Kumbh Mela plays a significant role in stimulating the local economy. The economic impact of the Kumbh Mela extends beyond the event itself, contributing to the long-term development and prosperity of the host region. The Kumbh Mela drives infrastructure development and urban transformation in the host cities, as authorities invest in upgrading roads, bridges, utilities, and public facilities to accommodate the influx of pilgrims and tourists. Temporary tent cities (*Akharas*) and accommodation facilities are set up to provide shelter to pilgrims, while temporary bridges and ferry services are established to facilitate movement across the rivers. The legacy of the Kumbh Mela often includes permanent improvements to the host cities' infrastructure, such as new roads, sewage systems, and sanitation facilities, which benefit local residents long after the event has ended.

3.3. Cultural and Social Dimensions of the Kumbh Mela

The Kumbh Mela is a melting pot of diverse cultures, languages, and traditions, reflecting the pluralistic ethos of Indian society. Pilgrims and tourists from different regions, states, and countries come together to participate in the festival, forging bonds of friendship, solidarity, and mutual respect. The Kumbh Mela is also inclusive of people from various social backgrounds, including caste, class, gender, and ethnicity, as all are welcome to partake in the sacred rituals and festivities. This diversity enriches the cultural tapestry of the Kumbh Mela, making it a truly inclusive and egalitarian event. The Kumbh Mela fosters interfaith dialogue and harmony, bringing together followers of different religious traditions to celebrate their shared humanity and spiritual heritage. Mass gatherings involvement can have positive psychological and physiological effects to the extent that a shared identity is felt (Kanaujiya and Tiwari, 2023b). While the festival is rooted in Hindu mythology and practices, it attracts visitors from other religious communities, including Muslims, Sikhs, Buddhists, Jains, and Christians, who come to experience its spiritual ambiance and cultural vibrancy. The Kumbh Mela provides a platform for religious leaders, scholars, and practitioners to engage in meaningful dialogue, promote peace and understanding, and celebrate the diversity of India's religious tapestry. The Kumbh Mela is a showcase of India's rich cultural heritage, featuring a vibrant array of art, music, dance, and cultural performances. Artists, musicians, and performers from across India converge at the Kumbh Mela to entertain pilgrims and tourists with their traditional and contemporary expressions of creativity. The festival also provides opportunities for cultural exchange and collaboration, as artists from different regions and communities come together to share their talents, learn from each other, and celebrate the unity in diversity that defines India's cultural landscape.

3.4. Tourism Dynamics of the Kumbh Mela

Tourists visiting the Kumbh Mela come from diverse backgrounds and have varied motivations for their pilgrimage or travel experience. Religious tourists seek spiritual renewal, blessings, and divine grace through participation in sacred rituals and pilgrimage activities. Cultural tourists are drawn to the Kumbh Mela for its vibrant festivities, traditional arts, and cultural heritage, seeking to immerse them in the rich tapestry of Indian culture. Adventure tourists are attracted to the sheer scale and spectacle of the Kumbh Mela, eager to witness the epic gathering of millions of pilgrims

and experience the energy and excitement of the festival. The Kumbh Mela offers a unique and transformative experience for tourists, characterized by a sense of awe, wonder, and spiritual upliftment. Tourists are mesmerized by the grandeur of the festival, the devotion of the pilgrims, and the sacredness of the rituals, which transport them to a realm of divine grace and cosmic harmony. Many tourists describe their visit to the Kumbh Mela as a life-changing experience, which deepens their spiritual understanding, strengthens their faith, and fosters a sense of connection with the larger human family. Tourists also appreciate the cultural richness, diversity, and hospitality of India, which adds to the allure of the Kumbh Mela as a must-visit destination. To cater to the needs of pilgrims and tourists, the Kumbh Mela organizers provide a range of tourism infrastructure and services, including accommodation, transportation, food, healthcare, and entertainment. Temporary tent cities (akharas) and guesthouses are set up to accommodate pilgrims, offering basic amenities such as shelter, bedding, and sanitation facilities. Special trains, buses, and ferries are arranged to transport pilgrims to and from the Kumbh Mela venues, ensuring smooth and hassle-free travel. Food stalls, restaurants, and eateries serve a variety of traditional and international cuisines to cater to the diverse tastes of pilgrims and tourists. Healthcare facilities, medical camps, and emergency services are also available to provide medical assistance and support to pilgrims in need.

