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Sustainable Tourism: Tackling Overtourism in Scotland (with Initiatives)

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What is sustainability?

The ability to be maintained (sustained) at a certain rate or level

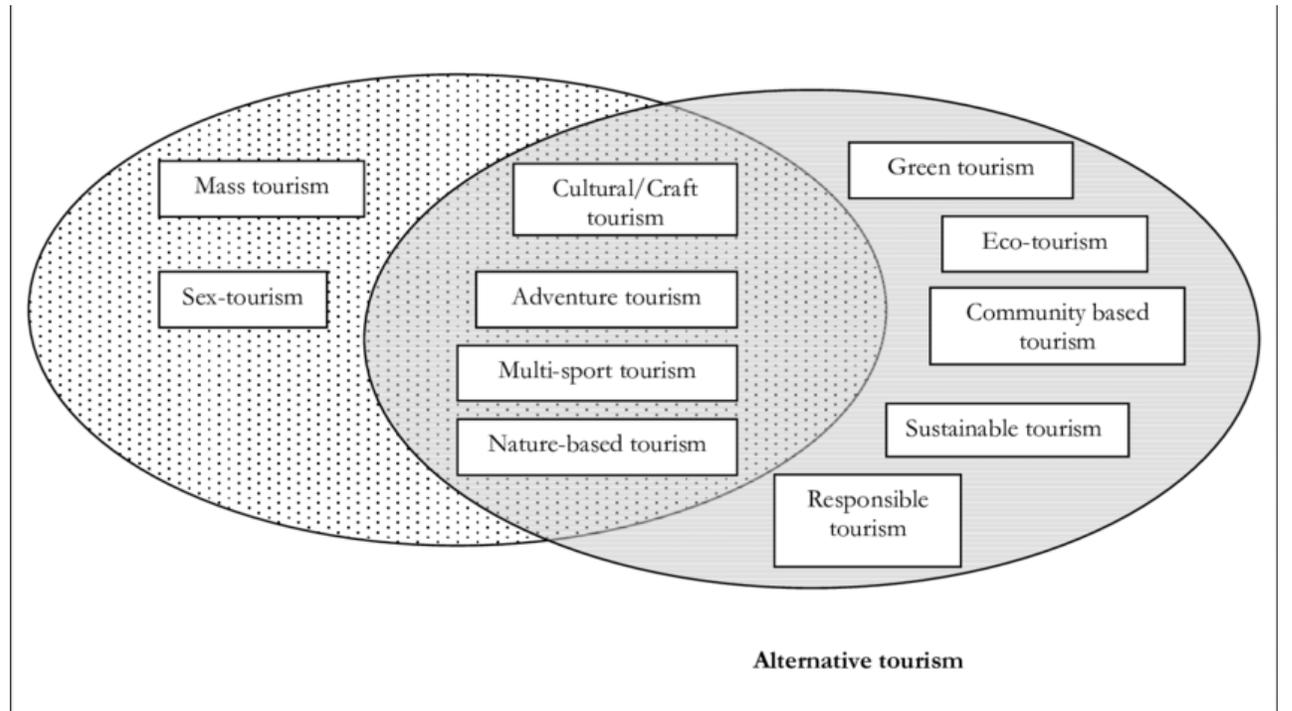
Avoidance of the depletion of natural resources in order to maintain an ecological balance

‘An enduring balanced approach to economic activity, environmental responsibility and social progress’ (BSI, 2007:1)

Degrees of sustainability



FIGURE 10.3 Degrees of sustainability





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What is Overtourism?



Overtourism defined

Concentration of tourists in specific, mostly urban, destinations which provokes concerns over the limits to destination resources

Results in damage to local monuments, damages to lifestyles or well-being of locals, & damage to the local environment

Relates to a series of inter-linked issues resulting from globalization, increased tourism and tourism impacts.



Causes of Overtourism



Globalization and the increased inter-connectedness of places through multiple different inter-connected flows of tourists, money, media, products and information



Increase in mass tourism due to ease in middle-class international travel through low-cost air, cruise ships and sharing economy



Growth in lifestyle and importance of identity construction through niche travel consumption, i.e. city tourism, responsible travel, educational experience



Shift away from industrial economies towards tourism based economies that rely on marketing, resulting in increased competition between destinations.



