

Sustainable Tourism in the Wadden Sea Region: key mechanisms to overcome barriers to sustainability

Position Paper¹

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Contents

Sustainable Tourism in the Wadden Sea Region: key mechanisms to overcome barriers to sustainability	1
1. Introduction.....	4
2. Barriers to sustainable development of mass tourism destinations.....	7
Barrier 1: Economic concerns given priority over social and environmental concerns	7
Barrier 2: The tragedy of the commons	8
Barrier 3: Flaw in tourism policy: number of tourists rather than net economic and well-being benefits.....	9
Barrier 4: Lack of international, national, regional and local policy integration and lack of acknowledgment of sustainable tourism importance	10
Overview of the four barriers in the PPP scheme	12
3. Understanding the barriers better: fundamentals of Sustainable Tourism	13
3.1 Long term economic development: large scale production, spare time and higher well-being	13
3.2 Human development, higher needs, sustainability and tourism	14
3.3 Deep feelings around the shallow Wadden coast.....	15
3.4 Urbanization and nature	16
3.5 Spatial distribution of (urban) fans across of the Wadden	19
3.6 Understanding sustainability and tourism	21
4. Multiplex governance and monitoring for sustainable tourism	24
4.1 Towards a new type of governance	24
4.1.1 Importance of building resilience for sustainable tourism: multiplex governance	24
4.1.2 Multilevel: global to local	25
4.1.3 Multi actor, multi domain, multi time-scale, multi objectives.....	25
4.1.4 Connecting to the millions of fans of the Wadden: from tourists to citizens	26
4.1.5 Governance and transitions	26
4.2 Monitoring for sustainable tourism	27
4.2.1 Tourism monitoring: Sustainable Tourism Area Life Cycle framework (S-TALC)	27
4.2.2 Spatially precise monitoring: islands, sea and mainland coast are different.....	30
4.3 Revisiting the four barriers.....	31
5 Capita selecta	33
5.1 Traditional sailing industry.	33
5.1.2 Discussion Governance & Monitoring.....	35
5.2 Branding and marketing UNESCO	36
5.2.1 Discussion Governance & Monitoring.....	42
5.3 Liveability, the housing market and education	43

5.3.1 Discussion Governance & Monitoring.....	45
5.4 The mainland coast tourism	45
5.4.1 Discussion Governance & Monitoring.....	47
6 Synthesis and summary: Key mechanisms to overcome barriers to sustainable tourism.....	50
References.....	55

1. Introduction

Tourism in the international Wadden Sea Region, from the Dutch city of Den Helder, along the German island of Borkum and Sylt to the Danish Fano and Esbjerg (see figure 1) is well-developed and yearly millions of visitors come to the area. The basis for this successful development is its natural attractivity: the Wadden Islands with their sandy dunes and beaches, the open space, the Wadden Sea and wetlands with its many birds and seals, the clean air and the peace and quiet which can be found (Sijtsma et al., 2012).



Figure 1: The international Wadden Sea Region as defined at www.walterwaddenmonitoring.org. This regional area definition includes the Wadden islands, the Wadden sea and a narrowly defined strip of coastal land.

The natural assets are also core of its World Heritage status and several nature protection regimes. However, as Butler (1980) has stressed so convincingly using the Tourism Area Life Cycle (TALC) framework, the success of tourism destination cannot be taken for granted: decline may occur due to increased competition from other destinations or further development may turn out to be unsustainable for several reasons. Furthermore, tourism is not the only activity in the Wadden Sea Region. The Wadden area also hosts fisheries, agriculture and mining of natural gas. One may find newly built energy power plants, car assembly and distribution sites. In and around the area there is intensive maritime transport and logistics serving the urban hinterland in Germany and the Netherlands. Intensive agriculture can be found along the mainland coast. Each of these sectors and activities also face sustainability challenges. Many policies are in place which somehow try to reach a more sustainable development of the trilateral Wadden Sea Region (Common Wadden Sea Secretariat, 2014), including its tourism.

Sustainability, i.e. sustainability of the whole system, is often framed as trying to achieve a better balance between People, Planet and Profit (see figure 2). Sustainability involves system

considerations, and therefore it is hard to look at sustainability of a sub-system only, i.e. to separate tourism from the rest of the economy or to separate the tourism experience or need from other human experiences and needs. Sustainable tourism has to be considered as part of the search for wider sustainability and it cannot occur without this.

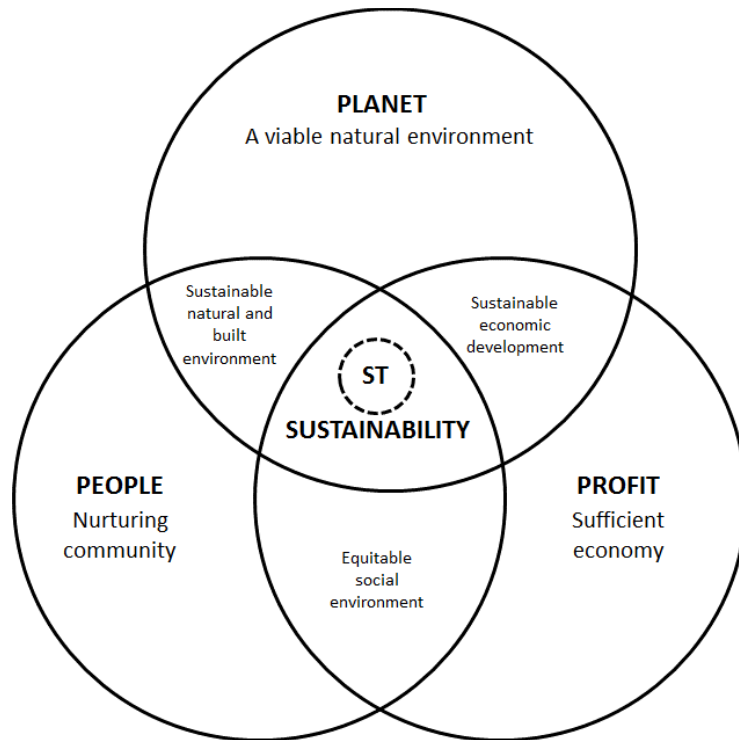


Figure 2: Sustainability and sustainable tourism (ST) framed using the PeoplePlanetProfit terminology.

Sustainable tourism for the Wadden, within the wider search for sustainability is confronted with several pressing questions. Yes, the international Wadden Sea Region has developed to a mature tourism destination, but where to should it sustainably be heading in the future? Increased sustainability is a key issue in many policy documents and among many entrepreneurs, but what exactly is sustainable tourism and can it be achieved? Is it about small scale nature-based activities? Can it be combined with serving bigger masses of people, for instance, Chinese tourists? Can a strong liveability of the area for the local community be combined with the attractiveness of the area as a touristic destination? What type of growth would be viable and logical, or is thinking in terms of growth outdated and possibly unsustainable and should the focus be towards enhancing specific qualities and specific experiences regardless of the number of visitors? These are key questions to this position paper.

In this paper we position sustainable tourism of the Wadden. The aim is to clarify the complex issues at stake and therewith provide a framework for future actions and policies. The structure of this paper is as follows. We start with digging into a limited set of seminal scientific articles on sustainable tourism to provide us with a useful framework to think about this complex problem. Especially implementation of sustainable tourism seems to be a key issue (Twining-Ward and Butler, 2002; Waligo et al. 2013). How to set up effective sustainable tourism processes involving all primary stakeholders from businesses to visitors from residents to special interest groups (Waligo et al. 2013). And how to monitor progress in multi-stakeholder environment, accounting for both the

specifics of a location (the Wadden Isles are not like Venice or Amsterdam) and how to overcome a sectoral touristic perspective (Twining-Ward and Butler, 2002). To firmly establish this focus on implementation of sustainable tourism we build on an approach taken by Dodds and Butler (2010), which focusses on *barriers* to sustainable tourism. The paper by Dodds and Butler is based on extensive research and identifies barriers to sustainable development of mass tourism destinations, especially coastal destinations. In chapter 2 we discuss four key barriers. In chapter 3 we deepen our understanding of these barriers to identify general mechanisms which may help to overcome the barriers, while also highlighting some key characteristics of the Wadden area. In chapter 4 we turn to a more concrete level and present a selection of topics on recreational boating, traditional sailing industry, the housing market, coastal tourism and highlight key aspects of Wadden tourism with the aim of sharpening the mechanisms to overcome barriers. In chapter 5 we come to a synthesis.

2. Barriers to sustainable development of mass tourism destinations

Dodds and Buttler (2010) particularly look into sustainable tourism and coastal destinations, like for instance Tenerife, the Caribbean, Cyprus, Turkey, Tunisia, Torremolinos and Mallorca. Their research included an elaborate literature review (80+ articles) which referred to tourism policy barriers of sustainable tourism. They verified their findings among sixty-nine academics who had published on sustainable tourism in refereed journals through a questionnaire. Finally, they identified barriers in two case studies Calviá (Spain) and Malta; which both have adopted sustainable tourism policies. Below we give follow their approach of focussing on barriers but give our own interpretation and especially our own structure of their findings, also combining their findings with some recent observations on tourism. We discuss four barriers:

- Barrier 1: Economic (short term) dominates (longer term) social and environmental concerns
- Barrier 2: Complexity of managing the commons
- Barrier 3: Marketing for visitors not for quality
- Barrier 4: Non-integrated multi-level governance

Barrier 1: Economic concerns given priority over social and environmental concerns

Tourism is an economic sector that brings jobs, income, investments. Projections of the UNWTO show that it is likely to grow in volume and gain in importance in terms of jobs and income. For example, within the NTO of the Netherlands, the NBTC, saw an 11% increase of inbound tourism in 2017. The attitude and related action of stimulating tourism as an economic activity is also known as “boosterism”, the act of stimulating tourism for the sake of more (and more) jobs, income, investments. To do so, actors resort to approaches such as “urban imagineering”, creating a strategic image policy that attempts to combine local history, architecture, the museum scene and the consumer and cultural offerings in the most attractive image that can be presented to an international audience. The fact that tourism brings in economic activity and jobs is of course an important aspect for both society as well as in politics. Therefore, quite regularly in the Netherlands politics and policies regarding tourism are traditionally related to departments of economic affairs.

The issue of economic concerns versus other concerns is well describe by Ravn (2012, p.4): *'There is a potential tension between the wish to promote the city [or region] to external audiences to attract investment, tourism and jobs etc., and the wishes of internal stakeholders to have a fair, representative image of the place exposed to the outside world'*. In line with this observation, Scaramanga (2012, p. 4) comments: *“While we develop programs which seek to attract new people to our cities we must remain focused on the fact that what makes our city interesting in the first place, are the people who already occupy it and the culture which they produce”*. Destinations run the danger of being pushed out of balance when economic concerns are overprioritized over environmental of social concerns. Overtime, when destinations are overemphasizing tourism development it could result in museumification of nature (Gobster, 2007), or result in McDonaldization (Ritzer, 2009) or Disneyization (Bryman, 1999) when places are very much commercialized or themed.

Dodds and Butler relate this barrier of economic concerns which are given priority over social and environmental concerns, to the issue of a short-term focus in process of politics and decision-making. They write: *'This barrier is related strongly to political governance's short-term focus and many other barriers arise out of this. A focus on short term objectives creates a negative feedback loop with*

economic priority because with short political terms attention is focused on job creation and development for growth that should yield immediate results instead of an equal priority with environmental and social concerns. This harmful feedback loop is often perpetuated by political agendas being usually of a five-year duration whereas sustainability objectives often need considerations of 10+ years at least' (Dodds and Butler, 2010, p.41).

The underlying aspects of growth-thinking (more is better) results in a strong hunger to acquire a more competitive position, over and over again. This could be particularly strong in destinations that find themselves in a growth phase of their destination life cycles but could also be strong in the case of a possible decline of a (mature) tourism destination its competitive position. Decline in coastal areas is often attributed to surplus bed capacity, diminishing market share and volume of domestic holiday makers, competition from other destinations, and reduction of average spending per tourist head and declining profit margins (Agarwal, 2002, p. 31). Such issues are very visible, impact directly on peoples their daily life and create acute urgencies to act.

Whereas we see the importance of diversification and renewal for the tourism industry to co-evolve to consumer demands and stay competitive, albeit under certain conditions (also see next sections), issues arise when strategies are implemented in an ad hoc fashion in relation to sustainability standards. Examples are copy-cat behaviour of concepts that do not fit the host destination or unfortunate forms of diversification e.g. activities with high impact on natural resources or put a relatively big pressure on (water)infrastructures (Hartman, 2016). There is a need for a degree of diversity or, alternatively stated, diversity within limits (see later sections on “possibility space”).

Barrier 2: The tragedy of the commons

Alternatively, Dodds and Butler (2010) point to a fundamental cause stating that *‘a strong sense of individualism can also be to blame’*. Destination can be facing what is known as “The Tragedy of the Commons”. The tragedy of the commons describes how the use and especially overuse of resources can result in the depletion of these resources (see figure 3). Particularly in a form of depletion of resources that cannot be reversed. It points out that society should be very careful with the use of resources and develop a proper understanding of carrying capacities. Otherwise destinations run the danger that at some point, a tipping point, resources are overexploited beyond a point of no return. Based on experiences in several case studies Dodds and Butler see the validity of the Tragedy of the Commons concept in tourism and tourism landscapes (Healy, 1994). The protection of common pool resources such as beaches, oceans, water supply and undeveloped land may be hard to achieve because *“the problem is that there is usually no incentive for individuals, acting purely in pursuit of the short-term, self-interested bargain to use less air or water. To the contrary, in the absence of aggressive regulation, the incentives usually motivate the depletion of such common goods”* (Portney, 2003: 135).

The Tragedy of the Commons

Imagine an open pasture shared by multiple cattle owners. Each owner increases their herd to maximize their benefit. With an unregulated resource this is "logical" since the benefit is enjoyed by the individual and the impacts are shared by all. This leads to the ultimate overgrazing of the pasture.

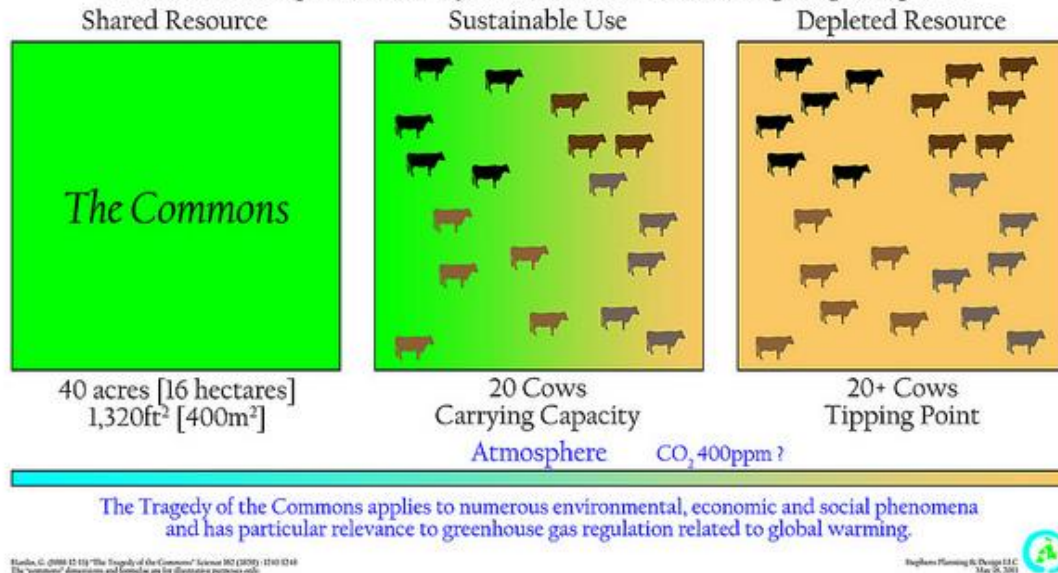


Figure 3: Illustration of the Tragedy of the Commons

Healy specifically addresses the tourism landscape as a common pool resource, or even as 'the' (most important) resource for many destinations. Healy sees two problems the problem of overuse and the investment incentive problem: Tourism landscapes (or background tourism elements) are subject to two of the classic problems encountered in the management of common pool resources. First, there is the problem of limitation of use to a level that provides maximum current output consistent with protection of the resource for future users. This may be termed the "overuse problem." Second, there is the problem of how to encourage investments in enhancing the quality of the resource in a situation where non-investors (often called "free riders") would enjoy many of the benefits of the enhancement. This may be called the "investment incentive problem". (Healy, 1994, p. 597). The investment incentive problem can also relate to setting up tourism when there is none. For large parts of the mainland Wadden coast this is the situation and pertinent questions are: is there enough attractiveness of some sort to build a serious tourism sector? Is there enough local or regional consensus on a potential and wished for tourism strategy? And, if yes, who is willing and able to invest in it?

Barrier 3: Flaw in tourism policy: number of tourists rather than net economic and well-being benefits

Dodds and Butler find a fundamental flaw in tourism and its marketing. They find that most destinations focus on numbers of tourists rather than yield. They state that '*Measures of the effectiveness and success of tourism policies to date are invariably set according to the numbers of tourists that arrive at destinations or gross expenditure rather than the net benefits that tourism brings to a destination.*' (Dodds and Butler, 2010, p. 42). These authors argue that a shift in thinking is needed from solely thinking in promotion to protection. The core qualities of a destination that cause it to contribute to people's well-being is what is most valuable, and warrants protection. Still too often tourism is considered to be a goal on its own and it measured in terms of a combination of visitor numbers, spending and overnight stays.

In line with this the down side of an ever-increasing number of tourists is extensively discussed. “Overtourism” is emerging as a major societal issue as it puts pressure on host communities and natural and built resources of tourism destinations. Cities such as Venice, Barcelona, Paris, Amsterdam and many more face large amounts of tourist – a result of rather successful marketing campaigns in the context of a globally growing industry (UNWTO). This phenomenon raises questions such as: who’s city is it? Are these cities being designed and transformed to tourism destination at the expense of the interest of local residents? The same discussions arise at various UNESCO sites, National Parks and other sites with a protected or special status, as these are regularly places with specific natural beauty or are of important cultural historical significance. Nowadays, the tourism industry is increasingly seen as a classic industry, in the sense of a polluting industry with various negative externalities. The UNWTO remains positive as Taleb Rifai, Secretary General of the World Tourism Organization (UNWTO) phrased it with the slogan “growth is not the enemy, it is how we manage it” (theme of ministers meeting, WTM London 2017). What are possible options from a sustainability perspective? The examples below are just illustrations, but they are presented here because they highlight causal mechanisms by which tourism can impact the broader sustainability of the hosting regions:

- Economic: tourism as a means to develop alternative, more economically viable sectors. For instance, in the agricultural sector across Europe tourism (and leisure) is frequently taken-up as a side business, over time potentially becoming the dominant source of income, in response to difficulties of operating agricultural activities and triggered by the higher revenue in tourism.
- Environmental gains: promoting synergies between investments in tourism and nature development (Heslinga, 2018). For instance, new developments should be matched by a 3:1 ratio in nature development, parts of (public) revenues are put in a fund for nature protection and restoration, etc.
- Social gains: using tourism to contribute to the upkeep of public facilities, infrastructure and retail offer. It could drive real estate prices however, resulting in new issues (see below). Moreover, tourism could offer a career perspective to low skilled work force and a spring board to higher positions. A highly competitive industry with slim margins and a cost structure that is highly influenced by the height of salaries, however, triggers the inflow migrant workers.

