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1 **Title page**

2

3 **Impacts of Tourism on Coastal Areas**

4

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7

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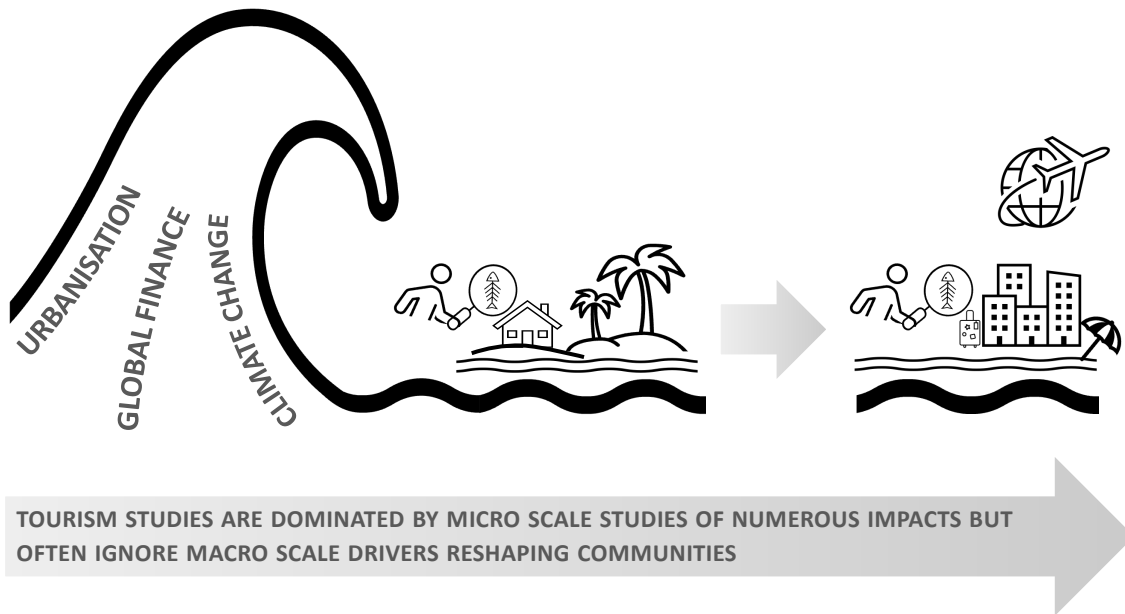
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17 **Impact statement**

18

19 Coastal tourism is often seen as an important part of an economic development strategy.  
20 However, most highly cited papers suggest that economic benefits are unequally distributed  
21 between tourism investors and resident communities. The highly cited papers also often  
22 reflected negative local environmental and social impacts. Furthermore, some global sector  
23 reviews describe the tourism enterprise as a guise for property development and investment  
24 speculation, without a long-term commitment to local peoples or place. The changing nature  
25 of the global tourism enterprise has implications for the way that tourism is examined  
26 (historically focused on local impacts from specific tourism operations) and for how tourism  
27 is considered within the context of integrated coastal zone management and sustainable  
28 development.

29 **Graphical abstract**  
30



31  
32

**33 Abstract**

34

35 The socioeconomics of the Anthropocene are exposing coastal regions to multiple pressures,  
36 including climate change hazards, resource degradation, urban development, and inequality.  
37 Tourism is often raised as either a panacea to, or exacerbator of, such threats to ecosystems  
38 and sustainable livelihoods. To better understand the impacts of tourism on coastal areas,  
39 Scopus and Web of Science databases were searched for the top-100 cited papers on coastal  
40 tourism. Web of Science suggested 'highly cited' papers were also included to allow for more  
41 recent high impact papers. Of the papers retrieved, forty-four focused on the impacts of  
42 tourism. Social/cultural and environmental impacts were viewed as mostly negative, while  
43 economic impacts were viewed as mostly positive but only of actual benefit to a few. In  
44 addition, when compared with recent whole-of-sector reviews and reports it was evident that  
45 coastal tourism is increasingly a global enterprise dominated by large corporations that  
46 leverage various interests across local to transnational scales. Through this global enterprise,  
47 even the positive economic benefits identified were overshadowed by a broader system of  
48 land and property development fuelling local wealth inequity and furthering the interests of  
49 offshore beneficiaries. Only two highly cited papers discussed tourism within a broader  
50 context of integrated coastal zone management, suggesting that tourism is mostly assessed as  
51 a discrete sector within the coastal zone and peripheral to other coastal management  
52 considerations or the global tourism sector as a whole. The findings have relevance to the  
53 holistic management of coasts, coastal tourism, and the achievement of sustainable  
54 development goals in a way that considers the increasing threats from coastal hazards,  
55 resource extraction and urbanisation, as well as the pervasive impacts of international  
56 business systems from local to global scales.