Global media: social media, blogs, travel writers, entertainment (films, TV) that streamline consumer tastes and values, direct tourists towards key locations



Imitation effect: Developing countries increasingly participating in tourism and choosing destinations common to western tourists



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Why is Overtourism a challenge?



There are multiple negative implications of over tourism

- Harm to cultural heritage & monuments
- Loss of QoL & community cohesion
- Increased traffic and congestion
- Rise in cost of living, real estate speculation and gentrification
- Drunk or badly behaved tourists affect locals' sense of place
- Air and waste pollution, water supply issues & municipal costs in managing them



Growth Governance, Undertourism and Crisis

Volume growth is thought to be the key to tourism development

UNWTO measures tourism development in arrivals, employment, revenue and market share

Covid-19 has led to the collapse of overtourism in some destinations, followed by pursuit of lost tourism or further growth (Hall et al, 2020)

Tourism flows are contextual

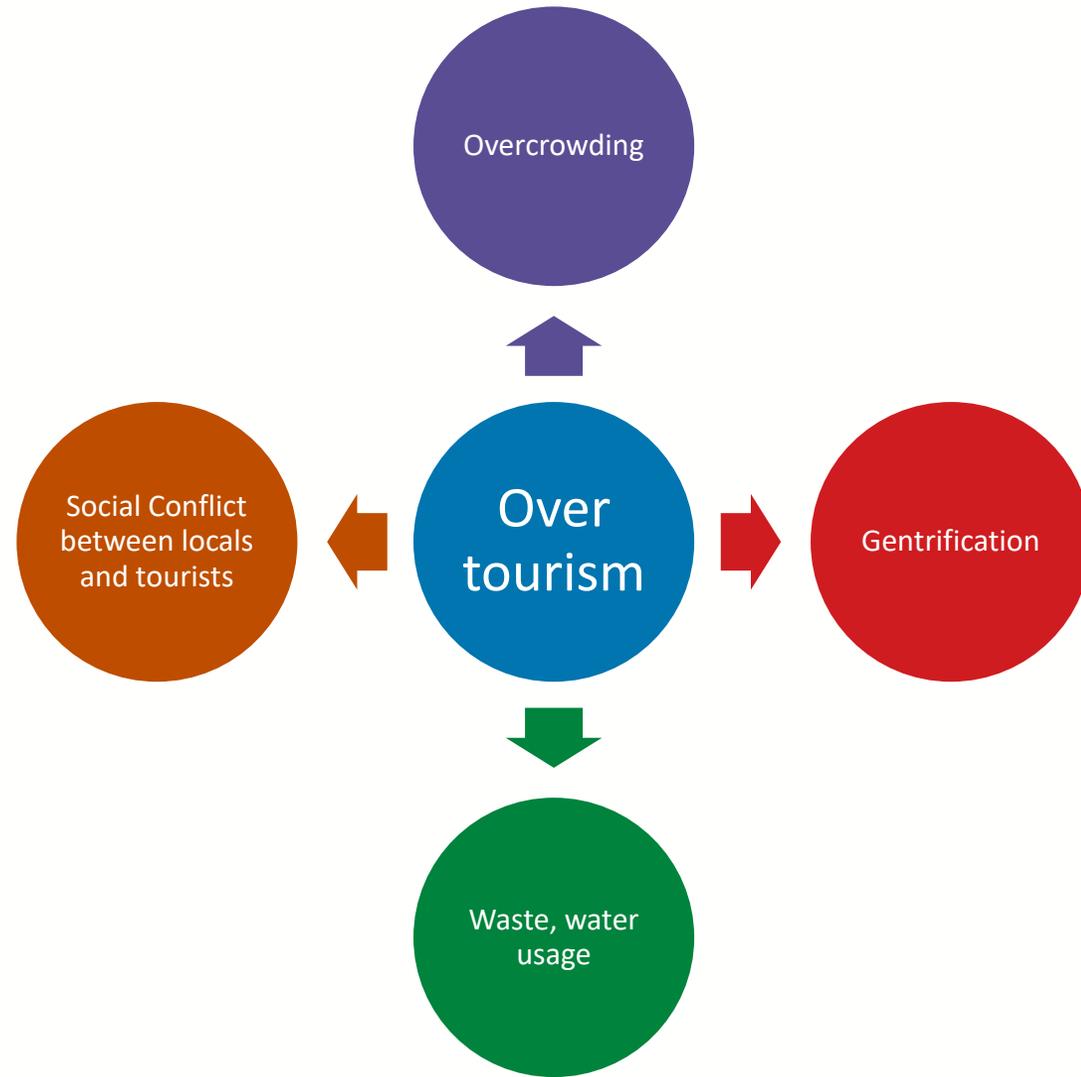


“Overtourism: growth is not the problem, its how we manage it that counts” (UNWTO, London, 2017)

