

Overtourism: Insights from Residents of a Himalayan Heritage Hill Station

Kushal Tamang^{A*}, Dr Sanmoy Mallick^B

Received: September 2025 | Accepted: November 2025

DOI:10.5937/turizam29-61208

Abstract

Overtourism is a phenomenon that negatively affects a tourist destination's economic, social, and environmental aspects. The problems overtourism reflects are overcrowding, traffic congestion, pollution, and stress on transportation infrastructure. This leads our study to understand the overtourism phenomenon through the residents' perception in a tourist destination of a Himalayan hill station. A descriptive research design is used to explore the problems of overtourism from the residents' perspective. The data was collected from 148 residents using Google Forms. The study was conducted in Darjeeling, a prominent Himalayan Heritage hill station situated in the northernmost part of the State of West Bengal, India. The study finds that overtourism is a concerning phenomenon, with its effects highly felt by the residents. The results further presented a strong agreement among locals regarding the region's high economic dependency on tourism. Recognising the need for an economically sound and socially acceptable solution. The study proposes a 3R strategic overtourism management model to address overtourism, where 3R stands for Reduce, Replace, and Regenerate. Rather than a strictly linear or sequential strategy, the 3R model for overtourism is conceptualised as a cross-sectional framework in which all three components may co-exist in an integrated manner within a destination's policy environment. This model proposes three key solutions to mitigating tourism pressure, diversifying tourism as a source of income, and regenerating tourism in a more sustainable manner.

Keywords: Economic, Environmental, transportation, Overtourism, Perception, Residents, sustainability.

Introduction

Tourism has often been seen as a vital segment of economic growth driven by advancements in technologies, accessibility of information, and affordability of travel. The rapid increase in tourism activities has brought the concept of overtourism into focus among researchers and experts (Gulsen et al., 2021). The UNWTO (2018) describes overtourism as a situation where tourism negatively influences residents' quality of life and visitors' overall experience. This

-
- A Research scholar, Department of Management, University of North Bengal, Darjeeling, West Bengal, India; Corresponding author: rs_kushal@nbu.ac.in
B Assistant Professor, Department of Management, University of North Bengal, Darjeeling, West Bengal, India; sanmoy.mallick@nbu.ac.in

phenomenon is mainly observed in popular cities like Barcelona, Amsterdam, Venice, London, Kyoto, and Dubrovnik (Colomb & Novy, 2017; Goodwin, 2017). Additionally, concerns are rising rapidly in other places such as Hawaii, Greece, beaches in Spain, national parks of the United States, unexplored places in Japan, and Africa (World Economic Forum, 2023). While tourism improves economies and livelihoods, excessive tourism causes overcrowding, environmental harm, higher costs, gentrification, and reduced visitor satisfaction, leading to negative public perception (Kruczek, 2019; Fedyk et al., 2020). This obstructs global efforts toward sustainable tourism (Goodwin, 2017). Recognising the urgent need to address overtourism, the academic community has started to study and understand its far-reaching consequences and propose potential solutions (Capocchi et al., 2019; Milano et al., 2019a, b). Extensive case studies conducted across different regions have provided valuable insights into the challenges posed by overtourism, along with strategies to mitigate its adverse effects (Watanacharoensil & Weber, 2020).

While overtourism has been widely debated, most conversations and studies have revolved around European destinations. Developing countries in Asia, like India, with immense tourism potential, have not been studied enough in the context of overtourism (Tamang & Mallick, 2025). In Asia, where many developing nations heavily rely on tourism, residents often tolerate overtourism issues like overcrowding and environmental harm, unlike in the West (Khainthola et al., 2021). Cultural and economic factors also enhance local pride, fostering positive perceptions despite these challenges (Quadros et al., 2024).

Darjeeling, a scenic hill station in West Bengal, India, is known for its popular tea gardens, cool climate, and views of Kanchenjunga. Tourism began in 1829 and flourished under British development, making it a premier retreat by 1880 (Mukherjee, 2022). However, its fragile terrain, with narrow roads, landslide risks, and limited water, faces strain from increasing tourist numbers (Kannegieser, 2015). This growth has led to traffic congestion, water shortages, and overcrowding, issues shared by other Indian hill stations like Shimla, Manali, Ooty, and Nainital (Dar, 2024). These shared struggles make Darjeeling a valuable lens through which to examine overtourism, particularly by amplifying the voices of its residents to guide more sustainable tourism policies.

Despite Darjeeling's enduring popularity as a tourist destination, research on overtourism in the region is scarce. Tourism remains concentrated in Darjeeling town, where a dense cluster of hotels, homestays, and key attractions makes it especially prone to overtourism (Bhattacharya, 1986; Mallick et al., 2023). While some studies have identified tourist hotspots (Banerjee & George, 2024), they often overlook how residents perceive and experience the impacts of tourism. This human dimension is critical, particularly in Asia, where locals may endure tourism-related hardships in exchange for economic stability (Khainthola et al., 2021). No existing research, as far as we know, captures the lived experiences of overtourism by Darjeeling's residents, leaving a gap in understanding that this study aims to address. Using a descriptive, perception-based approach, the study explores whether overtourism is even recognised as an issue by the local population. Giving voice to residents contributes to the global discourse on overtourism and offers a foundation for future, more rigorous research in the region. Ultimately, the study seeks to guide policymakers in managing overtourism in Darjeeling and other similarly vulnerable mountain destinations, recognising that sustainable tourism depends on continued local support and positive resident attitudes (Nunkoo et al., 2019).

