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# Fostering Innovation and Entrepreneurship in Ecotourism to support sustainable development in Vietnam and the Philippines

## Submodule 2.2. Ecotourism

### Visitor management strategies and techniques

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### Direct impact

Direct impacts are caused by tourism itself to protected areas.

This type of impact is generally easy to inventory, assess, and control than the indirect impact, since the cause-and-effect relationship is usually obvious

This affects directly the protected area and such an impact could be visible and conspicuous

Example: newly constructed lodge in a protected area

### Indirect impact

Indirect impacts (also known as secondary, chain impacts) are usually linked closely with tourism, and may have more profound consequences on the environment than the direct impacts.

Indirect impacts are more difficult to measure but can ultimately be more important.

This is because they are usually invisible and neither conspicuous nor explicit.

### Cumulative impacts

Cumulative impacts is the process of cumulative environmental change as a result of tourism in protected areas.

Single large event e.g., a group of many tourist vans trailing the wildebeest migration, multiple interrelated events, catastrophic sudden events, forest fires destroying wildlife and incremental, widespread, slow change for example a lodge having a poorly designed culvert or drainage system thereby affecting the environment in the protected area.

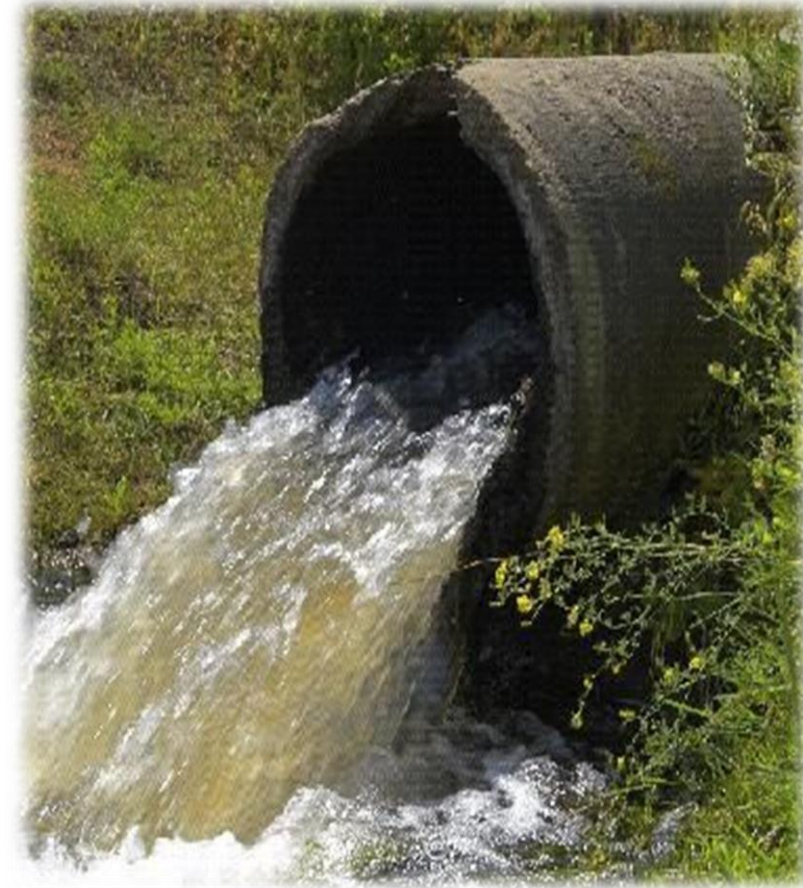
High **water** consumption

Water **shortages**

Water **quality** degradation

Groundwater **depletion**

Increase in **sewage** water