Overtourism, Media Sensationalisation and Responsibility

- Overtourism is a media construct resulting in sensationalisation
- Media reporting that touches on tourism's inherent paradox of desire/damage tend to provoke significant public responses (Cohen et al, 2020)
- Media frames resolving overtourism as the responsibility of destinations and individual tourists (Phi, 2020)
- The tourism industry is supposedly not to blame







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How is Overtourism being managed?



Managing Overtourism

- Institution of controls:
 - Limiting numbers by pricing
 - Limiting numbers by physical capacity constraints
 - Limiting numbers by modifying destination image
 - Limiting numbers through policy
- Optimisation: Target the right segment, with fewer tourists, who do more and stay longer (Oklevik et al. 2019)
- Technology and spreading crowds (but does that assume growth?)



**KLM Growth Prospects Threatened
by Dutch Government's Airport Cap
Policy**

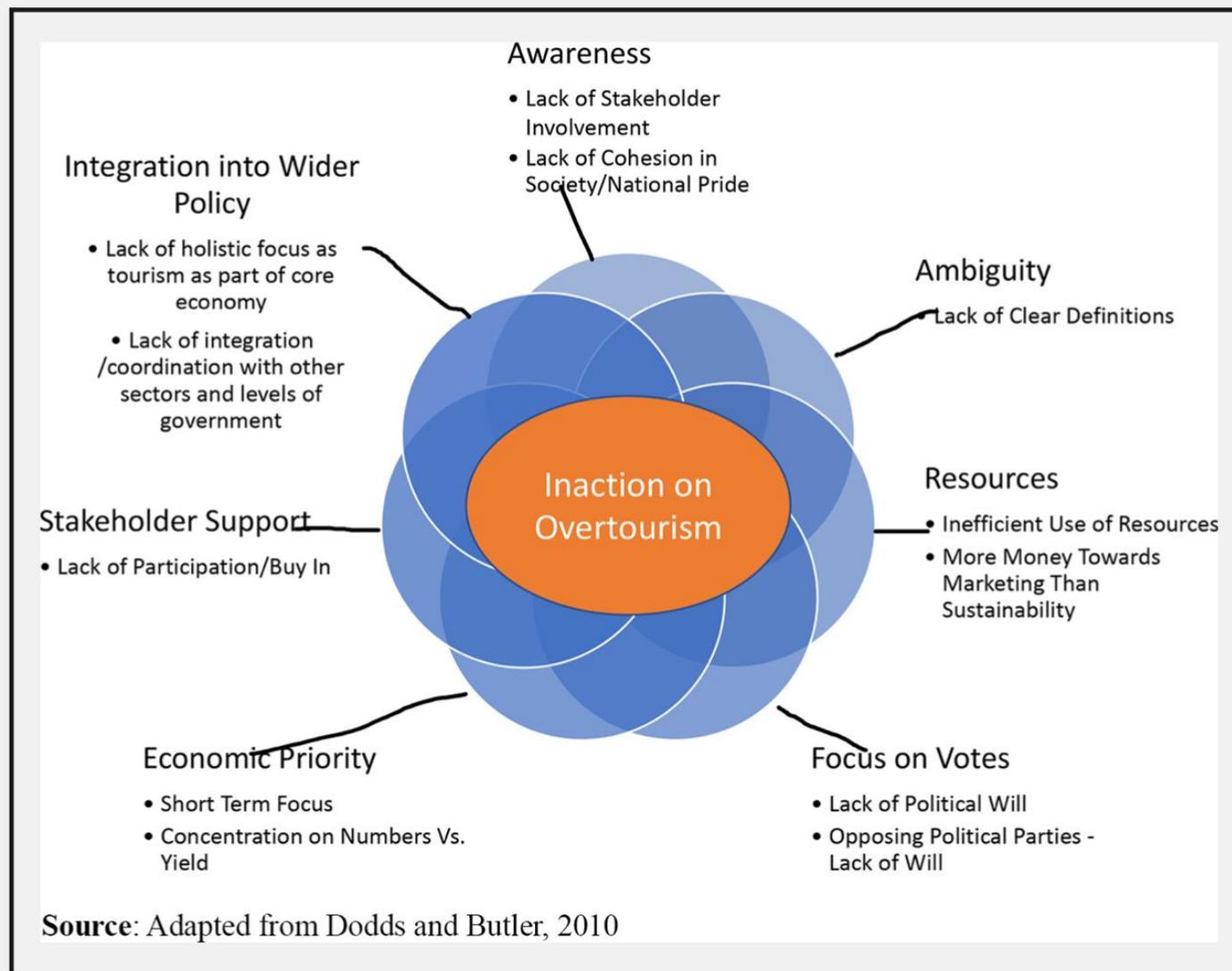
**Bhutan reopens with \$200 tourist
tax in test for sustainable travel**