Literature review

Concept and definition of overtourism

Overtourism emerged as a formal research concept in 2018, though its underlying issues, such as overcrowding, environmental degradation, and local resistance, were examined as early as the 1960s (Forster, 1964; Wagar, 1964). By the 1980s, attention shifted to carrying capacity, though this remains a contested and context-dependent concept (Nilsson, 2020). The term “overtourism” was used in the early 2000s to describe tourism’s overuse of natural resources (An et al., 2008; Nelson, 2002). It is not merely about tourist volume, but when visitation exceeds a destination’s physical, ecological, or social capacity, leading to overcrowding, environmental damage, rising costs, gentrification, and resident dissatisfaction (Kruczek, 2019; Fedyk et al., 2020). Environmental impacts include biodiversity loss, pollution, and infrastructure strain (Perez Garrido et al., 2022). Definitions by UNWTO (2018), Peeters et al. (2018), and Higgins-Desbiolles et al. (2019) are widely cited, with Peeters et al. defining overtourism as impacts exceeding ecological or socio-economic thresholds.

Various factors have been considered for overtourism. An increase in tourists, with 1 billion in 2012, is expected to double by 2030 (UNWTO, 2019), increasing overtourism risks. Domestic tourism also adds pressure (Hall, 2015; Phi, 2020). Dodds and Butler (2019) list ten causes of overtourism, from more tourists and cheaper travel to poor management and stakeholder conflicts. Overtourism leads to overcrowding, rising living costs, visitor-host conflicts, and safety concerns (Phi, 2020; Koens et al., 2018). It disrupts local economies, fuels gentrification, harms the environment, and can destroy attractions, creating a ‘tourism dystopia’ (Bauman, 2019; Panayiotopoulos & Pisano, 2019). Addressing its causes and impacts is vital for sustainable tourism.

Cases of Overtourism Globally

Overtourism has emerged as a key topic in sustainable tourism discussions (Mihalic, 2020), with extensive research focused on popular European cities like Amsterdam, Barcelona, Venice, and Wrocław, where excessive tourism has raised growing concerns (Alonso-Almeida et al., 2019; Adie et al., 2020; Bertocchi et al., 2020; Fedyk et al., 2020; Hidalgo-Giralt et al., 2021; Benito et al., 2025). These European contexts continue to shape much of the academic discourse on overtourism (Adie et al., 2020; Santos-Rojo et al., 2023), yet the phenomenon varies globally depending on local economic, social, cultural, and ecological factors (Nilsson, 2020; Santos-Rojo et al., 2023). Cases outside Europe, such as Santorini in Greece (Leka et al., 2025), Petra in Jordan, the Karnak Temples in Egypt (Khater et al., 2025), Hunza in Pakistan (Ud Din et al., 2024), and forest tourism in South Korea (Yoon et al., 2024), show overtourism’s diverse impacts, from cultural and environmental degradation to overcrowding and identity loss. Events like Mexico City’s Day of the Dead celebration exemplify temporal overtourism (Sánchez-Aguirre et al., 2025), while studies in Prague, Krakow, and Braga stress the value of involving residents in tourism planning to mitigate tensions (Walas et al., 2024). Bibliometric analyses confirm that overtourism and sustainability are dominant themes in current tourism research, with growing attention to Asian contexts and their unique challenges (Robayo-Acuña & Chams-Anturi, 2023; Tamang & Mallick, 2025). Understanding overtourism in varied regional settings is vital for crafting context-specific, effective solutions (Khater et al., 2025).

Overtourism in India and Darjeeling

In the Indian context, overtourism has gained significant media attention, with destinations like Karnataka, Uttarakhand, Mount Everest, the hills of West Bengal, and the forts of Maharashtra experiencing severe tourism pressure (Ganguly, 2024; Nabi, 2024). In their study, Gowreesunkar and Gavinolla (2020) evaluate city tourism, urbanism, and overtourism in Hyderabad, reflecting their interconnected impacts. A study by Barbhuiya (2021) examines overtourism in Nainital and highlights various factors for overtourism. Specific issues, such as overcrowded trekking routes, strained infrastructure, and ecological degradation, are frequently reported in India. In Darjeeling, a fragile Himalayan hill station, witnesses similar issues to those of overtourism, ranging from traffic congestion and infrastructure stress to resource shortages and unchecked urban expansion (Kannegieser, 2015; Dasgupta & Garg, 2021; Bhutia, 2015). While recent studies have mapped tourist flows using geospatial tools (Banerjee & George, 2024), they lack insights into how local communities perceive these changes. Understanding residents' perceptions is critical, as the success of sustainable tourism depends on inclusive stakeholder engagement (Adongo et al., 2017; Butler & Dodds, 2022). Without local acknowledgement of overcrowding, the existence and impact of overtourism may be underestimated.