# FLUCTUATION of the water level in Ulken Shabakty—the Aral Sea syndrome



**POLLUTION** of water bodies (lakes)



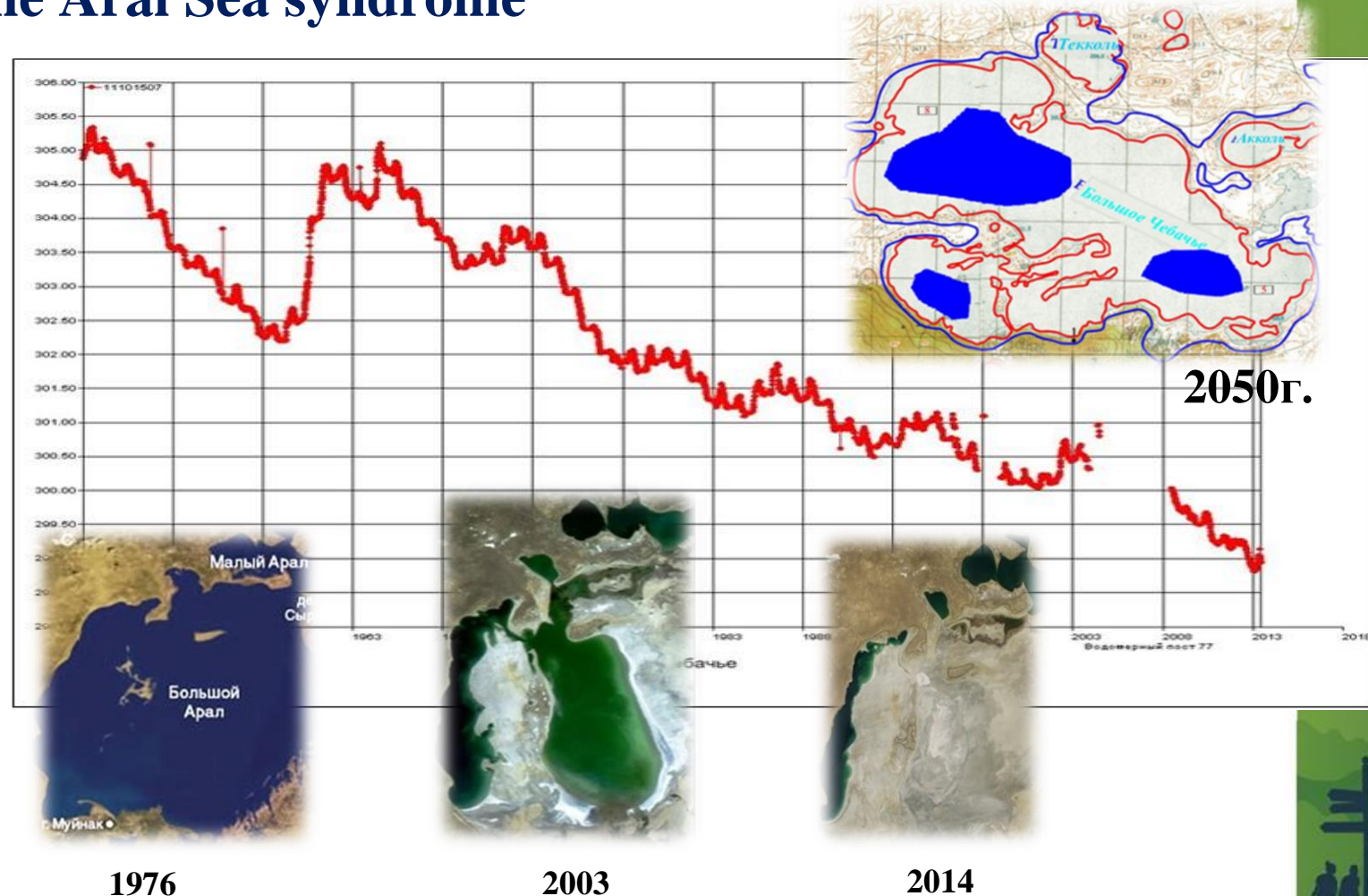
**INEFFICIENT** water CONSUMPTION



**QUALITY** of groundwater



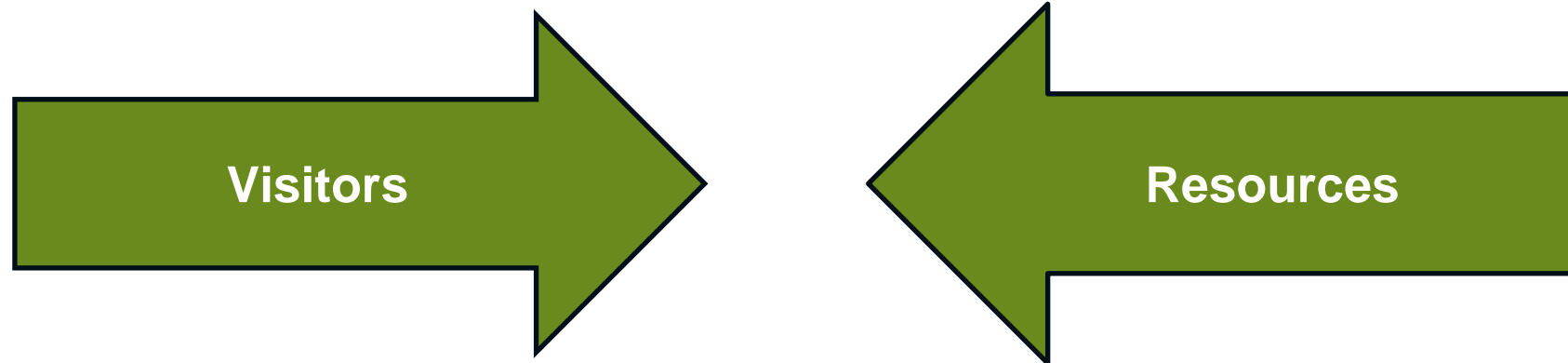
**LACK** of centralised WATER SUPPLY (UNDP, 2004)



Direct	
Water use category	L per tourist per day
Accommodation types	Between 84 and 2000 Campsites: 84 - 145 1 star hotel: 174 2 star hotel: 194 Guesthouses: 248 3 star hotel: 287 4 star hotel: 361 - 1000 5 star hotel: 500- 2000
Tourism activities	10-30
Indirect	
Water use category	L per tourist per day
Infrastructure	n.a.
Fossil fuels	750 (per 1000 km by air/car)
Biofuels	2500 (per 1 L)
Food	2000-5000
<b>Total per tourist per day</b>	<b>Estimated range: 2000-7500</b>

Gossling et al. (2012)

- **Tourism is directly and indirectly depends on quantity and quality of water resources** (Becken et al., 2013)
- **WATER CONSUMPTION DUE TO THE TOURISM: Indonesia (8%), India (7.6%), Thailand (6%)** (Gössling et al., 2012)
- **Tourism water consumption was directly and indirectly responsible for around 10% of the total water use in Cyprus** (Hadjikakou et al., 2015)
- **Water accounts for 10% of utility bills in many hotels** (UNWTO, 2013)



**Visitor management** is the component of destination management that attempts to encourage positive behaviours and discourage negative behaviours to mitigate or avoid negative impacts on the destination.

**Visitor management** refers to the application of management tools and interventions to regulate the flow, movement and behaviour of visitors in tourism destinations

It highlights concepts such as

- visitor experience
- service quality
- frameworks and interpretation tools in relation to the environmental, socio-cultural, political and economic dimensions of a destination