Barrier 4: Lack of international, national, regional and local policy integration and lack of acknowledgment of sustainable tourism importance

Although it is often suggested that local level policy implementation is more effective because local governments have more specific control over issues of sustainability within their areas, Dodds and Butler (2010, p.43) find that local policies often lack successful implementation without overarching frameworks and principles being in place that operate effectively at an international or national level.

Dodds and Butler found that higher level, i.e. national or regional, support and acknowledgement was seen by many (local) stakeholders as imperative. Without this support policy plans could not be effective because sustainability extends beyond the local level. They show two examples of this, one on liveability and one on transport. *‘For example, economic growth and prosperity often hides growing social problems. In Calviá one problem that emerged was low education standards and high dropout rates from school, as the skill set needed for jobs in the mass tourism sector (waiting tables, housekeeping, bartending) is low.’* A mitigation policy could be to legislate higher professional standards for the tourism industry and have the private sector endorse them so as to raise quality of service, as well as the social/education status of the community living in tourism dependant areas. Clearly this would involve higher levels of government to provide such legislation. The other example

is on transport. It is quite obvious that transportation is a factor which is dependent on a wider territorial transportation (busses and trains) plans. *'Working with other municipalities to make sure all public transport systems link together is essential and regional or national governments need to coordinate and oversee such a system.'*

The point here is not that the national should prevail or the local should still be predominant. The point is that sustainable tourism policy should be a well-integrated effort of different levels of policy making. Dodds and Butler write the lack of acknowledgement of the importance of tourism: *'A potential explanation for the lack of integration of policy initiatives is that tourism is not regarded as important by many government sectors and there is a general lack of recognition of tourism on political agendas'*. Especially in elections, from local to national, tourism is only one, usually a minor, aspect in the voting system when compared to taxation, health care, security and job creation, if it is targeted at all. Dodds and Butler see little appreciation of the overall importance of the concept of sustainable tourism at large. Add to this the difficulty of operationalising a fuzzy concept such as sustainability.

Overall, there is then a challenge to develop a "multilevel governance system". A system that is able to develop an understanding of carrying capacity and act upon it. This would involve making laws, policies and regulation on multiple levels, coordination on and between levels, and attention for the inclusion of (silent) stakeholders, power struggles, lack of leadership/willingness. For these types of systems, the "wish-list" is extensive and it can be debated. *In practice it seems to be hardly possible to meet all the conditions ... and take care of all the implications foremost due to high amount of resources involved. Whereas major tourism destinations such as capital cities are able to cover many conditions, the more rural and remote destination tend to struggle to mobilize resources.* (Hartman, 2018)

Overview of the four barriers in the PPP scheme

The four barriers can be tentatively placed within an adapted PeoplePlanetProfit scheme (figure 4). We highlight that sustainable tourism also involves the balancing of the three Ps but are also part of the balancing of the three Ps in the broader system; a system which is also multi-layered.

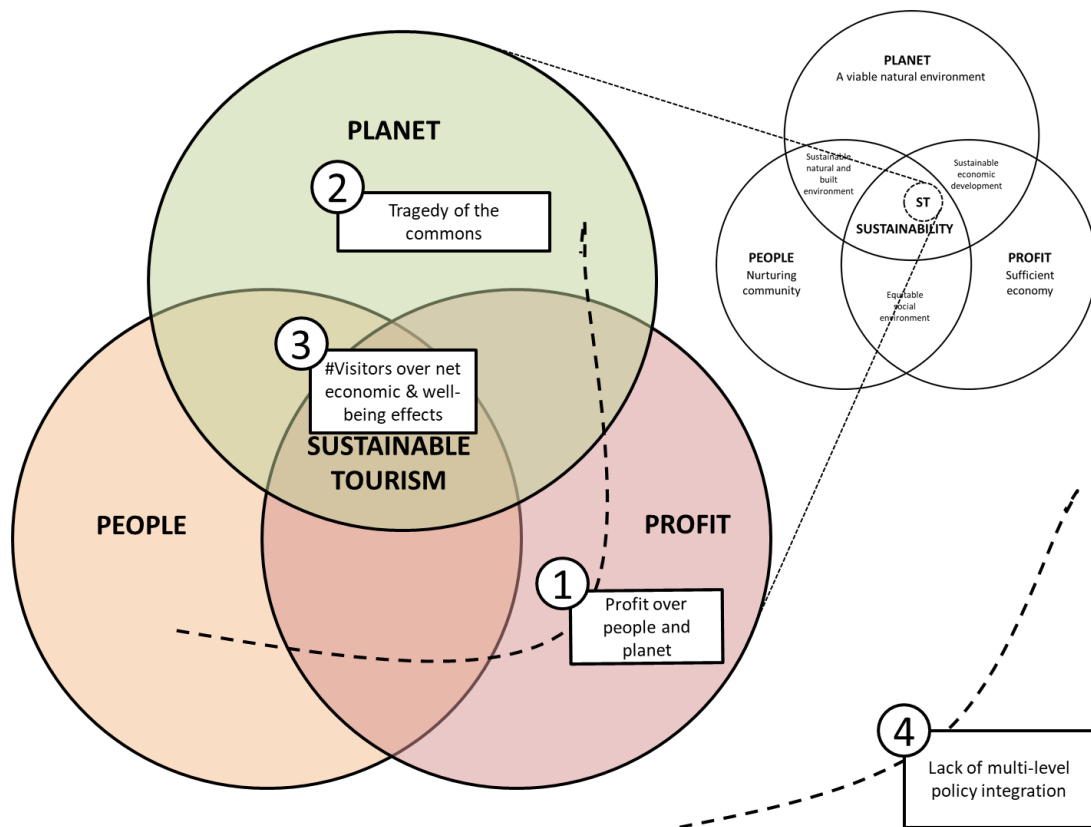


Figure 4: Barriers to sustainable tourism framed using the PeoplePlanetProfit terminology: 1.) priority of economic concerns, 2.) tragedy of the commons, 3.) tourism numbers over well-being contribution, and 4.) lack of multi-scale policy integration.

3. Understanding the barriers better: fundamentals of Sustainable Tourism

If tourism should be heading towards sustainable development it is obvious that it is important to overcome the four barriers to sustainable tourism. However, problem understanding precedes problem solving. Therefore in this chapter we will try to understand the four barriers better by looking at fundamental developments and concepts at the back of sustainable development while at the same time highlighting key aspects of the touristic Wadden area.

We will ask: What is sustainable tourism? Where does it come from? To position sustainable tourism in the Wadden area it is important to understand that sustainable tourism is not a phenomenon that occurs accidentally; it has fundamental logic. Developing policies and strategies is therefore also not a passing whim or a fashionable activity. In this section we will sketch the fundamental background underlying sustainable tourism. In this chapter we first address long term economic development and urbanisation and then we turn to the increasing importance of higher needs in human development.

3.1 Long term economic development: large scale production, spare time and higher well-being

Increased division of labour

Probably the most fundamental driving force for our economic development in the past centuries is the ever increasing and ongoing division of labor. Before the modern economic system developed, society was characterized as subsistence economies. In this type of society every family, paraphrasing the words of the famous economist Alfred Marshall, was not only a farmer, but also a brewer, a baker, a spinner, a weaver, a bricklayer, a carpenter, a dressmaker, a tailor and many other things⁵. The increased division of labor has changed all this. An increased division of labour is synonymous with specialization of the labor force as people take on specialized jobs and activities, and specialisation is synonymous with larger scale production. Furthermore it should be noted that large scale production in time goes hand in hand with standardization of the production process. Standardisation and larger scale production are more efficient: it costs less effort to make the same volume of output. In a competitive setting this often means that larger scale production the battle for consumers as they can offer products and services at a lower price. As a final stage of large scale standardized production we have the phase of mass-customization. With mass customization producers give small personalized twists to products which are to a large extent standardized (standardized 'under the hood').

What we see in the whole economy we also see in the tourism and tourism related sectors: large scale, specialization and mass-customisation. We see large scale in the success of a large scale tourism company like the TUI group (turn over Euro 19 billion in 2017⁶). We can see low costs per unit thanks to large scale production, very prominently in transport developments. Cheap flights now bring many destinations within reach to masses of people which were formerly only accessible and affordable for few. Ryanair is a clear example of this, serving 130 million passengers per year⁷ and an

⁵ '...they did for themselves a great part of the work now done by brewers and bakers, by spinners and weavers, by bricklayers and carpenters, by dressmakers and tailors and by many other trades.' (Marshall, 1890. Principles of Economics (1890) Industry and trade (section IV, Chapter X, 4)).

⁶ TUI Group, Annual Report 2017.

⁷ <https://corporate.ryanair.com/about-us/fact-and-figures/>

average booked passenger fare as low as 41 Euro⁸. We may see the ongoing specialization in for instance the emergence of Airbnb as an intermediary service: now active for 4 million lodging listings in 65,000 cities in 191 countries. Airbnb clearly shows the power and relevance of mass-customization: every customer has a personalized web experience, yet it is standardized for every users.

Spare time, and time for new, less urgent needs

Tourism has a strong relation with this fundamental development of the economic system. If we only kept producing the urgent consumption basket of the early days (bread, beer, a simple house, etc.) with modern very efficient production processes then many, many people would simply have nothing to do. So increased division of labor and more efficient production processes, 'produce' spare time, or free time to do other things. This spare or free time can be used for many, many other needs. Tourism is one of the typical non-urgent needs which are made possible on the basis of a very efficient production of the urgent needs. Literally tourism needs the labour time which has fallen free: spare time. Time no longer needed for urgent work on the fields or building houses. Tourism rests very basically upon people having nothing to do. Furthermore, it seems to be solidly in the realm of not-very urgent needs.

3.2 Human development, higher needs, sustainability and tourism

A final fundamental concept we need to discuss for understanding sustainable tourism, and the barriers towards it, is human well-being and human development. A broadly used concept to understand human well-being is Maslow's hierarchy of human needs (Maslow, 1948; Rowan, 1998; Wallace, 2007). Maslow's thinking is mirrored in many other psychological researchers and it is reflected in many human development and human well-being concepts (Rowan, 1998; Wu, 2013). Understanding thinking about human development and human well-being with some depth will be very rewarding to our purposes since it is at the core of sustainability and of importance to tourism.

Maslow's hierarchy of needs is often sketched as having five needs: 1) physiological, 2) safety, 3) love/belonging, 4) esteem and 5) self-actualisation. The lower four needs are known as deficiency-dominated needs in which individuals are motivated to overcome the discrepancy between their actual state and some optimal adequate state. For the higher needs, known as growth needs, context and circumstances differ markedly, because at this stage individuals lack final targets or optimal states (Heylighen, 1992). Heylighen argued that Maslow can be applied to any system: individual people but also to societies, regions and countries. To help our discussion of sustainability and tourism and using Heylighen's interpretation, we may define a tripartite division of well-being, which is defined by two extremes: with basic well-being as completely urgent and higher well-being as completely non-urgent. We will label the intermediate category between the two extremes as 'everyday' well-being, since this is what constitutes most of people's everyday worries and activities. Thus three well-being domains can be distinguished: basic, every day and higher well-being. At the lowest level the 'system' is busy with itself; busy with its own survival. In the second level, a system cares more about every day improvements to its well-being. Finally, in the higher level, when many, many every day needs are met and the survival continues to be assured the systems may develop fundamentally new needs. Needs with far less strife, with less anxiety to reach something. Empirically Maslow observed that people motivated by higher growth needs typically have an openness to experience, a large extent of spontaneity or naturalness, creativity or a general playful attitude. They too tend to have 'freshness of appreciation', that is a tendency to experience old-well-known stimuli in a new way. Since everything is well on an everyday level, there is room to reach 'for higher

⁸ Ryanair Annual Report 2017, p53.

ground'. Growth needs are considered to be more discovering, more playful, and more contemplative. At a somewhat subtler level, the growth needs may also concern what is called non-dualism or transcendence: the system merges, feels as one, with the larger whole. It is also the level of creativity of caring for beauty and of caring for others even far away others or other parts of the bigger system (Roncken, 2018). These notions sketch a very simple logic. This logic is that, as a human being or human part of society develops, it first worries to survive, it then tries to live better on a day-to-day basis, and finally it starts to more and more understand itself within the bigger system. Deeper feelings of connectivity and both purposeful and playful exploration are core to higher well-being.

3.3 Deep feelings around the shallow Wadden coast

To substantiate the relation between higher needs, tourism and the Wadden Table 1 shows that the Wadden area, a shallow coastal zone, arouses deep feelings of attraction in several tourists. Data come from the Greenmapper/Hotspotmonitor in which they mark attractive natural places but also state in their own words why they find the area attractive valuable or important. Table 1 gives a selection of quotes for the Wadden area that are striking for their uncommonly deep wording, including 'priceless' and 'pure', and 'vulnerable'. Or in other instances respondents comment that they 'experience the immensity of nature' and 'commune with nature'. (Sijtsma et al., 2012)

Table 1: Selection of deeply felt attractiveness quotes for the Wadden area from the Greenmapper/Hotspotmonitor database

Selection of 'deeply-felt-attractiveness' quotes	Marker ID
I've experienced a lot of freedom in an overwhelming nature	5485
Pureness, peacefulness (...) wonderful nature. Actually: fantastic!	2343
I always feel like I can finally breathe and I actually do; frequently and deeply!!	568
A place where you can be together with nature and the elements without disturbing anyone	6137
The immensity of nature in which man seems only a very little crumb.	304
Space, vastness, silence. You can be with your memories without being disturbed.	5364
No words to describe what I feel.	4185
A prehistoric piece of the Netherlands, with virtually no visual pollution. A sense of freedom and room to roam.	1228
The most beautiful place in the Netherlands where nature is still in charge.	4838
Nothing more beautiful than a very distant horizon over water.	250
Experienced precious and intense moments, both sailing and falling dry. This area is so dynamic and autonomous. It has a strong presence, but is also vulnerable and sometimes tranquil.	2503
The last truly great nature in the Netherlands.	4229
The vastness, the smells, the wind in your hair, the sounds: priceless!	1211
Beautiful, beautiful, beautiful under all weather conditions.	2982
Spacious, dynamic, unique, magnificent!	827
The last wilderness in the Netherlands: you never know what you will encounter, and you feel the power of nature.	3910

Different nature areas serve different needs

In the Greenmapper survey people are asked why they find an area attractive, valuable or important. People may then for example simply say 'the beach' or they may say something like 'Experienced precious moments'. The first answer is just a physical aspect, the second highlights an emotion. In

the map below (figure 5), we show the result of an environmental-psychological text analysis classifying the attractiveness answers: it shows how many emotions are attached to different nature areas (Davis et al., 2016). In the map, the darker the area, the more emotions are reported. The clusters containing the highest percent of emotions, i.e., the areas that evoke the most emotional appreciation, represent the highest level of cultural ecosystem service delivery. These include in the Wadden Islands, specifically, Terschelling, Vlieland, and Schiermonnikoog. To tourism a high emotional intensity implies that the area holds strong (future) potential.

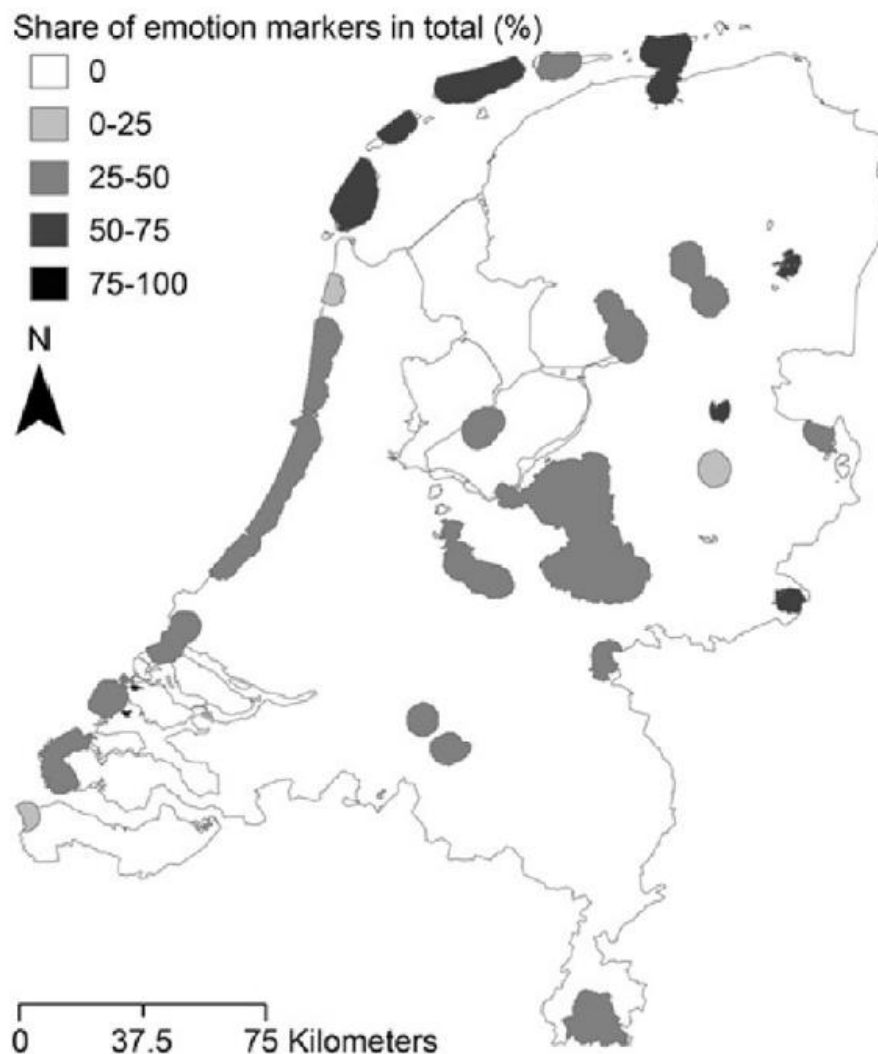


Figure 5: The high density of emotions in statements of the attractiveness of the Wadden area, as compared to other clusters of nature attractiveness in the Netherlands (source Davis et al. 2016)

3.4 Urbanization and nature

These fundamental aspects of human and economic development discussed above also have a spatial component, in that it strengthens the difference between the urban and the rural. The economic development process sketched above is closely linked to urbanisation (Bairoch, 1988; UNFPA, 2007; UN, 2015), and urbanisation is seen as pivotal for increasing prosperity (McCann & Acs,

2011). But urbanisation implies that people live less rural and thus farther away from nature. There for in modern times people increasingly live in cities and not in areas like the Wadden.