This study addresses this gap by using descriptive statistics to explore overtourism through the lens of Darjeeling's residents. It aims to validate whether overtourism is felt locally and proposes resident-informed directions for managing it. The study also introduces the "3R Strategic Overtourism Management Model": Reduce, Replace, and Regenerate, as a conceptual solution rooted in community perception.

Research Methodology

This study explores how residents of Darjeeling perceive the growing pressures of overtourism in their region. Using a descriptive research design, it aims to capture and describe the behavioural dimensions of overtourism without establishing cause-and-effect relationships. Rooted in perception, this approach acknowledges that individuals absorb information about the surroundings through their senses (Melgarejo, 1994; Capel, 1973; Crane, 2005; Muñoz, 2008). The study employed a structured questionnaire comprising 15 statements rated on a five-point Likert scale. These statements addressed environmental degradation, strain on public transportation infrastructure, quality of life, economic dependence on tourism, and concerns like rising costs, traffic, pollution, and safety (Cao et al., 2021). The survey was distributed via Google Forms using convenience sampling, suitable for the study's exploratory nature. Responses from 148 local participants were analysed using mean, standard deviation (SD), skewness, and kurtosis to gauge overall sentiment. The questionnaire demonstrated strong reliability with a Cronbach's alpha of 0.815. Data analysis used Jamovi version 2.6 (The Jamovi Project, 2025). Ethical standards were upheld, with informed consent and participant anonymity strictly maintained. Demographic details are presented in Table 1.

Table 1. Demographic details of the respondent from Darjeeling.

Gender	
Male	79
Female	69
Age	
Below 20	11
21 to 30	124
above 31	13
Educational Background	
10th	3
12th	14
Under Graduate	60
Post Graduate	68
Ph.D. scholar	3

Source: Author

Table 2. Questionnaire items.

Question code	QUESTIONNAIRE ITEM
A	Darjeeling is overcrowded with tourists.
B	Tourism has resulted in a lack of space in this area.
C	The economy of Darjeeling is too tourism-oriented.
D	Tourism has increased the amount of waste generated.
E	Tourism has increased the amount of sewage released.
F	The construction of tourist facilities and homestays has destroyed the natural landscape of Darjeeling.
G	There is a need for a reduction in tourists during the peak season.
H	There is a need to redistribute tourists from popular tourist spots to surrounding tourist destinations.
I	Limiting the number of visitors daily is necessary to reduce the stress on popular destinations.
J	Locals are denied transportation services because tourists consume most taxi services for sightseeing.
K	Tourism during peak season often puts significant stress on transportation infrastructure.
L	Toy trains using the same path as the vehicles, often during peak season, cause traffic jams.
M	Tourism has created employment opportunities for your community.
N	Tourism has attracted more investment to your community.
O	Tourism has provided a business opportunity for the locals.

Source: Author's conceptualisation

Findings and recommendations.

Residents' Perception of Overtourism

The descriptive analysis of the 15 Likert-scale items, based on responses from 148 participants, reveals a general tendency toward agreement across all items, as indicated by high mean scores ranging from 3.69 to 4.42, as shown in Table 3. Question (Code K and A) about stress on transportation infrastructure and overcrowding during peak tourist season recorded the highest means, suggesting strong consensus. Stress on transportation infrastructure and overcrowding issues have also been a significant problem in other hill stations like Shimla, Manali, Ooty, and Nainital (Dar, 2024). The main contributor of overtourism, being overcrowding, has also been highly agreed upon by the locals of Darjeeling. Dodds and Butler (2019) highlight a rise in the number of tourists, resulting in overcrowding in a particular destination at a time, which is a key contributor to overtourism. While questions (Code G) about the reduction of tourist numbers revealed the lowest mean ($M = 3.69$, $SD = 1.124$), indicating more varied opinions. Standard deviations ranged between 0.726 and 1.124, reflecting moderate response variability, with greater dispersion observed in questions like G and I, which concern reducing and limiting tourist numbers. The standard errors (SE) of the mean were consistently low (ranging from 0.0597 to 0.0924), confirming the precision and reliability of the calculated means.

Table 3. Descriptive results of the responses to questions on a 5-point Likert scale.

Question code	N	Mean	SE	SD	Skewness	SE	Kurtosis	SE
A	148	4.29	0.0659	0.802	-1.057	0.199	1.1535	0.396
B	148	3.99	0.0657	0.8	-0.704	0.199	0.8058	0.396
C	148	4.13	0.0732	0.89	-0.901	0.199	0.4404	0.396
D	148	4.21	0.0769	0.935	-1.14	0.199	0.7032	0.396
E	148	4.09	0.0713	0.868	-0.692	0.199	-0.2265	0.396
F	148	4.3	0.0641	0.779	-0.854	0.199	-7.16e-4	0.396
G	148	3.69	0.0924	1.124	-0.497	0.199	-0.6126	0.396
H	148	4.18	0.0597	0.726	-0.498	0.199	-0.2294	0.396
I	148	3.91	0.0894	1.088	-0.853	0.199	-0.068	0.396
J	148	4.18	0.0806	0.981	-1.106	0.199	0.4133	0.396
K	148	4.42	0.0621	0.756	-1.348	0.199	1.6771	0.396
L	148	4.18	0.0761	0.926	-1.05	0.199	0.5397	0.396
M	148	3.84	0.0812	0.988	-1.271	0.199	1.9679	0.396
N	148	3.85	0.072	0.876	-1.183	0.199	2.2451	0.396
O	148	4.07	0.0722	0.878	-1.294	0.199	2.5325	0.396