- the use of indicators and information panels (Albrecht, 2017)

The central aim of visitor management is to minimize undesirable consequences of tourism on destinations through regulating visitor flow (Guilarte & González, 2018)

The appropriate visitor management process is an integral part of balanced tourism management (Kuo, 2002)





In the context of tourism, **the term ‘carrying capacity’** refers *to the maximum number of people that may visit a tourist destination (here, a protected area) at the same time without causing*

(i) destruction of the physical, economic and sociocultural environment

(ii) an unacceptable decrease in the quality of visitors’ satisfaction

A definition of tourist carrying capacity proposed by the World Tourism Organization (WTO) in 1981 was:

*“the maximum number of people that can visit a tourist destination simultaneously, without causing damage to the physical, economic, social, and cultural environment or an unacceptable decline in the quality of tourists’ satisfaction with their stay”*

**Ecotourism carrying capacity (ETCC)** is an essential tool in ecotourism planning, which provides sustainable ecotourism standards and the protection of cultural heritage

Using the ETCC concept in PAs may generate a satisfactory experience for ecotourism with an acceptable or minimum impact on the resource of these areas

It is related to the amount of suitable land available for facilities, and also includes the limited capacity of the facilities, for instance, parking spaces, or bed spaces in accommodation.

## Physical carrying capacity

It is also called perceptual carrying capacity. Such capacity is exceeded when a visitor's experience is significantly spoiled. It is an individual feeling and difficult to influence by management and planning.