3.5. Management and Governance of the Kumbh Mela

The Kumbh Mela is managed by a complex organizational structure involving multiple government agencies, religious bodies, community organizations, and private stakeholders. The central government, state governments, and local authorities collaborate closely to plan, coordinate, and execute various aspects of the festival, including infrastructure development, crowd management, security, and sanitation. Religious bodies such as Akhil Bharatiya Akhara Parishad and local akharas play a crucial role in overseeing the religious rituals and activities at the Kumbh Mela, ensuring adherence to tradition and discipline. Community organizations and non-governmental organizations (NGOs) also contribute to the management of the Kumbh Mela by providing support services, volunteering assistance, and community outreach programs. Formal and informal systems in management can help to better address the multifaceted impacts of religious tourism and contribute in developing measure for its sustainability (Shinde, 2018). Ensuring the security and safety of pilgrims and tourists is a top priority for the organizers of the Kumbh Mela. Robust security measures are put in place to prevent any untoward incidents, including crowd control, surveillance, and deployment of law enforcement personnel. Specialized units such as the Central Industrial Security Force (CISF), Rapid Action Force (RAF), and National Disaster Response Force (NDRF) are deployed to manage security threats, emergency situations, and natural disasters. Closed-circuit television (CCTV) cameras, drones, and other surveillance technologies are used to monitor the crowd, detect suspicious activities, and respond to emergencies in real-time. The basic element of mass gathering event planning is to understand the behavior of visitors or participants (Kanaujiya and Tiwari, 2022). The way that pedestrians behave is a major feature that influences crowd dynamics; these minute characteristics may be utilized to gauge how vital the system is to crowd safety (Karthika and Aparna et al., 2018). The age and gender distribution of a group, together with its overall size, also affect how far ahead pedestrians travel when there is a lot of people in it. As a result, the dynamics of crowd movements are altered when groups are present. The infrastructure's capacity may decline as a result of this (Duives et al., 2014). When the perceived motivation, service quality, and safety requirements are met, pilgrims at a religious gathering are more likely to be happy with their visit and presumably exhibit a favorable desire to return or suggest others to experience Kumbh Mela (Verma & Sarangi, 2019). Medical teams, ambulances, and emergency medical services are also stationed at strategic locations to provide timely medical assistance and evacuation to pilgrims in need. Promoting environmental sustainability and conservation is an integral part of the management and governance of the Kumbh Mela. Given the massive scale of the festival and its impact on the environment, efforts are made to minimize ecological footprint, reduce waste generation, and conserve natural resources. Waste management systems, including collection, segregation, recycling, and disposal of solid waste, are implemented to maintain cleanliness and hygiene at the Kumbh Mela venues. Eco-friendly initiatives such as solar power generation, water harvesting, and tree plantation are promoted to mitigate environmental degradation and climate change. Awareness campaigns, educational programs, and community engagement activities are organized to promote environmental stewardship and responsible tourism practices among pilgrims and tourists.

4. Challenges and Opportunities in Kumbh Mela Tourism

Despite significant investments in infrastructure development, the Kumbh Mela continues to face challenges related to inadequate facilities, congestion, and overcrowding. Temporary tent cities (akharas) and accommodation facilities may lack basic amenities such as sanitation, hygiene, and security, leading to discomfort and inconvenience for pilgrims and tourists. Transportation networks, including roads, bridges, and ferries, may be overwhelmed by the sheer volume of traffic, causing delays, bottlenecks, and safety concerns. Capacity constraints in healthcare, hospitality, and other service sectors may strain resources and compromise the quality of services provided to pilgrims and tourists. Health and sanitation concerns pose significant challenges to the management of the Kumbh Mela, given the risk of outbreaks of

