

Examining the Phenomenon of Overtourism in the Context of Local Community Perception: The Case of Bodrum.

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Abstract

The concept of "overtourism," introduced by Claudio Milano in 2017, refers to the unsustainable growth of mass tourism and its negative impacts on local communities. These include overcrowding, traffic congestion, seasonal economic dependency, housing pressure, environmental degradation, and reduced contributions to the local economy. Such pressures often lead to social discomfort, loss of belonging, and displacement. Since the 2000s, studies have increasingly focused on how residents perceive these impacts. This study aims to measure the level of overtourism in Bodrum, a key tourist destination in the Mediterranean, by adapting international overtourism indicators. Using surveys and statistical data, it identifies the physical, economic, social, and environmental pressures experienced by locals. The findings contribute to developing strategic planning approaches for more sustainable tourism governance in overburdened coastal settlements.

Keywords: overtourism; tourism capacity; tourism impact studies; local community perception; sustainable tourism

Introduction

Although the concept of overtourism is relatively recent, the impacts of tourism on settlements have been studied since the 1960s, initially with an economic focus, later expanding to environmental concerns. The social dimension, particularly local perceptions, gained attention in the 2000s, culminating in the emergence of overtourism as a distinct concept in 2017.

Dodds and Butler (2019) argue that the rise of overtourism stems from the public's growing opposition to tourism and the widespread transformation of once-untouched areas into tourist destinations. Milano, Cheer, and Novelli (2018) emphasize the importance of local perspectives, identifying key indicators such as overcrowding, housing pressure, environmental degradation, and economic leakage.

Koens et al. (2018) note that these impacts are no longer confined to Europe, increasingly affecting vulnerable coastal and heritage destinations globally. As a response, various international organizations now promote locally tailored indicators and management strategies aimed at balancing visitor experience with resident well-being. The first step in addressing overtourism, however, is to define and measure its presence. This study aims to fulfill that step for Bodrum. (Kuduban, Yerliyurt, 2023)

The Concept of Overtourism

In the literature concerning the impact of tourism on settlements, tourism was historically an activity exclusive to noble families between the 14th and 17th centuries. After World War II, during the period from the 1960s to the 1980s, tourism emerged as a tool for economic development. Consequently, early tourism research predominantly stemmed from economic sciences, focusing on tourism's positive effects as a means to justify steps toward economic growth. By the 1980s and 1990s, the rise of mass tourism movements driven by globalization and neoliberal policies transformed tourism into an industry, resulting in significant changes in its impacts. Consequently, literature during this period began to critique the environmental issues associated with the large-scale movements generated by mass tourism. (Postma, Schmuecker, 2017).

Since the early 2000s, the growing emphasis on sustainability and the widespread adoption of strategic planning approaches have led to a more comprehensive examination of tourism's effects. Research during this period expanded to include not only economic impacts but also physical and social dimensions. Nevertheless, environmental impacts continued to be a dominant topic in the literature.

Post-2010, influenced by postmodern movements, approaches emphasizing the social presence of a place rather than viewing it solely as a destination for consumption gained prominence. This period saw an increased focus on the social impacts of tourism, particularly from the perspective of local communities. These discussions, often highlighting negative aspects, coincided with the emergence of the concept of overtourism.

In 2018, the UNWTO defined overtourism as "the impact of tourism on a destination or its parts that excessively influences residents' perceived quality of life and/or visitors' experiences" (UNWTO, 2018). Consequently, overtourism has become a significant focus in contemporary tourism literature. While settlements are expected to have some degree of flexibility in accommodating varying and diverse populations, the tourism sector, once seen as a relatively sustainable development model and an economic driver following the 2008 financial crisis, has undergone substantial changes with the integration of mass tourism into modern conditions. (Postma, 2013)

One of the most distinctive and visible elements of overtourism is the significant shift in local residents' perceptions of tourism. Gürsoy and Rutherford argue that successful tourism development largely depends on local community support (Gürsoy & Rutherford, 2004). Similarly, Ap emphasizes that local communities play a crucial role in determining the success or failure of the tourism industry (Ap, 1992). Thus, local residents may either shape, facilitate, or oppose tourism. They may support tourism if they perceive it as contributing to their well-being or develop negative attitudes toward tourists. The concept of overtourism first emerged in Barcelona, a prominent tourism destination. Claudio Milano of the University of Barcelona was the first to define the term in 2017. Milano noted that by the 2010s, many destinations had reached capacity saturation. The term was initially used by Spanish citizens and later by residents of Venice and other major destinations to express dissatisfaction with tourism's impacts. Milano described overtourism as the negative perception created by unsustainable tourism activities on local communities (Milano, 2017). Since 2018, local residents, civil society organizations, academics, and urban activists have expressed their reactions in various ways. For example, key tourist destinations such as Barcelona, Ibiza, Palma de Mallorca, Malta, Florence, and Venice published a manifesto outlining their concerns and demands. From a social and perceptual perspective, the continuous sharing of urban space between locals and tourists in daily life has increasingly caused discomfort among residents