Sky-high daily levy worries pandemic-battered tourism operators

**VENICE LATEST TO ADD TOURISM
TAX, WON'T STOP OVER TOURISM**



Figure 1 Failure to overcome overtourism



Overtourism in Edinburgh City Centre



- Edinburgh is one of Europe's most visited historic capitals, with tourism heavily concentrated in the city centre.
- The UNESCO World Heritage Site (Old and New Towns) experiences persistent visitor pressure year-round, peaking during festivals.

Overtourism in Edinburgh City Centre

Key Drivers

- High concentration of attractions along the Royal Mile and Old Town
- Seasonal mega-events (Edinburgh Festival Fringe, Hogmanay, Military Tattoo)
- Growth of low-cost air travel and cruise tourism
- Expansion of short-term rentals (e.g. Airbnb)

Impacts

- Overcrowding and congestion in public spaces
- Pressure on historic fabric and infrastructure
- Housing shortages and rising rents for residents
- Decline in residential quality of life and local services
- Tension between residents, businesses, and visitors





Current Responses to Overtourism in Edinburgh City Centre

Policy and Regulation	Introduction of Short-Term Let (STL) licensing schemes Proposed Tourist Levy (visitor tax) to reinvest in city services Planning controls in heritage-sensitive zones
Event and Visitor Management	Crowd control during major festivals Promotion of off-season travel Dispersal strategies encouraging visits beyond the Royal Mile
Community-Oriented Measures	Resident consultations and community impact assessments Support for local businesses and traditional retail Public campaigns on respectful visitor behaviour

Smart Responses to Overtourism in Edinburgh City Centre



Smart Response Area	Smart Measure	Primary Responsible Actors	Supporting Actors
Data-Driven Visitor Management	Real-time footfall monitoring (sensors, mobile data)	City of Edinburgh Council	Transport Scotland; Telecom providers; VisitScotland
	Predictive analytics for congestion hotspots		Universities (e.g. University of Edinburgh); Smart city tech partners
	Dynamic visitor flow management (rerouting, timed access)		Historic Environment Scotland; Festival organisers
Smart Governance	Integrated tourism and city data dashboards		Scottish Government; VisitScotland
	Evidence-based policymaking (tourism–housing–transport integration)		Scottish Government; Planning authorities
	Digital short-term rental licensing systems		Scottish Government
Smart Visitor Engagement	Mobile apps with live crowd information	VisitScotland	DMOs; Private developers
	Digital nudging towards less-visited areas	VisitScotland	City of Edinburgh Council; Marketing bodies
	Personalised smart itineraries	Tourism platforms	VisitScotland
Smart Heritage & Sustainability	Preventive protection of heritage assets	Historic Environment Scotland	City planners; UNESCO site management
	Resident wellbeing and community monitoring	City of Edinburgh Council	Community councils; Resident associations
	Alignment with smart city / smart heritage strategies		Scottish Government; Academic institutions



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Overtourism in Isle of Skye

The Isle of Skye has experienced rapid tourism growth since the 2010s, driven by international marketing, social media exposure, and improved accessibility.

Visitor numbers are high relative to the island's small resident population and limited infrastructure.