Figure 6 (upperpart) for a large part of Europe shows the two extremes on the urban-rural gradient. It shows on the one hand the metropolitan areas, in pink. We use the definition of Functional Urban Areas as defined by the OECD. Metropolitan FUAs are agglomerations with more than 500.000 inhabitants. Bremen and Hamburg and Amsterdam are the metropolitan FUAs which are nearest to the Wadden area. The map also shows remote rural areas in Europe, in yellow. These are areas where it takes more than one and a half hour to reach a town of 50.000 inhabitants or more. We can see that the Wadden area is not part of such remote rural areas. It is in between the metropolitan urban and the remote rural. To clarify more, the lower part of figure 6 zooms in on the urban landscape around the Wadden area. In this lower part also the smaller and medium urban areas are shown (in orange). As can be seen, several of these smaller and medium urban areas border the Wadden area.

The long-term movement towards more urbanization is a complex development which we need not discuss fully, but it has a few aspects which are easy to understand and very relevant for our purposes. First of all, cities only start to exist if there is a seriously specialized larger scale farming which produces an agricultural surplus to feed the urban population (Boserup, 1965) Second, cities are the logical place for less urgent needs to be produced. As Christaller and Lösch have clearly shown it is in cities where higher order goods and services are produced. Higher order goods and services (read: 'often newer needs') are consumed/bought less often and need a large customer base; generally, the city and its hinterland. Finally, as we saw above the modern economy rests upon a heavily specialized workforce. So, people can work as the visual support employee in game developing, people can have a job as financial controller in the non-profit sector, as a left-wing player in a premier league football competition. This specialization also implies that supply chains are sliced up, fragmented. Whole factories are dedicated to making tires for cars or for mere digital data storage. Now specialized tasks need to be coordinated somehow, and this is where well-connected cities, connected through different modes of transport, play their key role. It is in the urban agglomeration where transport modes come together and where coordination takes place.

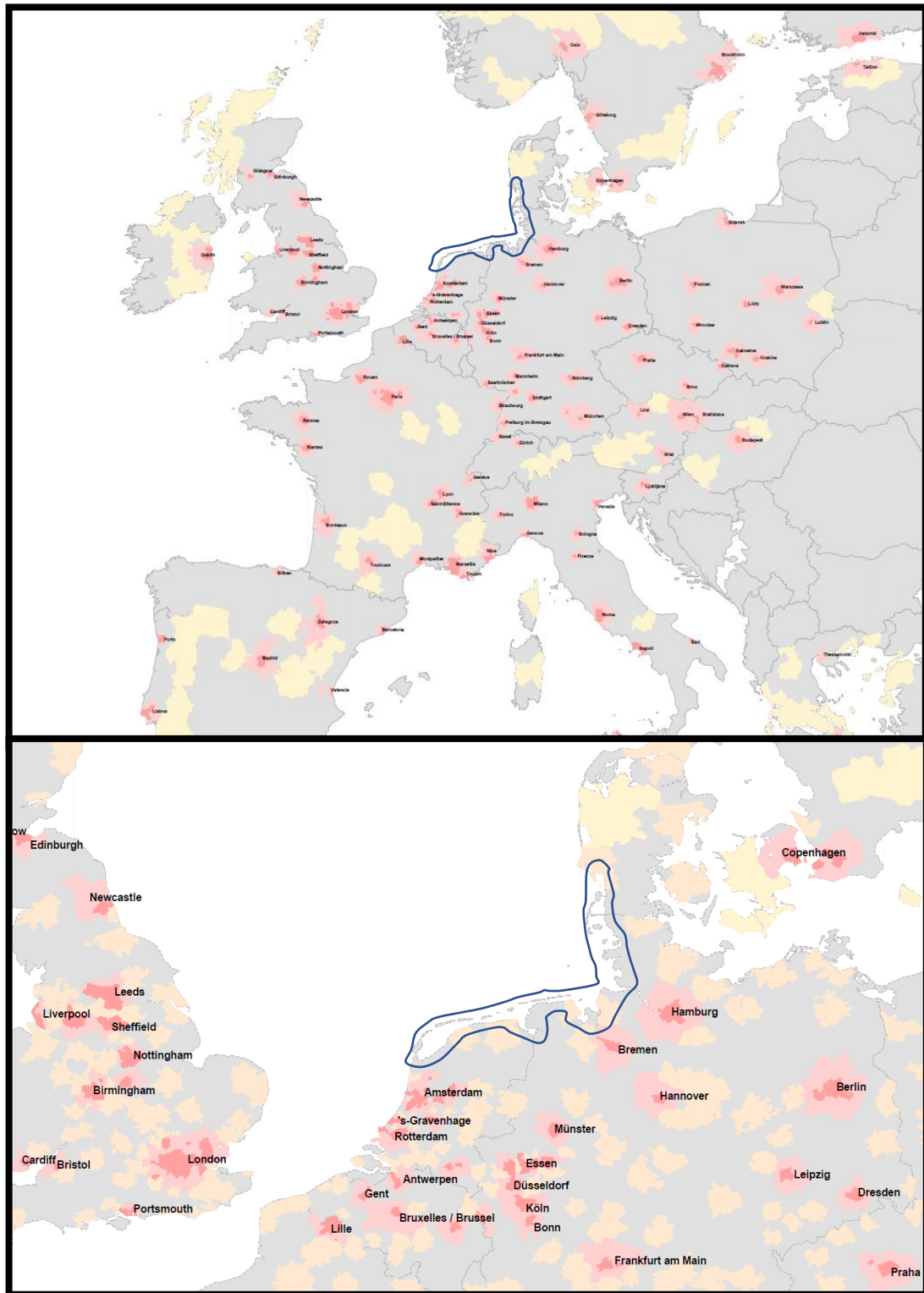


Figure 6: Understanding the Wadden area (sketched with the blue polygons) within European urban-rural gradients using Functional Urban Areas (pink and dark pink denote metropolitan areas; orange denotes medium or small urban areas) and remote rural areas (yellow) as defined by the OECD. Source: OECD.

3.5 Spatial distribution of (urban) fans across of the Wadden

The Hotspotmonitor/Greenmapper dataset contains information on which people from which areas like find which nature areas attractive, valuable or important. Since this database contains the location of the homes of the respondents, we can also analyse the intensity of appreciation and take note of the areas where respondents live. For this purpose, we consider the 7500 respondents from the GfK 2013 dataset who have placed their markers within the Wadden area: either in the sea, on the island or in the mainland coast.



Figure 7: National Hotspots of all respondents: The islands are clear Hotspots of attractiveness everywhere

The map in figure 7 gives an overview of results of 'attractive places in the Wadden area' as selected through the survey with the Greenmapper/Hotspotmonitor. It shows the combination of Dutch, German and Danish people who have marked natural places indicated by red dots that they find attractive, valuable or important at a national scale. The map confirms that the attractiveness is not evenly spread across the Wadden area; the islands are clear hotspots of attractiveness everywhere, but they too differ in intensity. More differentiation is visible at the mainland coast. The Dutch coast is hardly marked, with the exception of the Lauwersmeer area. The German coast in Niedersachsen, however, contains many highly appreciated areas. Similar to the mainland Dutch coast, the mainland coast in Schleswig Holstein and Denmark is hardly appreciated.

As a next step we can clarify the urban-rural connectivity: where do the markers on the map in the Wadden come from: from people living where? In the map below, we have calculated for all 12 provinces in the Netherlands, all 16 Länder in Germany and all 5 regions in Denmark, how many

the distance decay is also much stronger than in Germany. This general picture is also shown for the international attractivity map (see Sijtsma et al. 2014)⁹.

An estimated 14 million ‘fans’ for the trilateral Wadden area

The percentages shown in figure 8 can be used to estimate the total amount of Dutch, German and Danish people who find the Wadden area to be an attractive, valuable or important place on a national scale. The percentages in figure 8 (and a similar figure for internationally placed markers ; see Sijtsma et al. 2014) of markers in the Wadden area are applied to the populations of the different provinces, Länder and regions, and summed to national totals and an overall total.

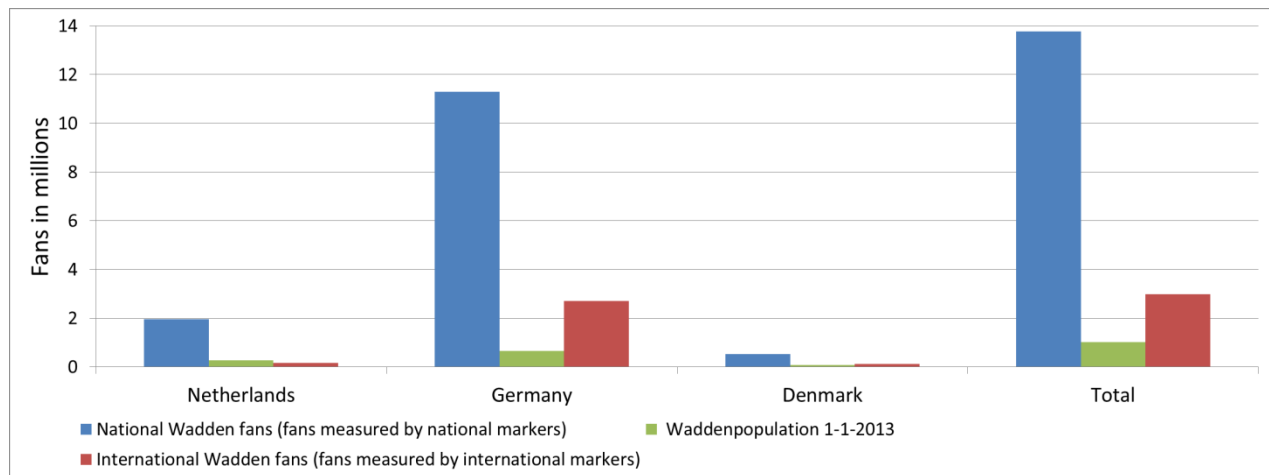


Figure 9: The estimated amount of Wadden ‘fans’ in the different countries and the total trilateral Wadden area – compared to the inhabitant population of the Wadden area

As we can observe in figure 9, the overall total is 14 million ‘fans’ for the three countries altogether. The figure also estimates the Netherlands as host to some 2 million fans, Germany to over 11 million, and Denmark to around 0.5 million, respectively, 14%, 82%, and 4% of the total number of fans. From a governance standpoint, it is interesting to compare this to the number of inhabitants of the regions. Since the number of inhabitants in the Wadden area is around 1 million, we calculate 14 times more Wadden fans than Wadden inhabitants. In the Netherlands the factor of fans/inhabitants is x7, in Germany x17, while in Denmark we record x7. Therefore, in order to achieve balanced governance involving all stakeholders (Mehnen, 2013) it would be reasonable to connect these ‘fans’ more closely to the area.

3.6 Understanding sustainability and tourism

Sustainability: higher needs and system worries

With the fundamental reflection upon economic and human development we may better understand the two things of most relevance to us: sustainability and tourism. In the higher need realm questions like ‘Where do we come from, where are we heading?’ are typical. Caring for far away people in distress is typical. Worrying about species extinction, even of never seen species, is typical.

⁹ When Dutch, German and Danish people pinpoint an attractive natural place at the world level, some respondents still place a marker in the Wadden area (linking the urban and the rural: compare Sijtsma et al. 2012b) and this attractiveness is stronger in Germany than in the other two countries. Several areas in the Netherlands and in Denmark receive 0% attractivity ratings, but not in Germany: Even in the Bayern attraction is still positive at 1.9%. (See Sijtsma et al. 2014)

Caring for the system, beyond the well-being of the individual person, company or country (because the everyday well-being and security is assured). So, sustainability is typically a higher need. Thus, the care for sustainability of our social, ecological and economic development is typical for people their higher needs. And so, we may also state that sustainability is not an accident or a fashion that will easily pass. Sustainability holds logic in human development. Sustainability concerns may involve 'system worries'. Worries about social aspects of our system, about environmental limits of our system. These are logical concerns for people or systems that are well functioning as to their lower deficiency needs: who do not have to worry too much about food and shelter, material wealth and esteem. The higher needs explain the emergence of sustainability as a concern in modern society. With the deficiency needs being met to an increasing extent it is inherently logical that the higher needs become more important.

Tourism: higher needs and discovery: playfulness, learning, exploration and nature

Higher needs may also involve more positive explorations. Interesting enough this freshness of appreciation is often triggered by nature or children (see Heylighen, 1992). Why nature and children? It is simple, because of nature and children in a very simple and direct way cut through the struggled-for-'system'-identity. The birds do not care what social standing you have, neither do children. Tourism within this simple three-layer framework of human well-being can be seen a very open, playful activity. It is about discovering. Getting away from everyday life and worries. Re-creating yourself (Roncken, 2018). Tourism also develops as economic development progresses more and more, and more and more people achieve more basic material standards. The tourism industry develops towards experiences (experience economy) and transformations (so called purpose economy) as specified by Pine & Gilmore (2011). Visitors seek continuously for those places, situations and activities that provides experiences (escape routines, for aesthetics, learning, amusement or, ideally, a combination of these) and meaning or purpose. In other words, as higher demands are met and the tourism industry is rapidly growing on the one hand and professionalizing on the other hand the result is that experiences should be (come) enriching experiences (figure 10).

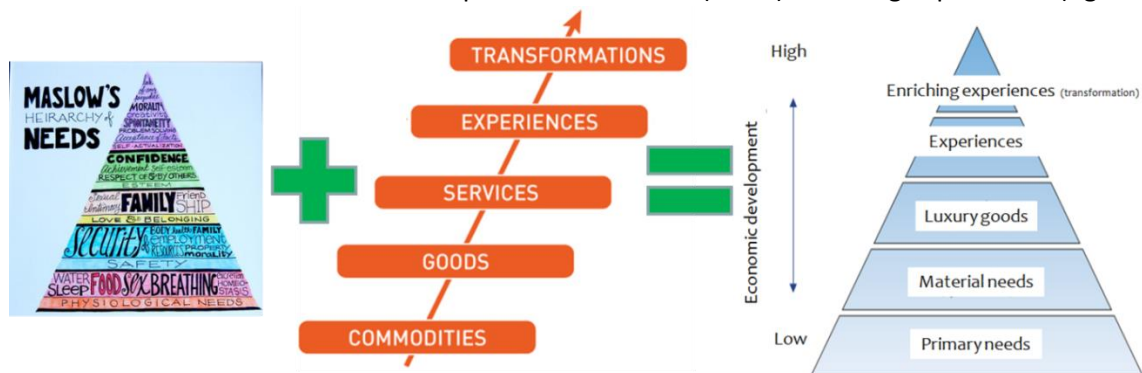


Figure 10: higher needs and a progressing industry results in a consumer's hunger for (enriching) experiences (composed by authors based on Maslow 1943, Pine & Gilmore, 2011)

Revisiting the barriers

At this stage we may revisit the four barriers of chapter 2 and briefly add to them based on the above.

- Barrier 1: Economic (short term) dominates (longer term) social and environmental concerns
Large scale production is often dominant in modern day economic processes including tourism, while urban-rural relations are critical for understanding tourism to the Wadden.
- Barrier 2: Complexity of managing the nature and landscape commons

- Barrier 3: Marketing for visitors and not for higher needs well-being of tourists
- Barrier 4: Non-integrated multi-level governance including the non-involvement of distant fans as stakeholder group

To overcome the four barriers to sustainable tourism we now take a closer look at governance and the monitoring of sustainable tourism.

4 Multiplex governance and monitoring for sustainable tourism

4.1 Towards a new type of governance

4.1.1 Importance of building resilience for sustainable tourism: multiplex governance

The tourism industry is a fast-evolving industry. Many places around the world are in the process of being developed as tourism destinations. This process is shaped by the actions of many firms, societal, organisations and institutions that are dispersed over multiple governance levels and often have different ambitions, interests and worldviews regarding issues at stake (Milne & Ateljevic, 2001; Urry, 2002; Parra, 2010; Hartman & De Roo, 2013). For places to transition towards tourism destination factors need to interlock and mutually reinforce in multiple domains and systems: the economy, culture, life styles, institutions, technology, ecology, and belief systems (Loorbach, 2007).

As a socio-spatial phenomenon tourism has been treated and managed in different ways. Particularly in protected areas (or broader, areas with 'special' status) we can identify three dominant ways of thinking and acting. First, tourism is being treated as an intruder of space and/or in competition or incompatible with other functions and land uses such as forestry, agriculture, nature, build heritage. Second, tourism is seen as an economic opportunity and approached (in policies) by means of quantitative goals in terms of number of visitors, number of jobs and boosting welfare. Whereas major cities such as Venice, Paris and Amsterdam are very successful in doing so other destination are struggling to be seen, found and selected by the visitors (compare to Butler, 1980, on Tourism Area Life Cycle and Doxey, 1975, on Irritation Index). Third, tourism is used as a means to achieve wider societal goals then economic only. For instance, a source to maintain liveability or a source funding for the upkeep of heritage and nature.

Over time, rural and peri-urban landscapes that were once predominantly dominated by production (agriculture, forestry) have evolved and nowadays increasingly move towards places of consumption¹⁰. But many places undergo this transition, the competition is increasing and visitors have a vast range of options to select from. This puts pressure on the tourism industry in various ways. First, to stand out from the competition and interest visitors, the emphasis shifts to offering experiences, and value creation via meaning making and 'mattering' (creating e.g. 'memorable moments' – and resulting in 'blurring' of industry sectors). Second, due to the increasing competition and ensuing professionalization of the industry life cycles of concepts and activities are shortening, meaning renewal and innovation is of the essence. This can be approached on the level of individual businesses, on the level of destinations or regions but also on branch or industry level. Third, the industry needs to anticipate and adapt to perturbations that can range from sudden shocks (natural and environmental disasters, terrorism, macroeconomic shocks, new technologies) and 'slow burns' (demographic change, climate change, lifestyle changes) that bring industries and destinations out of balance. The act of continuous rebalancing is a key challenge.