Source: Author

All items exhibited negative skewness values (ranging from -0.497 to -1.348), suggesting a distribution skewed toward higher agreement levels. Overtourism issues in the region are being felt by the respondents, with a need for a reduction of tourist numbers and high economic dependency on tourism. Items such as K, O, and M showed stronger negative skewness, reflecting a clustering of responses around “agree” or “strongly agree.” In terms of kurtosis, values

varied from -0.6126 to 2.5325. Some items (notably O and N) exhibited leptokurtic tendencies, suggesting a sharper concentration of agreement around the mean. This relates to people's economic benefits derived from tourism. Darjeeling highly depends on tourism for income generation among the locals (Bhutia, 2015; Kannegieser, 2015). The descriptive statistics show a generally favourable and consistent agreement pattern among the residents about overtourism issues and economic benefits. However, opinions regarding limiting and reducing tourism vary with leptokurtic tendencies. This shows an interesting pattern where the residents of Darjeeling agree highly on overtourism issues and economic benefits, which results in a varied opinion about reducing or limiting tourist numbers. These issues are alarming in the region, calling for a change of conventional tourism approaches to a more sustainable form of tourism (Bhutia, 2015). This observation calls for a localised solution that is economically viable to solve overtourism issues in such highly economically dependent destinations.

Conceptualisation of the 3R strategic Overtourism management model.

Table 4. 3R strategic overtourism Management model for managing the problem of overtourism.

Step	Meaning	Targeted problems
Reduce	Immediate control of mass tourism pressure on local life, space, and infrastructure. Limit and manage current excesses of tourism.	Short-term corrective measures for managing internal threats within tourism.
Replace	Shift focus from tourism as the sole economic driver to alternative development areas. Build alternative local industries beyond tourism.	Lack of other opportunities and external threats.
Regenerate	Rebuild tourism sustainably via niche, mindful experiences, and a community-based approach.	Long-term internal threats, through the transformation of tourism practices.

Source: Author's conceptualisation

The above findings of the study suggest locals in the region feel that there are overtourism issues in Darjeeling. The results also show a tendency to be hesitant towards reducing tourism due to the high economic benefits derived. This calls for a solution tailored to mitigate overtourism issues in the region. Considering this observation, a 3R strategic overtourism management model for solving overtourism is proposed, as seen in Table 4, where 3R stands for Re-

duce, Replace, and Regenerate. This solution to overtourism integrates managerial and normative critical perspectives (Black et al., 2025). The managerial perspective deals with local conflicts between tourists and residents, focusing on impacts, accommodation, daily life, and policies. In contrast, the normative perspective deals with deeper ethical concerns in tourism and the global economy, advocating for broader, structural solutions.

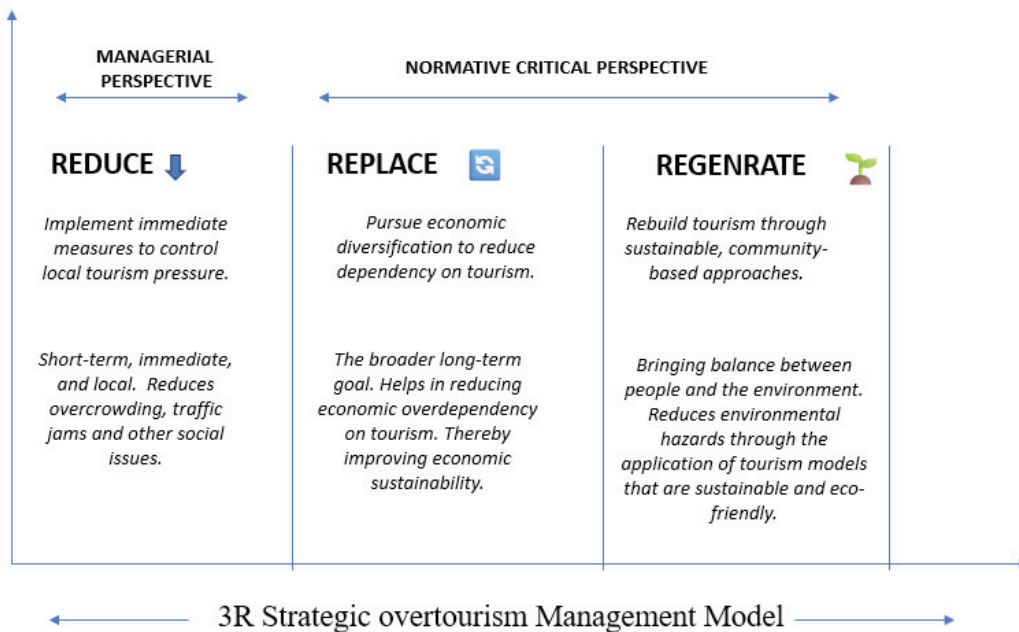


Figure 1. 3R Strategic Overtourism Management Model.