infectious diseases, waterborne illnesses, and sanitation-related hazards. As per the study of Shukla, Khan and Memish, Kumbh Mela has a direct impact on the rise in the total number of COVID-19 cases (Shukla et al., 2021). Even though mass gatherings have significant socio-cultural, psychological, and economic benefits in developing countries like India, organizing such events might pose serious health risks. Inadequate sanitation facilities, open defecation, and improper waste disposal contribute to environmental pollution and public health risks. Crowded living conditions, lack of clean water, and poor hygiene practices may exacerbate the spread of communicable diseases such as cholera, typhoid, and hepatitis. International connectivity, mostly through air travel, makes infectious disease a hazard to global health (Khan et al., 2013). Healthcare infrastructure and medical services may be overwhelmed by the surge in demand, leading to delays in treatment, shortage of supplies, and suboptimal patient outcomes. Kumbh Mela is associated with mass gatherings and might intensify the COVID-19 epidemic in India, which could put an enormous strain on the country's healthcare system (Quadri and Padala, 2021). Integrating Anti Microbial Resistance (AMR) awareness and responsible antimicrobial use into event planning can address the challenges of the pandemic and ensure the safety of pilgrims and communities (Sharma et al., 2023). The commercialization and commoditization of the Kumbh Mela pose ethical and cultural challenges, as traditional rituals and practices are exploited for commercial gain and mass entertainment. Commercial vendors, advertisers, and sponsors may capitalize on the religious sentiments of pilgrims and tourists by promoting products, services, and experiences that detract from the spiritual essence of the festival. Traditional artisans, performers, and cultural practitioners may face marginalization and exploitation in the commercial marketplace, as their heritage and livelihoods are commoditized and diluted for mass consumption. Maintaining the authenticity, integrity, and sanctity of the Kumbh Mela while promoting responsible and sustainable tourism practices is essential to preserving its cultural heritage and religious significance. Effective branding and positioning strategies play a crucial role in promoting the Kumbh Mela as a premier religious tourism destination on the global stage. The Kumbh Mela brand should evoke a sense of spirituality, tradition, and cultural richness, resonating with the aspirations and values of pilgrims and tourists. Key messages such as purity, renewal, and transcendence should be conveyed through visual imagery, storytelling, and experiential marketing campaigns. Strategic partnerships with media outlets, travel agencies, and influencers can amplify the reach and impact of marketing initiatives, attracting a broader audience and enhancing the visibility and reputation of the Kumbh Mela brand. Digital marketing and social media campaigns are effective tools for engaging with modern-day pilgrims and tourists, who rely on digital platforms for information, inspiration, and interaction. A multi-channel approach, including website optimization, search engine marketing, social media advertising, and content marketing, can reach diverse audiences and drive traffic to official Kumbh Mela websites and social media profiles. Engaging storytelling, user-generated content, and virtual reality experiences can create immersive and memorable experiences for potential visitors, encouraging them to plan their pilgrimage or travel experience to the Kumbh Mela. Real-time updates, live streaming, and interactive features can enhance the engagement and participation of pilgrims and tourists during the festival, fostering a sense of community and belonging in the digital realm. Strategic public relations and media partnerships are essential for generating positive publicity and building credibility for the Kumbh Mela brand. Press releases, media briefings, and press tours can generate media coverage and generate buzz around the festival, attracting the attention of journalists, bloggers, and influencers. Collaborations with travel writers, photographers, and filmmakers can produce compelling stories, images, and videos that showcase the beauty, diversity, and significance of the Kumbh Mela to a global audience. Media partnerships with television channels, radio stations, and streaming platforms can extend the reach of the Kumbh Mela to millions of viewers, creating awareness and interest in the festival as a unique cultural and spiritual experience.