Overall, the tourism challenge for destinations is to become robust enough to endure perturbations and flexible enough to recover or to re-develop/re-invent itself – contributing to its resilience. This requires taking an evolutionary-adaptive perspective, considering and managing tourism destinations as complex adaptive systems. Taking this perspective allows us to identify conditions that contribute to the ability of systems to adapt and evolve and to building resilience. How to deal with this multiplex nature? Particularly for the maintenance and development of protected areas such as the

¹⁰ Urban places may follow a comparable development: city centres that evolve nonlinearly from marketplaces via shopping centres to a décor for leisure activities such as events.

Wadden Sea Region, this multiplicity raises complex governance issues. Below we examine this multiplex nature and distinguish implications for management (Dewulf et al., 2009)

4.1.2 Multilevel: global to local

The WSR is influenced by processes that take place on different levels. At the global level, there are various international communities promoting the protection of areas that are characterized by one the one hand their specific features (flora, fauna, landscapes, geology, cultural history and built heritage) and on the other hand by their limited carrying capacity. Organisations include UNESCO, WWF, United Nations World Tourism Organisation. These communities find societal support across the globe. Many people attach great value to these feature and areas and support their protection and at the same time, and regardless of their limited carrying capacity, these areas are often tourism destinations. Travelers are attracted by the specific features such as unique landscapes, characteristic local culture and heritage, wildlife.

At the macro level of the EU and nation states we see that virtually every government body actively promotes protection of spaces and places, drawing up policies, laws and regulation to steer and adjust the ways in which these areas are developing. From the EU we see policies such as Natura 2000, the Bird and Habitat directives which strongly influence national and provincial decisions. In the Netherlands, the national government has reduced its funding for the management of protected nature areas and has redistributed large parts of the management of national parks to the level of the provincial government. At the same time, the Ministry of Economic Affairs is supporting a campaign 'World Class National Parks', in which people select the most outstanding national parks. These parks will receive support from the national tourism marketing organisation NBTC to market these areas to the international community.

At the meso level, the level of organized groups of protected sites, we see a major struggle: how to find a balance between protection and avoiding risks on the one hand and developing and taking opportunities on the other hand (Hartman, 2016). This struggle raises issues for management and decision-making regarding the future situation, and involves many stakeholders such as National Park agencies, the State Forest Agency, nature protection agencies such as Natuurmonumenten, destination marketing organisations, etc.

At the local level, we see that protected areas such as the WSR are in the constant process of being adjusted by the actions of entrepreneurs (activities, accommodations), nature conservation agencies (reforestation, nature development, rewilding), local governments and organisations (facilities, signage), etc.

Overall, following Milne and Ateljevic (2001, p. 371), we should acknowledge that "it is essential to look carefully at how interactions between the global and the local shape development outcomes for individuals, households, communities and regions". This also applies to the WSR, which are continually influenced by actions and decision taken on different, either higher or lower, levels.

4.1.3 Multi actor, multi domain, multi time-scale, multi objectives

As the above already points out, the management and development of the WSR is influenced by a variety of actors dispersed over multiple levels of governance. Governance refers to the ways in which "associational networks of private (market), civil society (usually NGO) and state actors" engage "in rule-making, rule-setting and rule implementation at a variety of geographical scales" (Swyngedouw, 2005, p. 1992; Algemene Rekenkamer, 2013). This is far from clear in the Netherlands. It differs from protected area to protected area which actors are involved and how actors are involved. For instance, it depends on historical events that have shaped organisational structures or

on differences between strategic plans and ambitions (e.g. focus on protection versus focus on development).

The WSR is also multiplex in the sense that many domains have an interest of stake in this area. In other words, these areas are 'layered'. The Wadden is a nature area, it offers natural resources (gas, salt) and ecosystem services that can be used by mankind to make a living, for instance in fisheries, agriculture and tourism.

The Wadden has to deal with a variety of process that diverge very much in terms of time scales. Some are relatively slow such as climate change, demographic development, adjustments in the composition and variety of species. Other developments could happen relatively fast: changing lifestyles and travel behaviour of visitors, politics and funding opportunities, emergent technologies. Basically, each process needs to be responded to in a particular way, in order to cope with and adjust to its impacts.

Due to the multiplicity of the WSR in terms of actors and usages, the WSR is used by actors to achieve a variety of objectives. These could include the protection of endangered species, the preservation of unique landscapes, the development of a tourism industry, improve accessibility, enhance awareness, increase community involvement, develop and apply new types of revenue and/or business models to create new flows of income, capitalize on ecosystem services. The number of objectives can be numerous and some objectives can be mutually exclusive – raising issues for decision-making and the ways in which the governance of the Wadden Sea Region is organised.

4.1.4 Connecting to the millions of fans of the Wadden: from tourists to citizens

The governance situation for the trilateral Wadden area is very complex. All stakeholders have their own interests, concerns, values, perceptions, and pursuits. A scarcely acknowledged group in the governance debate, however, are the fans of an area. In tourism there is always a strong focus on visitors. Although visitors and fans can be related, it is fans that can be seen as a more logical stakeholder group to involve in governance. Fans are citizens more than consumers, or consumers in their role as citizens.

Fans are, as we have seen, related to a different non-local scale, showing the multi-scale complexity of governance including fans. But, as shown, in terms of numbers they may be predominant compared to other actors. Shouldn't size matter? Should there be greater urgency to actively connect to fans, if the number of fans is apparently 14 million compared to, for instance, the local Wadden inhabitants of 1 million?

From a governance perspective we have demonstrated that a potentially large number of actors needs to be considered when decisions are being made in relation to both appreciated and protected landscapes (Vanclay 2012, Mehnen et. al. 2013). How to connect these fans with local communities, and how to evaluate the type of influence they will have on the decision-making is a challenge for the future. In ongoing research, the authors experiment with new software that connects people online to their favorite natural places and landscapes (see www.greenmapper.org and Bijker et al., 2014). Given the size of the fan base and the physical distance between fans' home locations and the protected areas, developing online communities for different natural areas to enhance more effective governance processes seems to be a logical path on which to embark.

4.1.5 Governance and transitions

A persistent issue for the WSR is finding the right balance between on the one hand conservation and the avoidance of perturbing risks (path dependency) and on the other hand developing and taking

opportunities (path creation). The multiplex nature makes managing such area rather complex. One option is to find the best type of governance.

Borrini-Feyerabend et al. (2014), for instance, distinguish between four generic types of governance for national parks, governance by government, governance by various rights holders and stakeholders together (including the fans), governance by private individuals and organizations (usually the landholders) and governance by indigenous peoples and/or local communities (often referred to as ICCAs). The question is whether such types of governance will actually help us further as, in practice, we see the emergence of mixtures of the above types. Top down planning takes place at the same time whilst bottom-up projects are initiated by active communities.

An alternative approach is to consider the development as transition processes. A transition can be conceptualised as a long-term movement from one relatively stable state to another. Theories of transitions rejects that idea that development can be steered and shaped by a single entity or actor and adopts the perspective that management should be done by influencing and adjusting: a more subtle, evolutionary way subtle adjustments (Loorbach and Rotmans, 2006). This perspective also fits in the multiplex nature and with the understanding that parks need to continually respond to development and processes on multiple levels of scale - they will be inherently dynamic entities to a greater or lesser extent and should also be managed as such. In this context, the four types of governance could still be helpful to describe how governance is organised of towards which type governance is developing. This means that the four types are treated as a continuum, whereby the area under study is constantly trying to find a mixture of approaches that fits best with the challenges it is facing at that moment in time. When situations change, due to interactions at multiple levels of scale, this could result in a (small) movement in the direction of a different governance approach.

4.2 Monitoring for sustainable tourism

Multiplex governance processes need reliable information (Vugteveen et al., 2014). Evidence-based sustainable tourism policies can only be realized with the support of long-term monitoring. The trilateral monitoring and assessment programme (TMAP) also works in the arena of data and monitoring as its vision to realize a 'harmonised and effective monitoring and assessment programme, based on sound scientific evidence, that serves the needs of policy making at all levels'. In the Netherlands the Wadden Sea Long-Term Ecosystem Research project (www.walterwaddenmonitoring.org) has been initiated to develop a blue print for an integrated monitoring network for the Dutch Wadden including the increased availability of data. A key element Walter is aiming for is to not only realize data and monitoring as such but to also aim for an increased understanding of Wadden area in all its 'People, Planet and Profit components'. For instance the SEED (Spatial Ecological Economic Database) has been created, aiming for a basic and shared understanding of the complexities of the Wadden area (<http://www.walterwaddenmonitor.org/tools/seed/>) while recently a Wadden dashboard has been created to serve the same purpose. Within this overall monitoring and enhancement of understanding, the monitoring of tourism has a special place and new developments occur (Hadwen et al., 2007; Wolf et al., 2012; Orsi & Geneletti, 2013).

4.2.1 Tourism monitoring: Sustainable Tourism Area Life Cycle framework (S-TALC)

As we have seen with barrier 3, tourism development is often monitored using the number of visitors, and the life cycle of tourism areas (TALC) is a strong illustration of the power of this since the number of visitors is the key variable in the TALC. Given the extensive discussion above, on sustainable tourism and its barriers, a more elaborate framework is needed. To understand, monitor and manage for sustainable development of the tourism area, additional perspectives are

imperative: perspectives that include environmental, social and governance aspects. In figure 11 we present a Sustainable TALC framework (see Sijtsma et al, 2016). The Sustainable TALC framework is a framework with a measurement and monitoring focus and it has four quadrants (Butler, 1999). The four 'quadrants' share a common time x-axis but have different and double y-axes (A&B), highlighting a total of 8 variables and their possible development. The first quadrant takes the Market and Well-being perspective. The other three quadrants are counterclockwise, the ecology & landscape perspective, the rural labor market & liveability perspective and the policy & governance perspective. Within every perspective two key performance indicators are shown along with their possible movement over time. In three of the four perspectives critical zones are highlighted. We will discuss the details of the four quadrants below.

The first quadrant shows the core of the TALC, it is the market and well-being perspective focusing on the tourists, but not only on the number of tourists (1A), but also on the contribution an area makes to the (higher) well-being of the tourists (1B). The latter reflects the logic and augmented urgency of moving up in the hierarchy of Maslow and the increased importance of the search for meaningful tourism.

The second quadrant shows the ecology and landscape perspective. Clearly this is relevant to the Wadden area, which attracts visitors because of their natural and landscape capital. The second quadrant measures the ecological quality of the area on the left-hand y-axis (2A). As shown above in the Wadden area several nature protection schemes are in place and already for a long time. Several monitoring variables may serve here, and these may be aggregated to a single variable too (e.g. Sijtsma, Van der Heide and Van Hinsberg, 2013). Regardless of the particular indicator that is chosen, clearly for a nature-based tourism area it is essential to safeguard its ecological capital (Hernández & León, 2007); while it is also clear that the development over time need not follow the shape of the TALC curve. The ecology&landscape perspective has a second y-axis, showing the landscape attractiveness of the area to visitors (2B). Different units of measurement may be applied here, for instance the hotspotindex (Sijtsma, Farjon, Van Tol, Van Hinsberg, Van Kampen, & Buijs, 2013; De Vries, Buijs, Langers, Farjon, Van Hinsberg, Sijtsma, 2013). In some respects, this is obviously related to the ecological quality as such, but in other respects this may be unconnected since for instance the view on the horizon or the sound of the waves on the beach may be an important part of the visitor attractiveness but may hardly matter to the ecological quality. Obviously, in the early stages of tourism the impact of tourism may be small but serious ecological and landscape damage may occur due to growth of tourism. If critical levels are reached for either ecology or landscape attractiveness then sustainability is at stake. Interestingly, if environmental limits are safeguarded, as in large parts of the Wadden area, then the mature development stage of the area may be long. Already in his original life cycle paper, Butler (1980; 2006a/b) asserted that some areas may escape periods of decline or the need for rejuvenation to prevent decline. Butler mentions those areas 'in which the development is kept within predetermined capacity limits' (1980, p.11; 2006a/b), may experience very long periods of continued attractiveness. Furthermore, 'in the case of the truly unique area, could one anticipate an almost timeless attractiveness', and 'many established tourist areas [...] attract visitors who have spent their vacations in these areas for several decades and the preferences of these repeat visitors show little sign of changing' (1980; p.8).

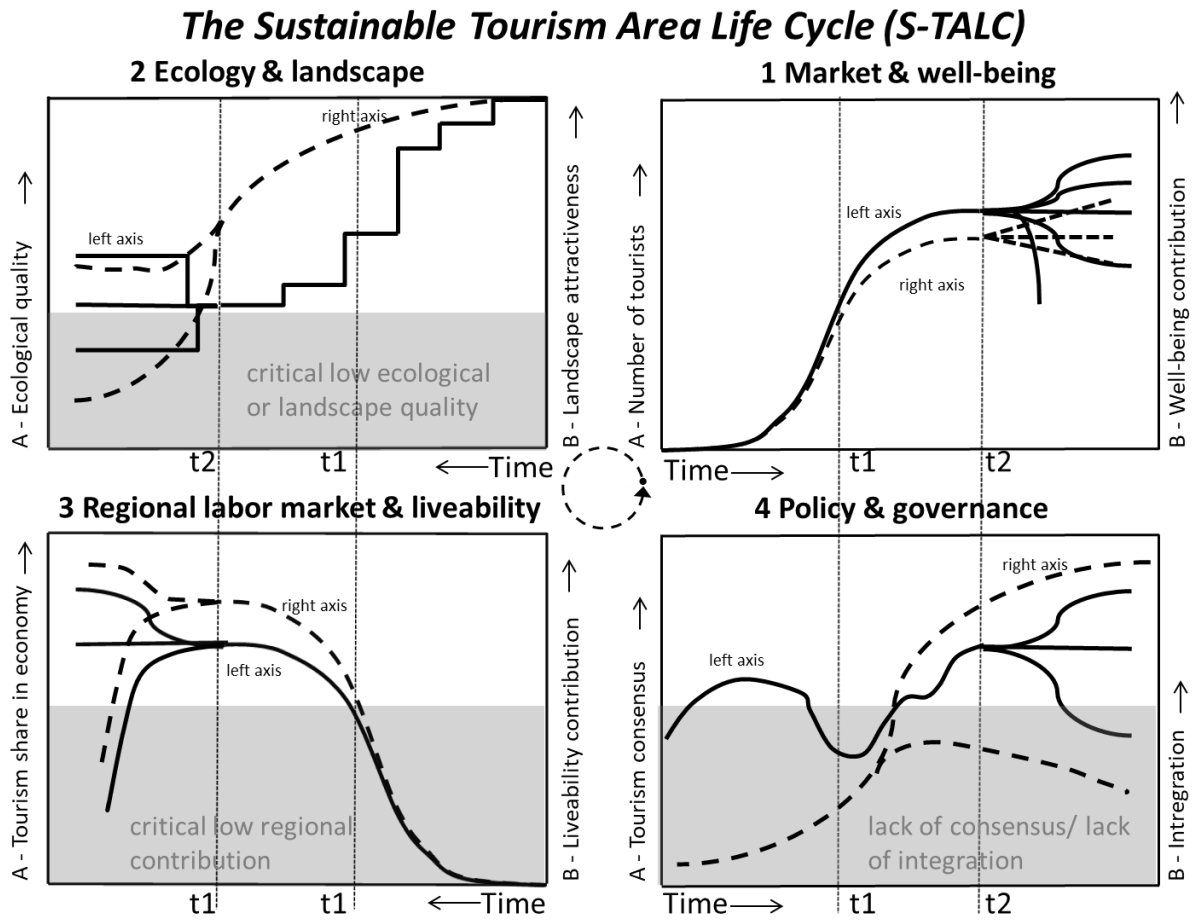


Figure 11: Sustainable Tourism Area Life Cycle (S-TALC) with its 4 quadrants and perspectives: Market&Well-being, Ecology&Landscape, Regional Labor Market & Liveability, Policy&Governance

The third quadrant, the regional labor market & liveability perspective, shows the development of tourism employment as a share in the regional economy and the contribution tourism makes to liveability. The curve here largely resembles the TALC curve shape of the first quadrant. Employment, its development, and size are key variables from a regional labor market perspective, but here the tourism share in the regional economy is the key variable (3A). The relevance of this indicator is clear and relates particularly to the relevance of having or achieving a substantial share in the regional economy. Tourism development cannot be taken for granted over time (the main point of the original TALC framework!), and continuous policy support of some sort is recommended as beneficial (Hovinen, 2002). Having a substantial share in the economy seems to be a prerequisite for effective policy making and is often necessary for acquiring sufficient (public) investment. Fairly robust employment growth has been found at the Wadden Islands. The islands have a completely specialized local economy which, for its own sake, is continuously monitoring the environmental limits of tourism activity, but by also being backed by its substantial share of the economy, is also investing in new opportunities and greater quality in order to remain competitive (Agarwal, 1997; Sijtsma, Werner & Broersma, 2008; Getz, 1992; Hoekstra, 2009). The steady and strong employment performance is typical of a highly specialized mature tourism economy, as one which may not be automatically stable or non-declining, but which is nonetheless vital and innovative in a competitive

environment. But the situation on the mainland coast is entirely different; in many parts here, tourism is either limitedly development or only a small part of the regional economy.

The contribution of tourism to the liveability of the tourism area is also a key aspect to achieve sustainable development (3B). Tourism impinges on the local culture and interacts in many ways with the local inhabitant. Tourism can have a very positive influence, but many of areas of tension can arise. As we have seen above the continuous growth in later, well-developed stages of a tourism area can cause huge tensions (e.g. in Venice and Amsterdam) between tourism and local liveability. It may for instance drive up housing prices, making houses unaffordable for locals.

Lastly, the fourth quadrant sets out the policy & governance perspective. The key indicator on the left axis is consensus about the direction of development (4A). Obviously not everybody has to speak and hold visions as if they were one, but without a reasonable amount of consensus among stakeholders, i.e. entrepreneurs, public policy makers and NGOs about the direction that tourism development should take, the chances of positive development decrease (Russell & Faulkner, 2004; Baum, 1998; Sijtsma et al., 2016). Even if funds and support are available due to the importance of the regional economy, without a shared focus, investment is not likely to be effective (compare Hovinen, 2002). A second key aspect of effective tourism policy is the integration of several levels of policy and governance, from global (actors) to local (actors), and from domain to domain (4B). Sustainable tourism development may be strongly dependent on the domain of general labour market policy or general educational policies, but the challenge is how to make different domains work together.