Source: Author's conceptualisation

Rather than a strictly linear or sequential strategy, the 3R model for overtourism is conceptualised as a cross-sectional framework in which all three components may co-exist in an integrated manner within a destination's policy environment, as seen in Figure 1. However, their effects and visibility may unfold phase-wise. The Reduce aspects emphasise immediate tourism pressure management strategies. Rogowski (2019) outlines the method for establishing visitor entry limits. This approach implements a managerial perspective by solving the issues locally in the short term. This results in immediate and instant relief on various overtourism issues. However, limiting visitors is controversial, but must be viewed through the lens of balancing benefits and losses, with priority given to preserving sensitive natural values (Arneberger & Haider, 2007; Rogowski, 2025).

The study recognises that reducing and limiting visitors can offer short-term relief, but such measures may undermine tourism's long-term benefits. In destinations like Darjeeling, where tourism is closely linked to global growth systems, reduction alone risks creating an unsustainable model that fails to support future development. Therefore, along with reducing tourist inflows, the Replacement aspect of this model plays a crucial role by replacing tourism with economic diversification for other industries. While replacing and reducing may act as a solu-

tion to overtourism. However, these two aspects may solve some of the problems associated with overtourism. However, one of the key problems of overtourism is the undesirable growth of tourism. The reduction and Replacement aspects may stop undesirable tourism growth, but they do not lead to desirable growth. In such a scenario, Regenerative aspects play a crucial role in the transformative rebuilding of tourism itself. Transformation of tourism through alternative tourism products has been highly recommended (Jieyao et al., 2025). The model uses existing concepts such as degrowth and sustainable tourism within the elements of ‘reduce’ and ‘regenerate’ to propose a solution internally within the tourism framework. The novelty of this model comes from the combined use of the degrowth solution, redistribution measures (Hosper, 2019; Sibrijns & Vanneste, 2021), the alternative tourism solution, and economic diversification. While degrowth as a solution to overtourism has been discussed for a long time (Fletcher et al., 2019). This framework’s ‘reduce’ element also upholds the principles of degrowth. The difference this framework makes is that it integrates these degrowth principles with regeneration and replacement elements. Tourism regeneration is empowered by sustainable tourism and alternative tourism (Ifrazoglu & Can, 2021; Koba, 2022). Unlike traditional models that seek to fix tourism from within, this framework recognises that true sustainability may require stepping away from tourism first, only to reintroduce it later in resident-led, environmentally grounded, and culturally meaningful forms. The study also proposes this model as a potential solution to overtourism issues in Darjeeling, based on the 3R model, as seen in Table 5.

Table 5. The 3R strategic tourism management model and practical implications for overtourism management in Darjeeling.

3R Strategy	Practical Implication
Reduce	<ul style="list-style-type: none"> ❖ Limit tourists during peak seasons. ❖ Redistribute tourist flows to the outskirts. ❖ Decongest and distribute transportation infrastructure for all stakeholders of the tourist destination. ❖ Pricing or time-based restrictions to control tourist inflow.
Replace	<ul style="list-style-type: none"> ❖ Reinvest in the tea industry. ❖ Promote education/literary heritage in Darjeeling. ❖ Encourage local entrepreneurship outside tourism.
Regenerate	<ul style="list-style-type: none"> ❖ Promote niche tourism (education, tea, culture, Dark tourism). ❖ Extend tourism beyond seasons. ❖ Rebuild eco-friendly infrastructure.

Sources: Author's conceptualisation

Conclusion

This study examined residents' perceptions of overtourism in Darjeeling, revealing social, environmental, and infrastructural concerns. The findings indicate that overtourism is not only recognised by locals but also seen as a pressing issue that calls for immediate, balanced action. Theoretically, the study adds a new context to overtourism literature by introducing Darjeeling, encouraging further research in similar fragile destinations. A key contribution is the 3R Strategic Overtourism Management Model, Reduce, Replace, and Regenerate, which offers a holistic, community-centric framework that addresses both short- and long-term challenges. While grounded in Darjeeling, this model is adaptable to other hill stations and global contexts. Practically, the study provides insights for policymakers aiming to balance tourism growth with local well-being and sustainability.

Lastly, this study uses a descriptive research design to identify how people of Darjeeling perceive the problems of overtourism. This exploratory study used convenience sampling through an online survey, which may not fully represent all residents of Darjeeling. Future studies may include identified issues with more methodological rigour and more representative sampling methods to look for a potential solution to the problem of overtourism in the region.

Ultimately, the study underscores the urgency of rethinking tourism in Darjeeling and other similar hill stations and tourist destinations worldwide. Tourism must be rethought not as an unlimited engine of growth but as a system that must be managed with care, responsibility, and inclusivity to ensure long-term benefits for both people and the environment.