57

58

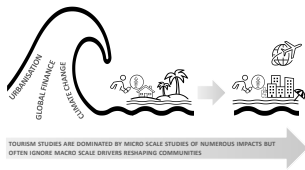
**59 Social media summary**

60

61 Coastal tourism studies focus on isolated micro issues at the expense of understanding macro  
62 sector trends.

## 63 Image for thumbnail

64



65

66

## 67 Key words

68

69 Tourism; coastal management; sustainable development; poverty; inequity

70

71

## 72 Introduction

73

74 Many economic development strategies for coastal regions throughout the world include  
75 tourism as part of the solution (Becker, 2013; Fahimi et al., 2018; Faber and Gaubert, 2019).

76 These strategies place tourism as a potential panacea to the improvement of national and  
77 regional economies, through to sustainable livelihoods at the community scale (Cortés-

78 Jiménez, 2008; Zhou, 2020). However, these strategies are not based on a holistic

79 understanding of the impacts of tourism on social, cultural, economic, or environmental

80 domains. Instead, they tend to focus on short-term inputs of capital in the form of land

81 development and projections of tourist expenditure, which may appear in national accounts of  
82 GDP, but are unlikely to benefit local communities in the long term (Lange, 2015;

83 Martasuganda et al., 2020). In 2012, Buckley identified that the '[tourism] industry is not yet  
84 close to sustainability' (p. 528) based on an evaluation of the tourism contributions to

85 sustainable development. As coastal regions continue to be exposed to multiple threats such  
86 as climate change, resource degradation, and urbanisation (Nunn et al., 2021), the

87 mechanisms for achieving sustainable development and building social-ecological resilience  
88 are ever more important. Following from the work of Buckley (2012) and others, this paper

89 takes a critical view of the role of tourism in achieving these aims and contributes to a better  
90 understanding of the impacts of tourism on coastal social-ecological systems.

91

92

## 93 **Methods**

94

95 To examine the role of tourism in achieving sustainable development and resilience in coastal  
 96 areas, the impacts of tourism on society, economy and environment were explored through an  
 97 analysis of highly cited literature. The Web of Science (WoS) and Scopus databases were  
 98 searched using the search string “touris\*” AND “coast\*” in title, abstract, keywords (Scopus)  
 99 or TOPIC (WoS), with no date limitation. The results were ordered by number of citations,  
 100 with top 100 cited journal papers from each database exported for review. The top 100 cited  
 101 papers from Scopus ranged from 152 to 3,688 citations. The top 100 cited papers from WoS  
 102 ranged from 163 and 3,607 citations.

103

104 In addition, WoS “highly cited” (WoSHC) journal papers (i.e., papers that perform in the top  
 105 1% based on the number of citations when compared to other papers published in the same  
 106 field in the same year) were included in the review to ensure highly cited papers were not  
 107 biased by date of publication. The WoSHC papers were published between 2011 and 2021  
 108 and cited between 8 and 871 times. The three exports (top 100 Scopus, top 100 from WoS, 60  
 109 WoSHC) were combined and duplicates were removed, leaving 164 unique papers for  
 110 review. Title and abstracts were reviewed, and inclusion and exclusion criteria applied (Table  
 111 1). 72 highly cited papers addressing aspects of tourism in coastal areas remained.

112

113 **Table 1: Inclusion and exclusion criteria for highly cited paper selection**

Inclusion	Exclusion
Peer-reviewed journal article	Book, book chapter, conference paper
Tourism is integral to the focus	Tourism incidental to the focus
The coast is integral to the focus	The coast incidental to the focus

114

115 Our analysis focused on understanding whether tourism has a positive or negative impact on  
 116 coastal social-ecological systems. The literature was therefore screened to distinguish  
 117 between papers that focused on the impacts *of* tourism on social-ecological systems (e.g., the  
 118 contribution of tourism to plastic pollution in coastal areas) versus those that addressed socio-  
 119 ecological impacts *on* tourism (e.g., the impacts of climate change on tourist visitation  
 120 levels). Forty-four papers focussed on the impacts *of* tourism, 24 on the impacts *on* tourism,

121 with four papers not addressing either (e.g., generating a profile of tourists or developing  
122 indicators of sustainable tourism) (Table 2).