5. Case Studies and Best Practices in Kumbh Mela Tourism

Several successful management models and best practices have emerged in the organization and execution of the Kumbh Mela, which can serve as inspiration and guidance for future events. During Kumbh Mela 2013, using a standardized framework, an equitable geographic distribution of ad hoc healthcare facilities was established along with integrated evacuation planning (Cariappa et al., 2015). The Kumbh Mela in Prayagraj (Allahabad) in 2019 was lauded for its efficient crowd management, comprehensive security arrangements, and innovative use of technology. The deployment of smart wristbands for pilgrims, real-time monitoring of crowd density and digital kiosks for information dissemination were among the key initiatives that contributed to the success of the event. During Kumbh Mela 2019, 122500 toilets were constructed and Sanitation volunteers (*Swachhagrahis*) were deployed to monitor the cleaning activities for each toilet and urinal blocks. Integrated command and control Centre (ICCC) was established for crowd management through closed circuit television CCTV. Integrated Traffic Management System (ITMS) was developed for traffic control and regulation. It might be a good idea to develop regular crowded event locations into smart cities. It might be helpful to employ various technologies for different types of crowds. Wireless and mobile technology may be used efficiently to measure crowd density, health and sanitation management (Yamin, 2019). The Kumbh Mela in Nashik in 2015 was praised for its eco-friendly initiatives, including waste management, water conservation, and renewable energy generation, which minimized the environmental impact of the festival and promoted sustainable tourism practices. Innovative tourism initiatives have been introduced to enhance the visitor experience and promote

responsible tourism at the Kumbh Mela. The Kumbh Mela in Ujjain in 2016, for instance, offered heritage walks, cultural tours, and storytelling sessions to tourists, allowing them to explore the historical and cultural significance of the city beyond the festival grounds. Special packages and itineraries were designed to cater to different interests and preferences, including spiritual retreats, adventure activities, and wellness programs. The integration of technology, such as mobile apps, augmented reality, and virtual tours, also provided tourists with interactive and immersive experiences, enriching their understanding and appreciation of the Kumbh Mela. Several lessons learned and recommendations have emerged from past experiences and evaluations of the Kumbh Mela, which can inform future planning and management efforts. Improving coordination and collaboration among government agencies, religious bodies, and community organizations is essential for effective governance and implementation of the festival. Investing in infrastructure development, crowd management, and emergency preparedness is critical for ensuring the safety, comfort, and well-being of pilgrims and tourists. Embracing technology and innovation can enhance the efficiency, accessibility, and sustainability of the Kumbh Mela, making it a model for other religious tourism destinations around the world.