References

- Adie, B.A., Falk, M., Savioli, M. 2020. Overtourism as a perceived threat to cultural heritage in Europe. *Current Issues in Tourism*, 23(14), pp.1737-1741.
- Adongo, R., Choe, J.Y., Han, H., 2017. Tourism in Hoi An, Vietnam: Impacts, perceived benefits, community attachment and support for tourism development. *International Journal of Tourism Sciences*, 17(2), pp.86-106.
- Alonso-Almeida, M.D.M., Borrajo-Millán, F., Yi, L., (2019). Are social media data pushing overtourism? The case of Barcelona and Chinese tourists. *Sustainability*, 11(12), p.3356.
- An, N.T., Phung, N.K., Chau, T.B., 2008. Integrated coastal zone management in Vietnam: patterns and perspectives. *Journal of Water Resources and Environmental Engineering*, 23, pp.297-304.
- Arnberger, A., Brandenburg, C. 2007. Past on-site experience, crowding perceptions, and the use displacement of visitor groups to a peri-urban national park. *Environmental management*, 40, pp.34-45.
- Back, A., Lundmark, L., Zachrisson, A. 2025. Bridging (over) tourism geographies: proposing a systems approach in overtourism research. *Tourism Geographies*, pp.1-20.
- Banerjee, S., George, A. 2024. Identifying overtourism & spill-over tourism using ST-DBSCAN analysis for sustainable management of tourism. *Current Issues in Tourism*, pp.1-21.
- Barbhuiya, M.R. 2021. Overtourism in Indian cities: a case study of Nainital. *International Journal of Tourism Cities*, 7(3), pp.702-724.
- Bauman, A. 2019, August. New urban tourism and urban infrastructure. *Presentation at the RGS annual conference, London* (Vol. 30, p. 2019).
- Benito, J.A.D., Zerva, K. 2025. From overtourism to overall-mobility. *Annals of Tourism Research Empirical Insights*, 6(1), p.100161.

- Bertocchi, D., Camatti, N., Giove, S., van Der Borg, J., 2020. Venice and overtourism: Simulating sustainable development scenarios through a tourism carrying capacity model. *Sustainability*, 12(2), p.512.
- Bhattacharya, B. 1986. Development of Tourism in India: A Case-Study of Darjeeling Himalaya. *World Leisure & Recreation*, 28(5), pp.23–30.
- Bhattacharya, N. 2013. Leisure, economy and colonial urbanism: Darjeeling, 1835–1930. *Urban history*, 40(3), pp.442–461.
- Bhutia, S. 2015. Sustainable tourism development in the Darjeeling hills of West Bengal, India: Issues & challenges. *Global Journal of Human-Social Science*, 15(3), pp.1–10.
- Butler, R. 2018. *Challenges and opportunities*. *Worldwide Hospitality and Tourism Themes*, 10(6), 635–641 [online]
- Butler, R.W., Dodds, R. 2022. Overcoming overtourism: a review of failure. *Tourism Review*, 77(1), pp.35–53.
- Cao, W., Yu, W., Xu, J. 2021. City vs. Town residents' place attachment, perceptions and support for tourism development in a linear World Cultural Heritage Site. *PLoS One*, 16(10), p.e0258365.
- Capel, H., 1973. Percepción del medio y comportamiento geográfico. *Revista de geografía*, pp.58–150.
- Capocchi, A., Vallone, C., Pierotti, M., Amaduzzi, A., 2019. Overtourism: A literature review to assess implications and future perspectives. *Sustainability*, 11(12), p.3303.
- Coldwell, W. 2017. First, Venice and Barcelona: now anti-tourism marches spread across Europe—The *Guardian*, 10, p.2017.
- Crane, T. 2005. What is the problem of perception? *Synthesis Philosophica*, 20, 237–264.
- Dar, V. 2024, December 8. *From Wayanad to Shimla: The rising crisis of overtourism and its environmental impact*. The Financial Express. <https://www.financialexpress.com/life/travel-tourism-from-wayanad-to-shimla-the-rising-crisis-of-overtourism-and-its-environmental-impact-3686713/>
- Dasgupta, S., Garg, P. 2021. The urban development and heritage conundrum: the challenges of heritage conservation in the hill-station of Darjeeling. *Journal of Urban Design*, 26(2), pp.184–208.
- Diaz-Parra, I., Jover, J. 2021. Overtourism, place alienation and the right to the city: Insights from the historic centre of Seville, Spain. In *Justice and Tourism* (pp. 16–33). Routledge.
- Dodds, R., Butler, R. eds., 2019. *Overtourism: Issues, realities and solutions* (Vol. 1). Walter de Gruyter GmbH & Co KG.
- Fedyk, W., Sołtysik, M., Oleśnik, J., Barwicka, K. and Mucha, A., 2020. How overtourism threatens large urban areas: A case study of Wrocław, Poland. *Sustainability*, 12(5), p.1783.
- Fletcher, R., Murray Mas, I., Blanco-Romero, A., Blázquez-Salom, M., 2019. Tourism and de-growth: an emerging agenda for research and praxis. *Journal of sustainable tourism*, 27(12), pp.1745–1763.
- Forster, J., 1964. The sociological consequences of tourism. *International Journal of Comparative Sociology*, 5, p.217.
- Ganguly, N. 2024, January. Overtourism hits tourist destinations: Calls for sustainable travel rise. The *Times of India*. Retrieved from <http://timesofindia.indiatimes.com/article-show/111627483.cms>
- García-Buades, M.E., García-Sastre, M.A., Alemany-Hormaeche, M., 2022. Effects of overtourism, local government, and tourist behaviour on residents' perceptions in Alcúdia (Majorca, Spain). *Journal of Outdoor Recreation and Tourism*, 39, p.100499.

