Research Paper

Jody Holland

2023-03-31

Abstract

Introduction

There has been thorough research into the impacts and dynamics of mass tourism on islands (Xing and Dangerfield 2018; Chapman and Speake 2011; Chong 2020; Figueroa B. and Rotarou 2021; Nieves and Diaz-Meneses 2018; D. B. Weaver 2001). In this context, "mass tourism" denotes an economic strategy of maximizing the number of visitors to an area, with less focus on targeted marketing to specific types of visitors (Camilleri 2018). A contrasting arrangement may be efforts to tailor a tourism arrangement to a small number of high-spending wealthy guests, sometimes referred to as "alternative tourism"(David B. Weaver 1991; Pigram and Wahab 2005). However, for many islands, mass tourism remains a reliable source of revenue, and any efforts to move beyond the model are costly and potentially could backfire. This was highlighted during the 2020-2022 restrictions on international travel during the COVID-19 pandemic, when several islands suffered serious declines in economic output (Fraga and Robledo 2022). When restrictions eased, many islands eagerly accommodated mass tourism, seeing it as a low-investment, high-yield, and reliable model of raising much-needed revenue (David Bruce Weaver 2022; Fraga and Robledo 2022).

Despite its economic benefits, mass tourism has substantial drawbacks. Overcrowding is a common issue, particularly in coastal areas. This can cause locals to be "spaced out" of public areas such as beaches (Chong 2020). More concerning is the link between mass tourism and increased pollution and environmental degradation, which can be more prevalent in coastal areas (Grelaud and Ziveri 2020; Cecchi 2021). This threat of pollution and litter entering fragile marine environments could endanger populations of several species and disrupt precious ecosystem services. Furthermore, pollution and litter can spoil the environment and aesthetic beauty of coastal areas, which could lead to tourists being less likely to visit, thus threatening revenue streams from mass tourism. The costs of mass tourism could be significant upon both the local population and the environment, and thus, policy makers need to consider the identifiable costs and benefits of mass tourism.

To mitigate the potentially harmful impacts of mass tourism, research into the dynamics of how the negative consequences of mass tourism develop could be beneficial. This study seeks to understand how tourist demographics and tourist density relate to the generation of terrestrial litter on beaches within the context of mass tourism. Tourist demographics refer to the features that differentiate different groups of tourists, such as national origin, education level, familial status, age, and gender. Tourist density denotes the number and concentration of tourists close to each of our study areas. Terrestrial litter refers to litter generated by land-based activities as opposed to marine litter, which may be brought onto beaches by marine currents.

This study focuses on the island of Fuerteventura in the Canary Islands, which is a leading international tourist location and a center of the mass tourism model. In 2022 alone, the Canary Islands received 12.6 million visits, with Tenerife, Gran Canaria, Lanzarote, and Fuerteventura being the most popular islands for tourism. Fuerteventura is renowned for its beaches and coastal areas, with popular beaches including Morro Jable, Costa Calma, and El Confital. There is significant international tourism to Fuerteventura, particularly from Northern and Western European countries such as Germany, the United Kingdom, and Sweden, which has formed a significant and important sector within the economy of Fuerteventura.

However, this tourism may place significant strain upon coastal environments on Fuerteventura due to terrestrial tourism activities, particularly in the form of litter such as plastics and foodstuffs. For policy makers on Fuerteventura, identifying the conditions relating to how this litter is generated may be crucial for guiding an intervention to reduce terrestrial litter on the beaches. In addition to tourist demographics and density, other factors could be influential, such as weather conditions, which may increase the frequency of people eating on beaches and thus increase the level of food packaging within samples of terrestrial litter.

In summary, this study seeks to answer the following research question:

To what extent does tourist demographics and density influence the generation of terrestrial litter on the beaches of Fuerteventura, and how can this information be used to mitigate the negative consequences of mass tourism on the island's coastal environments?

Bibliography

Camilleri, Mark Anthony. 2018. "The Tourism Industry: An Overview." In *Travel Marketing, Tourism Economics and the Airline Product: An Introduction to Theory and Practice*, edited by Mark Anthony Camilleri, 3–27. Tourism, Hospitality & Event Management. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-49849-2_1.

Cecchi, Teresa. 2021. "Analysis of Volatiles Organic Compounds in Venice Lagoon Water Reveals COVID 19 Lockdown Impact on Microplastics and Mass Tourism Related Pollutants." *Science of The Total Environment* 783 (August): 146951. https://doi.org/10.1016/j.scitotenv.2021.146951.

Chapman, Anya, and Janet Speake. 2011. "Regeneration in a Mass-Tourism Resort: The Changing Fortunes of Bugibba, Malta." *Tourism Management* 32 (3): 482–91. https://doi.org/10.1016/j.tourman.2010.03.016.

Chong, Ka Leong. 2020. "The Side Effects of Mass Tourism: The Voices of Bali Islanders." *Asia Pacific Journal of Tourism Research* 25 (2): 157–69. https://doi.org/10.1080/10941665.2019.1683591.

Figueroa B., Eugenio, and Elena S. Rotarou. 2021. "Island Tourism-Based Sustainable Development at a Crossroads: Facing the Challenges of the COVID-19 Pandemic." *Sustainability* 13 (18): 10081. https://doi.org/10.3390/su131810081.

Fraga, Julia, and Daniel Robledo. 2022. "Covid-19 and Sargassum Blooms: Impacts and Social Issues in a Mass Tourism Destination (Mexican Caribbean)." *Maritime Studies* 21 (2): 159–71. https://doi.org/10.1007/s40152-022-00267-0.

Grelaud, Michaël, and Patrizia Ziveri. 2020. "The Generation of Marine Litter in Mediterranean Island Beaches as an Effect of Tourism and Its Mitigation." *Scientific Reports* 10 (1): 20326. https://doi.org/10.1038/s41598-020-77225-5.

Nieves, Julia, and Gonzalo Diaz-Meneses. 2018. "Knowledge Sources and Innovation in the Hotel Industry: Empirical Analysis on Gran Canaria Island, a Mature Mass-Tourism Destination." *International Journal of Contemporary Hospitality Management* 30 (6): 2537–61. https://doi.org/10.1108/IJCHM-07-2016-0341.

Pigram, John J., and Salah Wahab. 2005. *Tourism, Development and Growth: The Challenge of Sustainability*. Routledge.

Weaver, D. B. 2001. "Mass Tourism and Alternative Tourism in the Caribbean." *Tourism and the Less Developed World: Issues and Case Studies*, CABI Books, January, 161–74. https://doi.org/10.1079/9780851994338.0161.

Weaver, David B. 1991. "Alternative to Mass Tourism in Dominica." *Annals of Tourism Research* 18 (3): 414–32. https://doi.org/10.1016/0160-7383(91)90049-H.

Weaver, David Bruce. 2022. *Sustainable Tourism. Encyclopedia of Tourism Management and Marketing*. Edward Elgar Publishing.

Xing, Y., and B. Dangerfield. 2018. "Modelling the Sustainability of Mass Tourism in Island Tourist Economies." In *System Dynamics: Soft and Hard Operational Research*, edited by Martin Kunc, 303–27. OR Essentials. London: Palgrave Macmillan UK. https://doi.org/10.1057/978-1-349-95257-1_10.