## Psychological carrying capacity

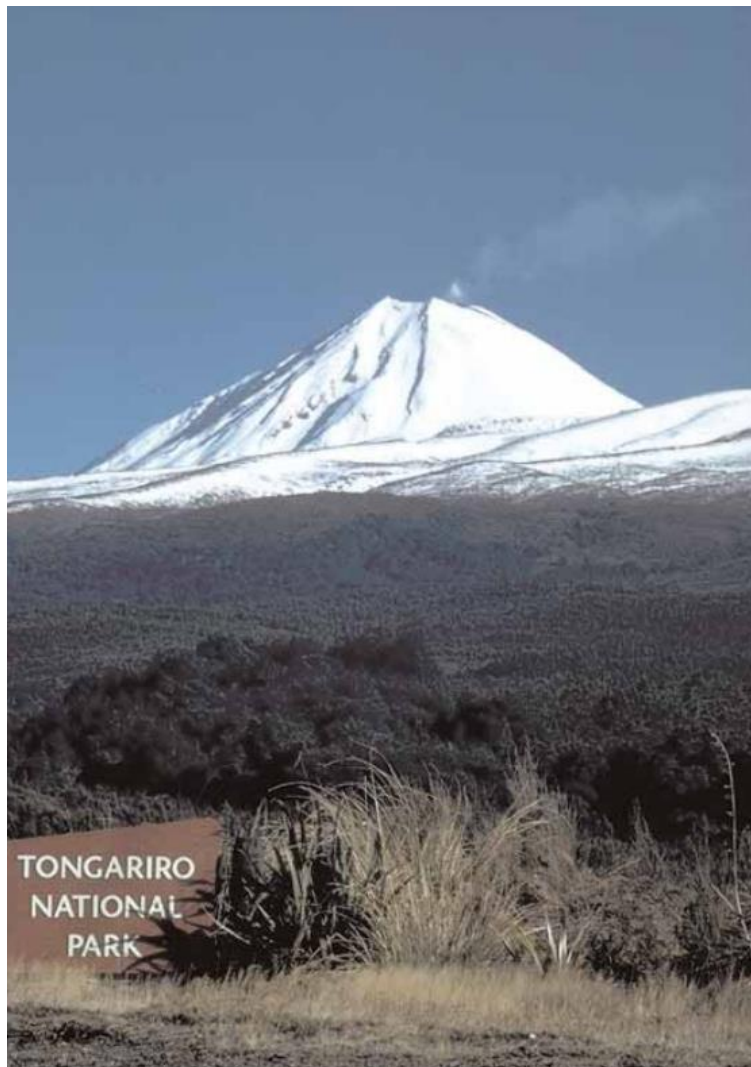
Biological carrying capacity refers to the level of tolerance the ecosystem a destination possesses. The changes of habits in wildlife and the alteration of flora and fauna habitat. When measuring the biological carrying capacity, it is important to consider the ecosystem rather than the individual element

## Biological carrying capacity

The concept of social carrying capacity is derived from the notions of community-based tourism planning and sustainability.

It attempts to define the levels of development which are acceptable to the host community.

## Social carrying capacity



UNWTO (2004). Indicators of Sustainable Development for Tourism Destinations: A Guidebook

Issues Indicators	
<p>&gt; Visitor numbers</p>	<ul style="list-style-type: none"> <li>&gt; Total number of visitors to park and to key sites;</li> <li>&gt; Peak numbers (peak day, month);</li> <li>Length of stay;</li> <li>&gt; Use intensity on key sites (persons per Km2) p. 192);</li> <li>Revenue from paid visitors;</li> <li>Number of guides/operators permitted to use park/protected area;</li> <li>% of all visitors who are in controlled/guided visits.</li> </ul>
<p>Integrity of key protected systems</p>	<ul style="list-style-type: none"> <li>Number of sites/ecosystems/assets considered to be damaged or threatened (% of all defined systems/assets in protected area);</li> <li>Indicators of health related to key plant and animal species (see details in &gt; Natural and sensitive sites p. 263 and &gt; Ecotourism p. 268);</li> <li>% of park hardened for visitor or other use;</li> <li>&gt; % of protected area subject to different levels of control (for example IUCN categories of protection and access).</li> </ul>
<p>Damage attributable to visitor activity</p>	<ul style="list-style-type: none"> <li>% of protected system in degraded condition -(where possible classified due to cause);</li> <li>% trails and routes (length) in damaged condition;</li> <li>Cost of repair to damaged systems (annually);</li> <li>% of park area affected by unauthorized activities (hunting, tree cutting, trapping, poaching etc);</li> <li>Number of incidents of poaching identified(see Ecotourism p. 268) and Natural and Sensitive Sites p. 263).</li> </ul>
<p>Level of visitor control and monitoring</p>	<ul style="list-style-type: none"> <li>Number of human/animal contacts reported involving injury or risk of injury;</li> <li>Number of crimes against tourists;</li> <li>Number of incidents of vandalism;</li> <li>% of visitors who do not pay for entry (where entry fee is charged);</li> <li>Number of wardens or control staff (and number per tourist).</li> </ul>
<p>Marketing</p>	<ul style="list-style-type: none"> <li>Amount spent on marketing the protected area;</li> <li>(See Marketing p. 228).</li> </ul>
<p>Management</p>	<ul style="list-style-type: none"> <li>Number of park officials (wardens, managers, maintenance etc);</li> <li>Number of enforcement personnel per visitor;</li> <li>Cost of protection;</li> <li>Number of public/community meetings held with stakeholders including local periphery communities;</li> <li>Ratio of revenues to costs for Park operations (See also Tourism Contribution to Conservation p. 123).</li> </ul>