6. Recommendations for Sustainable Kumbh Mela Tourism

The future of Kumbh Mela tourism holds immense potential for growth, innovation, and transformation, as it embraces new technologies, engages diverse communities, and adapts to changing socio-economic and environmental dynamics. By leveraging digital platforms, smart solutions, and data-driven insights, the Kumbh Mela can enhance the visitor experience, improve operational efficiency, and promote environmental sustainability. By empowering local communities, fostering cultural exchange, and promoting interfaith dialogue, the Kumbh Mela can become a beacon of peace, harmony, and unity in a world of increasing divisions and conflicts. By embracing the principles of sustainability, equity, and inclusivity, the Kumbh Mela can continue to inspire and uplift the hearts and minds of pilgrims and tourists for generations to come. The Kumbh Mela's role in global religious tourism is poised to continue growing in the coming years. As more people seek authentic spiritual experiences and cultural immersion, the Kumbh Mela stands out as a beacon of traditional wisdom and sacred pilgrimage. By understanding and appreciating the multifaceted impact of the Kumbh Mela on global tourism, we can gain valuable insights into the enduring relevance of ancient traditions in a modern world. The future of Kumbh Mela tourism lies in harnessing the power of technology to enhance the visitor experience, improve operational efficiency, and promote environmental sustainability. Digital platforms, mobile apps, and virtual reality tools can provide pilgrims and tourists with interactive maps, guided tours, and real-time updates on events and activities. Smart sensors, IoT devices, and drones can be used for crowd monitoring, waste management, and environmental monitoring, enabling data-driven decision-making and proactive interventions. Geographic Information Systems (GIS) may be utilized to target urban regeneration locations in order to preserve Kumbh Mela-related cultural heritage tourism (Saha and Khare, 2020). Blockchain technology can enhance transparency, accountability, and trust in transactions and interactions, reducing fraud, corruption, and disputes in tourism operations. By embracing technology and innovation, the Kumbh Mela can become a model for sustainable tourism development in the digital age. Community engagement and empowerment are essential for ensuring the inclusivity, authenticity, and sustainability of Kumbh Mela tourism. Local communities should be actively involved in the planning, management, and decision-making processes related to the festival, as they are the custodians of its cultural heritage and natural resources. Community-based tourism initiatives, such as home stays, cultural tours, and handicraft cooperatives, can create economic opportunities and empower local residents to benefit from tourism in a fair and equitable manner. Capacity building programs, vocational training, and entrepreneurship development can equip community members with the skills, knowledge, and resources to participate in the tourism value chain and enhance their livelihoods. Balancing conservation and development goals is crucial for preserving the ecological integrity and cultural authenticity of the Kumbh Mela while promoting sustainable tourism and economic growth. Conservation efforts should focus on protecting the biodiversity, water resources, and natural habitats of the Kumbh Mela venues, which are under threat from urbanization, pollution, and climate change. Development initiatives should prioritize investments in eco-friendly infrastructure, renewable energy, and green technologies to minimize environmental impact and enhance resilience to environmental hazards. Studying the massive Kumbh Mela offers a rare opportunity to build an evidence foundation for suggestions and strategies for managing, preventing, and controlling infectious diseases during mass gatherings. This might offer guidance on creating situation-specific strategies to enhance and maintain the best possible health conditions for individuals during the Kumbh Mela and other major global gatherings (David and Roy, 2016). Sustainable tourism practices, such as responsible travel, eco-friendly accommodations, and carbon offset programs, can mitigate negative impacts on the environment and promote sustainable livelihoods for local communities. By adopting a holistic and integrated approach to conservation and development, the Kumbh Mela can become a model for sustainable tourism destinations worldwide.

7. Conclusion

The Kumbh Mela is a unique and transformative pilgrimage experience that attracts millions of devotees and tourists from around the world. Rooted in ancient mythology and tradition, the Kumbh Mela holds profound significance as a spiritual pilgrimage, a cultural phenomenon, and a major tourism event. Its historical and cultural heritage, coupled with its socio-economic and environmental impact, make it an epicenter of global Hindu religious tourism. Through its rituals, traditions, and beliefs, the Kumbh Mela offers pilgrims and tourists a journey of self-discovery, spiritual renewal, and cultural immersion. Its diversity, inclusivity, and interfaith dialogue promote peace, harmony, and understanding among diverse communities, fostering a sense of unity in diversity. Its economic contributions, infrastructure development, and employment generation stimulate growth, prosperity, and development in the host regions, leaving a lasting legacy for future generations. The findings of this study have several implications for policy and practice in the management and governance of the Kumbh Mela and other religious tourism destinations. Policy makers, government agencies, and tourism stakeholders should prioritize sustainable development, environmental conservation, and community empowerment in their planning and decision-making processes. Investments in infrastructure, technology, and capacity building should be aligned with conservation goals, social equity, and cultural preservation objectives. Public-private partnerships, multi-stakeholder collaborations, and international cooperation are essential for achieving sustainable tourism development and promoting responsible tourism practices. By adopting a holistic and integrated approach to tourism management, the Kumbh Mela can continue to thrive as a model for sustainable religious tourism, enriching the lives of pilgrims and tourists and contributing to the well-being of host communities and the planet.

Compliance with ethical standards

Disclosure of conflict of interest

The authors have declared no conflicts of interest.

Funding

The authors did not receive any grant or financial support from any organization for the submitted work.

Author's contributions

All authors contributed to the study's conception and design. All authors read and approved the final manuscript.