4.2.2 Spatially precise monitoring: islands, sea and mainland coast are different

It was argued by Butler (2002) that to be effective management tools, the monitoring of sustainable tourism development needs to reflect the space and time specific context of the locality under study. Concerning tourism, the Wadden 'localities' strongly differ between the islands, the sea and the mainland coast.

Above we have seen that economic development is a long-term process of specialization and that the Wadden area are not pivotal in the urban agglomeration centered production structure of modern day Europe, where a wide variety of production functions come together. In a study of the long-term development of Terschelling (Sijtsma et al. 2012) it was shown how throughout the time period of a century employment in fisheries and later on in agriculture have strongly decreased and that the island has specialized in tourism employment. However, the degree of specialisation differs strongly between the islands and the mainland coast, while the sea despite its importance even lacks formally registered employment.

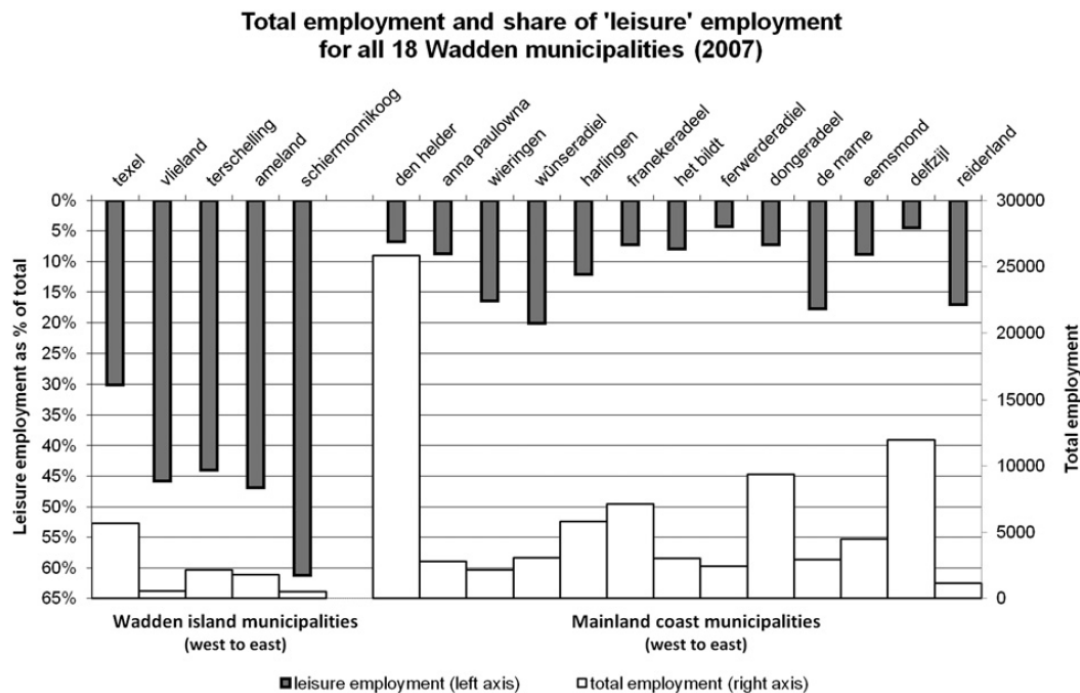


Figure 12: Total employment in the Dutch Wadden area, and the share of tourism/leisure employment in the total employment

To substantiate the point of spatial specific monitoring in figure 12 we give a more spatially detailed view of the tourism economy in the Dutch part of the Wadden area. We show the leisure employment as part of the economy of 18 different Wadden municipalities as of 2007. Figure 12 draws from employment data from the LISA database for year 2007. Employment is measured here as the total number of all jobs, including part-time, from 1 h (p) per week. Figure 12 categorizes the 18 Dutch Wadden municipalities in two groups; on the left are five Wadden island municipalities, and the municipalities on the mainland coast are depicted on the right side of the figure. Both groups are shown from west to east. The overall economic structure of the Wadden area clearly indicates that the Wadden islands are indeed small 'island economies'. Texel is by far the biggest island of these, with over 5000 jobs; Terschelling and Ameland have around 2500 jobs, while Vlieland and Schiermonnikoog have nearly 500 jobs. On the mainland coast Den Helder is the largest municipality in total employment, with over 25,000 jobs in 2007. Employment in Den Helder is dominated by the Royal Dutch Navy, and by firms that operate in the oil and gas sector in the North Sea. After Den Helder, Delfzijl and the municipality of Dongeradeel have the most jobs. If we focus on the extent of leisure specialization, i.e., the share of recreation and tourism related employment within the total employment number, the darker bars in figure 12 reveal that the Wadden islands have substantial shares of tourism employment, ranging from 30% for Texel to over 60% for Schiermonnikoog. Tourism is, however, limited at the mainland coast, it reaches 20% in Wûnseradiel (where tourism is mainly located at the IJssellake) and De Marne (Lauwerslake). Leisure employment comprises around 7% of the total employment in Den Helder.

4.3 Revisiting the four barriers

At this stage we may again revisit the four barriers as we did at the end of chapter 3 and briefly add to them based on the above.

- Barrier 1: Economic (short term) dominates (longer term) social and environmental concerns
Large scale production is often dominant in modern day economic processes including tourism, while urban-rural relations are critical for understanding tourism to the Wadden.
- Barrier 2: Complexity of managing the nature and landscape commons
- Barrier 3: Marketing for visitors and not for higher needs well-being of tourists
- Barrier 4: Non-integrated multi-level governance including the non-involvement of distant fans as stakeholder group

We can add two aspects to overcoming the barriers. First is that to monitor and govern for Sustainable Tourism with the aim of overcoming the four barriers, the four perspectives of the Sustainable Tourism Area Life Cycle (S-TALC) are useful. Second, we have argued that monitoring and governance for Sustainable Tourism should be spatially precise and for the WSR the Sustainable Tourism dilemmas may be quite different at the islands, on the sea and at the mainland coast.

5 Capita selecta

To balance the social, the economic and the environmental and to overcome barriers to sustainable tourism a series of governance mechanisms needs to be in place or developed. To gain a deeper and specific understanding of what is needed to face the challenges of sustainable tourism in this chapter we turn to four capita selecta, i.e. to four specific Wadden tourism activities, spread over islands, sea and main land coast and spread over the different barriers (see table 2). We take a closer look at 1) the traditional sailing industry 2) the recreational homes within the housing market, 3) branding and marketing of protected areas and market and 4) mainland coast tourism. This list of selected topics could have easily been much, much longer, but this selection will suffice to give enough color and specifics to our earlier discussion without drowning in details.

Table 2: The four barriers to sustainable tourism and the four capital selecta

Capita Selecta	WSR part			Barriers to Sustainable Tourism			
	Islands	Sea	Mainland	1 Economic dominates social and environmental	2 Complexity of managing the commons	3 Marketing for visitors and not for well-being	4 Non-integrated multi-level governance
Traditional Sailing Industry		X			XXX		
Branding and marketing UNESCO	X	X				XXX	XXX
Liveability & housing market	X						XXX
Mainland coast tourism			X	XXX			XXX

5.1 Traditional sailing industry¹¹.

The traditional sailing industry in the Netherlands (locally known as the ‘Bruine Vloot’ – the brown fleet – referring to the traditional colour of the hulls of the boats) is known for the Clippers and Tjalken that can be found in the harbours of cities such as Harlingen, Kampen, Lelystad, Stavoren and

¹¹ The research is based on various sources:

- Data provided by booking agencies on variables: name of ship, amount of beds, group travel, date of departure, time of departure, place of departure, date of arrival, time of arrival, place of arrival, place of residence of customer, country of residence of customer, rent price, date of booking, return visitor, whether an intermediary is involved in the booking
- Quicksan ‘environmental scanning’ of literature, documents and policies to understand consumer behaviour and demographic (market) development in the Netherlands and Germany
- 15 interview with stakeholders in the industry.
- Focus groups (6x) with youngsters in the age category of 18-25 jaar from the Netherlands and abroad: understanding image, perception, attitude and motivation towards the traditional sailing industry.
- Meeting with skippers: understand issues and possible solutions to escape the status quo
- Survey targeting skippers: understanding the perspective of skippers on the future of the branch (response of 45%, 74 respondents).

Enkhuizen. The ships are for rent and can be chartered for a day, a weekend, a midweek or longer. The industry has had a period of great success particularly in the 1980-1990s and the concept of sailing from A to B has not been changed very significantly over the last decades. In recent years, this comfortable position is under pressure and the industry is slowly being pushed out of balance as is indicated by urgencies that emerge (e.g. declining turnover, margins). A variety of reasons is causing this.

On the one hand, there are trends and development that occur in the business environment, outside of the sphere of influence of actors and collectives that operate within this industry. For instance, the tourism industry is quickly growing, professionalising and turning into a globally interconnected economy, consumers have a wide range of options to select from. Consumers become more critical, are more able and willing to change their preferences, choices and behaviour. Nowadays the sailing industry has to compete against short break holidays in Barcelona. The sector is also quite heavily relying on groups of school children particularly from Germany. Whereas these are return visitors, also their interest is shifting towards other activities and destinations – and it is no longer the school or teacher that decides but also the children themselves and their parents. Here too a weekend Barcelona might be(come) more appealing. Moreover, the market of groups and of members of associations (sports, religious) is under pressure due to a diminishing interest in associates and an ageing population. Another push factor is that fact that the industry is subjected to various changes in laws and regulations that require investments to meet safety standards whereas nowadays margins are rather small, capital is limited and attracting financial resources is difficult. At the same time, the low investment capacity creates an inability to make necessary investments in updating the quality of the tourism product. Finally, the image of the industry is often quite neutral as people know too little of the industry although it is also occasionally perceived as old-fashioned, the clientele as noisy (partying youngsters), or less important relative to the yachting industry. These are amongst the push factors that slowly push the sector out of balance, and require a response by actors and collective active within the sector.

On the other hand, there are factors that relate to the industry itself that contribute to or reinforce its situation. A key factor is the unchanged focus on the supply side. For a large part the offer that is presented to consumer is the activity of sailing whereas the wider tourism industry is much more demand focussed. This has much to do with the cultures and traditions in the sector, particularly with the preferences and attitudes of the skippers – generally trained in the sailing sector not the hospitality or tourism sector, being the owners and therefore the decision makers. Whereas some owners turn to more luxury (bigger huts, good beds, more facilities, all-inclusive) there is a large part that has not changed the offer (small huts, shared huts, simple bunk beds, basic facilities). In terms of organisation the sector is rather fragmented (various small booking platforms, many independent individuals, relatively small branch organisation) which makes it difficult to upscale and create a critical mass.

All in all the traditional charter sailing industry faces the challenge to reach a better “2.0” situation. Judging on the current state of the industry, there are a series of steps to be taken. A transition is needed to regain vitality and competitiveness. The research brings forwards a set of 9 points for action:

- Repositioning the industry image
- Entrepreneurship & hostmanship
- Knowledge about the guest
- Ship-skipper-market combinations (compare to product-market-combinations)

- Better utilizing the 'heritage' characteristics
- Tools and instruments for booking agencies to stimulate quality
- New inflow: business succession and resale of ships
- Cooperation to save costs
- Cooperation to initiate guarantee funds

Overall, the day-to-day struggle is how the sector can re-bounce and reclaim its position as an attractive and economically viable industry. Can it benefit from the experience or purpose economy, outlined in chapter 2? Then, that starting point is understanding the preferences and motivations of guests and tailoring the offer specifically to – or in co-production with – the guest to be able to meet their demands and desires. That could potentially greatly stimulate diversification, stimulate flexibility of entrepreneurs, and result in better experiences and reviews.

A major key condition that was identified was the important to unite and cooperate actors within the industry to ensure that the required organizing capacity is realized to operationalise the actions. On the one hand, this involves downscaling ideas to the level of the skippers such as creating awareness that the urgency to act is increasing for instance due to changing consumer behaviour and the increasing and professionalizing competition. On the other hand, it involves upscaling actions to the level of the industry which is currently difficult due to the rather fragmented organization within the branch. The latter has recently (in 2017) been done by a selection of the fleet by seeking cooperation with the water sports association HISWA – in line with action point no. 1 to reposition the industry and its image as water sports activity instead of traditional sailing.

5.1.2 Discussion Governance & Monitoring

The traditional sailing industry is extremely valuable for the Wadden area since it allows people of all sorts to visit the environmentally sensitive area of the Wadden in a true but organized way. It allows visitors to experience the tide and dynamics of the area, the open landscape and the birds and seal-wildlife, while being on a boat and sailing has its own special character. The traditional sailing industry is not the only recreational boating activity, and with all recreation boating sector a special agreement (Convenant vaarrecreatie¹²) has been signed between the governments, the sector organisations and NGO's to stimulate responsible behavior of boats regarding the vulnerable nature. Given the vulnerable nature of the Wadden serious monitoring of behavior is required, which has recently been organized. Here we may highlight that such monitoring needs to be detailed in space and time. In a recent project the use of radar and AIS (for 2016) and both AIS and Radar (for 2017) systems have been used to provide this, which allow insight in the intensity of use of different parts of the Wadden sea (see figure 13 below), which are then combined with maps on the foraging behavior of birds and the resting places of seals. This information feeds the governance process and assures a factual basis in policy debates.

¹² www.ikpasophetwad.nl/



Figure 13: Line density of (from bottom to top) ferries and other passenger ships (including the traditional sailing ships), motor yachts, and sailing yachts. In 2016¹³.

5.2 Branding and marketing UNESCO

The branding and marketing of places takes place in a multi-level governance system that consist of a multitude of actors with diverging interest who are dispersed over multiple organisations, spatial scales and levels of government¹⁴. In 2009 the Wadden Sea area became UNESCO World Heritage in

¹³ <https://rijkwaddenzee.nl/nieuws/vaarrecreanten-houden-zich-goed-aan-de-regels-op-het-wad/>

¹⁴ Branding is what is done and discussed in the proceedings of the trilateral symposium (held in December 2016 in Husum Germany) Waddenland Outstanding (see:

Germany and the Netherlands, while the Danish part followed in 2014. The specific qualities of the area in combination with this status provide interesting ingredients for regional branding and marketing. For branding, the status and labels of UNESCO bring the opportunity to add an extra layer to the area, 'enriching' it in the process. Subsequently, World Heritage place marketing must gain a place in the multi-level governance system. However, acquiring a place in such a system is not easy. A system has been built wherein multiple actors are busy with the branding and marketing of places and sites that sometimes fall within the Wadden Sea area or partly overlap with the boundaries of the Wadden Sea. To acquire a place within this governance system requires meetings, choices, alignment and cooperation.

In general, the goals and aims of place branding and marketing is about increasing the amount of tourist, addressing new market segments and market development, more revenue, more employment and make visitor stay longer. As we saw above this focus on visitor numbers and economic benefits is also a barrier to sustainable tourism. But place marketing is also a communication tool to enhance the sense of place identity and express this place identity internally within the place but also externally to the outside world. Through better communication potentially a better match can be achieved between the (higher) needs of the possible visitors and the unique qualities that the WSR has to offer in comparison with other destinations. As such, regional marketing can directly contribute to sustainable tourism. What makes the WSR so attractive that it lends itself for place marketing? The answer is pluriform and would differ depending on who you would ask. For some it would be the picturesque, small scale and historic villages, the sandy beaches and the landscape and vistas. For others it would be the uniqueness of the mudflats, the diversity and abundance of birds or other fauna and flora, while for again others it is the human-nature interactions that shaped the landscape and gave rise to spatial patterns and design of the mounds ('terpen' and 'wierden'), the extensive dike system and the salt marshes.

Labelling areas as UNESCO World Heritage is in essence a form of regional branding. Branding is a way to use the positive characteristics of an area, its place-based qualities, and develop a brand around it. But the WSR was already a mature tourism destination, visited by millions each year, so what does the UNESCO labelling bring. By means of the UNESCO World Heritage label the area is internationally (more) appreciated and valued: it is a sign that the place-based qualities are indeed recognized and appreciated on an international level. Not every area can apply successfully for such a label. Hence, these labels offer a way to make a seemingly random area part of an internationally renowned brand and platform, in the process providing a particular brand identity to the area. Potentially, the international community may not have a clear picture of the WSR but it does have (positive) associations regarding UNESCO World Heritage sites because these also exist closer to home and are also marketed as such. Overall, labels are instruments to create a brand identity and contribute to familiarity: UNESCO is a phenomenon that is known worldwide. The label and the associated networks (UNESCO, UNWTO) are platforms for individual destinations to generate further awareness and publicity. Hence, branding is a way to produce, reproduce or adapt a particular identity. The identity can subsequently be used to position an area and to create a particular image (Ashworth, 2008).

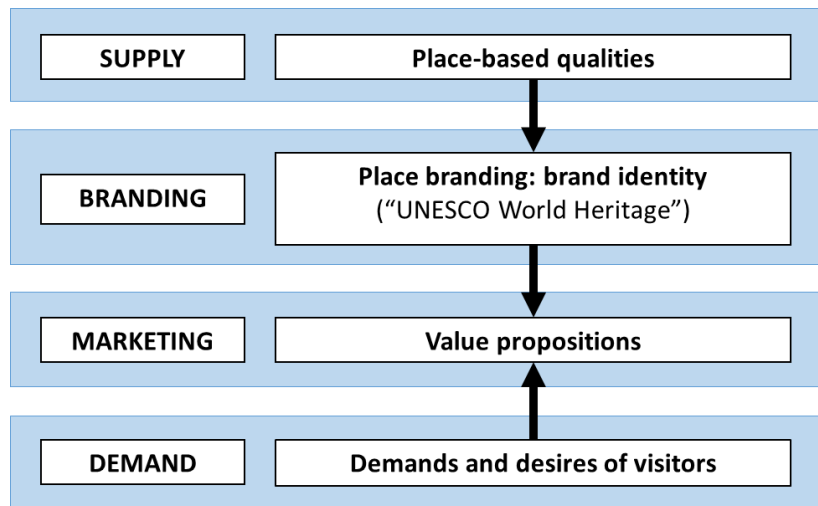


Figure 14: Coherence of supply, branding, marketing and demand (source: authors)

Connecting place-based qualities and a brand identity (on the basis of place branding) is the basis, the content, for place marketing. On the basis of these characteristics it is possible to create storylines, collect images, create logos and corporate identities that in turn can be used to reinforce the identity as well as to raise expectation. The marketing literature often speaks of the value proposition: what does the area offer? What will you gain out of a visit? What will you get in return? Value propositions are basically promises to potential visitors and serve as a means to build a bridge between the destination (the supply side) and the potential visitor (the demand side). Figure 14 above summarizes this relation between the supply side, branding, marketing and the demand side. The figure also visualizes that place branding has often a strong connection to place based qualities whereas it also strongly depends on a self-chosen view or interpretation of these qualities. Hence, place branding can be considered (highly) selective and therefore contested. Marketing is more consumer focused and is often driven by the demands and desires for instance of particular target groups. Collectively, this leads to a process that is aimed at connecting the urban and/or regional environment as best as possible to the demands and desires of selected and relevant target groups (e.g. inhabitants, firms, visitors, investors) to shape permanent stimuli for socio and economic functions and activities of the area (Ashworth & Voogd, 1990).