*Indicators:* Some of the indicators which have proven important to the managers of reef systems considering tourism are the following:

- % of reef system considered to be degraded (biological surveys);
- > % of reef area under protection;
- Biological diversity of the reef (species counts);
- > Number of visitors to the reef per square metre of reef (or per square Km for large reef systems) maximum and average, per type of users: snorkel, diving, boating, sport fishing, etc);
- % of visitors to the reef who are guided;
- Number of boats per day on/near the reef;
- Number of dive operators adapting environmental policies, promoting codes of conduct for divers;
- Number of incidents of anchor damage, spills, etc per month;
- Number of control/enforcement officers patrolling reef area;
- Funds generated for reef protection from user fees (tourists, operator licences);
- Funds allocated for reef protection from public sources, donor and development agencies, private funds, etc.



Reef Snorkelling, Bonaire. The entire coast of Bonaire in the Netherlands Antilles is a marine protected area

Reefs are the main aquatic focus for sports and **ecotourism**, experiencing growing numbers of tourists worldwide. Indicators on the health of reef ecosystems are very important for sustainability of these tourist destinations and the global environment as well.

There are various methods and techniques of visitor management, applicable at different levels: micro-scale (equipment, monuments, sites, etc.) or macro-scale (area, region or country)

### Hard visitor management strategies aimed at regulating visitor activities

- Restrictions on access and certain activities
- Security site personnel/ranges/police
- Implementation of rules and regulations
- Discriminated entrance and parking fee charges
- Zoning
- Resource hardening such as construction of boardwalks, reconstruction and repair of heritage buildings and monuments

### Soft visitor management strategies aimed at educating visitors

- Provision of visitor information and environmental interpretation
- Marketing for targeted visitor groups
- Landscaping and planting

### Regulation on visitors' activities

#### Actions:

- Restrict access to and within a site
- Restrict visit duration
- Restrict group size
- Restrict equipment
- Restrict activity
- Restrict experience (qualified guide)

### Economic methods

#### Actions:

- Charging visitors to access resources or using facilities (car park charges, entrance fees)
- Create exclusive use ("members only", clients form a particular operator)

### Physical modification of the resources

#### Actions:

- Use of more robust areas (zoning, concentration of tourism in more resilient areas)
- Alter physical environment (car parks, drainage, construction of tracks)