- Goodwin, H. 2017. The Challenge of Overtourism. Responsible tourism partnership (working paper 4). *Erişim adresi*, 24.
- Gülşen, U., Yolcu, H., Ataker, P., Erçakar, İ., Acar, S., 2021. Counteracting overtourism using demarketing tools: a logit analysis based on existing literature. *Sustainability*, 13(19), p.10592.
- Hall, C.M. 2015. On the mobility of tourism mobilities. *Current Issues in Tourism*, 18(1), pp.7–10.
- Harijan, K. 2018, January. HISTORY AND HERITAGE OF DARJEELING “THE QUEEN OF HILLS” IN INDIA, 1835-1947. In *Proceedings of the Indian History Congress* (Vol. 79, pp. 371–378). Indian History Congress.
- Higgins-Desbiolles, F., Carnicelli, S., Krolikowski, C., Wijesinghe, G., Boluk, K. 2019. Degrowing tourism: Rethinking tourism. *Journal of Sustainable Tourism*.
- Hospers, G.J. 2019. Overtourism in European cities: From challenges to coping strategies. In *CESifo Forum* (Vol. 20, No. 03, pp. 20–24). München: ifo Institut–Leibniz-Institut für Wirtschaftsforschung an der Universität München.
- Iflazoglu, N., Can, I.I., 2021. As a possible solution to overtourism in destinations, the alternative tourism movement. In *Overtourism as Destination Risk: Impacts and Solutions* (pp. 97–110). Emerald Publishing Limited.
- Jieyao, Z., Kumar, J. 2025. Post-pandemic tourism in Asia: addressing overtourism through sustainable practices. *Worldwide Hospitality and Tourism Themes*.
- Kainthola, S., Tiwari, P., Chowdhary, N. 2021. Overtourism: striking a balance between limiting and managing tourism growth in Asia. *Future of Tourism in Asia*, pp.231–249.
- Kannegieser, I., 2015. A Home In The Hills: Examining the socioeconomic benefits of homestay tourism on rural women and their communities in the Darjeeling District.
- Khater, M., Muhammad Zeki Mahmood Al-Leheabi, S., Faik, M. 2025. Navigating over-tourism challenges: comparative insights and solutions from Petra and Karnak. *Journal of Heritage Tourism*, 20(2), pp.282–313.
- Koba, Y. (2022). Alternative Tourism as a Solution to Overtourism. In *Overtourism, Technology Solutions and Decimated Destinations* (pp. 203-215). Singapore: Springer Nature Singapore.
- Koens, K., Postma, A., Papp, B. 2018. Is overtourism overused? Understanding the impact of tourism in a city context. *Sustainability*, 10(12), p.4384.
- Leka, A., Lagarias, A., Stratigea, A., Prekas, P. 2025. A methodological framework for assessing overtourism in insular Territories—Case study of Santorini Island, Greece. *ISPRS International Journal of Geo-Information*, 14(3), p.106.
- Mallick, S., Mitra, D., Ghosh, A. 2023. Ranking of Potential Tourist Destinations of Darjeeling District for Tourism Investment with Multi-Criteria Decision-Making Approach.
- Melgarejo, L.M.V., 1994. Sobre el concepto de percepción. *Alteridades*, (8), pp.47-53.
- Mihalic, T. 2020. Conceptualising overtourism: A sustainability approach. *Annals of Tourism Research*, 84, p.103025.
- Milano, C., Novelli, M., Cheer, J.M. 2019. Overtourism and tourismphobia: A journey through four decades of tourism development, planning and local concerns. *Tourism Planning & Development*, 16(4), pp.353–357.
- Milano, C., Novelli, M., Cheer, J.M. 2020. Overtourism and degrowth: A social movements perspective. In *Tourism and Degrowth* (pp. 113–131). Routledge.
- Mukherjee, S. 2022. Tourism and recreation in colonial Darjeeling: A social history of leisure. In *Darjeeling* (pp. 99–113). Routledge.