123

124 **Table 2: Categorisation of the 72 highly cited papers addressing coastal tourism**

	<b>Scopus top 100</b>	<b>Additional unique papers from WoS top 100</b>	<b>Additional unique papers from WoSHC (60)</b>	<b>Total</b>
<b>Impacts of tourism</b>	35	4	5	44
<b>Impacts on tourism</b>	13	3	8	24
<b>Other</b>	3	-	1	4

125

126 Sentiment analysis was manually performed on the 44 papers addressing impacts of tourism  
127 on coastal regions to determine the polarity of each paper (positive, negative, mixed, or  
128 neutral). Each paper was reviewed and references to the impacts of tourism across the themes  
129 of: (i) society; (ii) economy; and (iii) environment, were recorded as either positive, negative,  
130 neutral or mixed (i.e., in instances where both positive and negative impacts of tourism were  
131 reported for the theme). Manual sentiment analysis was adopted over automative programs to  
132 improve accuracy (van Ateveldt et al., 2021; Boukes et al., 2020). In addition, to explore  
133 whether highly cited coastal tourism literature considered the impacts *of* tourism within the  
134 broader context of integrated coastal zone management (ICZM), the 44 articles were searched  
135 for terms relating to integrated management (i.e., ICZM, integrated, and management).  
136 Finally, the analysis was compared with the findings of whole-of-sector reviews and reports,  
137 including grey literature, on the tourism sector (e.g., Buckley, 2012; and Honey and Krantz,  
138 2007) identified through Google Scholar to situate the findings within macro trends.

139

140

## 141 **Results and discussion**

142

143 Sentiment analysis focused on the impacts of tourism on social, economic, or environmental  
144 conditions. As only three of the 44 papers referred to cultural impacts (Saveriades, 2000;



145 Almeida-Garcia et al., 2016; Cuadrado-Ciuraneta et al., 2017; Grilli et al., 2021) and often  
 146 combined social and cultural factors in their discussion, these papers were included in the  
 147 ‘social’ category for analysis. Negative sentiment was present in 84% of papers, compared to  
 148 52% identifying a positive impact of tourism (Table 3). However, negative sentiment was  
 149 strongest when relating to social and environmental conditions. More specifically, none of the  
 150 35 papers that discussed environmental conditions expressed solely positive sentiment, and  
 151 only 17% showed mixed sentiment. Beyond the review, other papers have also explained that  
 152 positive environmental impacts may be perceived rather than proven. For example, Diedrich  
 153 (2007) states that some coral reefs may be perceived to be less impacted by a transition from  
 154 extractive fishing towards tourism but that these assumptions may not be based on measured  
 155 improvements. Of the papers that focused on environmental impacts, those impacts were  
 156 often narrowly defined such as an impact on a specific species. For example, dolphins (e.g.,  
 157 Constantine et al., 2004; Lusseau, 2004), penguins (e.g., Ellenberg et al., 2007), and coral  
 158 reefs (e.g., Zakai et al., 2002; Barker and Roberts, 2004). Moreover, the extensive range of  
 159 environmental impacts is likely to have prevented their inclusion on the highly cited list (e.g.,  
 160 land cover change, wastewater discharge, land and marine litter, air pollution, and water and  
 161 energy consumption).

162

163 **Table 3: Sentiment analysis of the 44 highly cited papers that focused on the impacts of**  
 164 **tourism on coastal regions**

	<b>Negative sentiment</b>	<b>Positive sentiment</b>	<b>Mixed sentiment</b>	<b>Neutral sentiment</b>	<b>Not addressed</b>
<b>Social</b>	8	4	5	1	26
<b>Economic</b>	2	19	3	1	19
<b>Environmental</b>	27	0	6	2	9
	<b>84%</b>	<b>52%</b>	<b>32%</b>	<b>9%</b>	

165

166 The focus on specific impacts also partly explains the limited consideration of integrated  
 167 management solutions, and that only two of the papers considered tourism within a broader  
 168 context of ICZM. For example, while the results of the studies such as plastic pollution in  
 169 coastal waters near tourist sites have management implications, the authors generally do not  
 170 discuss integrated management. Instead, they seek to understand and recommend specific  
 171 actions in relation to that specific impact such as variation in levels of marine plastic

172 pollution based on tourism intensity and ways to address it in isolation. However, of the two  
173 papers that did consider ICZM, both included recognition of environmental impacts. None of  
174 the papers that focused on social or economic issues considered tourism within the context of  
175 ICZM.