Overtourism in Isle of Skye

Key Drivers

- Iconic, highly Instagrammable sites
- Year-round destination branding following the NC500 route popularity
- Free access to natural attractions with minimal capacity controls
- Concentration of visitors at a small number of locations)

Impacts

- Severe congestion on single-track roads
- Parking overflow and roadside erosion
- Environmental degradation of fragile landscapes
- Pressure on waste management, water, and emergency services
- Resident frustration and declining quality of life





Current Responses to Overtourism in Isle of Skye

Infrastructure and Access Management	Expansion of parking facilities at major attractions Road improvements and passing places on key routes Installation of toilets and waste facilities
Regulatory and Planning Measures	Managed car parks and parking charges at popular sites Planning controls for tourism accommodation Support for local housing initiatives to address worker shortages
Visitor Management and Communication	Promotion of off-season and shoulder-season travel Visitor codes of conduct (e.g. Scottish Outdoor Access Code) Signage encouraging responsible behaviour

Smart Responses to Overtourism in Isle of Skye



Smart Response Area	Smart Measure	Primary Responsible Actors	Supporting Actors
Data-Driven Visitor Management	Real-time monitoring of car park capacity and road congestion	Highland Council	Transport Scotland; Tech providers
	Digital alerts directing visitors to alternative sites		VisitScotland; DMOs
	Timed-entry / booking systems at high-pressure sites		Private operators; VisitScotland
Smart Governance	Integration of transport, environmental & tourism data		Academic institutions; NatureScot
	Predictive modelling of seasonal and daily demand		University of Edinburgh; Tech partners
	Evidence-based infrastructure and conservation investment		Scottish Government
Smart Visitor Engagement	Mobile apps/web platforms with live conditions & crowd levels	VisitScotland	DMOs; Private developers
	Digital nudging to promote lesser-known locations	VisitScotland	Highland Council; Tourism marketing bodies
	Personalised itineraries aligned with capacity	Tourism platforms	VisitScotland
Smart Rural Sustainability	Landscape protection through adaptive management	NatureScot	Environmental charities; Tech providers
	Smart waste, water, and energy management at sites	Highland Council	Community councils
	Community-inclusive governance using local data		Scottish Government; Academic institutions



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Overtourism in NC500

The North Coast 500 is a 516-mile scenic driving route around the north of Scotland, marketed as “Scotland’s Route 66”.

Since its launch in 2015, visitor numbers have grown rapidly, particularly among self-drive tourists and campervan users.





Overtourism in North Coast 500

Key Drivers

- Strong destination branding and international marketing
- Growth of campervan and motorhome tourism
- Social media exposure of scenic stop-points
- Limited public transport alternatives

Impacts

- Congestion on single-track roads and passing places
- Unsafe roadside parking and traffic conflicts
- Damage to verges, laybys, and fragile landscapes
- Pressure on waste management and sanitation facilities
- Tension between visitors, local residents, and road users





Current Responses to Overtourism in NC500

Infrastructure and Traffic Management	Expansion of passing places and laybys Road surface improvements and safety signage Installation of toilets and waste disposal points
Regulatory and Policy Measures	Campervan parking restrictions and overnight bans in sensitive areas Promotion of designated campsites and motorhome facilities Local authority bylaws addressing irresponsible parking and littering
Visitor Management and Education	NC500 Code of Conduct and responsible driving campaigns Encouragement of slower travel and longer stays Promotion of lesser-known detours and inland routes

Smart Responses to Overtourism in Edinburgh City Centre



Smart Response Area	Smart Measure	Primary Responsible Actors	Supporting Actors
Smart Corridor Management	Real-time traffic & congestion monitoring	Highland Council	Transport Scotland; Tech providers
	Smart signage indicating congestion or alternative routes		VisitScotland; DMOs
	Digital management of layby & car park capacity		Private operators; Tech partners
Smart Governance	Integrated tourism and city data dashboards		Scottish Government; VisitScotland
	Evidence-based policymaking (tourism–housing–transport integration)		Scottish Government; Planning authorities
	Digital short-term rental licensing systems		Scottish Government
Smart Visitor Engagement	NC500 digital platform/app with live route conditions	VisitScotland	DMOs; Private developers
	Digital nudging to spread visitor demand		Highland Council; Tourism marketing bodies
	Pre-trip planning tools for responsible vehicle choice		DMOs; Transport Scotland
Smart Heritage & Sustainability	Landscape protection through adaptive management	NatureScot	Highland Council
	Community feedback loops using digital reporting tools	Highland Council	Community councils
	Smart waste monitoring at key stop points		Scottish Government; Academic institutions



- Integration between local and national initiatives
- Diverse and alternative economies based in common resources
- Bolstering and recognizing local social movements for increased democratic participation



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Thank you for your
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