**Limited  
resources**

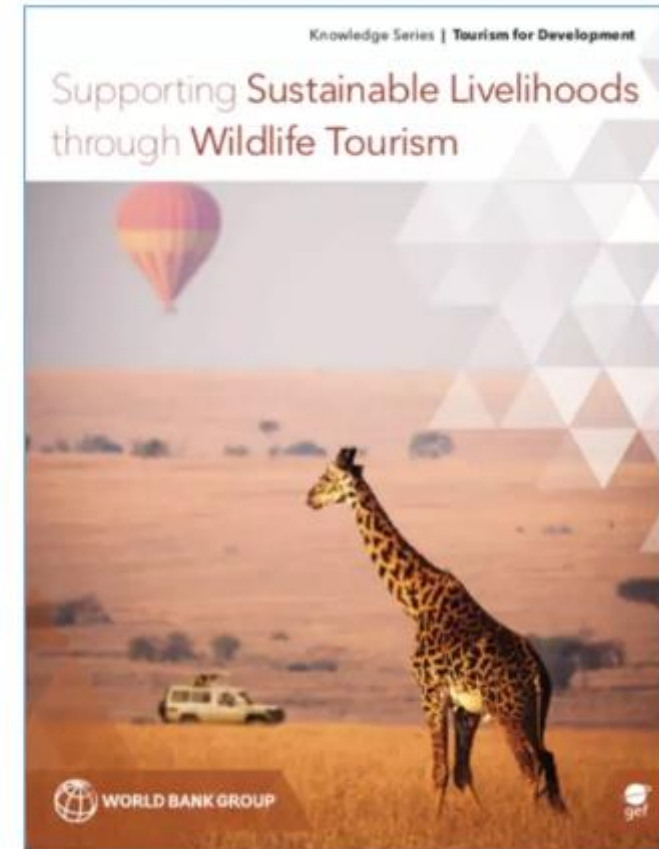
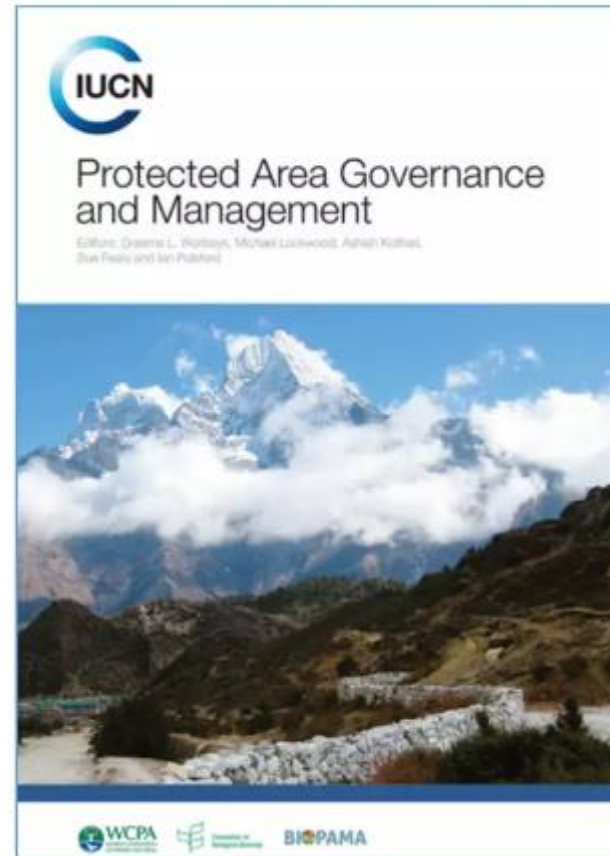
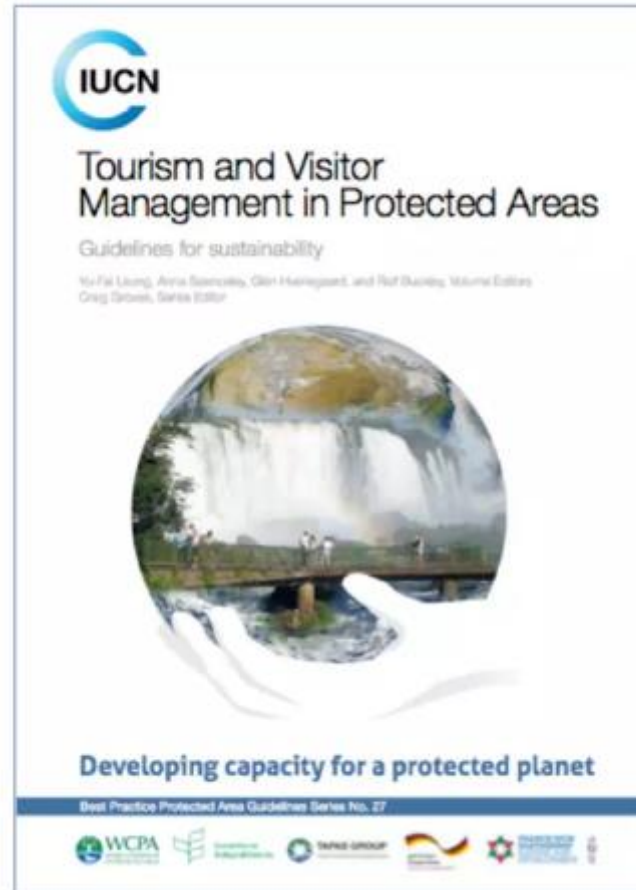
**Inadequate  
Infrastructure**