In pioneering research, Jordan, Pastras, and Psarros emphasized that overtourism fundamentally results from mass tourism. They argued that the presence of large groups of tourists in settlements for certain periods creates density-related issues, particularly seasonal imbalances. They identified insufficient infrastructure and services to meet seasonal demand, alongside the uncontrolled consumption of available services, as both a cause and a consequence of overtourism (Jordan, Pastras, & Psarros, 2018).

Many measurable different indicators are used in researches. An important outcome of any evaluation of overtourism is the lack of a universally accepted set of indicators. This prevents effective evaluation of destinations that are either at risk of overtourism or have already entered into overtourism. In this context, indicators should be specialized according to the characteristics of the settlement (Peeters et al., 2018; Milano et al, 2018; Kim et al, 2020). Alongside these statistics, which are key components of overtourism, it should not be overlooked that the local population's perspective on this situation is also one of the most important indicators. For this reason, surveys and in-depth interview studies are increasing. After the investigations, the goal is to identify the level of overtourism and problematic areas, and to generate input for strategies.

As a result, the necessity of a management strategy to ensure the sustainability of tourism has been emphasized in the literature since the early stages. This strategy primarily involves the identification of area-specific indicators and the development of strategies based on the analysis of these indicators. In this regard, the strategy

sets of organizations such as UNWTO, TRAN, Responsible Tourism Partnership, ENAT, and IUCN and many more are very important; (Goodwin, 2017; Koens, 2018; Postma, Papp, 2018; Koens, Papp, Postma, 2018; Peeters et al, 2018)

Case Study

a) Destination Selection

The top three tourism destinations of national and international significance in Turkey are Istanbul, Antalya, and Muğla (Çakır Zeytinoğlu and Sadiç, 2013). This can be examined through various data such as the number of accommodation facilities, bed capacity, and statistics from the Ministry of Culture and Tourism. These three coastal provinces, being areas with various disaster risks, rich cultural heritage, and ecological diversity, appear to be worth testing in terms of the perception of the local population, which is a key indicator of overtourism. While Antalya and Muğla stand out with sea, sun, and sand tourism, Istanbul is known for cultural tourism. In this context, it can be said that Antalya and Muğla exhibit the indicator of excessive dependency on a single season, which is an important indicator of overtourism, while Istanbul has a tourism dynamic spread across all four seasons.

The primary reason for choosing Muğla over Antalya between the two provinces is that the bed capacity per capita criterion in Muğla indicates that locals and tourists encounter each other more frequently in the urban space. Selected criteria are shown in the following table. [Table 1 near here]

Table 1. City selection index

City	The Number of Accommodation Facilities Per Resident Population	The Number Of Beds Per Resident Population	Coastline Length (km)
Antalya	4,166,471,961	4.16	630
İstanbul	5,935,467,777	59	614
Muğla	4,436,673,377	4.43	1479

Formula Used: Value: x; Normalized value: y; Smallest value of the data series: minimum; Largest value of the data series: maximum: $y = (x - \text{minimum}) / (\text{maximum} - \text{minimum})$

Muğla, with a coastline of 1.114 km, has a population of 1,066,736 (TURKSTAT, 2023). Located in the NUTS 1 level classification of Turkey, Muğla lies between the coordinates 36° 17' and 37° 33' North latitude and 27° 13' and 29° 46' East longitude. Situated at the southern tip of Western Anatolia, Muğla covers an area of 13,338 km². As mentioned earlier, tourism in Muğla is concentrated in coastal settlements, and therefore, the issue of over-tourism primarily affects these areas. Bodrum, Marmaris, and Fethiye are significant tourism destinations both for Turkey and Muğla. For the fieldwork, the selected district was determined through an evaluation of Muğla's coastal districts. The main reason for evaluating the coastal districts is that Muğla has a tourism structure dominated by sea-sun-sand tourism, while rural characteristics are observed as one moves inland from the coast. District selection criterias are;

