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Measures and Tools

Introduction

The old adage says that “you can only manage what you can measure”. Yet, it is also perhaps true that in the tourism space, where the public and private domains collide, a little more imagination might be required, and sustainable tourism management tools are needed that can cover the intangible aspects of tourism as well as the more tangible aspects.

This is because the public sector, as highlighted in Chapter 3, holds places and spaces in the public trust – the places and spaces that we share with family and friends, that recharge and rejuvenate, that hold aesthetic, recreational, functional and emotional values for us, as residents of those spaces and places. Meanwhile, the private sector sees those same places and spaces as opportunities to generate a return on investment, often transforming them into economically productive areas through processes of urban regeneration or concessions on public land such as national parks.

It is in this chapter on sustainable tourism management tools that the previous chapters on systems, impacts, governance and collaboration, as well as ethics and values, come together to deliver the ways in which we can track how well we are managing tourism for a Triple Bottom Line approach to sustainability, minimising the negative outcomes while maximising the positive outcomes of tourism, for multiple stakeholders and across multiple scales.

It is also in this chapter that we practice our various juggling techniques, and once we have learned how to keep the three balls up in the air, we will take a step back and look at how elegant this process can be when applied to the practice of tourism in Chapter 9.

For now, however, we want to focus on the number of tools available to us to track our progress towards sustainable tourism. These tools come in a range of formats – from measurement instruments to regulatory frameworks and voluntary tools. They can be directed at tourists, tourism businesses, tourism employees, and/or destinations and destination management or marketing organisations. This chapter will introduce you to the range of tools available to

you, how they work and what they do, so that you can best select which ones will work in any given context.

In Chapter 2, on systems thinking, we looked into the idea of intervention points which allow us to change the state of a system. Interventions can act on parts of a system, changing on feedback loops to increase or decrease a variable (e.g. increase host wellbeing), to stabilise certain dynamics or reverse others, or they can act on the entire system itself, e.g. by changing the goal of a system, such as a growth in tourism numbers.

As a reminder, one of the earliest but still highly relevant lists of intervention points was put forward by Meadows in 1999:

12. Constants, parameters, numbers (such as subsidies, taxes, standards).
11. The sizes of buffers and other stabilizing stocks, relative to their flows.
10. The structure of material stocks and flows (such as transport networks, population age structures).
9. The lengths of delays, relative to the rate of system change.
8. The strength of negative feedback loops, relative to the impacts they are trying to correct against.
7. The gain around driving positive feedback loops.
6. The structure of information flows (who does and does not have access to information).
5. The rules of the system (such as incentives, punishments, constraints).
4. The power to add, change, evolve, or self-organize system structure.
3. The goals of the system.
2. The mindset or paradigm out of which the system – its goals, structure, rules, delays, parameters – arises.
1. The power to transcend paradigms.

These 12 places to intervene in a system can be grouped under four realms of leverage, and characterised as *parameters* (points 12, 11, 10), *feedback* (9, 8, 7), *design* (6, 5, 4), and *intent* (3, 2, 1). In tourism it is most common for us to act in the first two realms, that is parameters and feedback, and less frequently design or intent. Typically, we will use indicators and benchmarks as ways of intervening at the easiest and least effective level – these might be setting renewable energy targets to tackle carbon footprints, or visitor taxes to manage visitor numbers to a national park.

Meanwhile much of the ‘smart’ (smart meters, smart transport, smart cities, internet of things) movement targets the mid-range level of interventions, e.g. the structure of information flow. And some of the more common command and control can be associated with the rules of the system.

This chapter will review the four realms of intervention types and provide examples of how these can be or have been implemented in tourism as a means to get you thinking about what each of these 12 intervention types can look like.

It does not provide an exhaustive list of all tools available in sustainable tourism management. Chapter 11 will specifically look at what happens when we try to change the goals of the system as well as the paradigm out of which the system evolves.

Key words and concepts

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| ■ Intervention points | ■ Tipping points |
| ■ Visitor management tools | ■ Green marketing |
| ■ Environmental Impact Assessment | ■ Nudges |
| ■ Limits of Acceptable Change | ■ The green economy |
| ■ Indicators | ■ Demarketing |

8.1 Parameter-based intervention tools

One of the easiest, albeit least effective, ways to intervene in a system is to play with the numbers, i.e. change the parameters. Setting a carrying capacity for a destination or attraction is perhaps one of the most common ways in which this is done (Intervention Point 12), while implementing tactics to increase guest satisfaction, as a 'stabilising stock' might be another, and represent Intervention Point 11 (focussing on host wellbeing on the other hand, would be more likely to fall into the category of changing the goals of the system, as tourism tends to focus more on the needs of the visitor than the host community, c.f. Higgins-Desbiolles & Bigby, 2022).

There are a whole range of visitor management tools that have been proposed as ways of setting and changing the parameters in which tourism operations. Some of these include: Visitor Impact Management (VIM); Visitor Experience and Resource Protection (VERP); Visitor Activity Management Process (VAMP); Tourism Optimisation Management Tool. More broadly, all forms of Environmental Impact Assessment fall under this category and will be touched on here in brief, as important starting places for setting parameters for a system.

Environmental Impact Assessments (EIAs)

EIAs are a key way of understanding the impacts of any future development on the environment, by exploring the relationship between specific human activities and the social, economic and environmental contexts in which they take place. An EIA provides a systematic way of evaluating the positive and negative impacts of any proposed development, with the aim of directing decision-making towards sustainability (Hughes & Morrison-Saunders, 2015).

EIAs are relevant to sustainable tourism management systems and system interventions in three ways:

- 1 They specifically value economic, social and environmental contexts equally, and seek to maximise benefits at the same time as minimise negative impacts.