**Diverse  
Stakeholder  
Interests**

**Lack of  
interest**

**Lack of Policy  
and  
Regulations**

**Limited data**



### Principle #1: Appropriate management depends on objectives and protected area values

#### Overview:

Objectives within protected area management plans provide definitive statements of the desired outcomes of protected area management

They identify the appropriateness of management actions and indicate acceptable resource and social conditions

They allow evaluation of success of management actions

#### Actions:

Ensure management plans include clear appropriate objectives, with conservation primary above all

Establish and agree to objectives through public participation

### Principle #2: Proactive planning for tourism and visitor management enhances effectiveness

#### Overview:

Proactive management starts with the articulation of protected area values and management objectives.

Policies and management decisions that can be tied to these values have a better chance for effective implementation.

The practice of forward-thinking can lead to better awareness of emerging opportunities for recreation and tourism activities

#### Actions:

Provide opportunities for visitors to learn about protected area values through information and programming

Be cognizant of emerging visitor activity or use pattern that may have management implications

### Principle #3: Changing visitor use conditions are inevitable and may be desirable

#### Overview:

Impacts, use levels and expectations of appropriate conditions tend to vary (e.g. impact of a campsite in the periphery vs. centre of the protected area).

Environmental variables influence visitor use and level of impact (e.g. topography, vegetation, access).

#### Actions:

Use zoning explicitly to manage for diverse recreation opportunities

Use knowledge of diversity to make decisions on desirability of tourism in specific locations (thereby separating technical decisions from those based on value judgements)

### Principle #4: Impacts on resource and social conditions are inevitable consequences of human use

#### Overview:

Any level of recreational use leads to some impact; in most cases the initial, small levels of use generate the greatest impacts per unit use. Where there is a conflict between conservation and other objectives conservation has primacy.

The process of determining the acceptability of impact is central to all visitor use planning and management.

Evidence of impacts can be used for environmental education for park visitors

#### Actions:

Managers must ask: “How much impact is acceptable based on protected area values and objectives?”

Managers must act appropriately to manage the acceptable level of impact.

### Principle #7: Monitoring is essential to professional management

#### Overview:

Monitoring is a key step for all adaptive or proactive management frameworks, generating data on resource, social, community and economic conditions that inform management decisions.

Monitoring need not be complicated or expensive. There are often several possible options.

#### Actions:

Enhance public engagement and visitor education by encouraging their involvement in monitoring.

### Principle #9: Affected groups should be engaged since consensus and partnership is needed for implementation

#### Overview:

All management decisions affect some individuals and groups

These groups should be identified early in the decision-making process

#### Actions:

Involve rights-holders and stakeholders of protected area in identifying values of protected areas and developing indicators

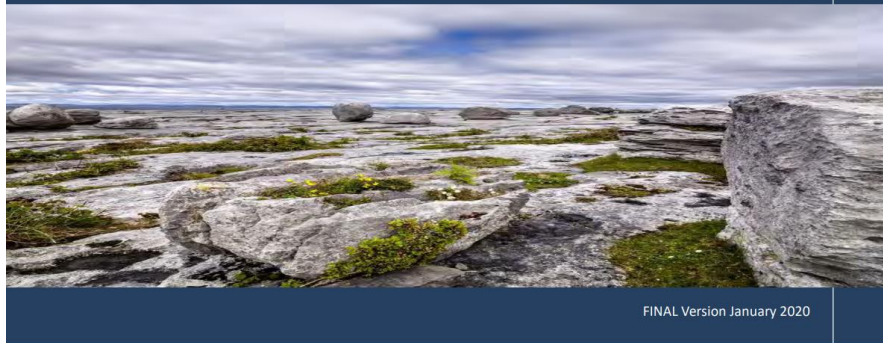
Train and engage rights-holder- and stakeholder groups in monitoring, management and education