- Resident Population Size (TUIK)
- Presence of Cultural and Natural Heritage Areas (Protected areas, conservation areas, national parks, museums, archaeological sites, etc.)
- Tourism Bed Capacity
- Number of Accommodation Facilities (Operating Certificate + Investment Certificate)
- Second Home Population Projection for 2025 (Territorial Plan, 2016)

Results are shown in the following table and map. [Table 2 and Figure 1 near here]

Table 2. District selection index

Districts	Arithmetic Mean
Bodrum	91,963
Fethiye	64,045
Marmaris	40,974

In the next step, to measure the perception of the local community, a sample representing the entire settlement was determined, and an evaluation was conducted at the scale of coastal neighborhoods in Bodrum. To determine the sample area for the field study, five statistically accessible criteria were identified for the Bodrum district, and an expert opinion analysis was conducted using the "Online Delphi Technique" with experts from academia, the sector, and institutions. The research questions of the project were given to the experts, and the question, "How important do you think these parameters are in answering the research question?" was asked. Based on the selected parameters and results, a new index study was conducted in 28 coastal neighborhoods out of 56 neighborhoods in Bodrum. The results are shown in the table [Table 3 near here] According to these criteria and the multipliers determined by the experts, the top three neighborhoods with the highest over-tourism pressure were selected as the areas for the survey studies and in-depth interviews.

Table 3. Neighborhood selection index

Project Area Neighborhood Selection Criteria	Importance Coefficient According to Expert Opinions
Population Density	1
Average Population Growth Rate (2018-2022)	0,6
Change in the Number of Accommodation Facilities (2019-2022)	0,4
Coastal Length	0,1
Tourism Facility Bed Capacity	0,3

Formulas Used a) Value of the Observation: x , Mean of the Data Series: μ , Standard Deviation: σ $Z = (x - \mu) / \sigma$ b) Value: x , Normalized value: y Minimum value of the data series: $\min$ Maximum value of the data series: $\max$ $y = (x - \min) / (\max - \min)$

The neighborhoods identified as the highest in over-tourism pressure were "Çarşı (0.24 points), Tepecik (0.21 points), and Gümbet (0.16 points)" neighborhoods, which are considered the center of Bodrum. [Table 4 near here] The field study was conducted in these neighborhoods.

Table 4. Overtourism levels of neighborhoods

Bodrum Coastal Neighborhoods	Overtourism Level Score
Çarşı	0,24
Tepecik	0,21
Gümbet	0,16

b) Bodrum, Turkey

Bodrum is one of the most tourism-intensive settlements in Turkey and the Mediterranean region, primarily known for sea-sun-sand and yacht tourism. With a history dating back 5,000 years, formerly known as Halicarp-

nassus, it is both a significant cultural heritage site and a fragile ecological zone. The town gained prominence in the 1980s with growing tourism investments, which led to rapid spatial expansion. This growth has significantly exceeded the area's carrying capacity, triggering substantial changes in land use, water resources, and ecological integrity. Between 1990 and 2018, urban land expanded by over 1,000 hectares, with a 330% increase in spaces dedicated to tourism and second homes (Arslan & Örüçü, 2019). Bodrum's official population in 2023 was 198,335, but this number swells to approximately 500,000 during the summer months (TURKSTAT, 2023). The rise in tourism and seasonal migration has led to issues such as water scarcity, traffic congestion, infrastructure strain, and loss of biodiversity due to construction in conservation areas. The neighborhoods of Çarşı, Tepecik, and Gümbet stand out as the most over-touristed zones. Çarşı and Tepecik form the historic and cultural core of the city, located within a 3rd-degree archaeological site, while Gümbet, a natural bay, lies within a designated natural conservation zone. These sub-regions reflect global tourism hotspots characterized by high environmental sensitivity and historical value, now facing challenges of unplanned growth and unsustainable tourism development.

c) Survey

To reveal the local perceptual response to unsustainable tourism activities, over-tourism indicator sets were analyzed and adapted according to the specific dynamics of the study area. The diagram shown in Table 5 illustrates the relationship between the survey questions and indicator categories. In addition to these questions, the survey included questions to better understand the profile of the respondents. A filter was applied to ensure that the respondent resided in Bodrum. Along with questions about the respondent's profession and educational background, the question "Does anyone in your family work in the tourism sector? How many people?" was also asked. The main purpose of this question was to determine whether the involvement of the respondent or their family members in the tourism sector influences their perspective on the questions related to the impacts of tourism on the settlement. The core sample group of the research was selected to represent all segments of the local population in Bodrum to analyze the local perception of tourism. The survey sample consisted of 50% women and 50% men. When looking at the age distribution of the group, 26% of the respondents were in the 18-29 age range, 27% were in the 30-39 range, 22% were in the 40-49 range, 17% were in the 50-60 range, and 8% were in the 60-70 range. This distribution provided an opportunity to evaluate the impact of tourism on different age groups more comprehensively.