176

177 In contrast to papers focused on environmental and social impacts, positive sentiment was  
178 evident in 76% of papers that discussed economic conditions. However, ‘economy’ was often  
179 vaguely defined with little detail on specific economic contributions, and where it was  
180 defined, it was largely discussed in terms of short-term inputs of capital, projections of  
181 employment opportunities for local residents, or estimates of tourism expenditure.  
182 Notwithstanding that in specific cases, tourism can account for a substantial proportion of  
183 income for some communities, only a marginal proportion of the overall tourism revenue  
184 reaches those communities (Sandbrook, 2008; Campbell, 1999), which is particularly true in  
185 developing contexts (Lacher and Nepal, 2010).

186

187 While several papers indicate significant perceived impacts (positive and negative) on social  
188 and/or economic conditions, the quantification of change in condition (e.g. income,  
189 employment, access to amenity, and congestion) is scarce among the highly cited papers.  
190 Liburd et al., (2012) also point out that positive perceptions can differ to actual impacts and  
191 found that while tourism ‘has the potential to contribute to enhanced QOL [Quality of Life]  
192 through economic benefits ... this can be at the expense of social equity, cultural identity, and  
193 environmental sustainability’. Overall, there has been wide recognition of the need to ensure  
194 tourism is locally beneficial rather than impactful and has resulted in the development of a  
195 range of related concepts, from Community Benefit Tourism Initiatives (Simpson, 2008) to  
196 Pro Poor Tourism (Ashley and Haysom, 2006). This recognition has been in part spawned by  
197 Murphy’s (1985) seminal book, which proposed that tourism development should respond to  
198 local needs and led to numerous studies in this area in a range of contexts. For example,  
199 Ashley and Jones (2001) discuss joint ventures between communities and tourist operators in  
200 Namibia. However, many of these studies tend to focus on business arrangements and profit  
201 sharing, rather than addressing broader long-term issues for affected communities. For  
202 example, Gulp (2021), identifies some deeper impacts of tourism on communities such as the  
203 commodification of culture and displacement.

204

205 Honey and Krantz's (2007) report on 'Global Trends in Coastal Tourism' provide a more far-  
206 reaching perspective on the tourism sector, highlighting that economic impacts occur most  
207 significantly through land development. Furthermore, Honey and Krantz note that land  
208 development under the guise of tourism development is largely a short-term speculative  
209 investment that does not result in a sustained commitment to the community, environment, or  
210 economy on the part of the developer. In addition, once the land development is complete and  
211 sold, the longer-term impacts of the development such as environmental degradation are  
212 usually unable to be compensated by the original developer. Honey and Krantz also found  
213 that this pattern is repeated throughout the world in both developing and developed world  
214 contexts, stating that 'Corruption and cronyism, although difficult to document, is said to play  
215 an important role in coastal and cruise tourism decision-making, in both first and third world  
216 countries' (p. 13). These findings are reinforced by Buckley (2012), who found that political  
217 approaches are used to gain access to public spaces and natural resources. More recently,  
218 Clavé and Wilson (2016) note the 'inherently "urbanising" nature of tourism development in  
219 the traditional coastal resort context', whereby tourism development initially led to 'path  
220 creation', then to 'path dependency', but now has morphed into new models of urban  
221 development that differ from the 'traditional coastal resort context'. However, Gormsen  
222 (1997) highlight historical cases of coastal tourism that also suggest coastal tourism being a  
223 form of property development. These trends exacerbate foreign ownership and wealth  
224 inequity within coastal regions and place increasing pressure on natural environments.