The organisation of place marketing

There are different ways to organize place marketing. Depending on the area under study it is quite likely that a unique, specific mix of organization emerges. Moreover, we can differentiate according to the amount and types of actors involved and where power and decision-making is centered. In general, we can imagine a spectrum with on the one hand centralized organization and on the other a decentralized organization. A centralized organization has the advantage that there is one single party involved that is responsible and authorized to make decisions. Disadvantages could be that there is a distance between the executives and decision makers and the actors that operate on an operational level. A decentralized organization means that responsibilities, authority and decision making is shared among multiple parties. It offers an organizational structure that has the potential to respond quickly to changes and offers more room to individual actions and creativity. Disadvantages are the possibility that actors operate individually 'on islands' that the overarching goals and aims become blurred and an extensive circuit of meetings and consensus building emerges to find matches between interests, finances, man power and actions.

In practice there are many mixture to be found that can be positioned somewhere in between centralized and decentralized forms of organization. Similarly, in the WSR there is a large amount of

actors active in the field of branding and marketing, varying from the local to the international level (see figure 15). Together these actors form a multi-level governance system that to a certain extent collaborates in terms of the branding and marketing of the WSR. The actions of actors can be varied, ranging for instance between presenting place based qualities ('unique selling points') to (segments of) the tourism market, to raising awareness and interest amongst inhabitants and to influencing the choices of firms regarding the location of their (future) businesses.



*Figure 15: An indication of some of the branding and marketing efforts within the WSR
(source: composed by the authors)*

The organisational diversity is a potential strength to attract a large number of visitors to the WSR. Namely, the market is diverse and the needs of visitor diverge. Not everybody will come to the WSR because the fact that it is listed as a World Heritage site. Visitors have multiple and divergent motives to travel to the WSR: for the nature, to for walking along the beach, to visit friend or family, for activities such as cycling or horseback riding, for events, because it is a UNESCO World Heritage site, and so on. Looking at these motives, the tourism market consists of 'direct visitors' who especially travel to the WSR because it is a World Heritage site. There is a group of 'indirect visitors' who travel to the WSR with a different motive – and who have the possibility (but may not necessarily have) to encounter the heritage aspects whilst on the spot. Perceiving the WSR as diverse, as a layered areas with many qualities, it requires knowledge of these qualities and the ability to frame them well to attract and motivate a large group of people that together have with a wide range of interest, demand and desires. Again, a reason why organizational diversity might be a potential strength.

Out of this organisational diversity it is possible that combinations emerge between (sub)markets and (sub)products in so-called product-market-partner-combinations (PMPCs). This market consists of (potential) visitors with particular demands and desires. Quite usual is the practice of segmenting the market down to life styles, areas of interest of experience domains. Then, the product consists of a core product (the basis for tourism products and services such as nature, landscape, culture, facilities), the service product (the services that use the core product as a basis) and the relational product (the involvement of the visitor regarding the core product). Partners are for instance entrepreneurs, firms, and organization that play a role in connecting the product to the market. The

combination describes the ways in which (sub)markets and (sub)products are joined together. Creating a brand identity or corporate identity (logos, recognizable colors, texts, designs) are usual ways to enhance the recognizability and enhance coherence. Figure 16 below provides a summary.

Whether or not is a collective and harmonious way, actors are together providing the contents and values that could motivate visitor to travel to the WSR. To do so, a wide range of messages, promises and other value propositions are send into the world via diverse range of information and communication channels. In turn, (potential) visitors are also using a diverse range of sources to gather information before deciding where to go. PMPCs that center on World Heritage are important to attract (new) visitors to the area. Moreover, also PMPCs that do not (directly) center on World Heritage are important to bring visitors to the area that in a later stage can be motivates to turn their attention towards the status. These PMPCs can be connected and enriched to further draw attention to the World Heritage status. Diversity could be used as a strength and cohesion could be used as a strategy to utilize this strength.

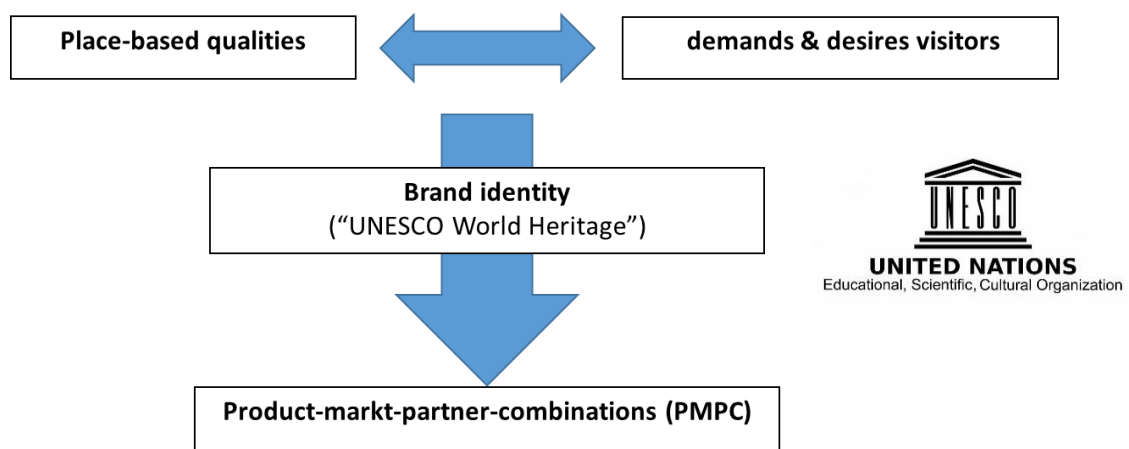


Figure 16: Coherence of PMPCs (source: authors)

Place marketing in a multi-level governance system

Within a multi-level governance system organizations have to create focus by making choices – often because of the practical limitations caused by capacity in manpower and financial resources – and by creative collaboration. The organizations that do place branding and place marketing are often, at least in the case of the Netherlands, relatively small so-called ‘project agencies’ that present themselves as ‘network organizations’. This means that these project agencies depend on partners and their actions to reach target markets and to reach their own goals.

How to motivate visitors to visit the World Heritage site of the Wadden Sea area? Concerning the issue of making choices and collaboration we can take inspiration from the Michelin Guide. Michelin uses the well-known classification systems rating the quality of restaurants by a number of stars. The logic behind the classification is: is it worth a specific trip (***)? Is it worth to make a detour when one is relatively close by (**)? Is worth to visit when it is on the route (*)? If we translate this logic to the marketing of regions then it is up to marketing organization to determine for target markets what they want to attract what people find worth a worth a specific trip(***), a detour when near (**), or a visit-when-on-the-route (*) (see figure 17). The underlying assumption is that only a few sites are considered worth to make a specific trip. Potentially these include for the Wadden Sea area the seals or the beach area. The number of sites that are worth a detour once people are already on site is likely to be larger: nature areas, walking tracks, a visitor center, a museum, etc. The number of sites and activities that are worth a visit when visitors are ‘en route’ is even larger: restaurants, cafes, etc. When this logic is visualized in a figure we see the marketing pyramid below.

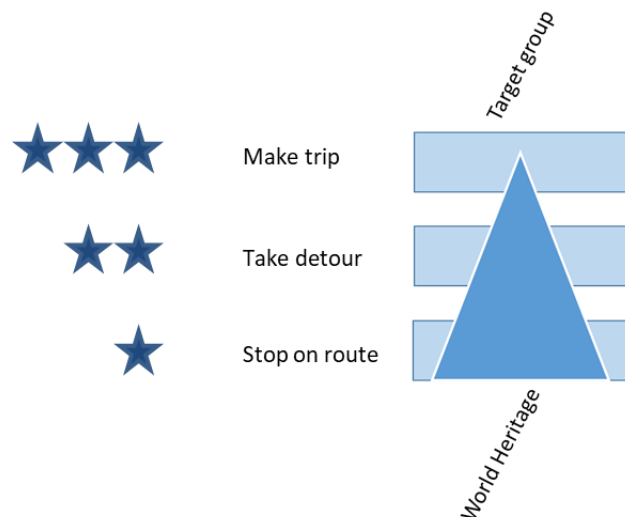


Figure 17: relation between visit, world heritage and target group (source: authors)

Who are visitor of the World Heritage areas? A first segmentation is to differentiate between the groups of “World Heritage Visitors”, the group of ‘Wadden Sea Region Visitors” and the “Non-Visitors of the WSR”.

- “World Heritage Visitors”: the group that comes to the area specifically for the fact that it is a World Heritage site. For this group a challenge or goal could be to simulate repeat visits of extend their stay.
- ‘Wadden Sea Region Visitors”: for this group the World Heritage status is not the main reason to visit the WSR – but they can be interested for the World Heritage status. The challenge or goal for this group could be to raise awareness, draw attention and stimulate their interest for World Heritage-related experiences – for the sake of repeat visits or extend their stay.
- “Non-Visitors of the WSR”. This group is currently “not yet” finding its way to the WSR and/or the World Heritage site. Raising awareness and drawing attention is a major first challenge or goal in order to attract this group to the area. When successful this could result in (new) market development and additional visitors.

In any case, for regional marketing it makes sense to embark in target group segmentation as (potential) visitor have an array of diverging expectations, interests and needs. From a marketing point of view target group segmentations helps to better serve the individual/group needs of visitors. Namely, for each target group there is a different reason to travel, a different motivation to come to the WSR. This means that each target group has its own ‘marketing pyramid’ (figure 18). What is worth a specific trip for one person is not necessarily the case for another. For marketing this has multiple implications. First, to reach multiple target groups one should know very well what motivate people to come to the WSR in order to make use of such information for niche marketing or target marketing actions. Second, it could mean that one should make choices regarding the prioritization of target groups. Prioritization could be a necessary (or pragmatic, or undesirable compromise) choice due to limited manpower or funding in order to still work efficiently towards goals (e.g. by focusing on biggest target group, most lucrative group, more promising group, most overlooked group, etc.).

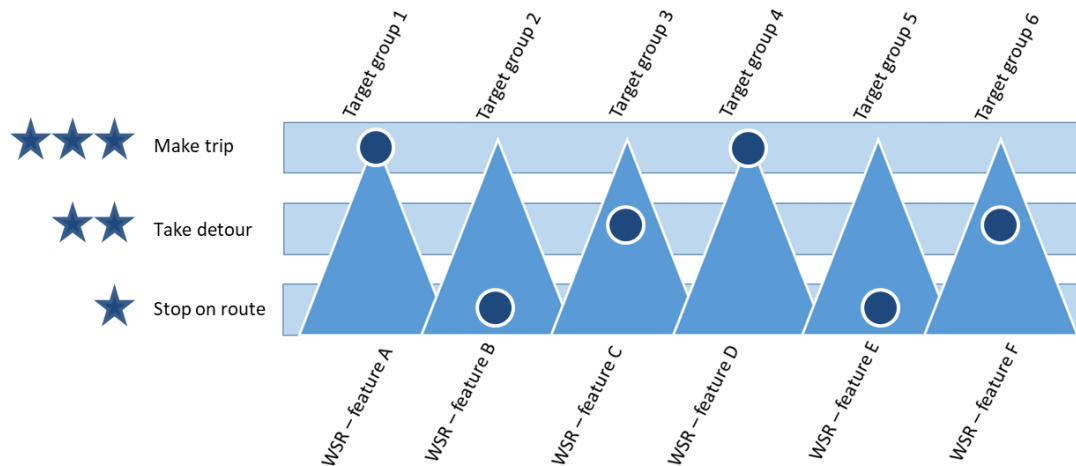


Figure 18: Relation between visit, WSR and multiple target groups (source: authors) .

How could organisations engage in joint collaboration within a multilevel governance system? There are multiple organisations busy with regional marketing in and around the WSR (see figure 15). Each organization tries in its turn to motivate (potential) visitor by packaging and presenting the area its qualities and features in interesting ways (as represented in figure 18 by the different, multiple 'marketing pyramids'). Without alignment and collaboration it could very well be that organisations are targeting the same groups (over and over). An implication is that organizations become each other competitor.

Each organization tries in their own way to create a marketing pyramid and load this pyramid with imagery, stories, and themes and so on to attract visitors to parts of the WSR. In theory this could be a strategy to attract a large and diverse number of visitors to the area, on the condition that organization are able to reduce the overlap between their approaches. Moreover, when marketing actions are complementary they could reinforce one another. Visitor that come to the area with differing motives could be interested for the World Heritage features of the area – in the process for instance extending their stay or resulting in repeat visits. In other words, different *layers* of the area could be made accessible to visitors via a diversity of organization and communication channels. It is possible that a hierarchy (in spatial terms) of marketing organization emerges: some organization focus on the local scale such as one particular island whereas there is a provincial or other umbrella organization that overarches multiple local scales that selects a limited amount of local features to market to a wider more general target group.

5.2.1 Discussion Governance & Monitoring

Governance: place marketing should be complex?

In the WSR a situation is emerging wherein place branding and marketing takes place in a multilevel governance system. On different levels organisation are involved, organisation that, whether or not in joint efforts, pursue their own agenda and actions. This diversity is on the one hand potentially very powerful and on the other hand quite dangerous.

Diversity is potentially powerful because each organization can in its own, unique and passionate way make use of their own knowledge, passion and expertise regarding the qualities of the WSR. This knowledge, passion and expertise are key ingredients to create a fitting, convincing, rich and authentic story that can be told/communicated to visitors. As indicated earlier, a centralized

approach could have as an effect that specific, area-bound knowledge is not present within such a centralized organization. The danger of an empty shell is on the lure.

Diversity also makes regional marketing robust and flexible *at the same time* (Hartman, 2016). Robust because when one or multiple organizations disappear for whatever reason this will not result in the collapse of the entire destination marketing system. Diversity then contributes to the resilience of this system. Flexible because it is relatively easy to add new actions and activities, even organization, to the multilevel governance system. When there is, for example, an organization that envisions the WSR as an outdoor or adventure destination, it could be added. By doing so it would make the area even more layered and potentially result in the attraction of new 'adventure' visitors that in the past did not find their way to the WSR (the group non-WSR visitors).

A point of attention that relates to diversity is that it could quickly lead to competition. A solution to deal with competition is to search for complementarity. How could one reinforce and enrich the actions and activities of the other? The goals of organisations is often quite similar: more visitors, more spending, extended stay, etc. It would require a degree of cohesion between different organisations. In literature this is referred to as 'related variety'. A coherent set of independent elements. Cohesion requires that there is coordination and choices are made about that one does and does not and leave to other organization. The implication could be that there is an extensive circuit of platforms and meetings to coordinate actions and create consensus. Next to 'related variety' there is also 'unrelated variety'. This means that independent elements are not connected. This is not per se a negative situation or unproductive. It could also mean that the emergence of a new organization has as an effect that a new target group is motivated, which would otherwise not come to the area and whereby the organization does not seek any cooperation with others. An example is the niche of urban exploration or 'urbex': people with a passion for empty, deserted or abandoned buildings or sites who create 'destinations' out of these buildings or sites by making beautiful photographs and sharing these via special interest forums on the internet with other fanatics. An example on the island of Vlieland is the emergence of Podium Vlieland, initiated by a local entrepreneur, nowadays attracting visitors is the low season to Vlieland for themed movie weekends. Such initiatives and projects could, at first, emerge out of sight of existing, formal communication and marketing channels. Nevertheless, it could bring a new group of visitors to places who encounter, albeit in a rather indirect way, other touristic or recreational products. Over time, it could gain momentum and result in more formal(ized) structures.

The above calls for a discussion: should destination marketing be complex? Or, is there no other way that destination marketing *is* complex? Complexity seems to be the implications of an area with a particular richness that makes regions layered. Organisations often select only a limited set of qualities or layers to market because they have a specific passion or command regarding this set. Alternatively, often there are layers added to regions to make places more attractive for visitors. This calls for coherence of actions or at least some form of coordination. Diversity and layers could easily become issues and become obstacles to overcome. It is up to a region and its stakeholders to find a balance in the degree of complexity. A balance could be found for instance that local governments are monitoring and facilitating (keeping data bases) and entrepreneurs are creating products and services. It is then up to an overarching (regional, provincial) marketing organization to keep sub areas and initiatives together. One way to keep sub areas and initiatives together is to keep an eye out for the complementarity of the region as a whole.

5.3 Liveability, the housing market and education

In balancing the local and tourism presence in one place the housing market is essential. Highly appreciated and visited resort experience gentrification: richer tourist people driving out the poorer

locals. A process of gentrification can be seen as positive, since it is sign of attractiveness and growth. However, it can eventually lead to a situation in which no locals remain. To show the relevance of this process to the Wadden area we may have a look at house prices in the Wadden Area.