References

- [1] Bansal, A., Plan, M., & Arch, B. (2013). Mega Events as Catalyst for Urban Transformation-A Case of Kumbh Mela in Ujjain. Academia. edu-Share research.
- [2] Baranwal, A., Anand, A., Singh, R., Deka, M., Paul, A., Borgohain, S., & Roy, N. (2015). Managing the earth's biggest mass gathering event and wash conditions: Maha kumbh mela (India). PLoS currents, 7.
- [3] Bhardwaj, S. M. (1973). Hindu places of pilgrimage in India: A study in cultural geography. Univ of California Press.
- [4] Blackwell, R. (2007). Motivations for religious tourism, pilgrimage, festivals and events.
- [5] Buzinde, C. N., Kalavar, J. M., Kohli, N., & Manuel-Navarrete, D. (2014). Emic understandings of Kumbh Mela pilgrimage experiences. Annals of Tourism Research, 49, 1-18.
- [6] Cariappa, M. P., Singh, B. P., Mahen, A., & Bansal, A. S. (2015). Kumbh Mela 2013: Healthcare for the millions. medical journal armed forces india, 71(3), 278-281.
- [7] Cohen, E. (1992). Pilgrimage and tourism: Convergence and divergence. Sacred journeys, 47-64.
- [8] Collins-Kreiner, N. (2010). Researching pilgrimage: Continuity and transformations. Annals of tourism research, 37(2), 440-456.
- [9] Collins-Kreiner, N., & Klot, N. (2000). Pilgrimage tourism in the Holy Land: The behavioural characteristics of Christian pilgrims. GeoJournal, 50, 55-67.
- [10] David, S., & Roy, N. (2016). Public health perspectives from the biggest human mass gathering on earth: Kumbh Mela, India. International Journal of Infectious Diseases, 47, 42-45.