- Muñoz, J.L.V., 2008. Cinco décadas de Geografía de la percepción. *Ería: Revista cuatrimestral de geografía*, (77), pp.371-384.
- Nabi, M. 2024, September 27. World Tourism Day: Overtourism threatens India's top destinations. Increased footfall exacerbates the climate change impact. *Media India Group*. Retrieved from <https://mediaindia.eu/tourism/world-tourism-day-overtourism-threatens-indias-top-destinations/>
- Nelson, B. 2002. *God's country or Devil's playground: the best nature writing from the Big Bend of Texas* (Vol. 54). University of Texas Press.
- Nilsson, J.H., 2020. Conceptualizing and contextualizing overtourism: The dynamics of accelerating urban tourism. *International Journal of Tourism Cities*, 6(4), pp.657-671.
- Novy, J., Colomb, C. eds., 2017. *Protest and resistance in the tourist city*. London: Routledge.
- Nunkoo, R., Seetanah, B. 2019. Innovation in sustainable tourism.
- Panayiotopoulos, A., Pisano, C. 2021. Overtourism dystopias and socialist utopias: Towards an urban armature for Dubrovnik. In *Travel and Tourism in the Age of Overtourism* (pp. 41–58). Routledge.
- Peeters, P., Gössling, S., Klijs, J., Milano, C., Novelli, M., Dijkmans, C., Eijelaar, E., Hartman, S., Heslinga, J., Isaac, R., Mitas, O., 2021. Research for TRAN Committee-Overtourism: impact and possible policy responses.
- Pérez Garrido, B., Sebrek, S.S., Semenova, V., Bal, D., Michalkó, G., 2022. Addressing the phenomenon of overtourism in Budapest from multiple angles using unconventional methodologies and data. *Sustainability*, 14(4), p.2268.
- Phi, G.T. 2020. Framing overtourism: A critical news media analysis. *Current issues in Tourism*, 23(17), pp.2093-2097.
- Robayo-Acuña, P.V., Chams-Anturi, O., 2025. Open innovation in hospitality and tourism services: a bibliometric analysis. *International Journal of Innovation Science*, 17(2), pp.394-418.
- Rogowski, M., 2019. Assessing the tourism carrying capacity of hiking trails in the Szczeliniec Wielki and Błędne Skały in the Stołowe Mts. National Park.
- Rogowski, M., 2019. Assessing the tourism carrying capacity of hiking trails in the Szczeliniec Wielki and Błędne Skały in the Stołowe Mts. National Park.
- Sánchez-Aguirre, D.P., Alvarado-Sizzo, I., Moury-Fernandes, B.G., 2025. Intangible cultural heritage versus tourism: residents' reactions to temporal overtourism during the Day of the Dead in Mixquic, Mexico. *Journal of Heritage Tourism*, 20(2), pp.235-259.
- Santos-Rojo, C., Llopis-Amorós, M. and García-García, J.M., 2023. Overtourism and sustainability: A bibliometric study (2018–2021). *Technological Forecasting and Social Change*, 188, p.122285.
- Sharma, R.P. 2012. *A study in environmental degradation in the Darjeeling hill areas* (Doctoral dissertation, University of North Bengal).
- Sibrijns, G.R., Vanneste, D., 2021. Managing overtourism in collaboration: The case of 'From Capital City to Court City', a tourism redistribution policy project between Amsterdam and The Hague. *Journal of Destination Marketing & Management*, 20, p.100569.
- Singh, B., Chhering, M. 2024. Overtourism in India: Impacts, Challenges, and Solutions for Sustainable Destinations. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)*, 11(3), pp.92–98.
- Tamang, K., Mallick, S. 2025. Exploring overtourism: A bibliographic Mapping of the research trends (2018-2023). *Atna Journal of Tourism Studies*, 20(1), pp.117–136.

- The jamovi project 2025. *Jamovi* (Version 2.6) [Computer Software]. Retrieved from <https://www.jamovi.org>
- Ud Din, N., Nazneen, S. and Jamil, B., 2024. Tourism crowding and resident approach/avoidance reactions through sustainable tourism: moderating role of proenvironmental behaviour. *Tourism Review*, 79(9), pp.1509-1524.
- UNWTO, O., 2018. *Understanding and Managing Urban Tourism Growth beyond Perceptions* [online]
- Wagar, J.A. 1964. The carrying capacity of wild lands for recreation. *Forest Science*, 10(suppl_2), pp.a0001-24.
- Walas, B., Szromek, A.R., Kruczek, Z. and Rončák, M., 2024. Minimising conflicts between residents and local tourism stakeholders to achieve sustainable tourism in Prague, Krakow and Braga. *Tourism Review*, 79(7), pp.1367-1384.
- Wattanacharoensil, W., Weber, F. 2020. Preface to Journal of Travel and Tourism Marketing: special issue measuring and monitoring overtourism. *Journal of Travel & Tourism Marketing*, 37(8-9), pp.871–872.
- World Economic Forum. 2023, October. *What is overtourism, and how can we overcome it?* World Economic Forum. <https://www.weforum.org/stories/2023/10/what-is-overtourism-and-how-can-we-overcome-it/>
- Yoon, T.K., Myeong, J.Y., Lee, Y., Choi, Y.E., Lee, S., Lee, S. , Byun, C. (2024). Are you okay with overtourism in forests? Path between crowding perception, satisfaction, and management action of trail visitors in South Korea. *Forest Policy and Economics*, 161, p.103184.
- Żemła, M., 2020. Reasons and consequences of overtourism in contemporary cities—Knowledge gaps and future research. *Sustainability*, 12(5), p.1729.