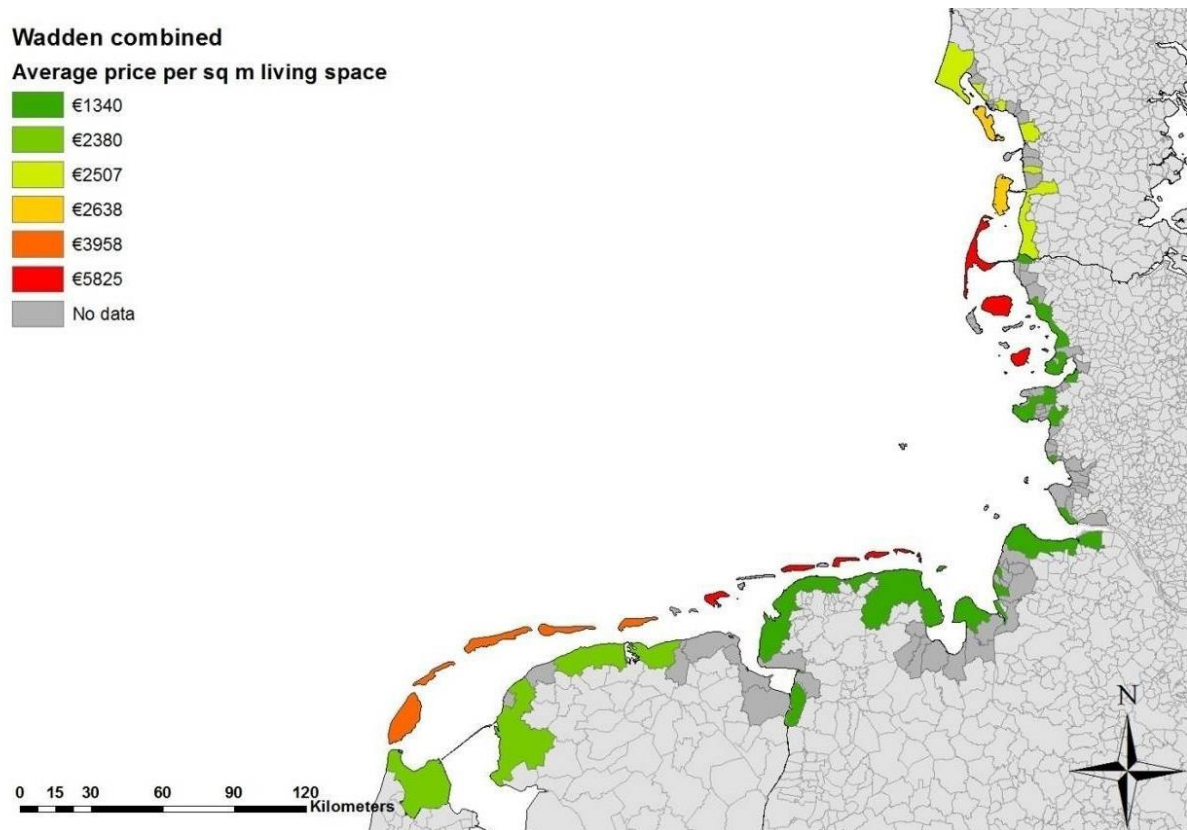


Figure 19: Average absolute square meter recreational house-price level

The maps above illustrate the spatial patterns of recreational housing prices (figure 19). A clear relation is found with the Greenmapper data: at the locations where the natural surroundings are marked intensely as attractive or valuable, at these locations the recreational house prices expressed as a price per m² is highest; showing the value of the real estate price as an indicator. However, this monitoring variable of price per square metre also has strong limitations. One may for instance wonder why the Niedersachsen mainland coast shows relatively low prices compared to other mainland coastal areas, but has been deemed highly popular by the Hotpot markers. The implication here is that the price of recreational homes is not merely dependent on the natural attractiveness of its surroundings. We suggest that price is also dependent on spatial policy, on institutional housing market characteristics (e.g. ease of financing, tax rates), and on supply and demand factors. We find too, that these factors all differ per country.¹⁵ More in-depth analysis is needed in order to adjust for many of these aspects.

However even these limited numbers still tell a story. We can compare the list prices of recreational homes with an indicator for the 'average price level in the housing market' of the respective countries. Using data from Hána et al. (2013), we show the price per m² of newly built homes in the different countries and in their capital cities (Amsterdam, Berlin and Copenhagen). This comparison is not quite 'pure' because not only are all existing recreational homes in a different category than

¹⁵ For instance, the relatively low housing prices of the Niedersachsen (Lower Saxony) mainland coast might be explained by the presence of urban centres (with relatively abundant social housing) such as Wilhelmshaven, Bremerhaven, Cuxhaven and Norden.

newly built family homes, but there is also a difference between the list prices of recreational homes and the transaction prices of newly built homes. However, our comparison can serve as a first try to better understand country differences.

Figure 20 shows that the average absolute price level in Germany is much lower than in Denmark and the Netherlands. But Wadden area price levels are higher everywhere. The Wadden mainland coast is mostly slightly above the country average. However, one can also see that the price level at the Wadden islands is higher than the price levels in all three country capitals. Once again, the German Wadden islands perform extremely well. For further verification of their performance, price levels of newly built homes in a selection of two major European cities: London and Paris are also given. The German Wadden island of Sylt has a price level of around 7000 Euro per m²: a number well below Inner London but higher than Outer London; and a number nicely in-between central Paris and the Paris region. Gentrification may also lead to the rich buying recreational homes for their own private use and not or no longer renting them out to other holiday makers. This lowers the overall capacity of the built housing stock and fewer people can enjoy the area.

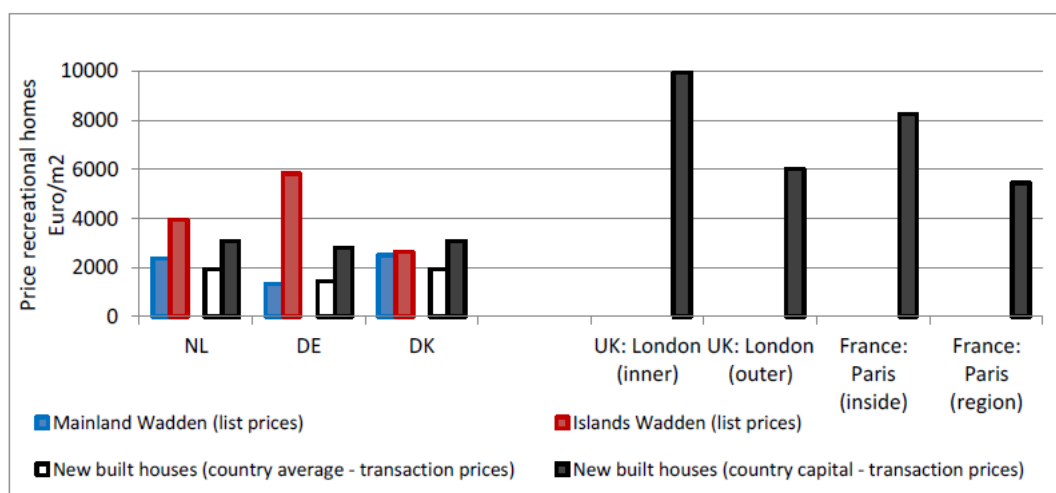


Figure 20: Average square meter (list) prices of recreational homes in the Wadden area (Islands and mainland coast) of the Netherlands, Germany and Denmark compared to the average newly built regular (transaction) house price for the different countries and the average in the country's capital. For comparison data are also shown for London (newly built) and Paris (older dwellings) Source: Sijtsma et al. 2014.

5.3.1 Discussion Governance & Monitoring

Concerning balancing the number of local inhabitant versus the number of tourists in the light of gentrification, social housing can be effective. The Netherlands have a long and strong tradition of social housing. Providing social housing is an effective means of assuring affordable housing to local inhabitants. Other mechanisms relate to the obligation to live and work in an area, as a condition for buying a house. As for the buying of recreational homes by rich people and no longer renting them out, again strong mechanisms are needed to prevent it, if this is desired. The obligation to rent out the home can be one of these; and is probably the strongest. But rules limiting the length-of-stay of tourists can also be effective to some extent.

5.4 The mainland coast tourism

Whereas tourism, recreation and leisure are dominating many of the islands of the WSR, tourism is not prominently present on the main land of the region. The area has undergone a long process of contraction, relative decline and emigration since the 1870's. This part of the WSR is a predominantly (semi-)rural region and is characterized by a history of functional specialization in support of the

development and revenues of the agricultural sector. Past and contemporary planning strategies have been in favour strictly separating agricultural development and nature protection, in the process limiting other types of land use. In the Netherlands we see that the development trajectory of this part of the region is moving towards a potential lock-in situation and that this situation is reinforced through strategic spatial planning. The situation in Germany is different as there is a long(er) history of mixed land use and a longer tradition for instance in terms of tourism, leisure, wellness and healthcare (“Kurhäuser”)¹⁶.

The result of these spatial planning intervention in combination with a tendency to larger scale agriculture is a relatively monotonous landscape¹⁷, as can be clearly experienced when visiting the area. In terms of economy and morphology, vast agricultural complexes dominate the landscape. Nowadays, the area lags behind in socioeconomic development and is confronted with liveability issues amongst others caused by the migration especially among the youth and the decline in a support base for schools but also shops. Locally, such change cause impoverishment, vacant properties, and the struggle to provide for public facilities. The rise of these issues provides incentives to reconsider planning strategies with regard to spatial development. So far, the planning regime has been rather restrictive towards alternative trajectories. However, there have been gradual developments that indicate that the region has potential for alternative activities in addition to production and protection (cf Holmes, 2008; Woods, 2007). Leisure and tourism-related activities are a good example of these developments.

Good examples of these include the following. Locally, entrepreneurs were able to convince and tempt authorities to introduce new types of novelties (self-organized or otherwise): from individuals starting bed & breakfasts or hotels to larger multinational organizations exploiting holiday villages. Also, the wide availability of the Internet allows for home-based businesses related to art, information technology, consultancy, and other ‘cottage industries’. Contextual developments such as the emergent societal interest in landscape heritage, nature, and ecology as well as the increasing welfare levels, available free time, and improved mobility changed lifestyles and opened up local opportunities for development related to leisure, recreation, and tourism (cf. Phillipson et al, 2004). These initiatives were considered relatively compatible with heritage, nature, and particular landscapes that originated in the past. The extent to which the initiatives find political support from local communities, however, varies strongly throughout the region. On the islands in the Wadden Sea the agricultural sector has not been as prominent as on the mainland; the potential of characteristics such as sandy beaches, picturesque villages, nature and ecology for tourism, leisure, and recreation had been recognized for decades, and these are nowadays providing the largest source of income. In areas where multiple land-use claims coincide, agriculture faces challenges to up-scale; in this case, non-agricultural or semi-agricultural farmers as well as urbanites or exurbanites start businesses related not only to tourism, recreation, local produce, and organic farming but also to health care, wellness, energy production, and cottage industries (Berkhout and Van Bruchem,

¹⁶ A related aspect relevant here is the different German perception towards the coast compared to the Netherlands and Denmark. The smaller countries Denmark and Netherlands have relatively more coast and far more coast and beach alternatives within reach. Germany is a far more populous country with a far less coastline compared to the Netherlands and Denmark (and even more so before 1990, when a large part of the Baltic Coast – in the former German Democratic Republic – was well-nigh inaccessible for ‘Western Germans’).

¹⁷ One could argue that the positive attractiveness of the Wadden area is connected to this relative dullness. The monotonous openness goes for the Wadden Sea proper too and many visitors appreciate it travelling ‘into the great wide open’. Unlike the spectacular Alps or the Grand Canyon this area doesn’t produce changing views in a few steps. To enhance understanding and love of the openness of the mainland coast may, according to for instance historian Meindert Schroor, require explanation concerning the history of the landscape.

2008; Overbeek et al, 2006). This is most manifest in the National Landscapes of 'Middag en Humsterland' and the 'Friese Wouden'. Moreover, villages surrounding the larger towns, such as Winsum and Zuidhorn near Groningen, are increasingly perceived as attractive places for living, and experience an influx of urbanites (Van der Schuit et al, 2008). In the surrounding municipalities they find space, tranquillity, and characteristic landscapes, villages, and farm houses that allow them to adopt a more rural lifestyle (Brouwer et al, 2007; Hermans and De Roo, 2006; Hartman, 2016).

These examples represent a fundamental difference compared with the traditional development trajectory of the region, especially on the mainland, exceptions to either nature or agriculture are still occasionally 'allowed' politically and administratively as a result of vested interests, planning strategies, and routines. A transition is constrained in its development. The transformations around the Lauwersmeer (Lauwers Lake) illustrate this. Here, the availability of nature, characteristic landscapes, water, tranquillity, and open space triggered developments related to leisure, recreation, living, and health care, such as the Esonstad holiday village, the Lauwersee villa park, and inspired parties to explore the feasibility of a combined care and recreational facilities of Lauwershage. To avoid negative impacts, developments are limited to a few locations, mainly on the fringes in between nature and agricultural areas. As a result, the density of buildings is relatively high, and the connectivity with surrounding areas is deliberately limited. From a socioeconomic perspective, some developments operate therefore as stand-alone entities. Esonstad, for example, came with a new restaurant, grocery store, and several shops, whereas retailers in nearby villages—important as they are for local inhabitants, liveability, and social life—struggle to keep businesses open.

These examples draw attention to a major controversy in terms of spatial planning and decision making. Promoting relatively monofunctional areas in the interest of nature protection and agricultural development through spatially separating land uses may limit the development options and potential for leisure and tourism related developments. Promoting multifunctional land use, however, may impede the progress of the agricultural sector and have a negative impact on the services and amenities provided by landscapes and nature. Such controversies emerge when land uses are to some extent competitive and not fully compatible. Consequently, these situations require decisions to be taken about the course of the development trajectory and the planning strategies applied.

5.4.1 Discussion Governance & Monitoring

What does this case teach us? There is a case to be made to promote diversity in terms of socio-economic and spatial-economic diversity. Promoting diversity could be triggered by creating more 'room' in policies and the physical environment for experiments in terms of new or temporary land uses, activities, facilities or other installations. This is an ingredient for novelty and the emergence of new forms of niche tourism and could boost the self-organized growth of niches that could, ultimately, result in the emergence new structures (new organisations, new industry clusters, new patterns in socio-spatial behaviour and land use). In other words, it comes with a governance challenge that centres around that we call "possibility space". Providing such possibility space is controversial and poses a major dilemma. It is strongly affected by on the one hand the obligation and ambition to protect, conserve and avoid risks and on the other hand the desire to adjust, adapt and transform. Figure 21 captures this dilemma and helps us to further elaborate on the implications for sustainable tourism.

Figure 21 shows a spectrum. On one side there is retaining existing qualities This is typically accompanied by the perception that certain qualities must be conserved and risks must be avoided for instance to protect flora, fauna, built heritage, unique landscapes, vested interests, to protect sunk

costs and so on. This side is associated with path dependence: developments, events and decisions made in the past (strongly) influence development trajectories of the future. Regarding change the action is to withhold/resist change or, at best, to ensure that changes are embedded as much as possible into local contexts so that qualities are not lost. On the other side there is adding new qualities. This is more development oriented and revolves around the idea of taking opportunities. This side is associated with path creation.

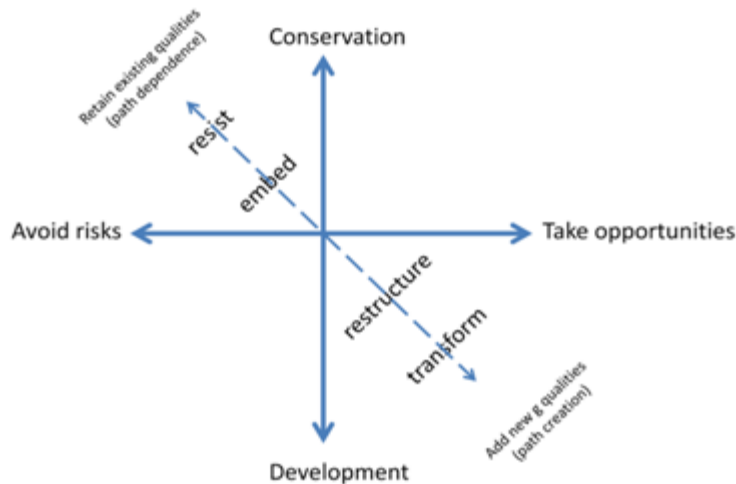


Figure 21: Spectrum of relations between leisure and landscape (course: adapted from Hartman et al. 2011)

This spectrum is relevant for sustainable tourism in the trilateral WSR in various ways. From the perspective of institutional design and policy making, it shows the importance of ensuring protection and conservation as well as adaptation and development *at the same time*. This is a major governance challenge that revolves around shaping the possibility space to sheer and shape how the tourism industry evolves. At the same time it is up to the tourism industry to take this possibility space and to ensure that their initiatives align with or even enhance other interests and ambitions. For instance pursuing synergies between tourism and nature development, tourism development and heritage management, or tourism development and socio-economic opportunities for local communities. The ability to take the possibility space is important for the tourism industry to renew, evolve in order to stay competitive and economically viable/sustainable. Moreover, in doing so the diversity of a tourism industry can be stimulated, contributing to the resilience at the scale of the (local) tourism sector as well as the wider destination.

However, taking the possibility space could be rather complex. Rules, regulation and guidelines that shape the possibility space are created in a multi-actor, multi-level and multi-domain governance system. Hence for entrepreneurs, firms and other initiators it could be difficult to navigate this possibility space and to understand how to bring their ideas into practice. Hence, support is needed to ensure this possibility space is actually taken. Such support is given in the agricultural sector in the province of Friesland, the Netherlands, via the approach called Nije Pleats. Whenever firms want to upscale, a team of experts is involved in the planning phase in order to match the ambition of the entrepreneur with policy frameworks in order to ensure that other ambitions that go beyond the firm such as landscape quality are incorporated as well (an example of ‘embedding’ – see figure 21). This approach is likely to be transferred to the tourism and leisure sector as well to steer and shape their influence of spatial quality (Hartman, Parra & De Roo, 2016).

Finally, as the tourism sector is dynamic and society is constantly evolving as well the possibility space for tourism development will be continuously renegotiated. It is in a permanent state of being produced, reproduced and adapted over time as it is reflexively reorganised in response to and to anticipate new, emergent events and situations. This majorly complicates matters for an efficient and effective governance system – as this system is evolving as well as old rules, regulations, policies, actors, organisations and networks disappear or evolve over time and new ones appear.

6 Synthesis and summary: Key mechanisms to overcome barriers to sustainable tourism

Tourism in the international Wadden Sea Region (WSR) is well-developed and yearly millions of visitors come to the area. As a tourism area, the WSR is not in a passive equilibrium but dynamic at multiple scales. But how can WSR tourism become and/or remain sustainable? We have emphasized four barriers to realizing sustainable tourism:

- Barrier 1: Economic (short term) dominates (longer term) social and environmental concerns
Large scale production is often dominant in modern day economic processes including tourism, while urban-rural relations are critical for understanding tourism to the Wadden.
- Barrier 2: Complexity of managing the nature and landscape commons
- Barrier 3: Marketing for visitors and not for higher needs well-being of tourists
- Barrier 4: Non-integrated multi-level governance including the non-involvement of distant fans as stakeholder group

To overcome the four barriers and balance the different demands and domains for achieving sustainable tourism the WSR needs to take into account multiple perspectives of the Sustainable Tourism Area Life Cycle (S-TALC) framework (see figure 22, repeated from figure 11). A general barrier-overcoming-mechanism is monitoring tourism: “a tourism barometer” for the first quadrant. It is about high level monitoring the short-term developments and long-term evolution of tourism (including tourist awareness of vulnerabilities of the area) and providing the sector with relevant and timely information, including long term outcomes of short-term developments. Data are needed on the “customer journey”/“guest journey” by focusing on three aspects:

- 1) Visitor flows: how visitors move through space and time (in terms of numbers, behavior, origins, destinations, types in terms of inhabitants, recreationist, tourists)
- 2) Visitor experience: the experience of the visitor in terms of appreciation, attachment, valuation, evaluation of experience relative to expectation
- 3) Visitor management: the influence on customer journey's in terms of the effectiveness of strategies, interventions, marketing, governance, managing high tourism pressure ('hotspots') versus low pressure ('notspots')

This tourism monitoring holds for all areas in the WSR but we have suggested that the barriers to Sustainable Tourism may be quite different in different parts of the WSR: at the islands, on the sea and at the mainland coast.