- [11] Damari, C., & Mansfeld, Y. (2016). Reflections on pilgrims' identity, role and interplay with the pilgrimage environment. *Current Issues in Tourism*, 19(3), 199-222.
- [12] Duives, D., Daamen, W., & Hoogendoorn, S. (2014). Influence of group size and group composition on the adhered distance headway. *Transportation Research Procedia*, 2, 183-188.
- [13] Dwivedi, S., & Cariappa, M. P. (2015). Mass-gathering events: the public health challenge of the Kumbh Mela 2013. *Prehospital and disaster medicine*, 30(6), 621-624.
- [14] Hudman, L. E., & Jackson, R. H. (1992). Mormon pilgrimage and tourism. *Annals of tourism research*, 19(1), 107-121.
- [15] Kanaujiya, A. K., & Tiwari, V. (2022). Crowd management and strategies for security and surveillance during the large mass gathering events: The Prayagraj Kumbh Mela 2019 Experience. *National Academy science letters*, 45(3), 263-273.
- [16] Kanaujiya, A. K., & Tiwari, V. (2023a). The statistical analysis to find correlation between mass gathering event and COVID-19 pandemic outbreak: The Prayagraj Magh Mela 2021 experience. *Proceedings of the National Academy of Sciences, India Section A: Physical Sciences*, 93(1), 107-111.
- [17] Kanaujiya, A. K., & Tiwari, V. (2023b). Pilgrimage Itineraries Dimensions with Focus on Kumbh Mela 2019, Prayagraj, India. In *Experiences, Advantages, and Economic Dimensions of Pilgrimage Routes* (pp. 118-142). IGI Global.
- [18] Karthika, P. S., Aparna, P. M., & Verma, A. (2018). Understanding crowd dynamics at ghat regions during world's largest mass religious gathering, Kumbh Mela. *International journal of disaster risk reduction*, 31, 918-925.
- [19] Khan, K., Sears, J., Hu, V. W., Brownstein, J. S., Hay, S., Kossowsky, D., ... & Cetron, M. (2013). Potential for the international spread of Middle East respiratory syndrome in association with mass gatherings in Saudi Arabia. *PLoS currents*, 5.
- [20] Liro, J. (2021). Visitors' motivations and behaviours at pilgrimage centres: Push and pull perspectives. *Journal of Heritage Tourism*, 16(1), 79-99.
- [21] Maheshwari, S., & Singh, P. (2009). Psychological well-being and pilgrimage: Religiosity, happiness and life satisfaction of Ardh-Kumbh Mela pilgrims (Kalpvasis) at Prayag, India. *Asian Journal of Social Psychology*, 12(4), 285-292.
- [22] Memish, Z. A., Steffen, R., White, P., Dar, O., Azhar, E. I., Sharma, A., & Zumla, A. (2019). Mass gatherings medicine: Public health issues arising from mass gathering religious and sporting events. *The Lancet*, 393(10185), 2073-2084.
- [23] Quadri, S. A., & Padala, P. R. (2021). An aspect of Kumbh Mela massive gathering and COVID-19. *Current Tropical Medicine Reports*, 8, 225-230.
- [24] Raghav, S., Singh, S. K., & Bhatia, T. (2020). Environmental Management in the World's largest mass gathering Kumbh Mela. *IJRST-International Journal for Innovative Research in Science & Technology*, 4(7), 25-34.
- [25] Raj, R., & Morpeth, N. D. (2007). RELIGIOUSTOURISM AND PILGRIMAGE FESTIVALS MANAGEMENT.
- [26] Ruback, R. B., Pandey, J., & Kohli, N. (2008). Evaluations of a sacred place: Role and religious belief at the Magh Mela. *Journal of Environmental Psychology*, 28(2), 174-184.
- [27] Saha, K., & Khare, R. (2020). A geospatial approach to conserving cultural heritage tourism at Kumbh Mela events in India. In *Tourism, Cultural Heritage and Urban Regeneration: Changing Spaces in Historical Places* (pp. 125-140). Cham: Springer International Publishing.
- [28] Saraswat, D. C. (2013). Kumbh Mela: 'Overall business could be worth between Rs 12,000 to Rs 15,000 crore. *The Economic Times*.
- [29] Sharma, A., Gupta, B., Petersen, E., Lee, S. S., & Zumla, A. (2023). Enhancing preparedness for reducing transmission and globalisation of Antimicrobial Resistance at the Ardh Kumbh Mela 2025, the world's largest recurring religious mass gathering. *International Journal of Infectious Diseases*, 137, 79-81.
- [30] Shinde, K. (2018). Governance and management of religious tourism in India. *International Journal of Religious Tourism and Pilgrimage*, 6(1), 7.

- [31] Shukla, S., Khan, R., Ahmed, Y., & Memish, Z. A. (2021). Conducting mass gathering events during the COVID-19 pandemic: a case study of Kumbh Mela 2021 as a potential 'super spreader event'. *Journal of Travel Medicine*, 28(8), taab160.
- [32] Smaldone, D., Harris, C., & Sanyal, N. (2005). An exploration of place as a process: The case of Jackson Hole, WY. *Journal of environmental psychology*, 25(4), 397-414.
- [33] Smith, V. L. (1992). Pilgrimage and tourism: the quest in guest; special issue. *Annals of tourism research*, 1992.
- [34] Times of India. Foreigners throng to Ardh Kumbh Mela 2019; 35% jump in FTAs. *Travel News*, Allahabad, 2019. Accessed 08/05/2024. <https://timesofindia.indiatimes.com/travel/destinations/foreigners-throng-to-ardh-kumbh-mela-2019-35-jump-in-ftas/articleshow/67899247.cms>
- [35] UNESCO (2017) Kumbh Mela. Accessed 04 April, 2024 <https://ich.unesco.org/en/RL/kumbh-mela-01258>.
- [36] Verma, M., & Sarangi, P. (2019, August). Modeling attributes of religious tourism: A study of Kumbh Mela, India. In *Journal of Convention & Event Tourism* (Vol. 20, No. 4, pp. 296-324). Routledge.
- [37] Yamin, M. (2019). Managing crowds with technology: cases of Hajj and Kumbh Mela. *International journal of information technology*, 11(2), 229-237.