<https://www.youtube.com/watch?v=hgs4IPnVhac>

## The Burren and Cliffs of Moher Visitor Experience Development Plan

Plean Forbartha an Bhoireann agus Aillte an  
Mhothair ar Eispéireas Cuairteora



FINAL Version January 2020



### CULTURALLY CURIOUS TRAVELLERS

- To **meet the locals** and to get to know their story
- Engage in activities and experiences that help them **develop as a person**
- **Do things that are different**, and authentic or unique to a place
- **Participate**, they don't just hear the story but also want to be involved

### GREAT ESCAPERS

- **Escape the everyday**, find a place to get away from it all
- Find places and **experiences that are life enriching**
- **Do things that are different**, and authentic or unique to a place
- **Participate**, they don't just hear the story but also want to be involved

## Key Performance Indicators Príomhtháscairí Feidhmíochta

As a part of implementing the framework for developing memorable visitor experiences, Fáilte Ireland has committed to pursuing the principles of Responsible Tourism as set out in the Cape Town Declaration (2002). As such, the following measures of success have been established around the four key components of Responsible Tourism, that is, a balance between visitors, industry, community and the environment.

These measures are to serve as key performance indicator areas which should be reported on annually to help ensure responsible and sustainable tourism growth is achieved in the Burren and Cliffs of Moher region.

Due to inadequate available data, a priority is to establish benchmarks for the KPIs outlined in the table below.

Performance Indicator	Measure	Source
<b>Visitors</b>		
Increase average length of stay	Visitor Nights, Numbers	FI Statistics
Increase FIT, luxury and higher spend visitors	Accommodation occupancies, tour operator bookings	Irish Hotels Federation, Tour Operators
Coach licenses and daily booking to the Cliffs of Moher and Aran Islands monitored against capacity limits from May to October	Maximum capacity and conditions set through the Transport Strategy and enforced May to October	Cliffs of Moher, CCC, Bus / Coach / Ferry Bookings / Licenses Issued / Geopark
Improve brand /proposition awareness	Website Traffic	Google Analytics
Improve visitor satisfaction – value over volume	Visitor Satisfaction Survey, Visitor Reviews	Holiday Maker Survey, TripAdvisor, OTA Reviews
Extend the length of the season	Off-peak Visitation	FI Statistics
Increase visitor take-up of key messages	Use of Hashtags	Social Media
Disperse visitors within the Burren	Traffic counts	FI, CCC
<b>Industry</b>		
Increase visitor expenditure with more bed nights	Increased Visitor Spend	FI Statistics
Increased sale of added-value packages to the corporate market	Increased Length of Stay	Accommodation providers
Increase tourism related jobs	Number Employed in Tourism Related Sectors	Central Statistics Office
Increase industry take-up of key messages	Use of Hashtags	Social Media
Increase industry collaboration in-region	Joint Ticketing to be established among Businesses	Ticket Sales
Increase visitor experience packages and itineraries online	Increase in New Experiences, Online Sales and Dwell Time	Business Online Sales, Google Analytics, WAW and Trade Websites

Performance Indicator	Measure	Source
<b>Industry continued</b>		
<b>Get 80% of the businesses contracting online and through Mobile Friendly compatible sites</b>	Online Business Surveys and Tracking	Trade Websites, Online Training Workshops
<b>Workshops/toolkit for a clear distribution plan that suits the business</b>	Number of Trade at Workshops	FI WAW Team and Trainers
<b>Increase the quality of visitor attractions / experiences through the small capital grants scheme – bring standards of attractions from ‘good’ to ‘brilliant’/‘world-class’</b>	Number of Small Capital Grants Awarded	Fáilte Ireland
	Number of Participants in the National Quality Assurance Framework	
	Number of Brilliant / World-class Ratings	
<b>Community</b>		
<b>Improve community perceptions of tourism</b>	Community Survey	To be Designed
<b>Increased Community Association involvement in Tourism Committees</b>	Local Tourism Committees with Community Representation	Tourism Committee Reports
<b>Environment</b>		
<b>Effective management of the environment, including natural, cultural and heritage assets</b>	Proposed Indicators as set out under the VEDP Environmental Monitoring Programme	VEDP Environmental Monitoring Programme
<b>Trade adoption of the principles of <i>Leave No Trace</i></b>	Number of Trade Adopted	Trade Websites

# Thank you!

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