225

226 The polarised sentiment analysis, showing mostly negative sentiment for social and  
227 environment impacts, and mostly positive sentiment for economic impacts, also reflects the  
228 divergence within the tourism discipline. Higgins-Desbiolles (2020) highlights a division  
229 between tourism academics who focus on the benefits of tourism and support for the current  
230 sector business model, and those who recognise the negative impacts of tourism on  
231 environment, culture and sustainable livelihoods and call for reforms. This division has  
232 become pronounced during COVID-19 and amounts to a 'war over tourism', with one side  
233 arguing that critiques of the tourism sector cause harm to tourism operators, workers and  
234 tourists, while the other calling for the sector to be more 'ethical, responsible and sustainable'  
235 (Higgins-Desbiolles, 2020).

236

237 While there have been calls for more comprehensive typologies of tourism for more than 25  
238 years (e.g., Wall, 1996), those that have been developed remain focused on micro-scale

239 activities and interactions. For example, Acott et al. (1998) discuss ecotourism as ‘deep’ or  
240 ‘shallow’ but not beyond the individual enterprise. And while Wall (1996) suggested that  
241 tourism needed to be viewed within a broader context of multiple other influences and  
242 impacts on communities, this ignored the more systemic influences and impacts that tourism  
243 has on broader social-ecological systems. However, there have been some attempts to raise  
244 these macro issues, albeit from a social justice, rather than a more-than-human lens. For  
245 example, Higgins-Desbiolles et al. (2019) call for a rethink through ‘degrowing tourism’,  
246 where they argue for more emphasis on issues of equity, and where the rights of local  
247 communities should be placed ahead of those of tourists and tourism operators to make  
248 profits. More recently, Lamers and Student (2021) highlight that the social and environmental  
249 implications of globalisation should be considered within coastal regions, including  
250 mobilities and flows including global tourist flows.

251

252 As Gössling et al. (2020) suggest, COVID-19 should present an opportunity to re-assess the  
253 growth trajectory of the tourism sector, particularly in relation to questioning whether more  
254 tourists actually result in greater benefits. However, like many other sectors, the opportunities  
255 for reform that presented through COVID-19 and the numerous other shocks before it such as  
256 the global financial crisis of 2007/08, have not been translated into any significant global  
257 transformational action towards sustainability (Glavovic et al., 2021).

258

259

## 260 **Conclusions**

261

262 This paper sought to explore highly cited papers focused on the impacts of tourism on coastal  
263 regions and to critique of the dominant view of tourism as a panacea to coastal futures.

264 Sentiment analysis reflected the divide within the tourism discipline, where those papers that  
265 focused on the environment and society generally showed negative sentiment towards the  
266 impacts of tourism, while those that focused on the economy generally showed positive  
267 sentiment. However, most papers remain fixated on the local scale and impacts from specific  
268 tourism enterprises, which is reflected in the deficiency of highly cited papers that considered  
269 ICZM or other integrated management solutions. Currently, the highest cited papers on the  
270 impacts of tourism on coastal areas represent a disparate set of micro impacts, which  
271 cumulatively represent significant social-ecological challenges, but with limited interrogation

272 of underpinning macro drivers. Hence, the need for studies that focus on coastal tourism as a  
273 complex globalised system. In particular, there have been few highly cited studies that focus  
274 on the underlying business model of the tourism sector, which some sector reports suggest  
275 can more accurately be defined as property development. When viewed through this lens, the  
276 tourism sector may be seen as a far-reaching global business that exploits peoples and places  
277 for the benefit of wealthy elites. The findings have implications for both the scale of tourism  
278 research, and also for considering tourism within the context of ICZM and sustainable  
279 development.

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281

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283

284

285 **Author contribution statement**

286

287 TS: Conceptualisation (lead); writing – original draft (lead); methodology (equal lead);

288 formal analysis (supporting); writing – review and editing (equal); graphical abstract

289 (supporting). CE-B: Conceptualisation (supporting); writing – original draft (supporting);

290 methodology (equal lead); formal analysis (equal lead); writing – review and editing (equal).

291 DT: Conceptualisation (supporting); writing – original draft (supporting); methodology

292 (equal lead); formal analysis (equal lead); writing – review and editing (equal); graphical

293 abstract (lead). LC: Conceptualisation (supporting); writing – original draft (supporting);

294 methodology (supporting); formal analysis (supporting); writing – review and editing (equal).

295 MLT Conceptualisation (supporting); writing – original draft (supporting); methodology

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297

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305

306

307 **Conflict of interest statement**

308

309 None

310

311

312

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