Table 5. Survey Questions Categories

Indicator Category	Focus of Survey Questions
Social Structure Perception	Safety, sense of belonging, local-tourist interaction, cultural impacts, desire to relocate
Economic Structure Perception	Job opportunities, seasonal instability, rising housing costs, cost of living, local benefit
Physical Structure Perception	Overcrowding, adequacy of public spaces, traffic, transportation, infrastructure strain
Environmental Structure Perception	Urbanization of natural areas, pollution levels, aesthetic change, impact on olive groves

Survey Findings

The findings indicate that excessive tourism in Bodrum exerts significant pressure on the physical, environmental, economic, and social structures of the city. Statistically significant results from factor analysis, regression, and ANOVA tests, along with qualitative insights from in-depth interviews, reveal how local perceptions vary based on education and length of residence.

1. Physically, Bodrum's infrastructure struggles to cope with seasonal population surges. Key issues include overcrowding in public spaces, traffic congestion, water shortages, and restricted access to the coastline. In-

interviewees highlighted infrastructure deficits and unregulated growth, while long-term residents were more sensitive to service inadequacies.

2. Environmentally, overtourism contributes to pollution, ecological degradation, and increased disaster vulnerability. Rapid urbanization, construction in fragile areas, and unplanned coastal development have altered local microclimates and increased water scarcity. Local perceptions show that urbanization and environmental pressures are felt more acutely by long-term residents.

3. Economically, although tourism creates jobs and stimulates local markets, it simultaneously raises the cost of living and fosters inequality. Real estate prices and basic goods costs have increased, especially during the tourism season. Residents reliant on tourism income expressed dissatisfaction, noting that perceived economic gains do not translate into better quality of life. Seasonal dependency and the “all-inclusive” model have also weakened local businesses.

4. Socially, overtourism leads to a weakened sense of belonging, identity loss, and discomfort toward tourists. Statements like “I feel like a foreigner in my own town” had high factor loadings. Issues such as rising crime, exclusion from tourism planning, and loss of cultural values exacerbate this. Educated and long-term residents report lower trust in governance and higher discomfort. Local movements like the “Free Beaches Movement” reflect emerging resistance to overtourism’s social impacts.

Overall, the findings suggest that excessive tourism in Bodrum deteriorates local life quality across multiple dimensions. Sustainable, inclusive tourism strategies are urgently needed to safeguard the city’s identity, environment, and long-term livability.

Conclusion

Overtourism, driven by seasonal overcrowding and unbalanced economic dependence, has increasingly transformed tourism-dependent settlements, particularly coastal areas like Bodrum. Once shaped by small-scale, interactive tourism, Bodrum has evolved into a destination marked by infrastructure strain, seasonal unemployment, environmental degradation, and social tensions.

This study confirms that Bodrum has reached its carrying capacity. Local residents report serious challenges, including:

- Seasonal overuse of infrastructure (water, waste, transport),
- Displacement of public spaces by private tourism enterprises,
- Rising living costs,
- Environmental degradation,
- Lack of effective governance tools such as a tourism master plan or accurate statistical monitoring.

Current indicators are insufficient due to gaps in data on second-home ownership and informal employment. This undermines efforts to monitor or manage overtourism effectively. A national level, flexible but binding tourism strategy is urgently needed. Local planning tools such as Integrated Coastal Area Management Plans and Transportation Master Plans should include mandatory environmental and social impact assessments. Additionally, alternative tourism models and strict visitor caps should be considered in saturated areas. Policies must also protect local businesses and housing markets from displacement pressures, particularly in zones affected by platforms like Airbnb. Ultimately, planning must prioritize local communities as core stakeholders. Sustainable tourism requires participatory governance, fair distribution of benefits, and protection of local residents’ quality of life. The findings of this study offer a roadmap for designing context-specific strategies in Bodrum and other regions vulnerable to overtourism.

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