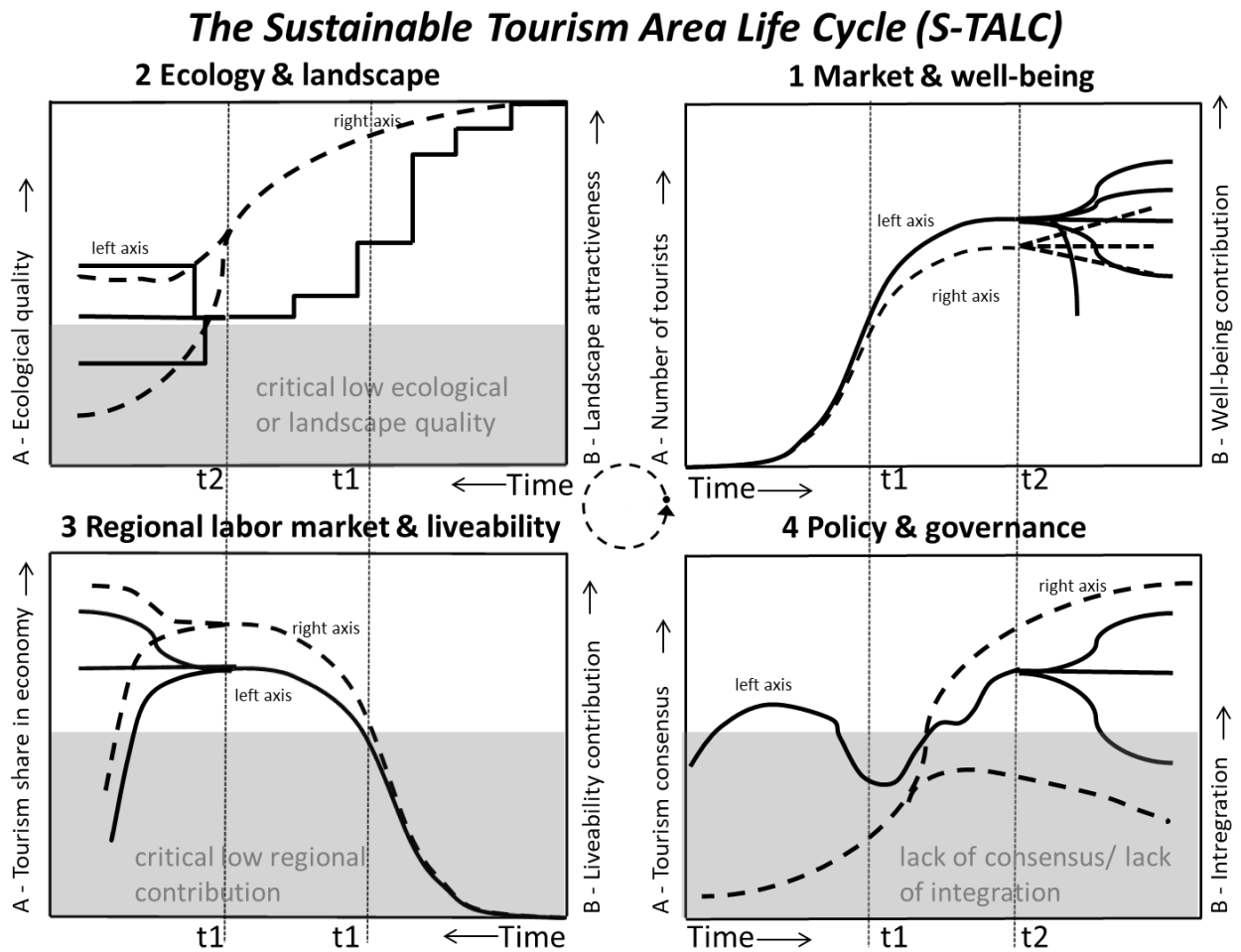


Figure 22 (/11): Sustainable Tourism Area Life Cycle (S-TALC) with its 4 quadrants and perspectives: Market&Well-being, Ecology&Landscape, Regional Labor Market & Liveability, Policy&Governance¹⁸

Using on the hand the S-TALC framework, and its axes from 1A to 4B, and on the other the division in three sub-areas, islands, sea and mainland coast, we will now highlight different dilemma's and possible solutions or measures per sub-area.

Sustainable Tourism on the Wadden Islands

The islands are well-developed as to tourism. They are mature destinations, but face the challenge of constant renewal, finding new niches as older segments decline. Bicycle paths need to be adjusted to e-bikes and mobile phone connectivity needs to be upgraded; just to name a few renewal elements.

¹⁸ The first quadrant shows the core of the TALC, it is the market and well-being perspective focusing on the tourists, but not only on the number of tourists, but also on the contribution an area makes to the (higher) well-being of the tourists. The second quadrant show the ecology and landscape perspective, if critical low levels are reached for either ecology quality or landscape attractiveness then sustainability is at stake, but if environmental limits are safeguarded, then the mature development stage of the area may be long. The third quadrant, the regional labor market & liveability perspective, highlights the importance of tourism having a substantial share in the regional economy and the importance of tourism making a positive contribution to regional liveability. Lastly, the fourth quadrant sets out the policy&governance perspective highlighting on the one hand the importance of a certain consensus about the direction of tourism development among stakeholders and the need for the integration of several levels of policy and governance on the other. Integration is needed for governance from global (actors) to local (actors), and from domain to domain. Sustainable tourism development may for instance be strongly dependent on the domain of the general labour market policy or general educational policies, but the challenge is how to make different domains work together.

This constant renewal is a necessity and very important, but as such it not really a dilemma, since (looking at the S-TALC framework) the sector holds strength in visitor numbers (axis 1A in figure 22) and in serving higher well-being (1B), since there is quite some consensus in the sector as to strategy (4A), including awareness of the importance the ecological and landscape qualities (the commons; 2A&B) and as the importance of the tourism sector to the whole of the island economies is large and well-recognized (3A).

We see two dilemmas to sustainable tourism on the islands that relate to multi-level integration of policies (4B) and the contribution of tourism to liveability (3B). The two dilemmas and possible directions for solutions or measures are:

“Island” Dilemma 1 - How to benefit effectively from the UNESCO World Heritage status towards more sustainable tourism?

Possible directions for solutions or measures

The UNESCO branding is one of the most valuable brands in tourism, and, it can be argued, it adds extra responsibility in opening up the Wadden more to a worldwide audience of tourists. However, it is granted to an area already well-developed and not everywhere suitable to strong growth in tourism numbers. The UNESCO brand can potentially bring Wadden tourism (marketing and governance) to a serious large scale, a scale which may accommodate some growth in numbers but primarily allows marketing for quality and well-being. This large scale potentially allows making profitable deals with large tourism players, which would not be possible on the small scale which is now common on most of the islands. The challenge here is not to make the tourism sector large scale on the ground; since this could easily endanger the safeguarding of environmental limits. The challenge is enhance sustainable tourism through the logic of large scale organization with the attractiveness of relatively small scale facilities on the ground¹⁹.

Organizing small scale tourism on a larger scale may then allow the flexible spreading of new tourists; e.g. offering arrangements for either Texel-Hamburg, or Harlingen-Sylt, or (any) other combinations or offering e.g. lighthouse tours to different combinations of say three islands. On a large-scale choices for this or that arrangement can effectively be made depending on environmental conditions, the dates of interesting tourist events and lodging capacity: balancing the demands of the four different S-TALC perspectives. However, the experience of the SNP (www.snp.nl), a large Dutch nature tourist operator shows this is not easy. SNP organized a popular Wadden island hopping arrangement in the 90s, but had to discontinue them after a few years due to the difficulties of cross-island organization. Therefor effectively following a larger scale approach across the whole Wadden area, in our view needs to be fueled by setting up forms of cooperation and business integration of tourism entrepreneurs, sharing capital, returns and organizational capacity on a larger scale.

“Island” Dilemma 2 -How to strengthen the liveability of the small island communities in the face of the lack of minimum scale to keep up amenities and in the light of crowding out by (super) rich tourists?

Possible directions for solutions or measures

For liveable communities, amenities like education for the children, family housing and good health care need to be affordably available at sufficiently high quality; but the islands communities often lack the minimum number of inhabitants to assure several of these amenities,

¹⁹ Such a combination is also common to for instance Booking.com and Airbnb.

and the housing market is under strong pressure from tourists, driving out locals. Furthermore, the labour market for tourism economies is biased towards relatively low-skill level jobs. As we have seen the tendency to large scale is strong in our economic system and therefore strong policy measures and creative policy innovations are needed to tackle these problems.

- The housing market needs strong mechanisms like social housing, obligatory renting out of recreational homes etc. to assure affordable housing for locals and to keep a balanced use among both rich and non-rich tourists.
- Educational quality requires a strong stimulus and search for innovative solutions. One can think of investing in distant learning services from high quality schools on the mainland or home schooling regulations by higher educated parents.
- Apart from optimizing enough attractiveness for the seasonal external workforce needed, a more mixed labor force composition is a key to liveable communities. The latter calls for innovative solutions. One might think for instance think of actively stimulating a certain amount of knowledge workers or institutes to settle on certain islands in combination with reduced fare (taxi-)boat arrangements.

Sustainable Tourism on the Wadden Sea

Tourism on the Wadden sea relates to a large extent to recreational boating. This comes in many variants: e.g. by individuals sailing their private boat or people joining organised seal spotting trips. Activities can also be for instance mud-flat walking or kite surfing. Policy wise, due to the many faceted activities there is less consensus as to the direction of tourism, but on the other hand many governance arrangements are already in place even for small scale activities (axis 4A&B in figure 22). The traditional sailing industry seems to suffer from lack of direction though, despite its potential (4A). Compared to the millions of people visiting the island this Wadden Sea tourism segment is small (3A&3B), but it is also quite developed (1A), and often serves higher well-being (seal spotting or bird watching, sailing and falling dry etc.; 1B). A key aspect is that the Wadden Sea tourist activities are regularly active in ecologically vulnerable areas and activities are therefore easily critical (2A&B) and therefore require spatially precise and year-round monitoring as to its impacts and behaviour. The dilemma is:

“Sea” Dilemma 1 - How to safeguard ecological limits while allowing valuable enjoyment of ecology and landscape?

Possible directions for solutions or measures

- Advanced and continuous monitoring (with radar, AIS, recreational experience, disturbance monitoring etc.) of both recreational boating behavior and bird and seal behavior to accommodate a multi-actor, multi-level governance process.
- Stimulate and invest in the upgrading of the traditional sailing industry (brown fleet). Investing in joint ventures and larger scale organization of the vessels, may allow continuous enjoyment by many and may, relatively easy, assure responsible – professional - behavior through the oversight of tourist behavior by the captains of the vessels. Given the commons-character of the Wadden sea nature and landscape, public-private partnerships can also be explored.

Sustainable Tourism on the mainland coast:

Tourism in the mainland coast area is especially in the Netherlands and Denmark relatively underdeveloped and limited in numbers (axis 1A&B in figure 22) and therefore also quite limited in its importance to the regional labour market and its contribution to liveability (3A&B). The environmental limits are not very critical though (2A), but on the other hand the landscape attractiveness in these low-tourism areas is in many parts of the area not so appealing to great

masses of people (2B). In these areas there is often a lack of consensus on where to head for with tourism (4A). At the same time large parts of this area face demographic change and population decline and relatively poor employment performance. Liveability is an issue there. Since the area is relatively nearby large urban centers but with moderate population density, it also allows locational advantages to larger and polluting industrial activities. For instance, the city of Harlingen has in recent years realized a large waste burning plant and at the Eemsmond, near Borkum and Schiermonnikoog, a series of enormous new power plants have been built, one of which is (unsustainably) coal-fuelled. These developments do not ostensibly fit into the investment strategy of a pure and clean environment, that seems to be key for tourism in the WSR. How to balance these conflicting demands (4B)? The dilemma then is:

Mainland coast dilemma 1: What tourism policy is needed if the labor market & liveability contribution is limited and landscape attractiveness is limited?

Possible directions for solutions or measures

- The mainland coast has its own cultural attractiveness strengths like the village on the mounds ('terpen' and 'wierden'), the churches, the extensive dike system allowing great views over the sea, the salt marshes, the open landscape. Continuous upgrading and modernizing of the touristic appeal of these own qualities of the mainland coast area are valuable in itself. (e.g. enhancing the online strength of the existing and dispersed B&Bs in the area or actively strengthening the attractiveness of the area through the Sense of Place project). The expectations for the contribution to employment and liveability should not be very high though.
- If substantially stronger growth is wished for, with a stronger quantitative ambition then this needs to be supported by enhanced and creative branding and strong new investments. Given the unique strength of the UNESCO World Heritage nearby it seems logical to strengthen a more quantitative growth development by actively building links between the mainland coast and the sea and the islands. This can take many forms which is also dependent on how nearby the islands and the sea are for starters (e.g. extra ferries or physical investments 'blurring' the, now often hard, separation between mainland and sea). Even stretching the UNESCO world heritage borders to include the islands and part of the mainland coast and making it a mixed cultural and natural heritage site can be considered²⁰. Furthermore, the mainland coast, due to its less vulnerable ecology and the available and accessible space, may give room for larger scale festivals and events than those who are possible on the islands (e.g. compare Delfsail).
- As a form of strengthened policy integration, the area should be more aware of addressing environmentally-detrimental developments in other parts within the regional economy (e.g. unsustainable power plants). Here too, as in tourism, strong policy commitment to sustainable activities seems to hold extra logic in the WSR.

²⁰ E.g. the 'Santiago aan het Wad' initiative <http://www.santiagoaanhethwad.nl/>

References

- Algemene Rekenkamer (2013). Waddengebied: natuurbescherming, natuurbeheer en ruimtelijke inrichting. www.rekenkamer.nl Report: 28-11-2013.
- Bairoch, P. (1988). Cities and economic development from the dawn of history to the present. Chicago: University of Chicago Press.
- Bijker, R. A., Mehnen, N., Sijtsma, F. J., & Daams, M. N. (2014). Managing urban wellbeing in rural areas: Can online communities improve the financing and governance of highly valued nature areas? *Land*, 3(2), 437–459.
- Bijker, R. A., & Sijtsma, F. J. (2017). A portfolio of natural places: Using a participatory GIS tool to compare the appreciation and use of green spaces inside and outside urban areas by urban residents. *Landscape and Urban Planning*, 158, 155–165. <http://dx.doi.org/10.1016/j.landurbplan.2016.10.004>
- Borrini-Feyerabend, G., P. Bueno, T. Hay-Edie, B. Lang, A. Rastogi and T. Sandwith (2014). A primer on governance for protected and conserved areas, Stream on Enhancing Diversity and Quality of Governance, 2014 IUCN World Parks Congress. Gland, Switzerland: IUCN.
- Boserup, E., 1965. The conditions of agricultural growth: the economics of agrarian change under population pressure. London: Allen & Unwin.
- Bryman, A. (1999). The Disneyization of society. *The Sociological Review*, 47(1), 25-47.
- Butler, R. (2002). Implementing Sustainable Tourism Development on a Small Island: Development and Use of Sustainable Tourism Development Indicators in Samoa. *Journal of Sustainable Tourism*, 10(5), 363-387.
- Daams, M. N., & Sijtsma, F. J. (2017). How green do we want to live in 2100? Lessons learned from the homes of the present-day rich. (Special issue: Nature-based solutions and their relation to urban resilience) *Buildings*, 7(4), 97. doi:10.3390/buildings7040097
- Daams, M. N., Sijtsma, F. J., & van der Vlist, A. J. (2016). The effect of natural space on nearby property prices: Accounting for perceived attractiveness. *Land Economics*, 92(3), 389–410. doi: 10.3368/le.92.3.389
- Daams, M.N. & F.J. Sijtsma (2013), Planting the SEED: Towards a spatial economic ecological database for a shared understanding of the Dutch Wadden area. *Journal of Sea Research*. Volume 82, September 2013, Pages 153–164. <http://dx.doi.org/10.1016/j.seares.2012.12.002>
- Davis, N., Daams, M. N., Sijtsma, F. J., & van Hinsberg, A. (2016). How deep is your love - of nature? A psychological and spatial analysis of the depth of feelings towards Dutch nature areas. *Applied Geography*, 77, 38–48. <http://dx.doi.org/10.1016/j.apgeog.2016.09.012>
- Dewulf, A., Gray, B., Putnam, L., Lewicki, R., Aarts, N., Bouwen, R., & Van Woerkum, C. (2009). Disentangling approaches to framing in conflict and negotiation research: A meta-paradigmatic perspective. *Human relations*, 62(2), 155-193.
- Van Dijk, J., Sijtsma, F.J. en H. Folmer (2011), Het Waddengebied als leefruimte. ESB, Economisch Statistische Berichten, 96 (4612S), 10 June 2011, pp.45-50.
- Dodds, R. and Butler, R., 2010. Barriers to implementing sustainable tourism policy in mass tourism destinations. *Tourismos: an international multidisciplinary journal of tourism*. Volume 5, Number 1, Spring 2010, pp. 35-53.

- Doxey, G.V. (1975) A causation theory of visitor-resident irritants: Methodology and research inferences. In Travel and Tourism Research Associations Sixth Annual Conference Proceedings (pp. 195–98). San Diego, September.
- Gobster, P. H. (2007). Urban park restoration and the "museumification" of nature. *Nature and Culture*, 2(2), 95-114.
- Görg, C. (2007). Landscape governance: The politics of scale and the natural conditions of places. *Geoforum*, 38, 954–966.
- Hadwen, W. L., Hill, W. & Pickering, M. C., 2007. Icons under threat: Why monitoring visitors and their ecological impacts in protected areas matters. *Ecological Management & Restoration*, 8(3), pp. 177-181.
- Hána, P., Novák, P., & Rádl Rogerová, D. (2013). Property Index: Overview of European Residential Markets. Czech Republic: Deloitte.
- Hartman, S. & De Roo, G. (2013). Towards managing nonlinear regional development trajectories, *Environment & Planning C: government and policy*, 31(3), 556-570.
<http://dx.doi.org/10.1068/c11203r>
- Hartman, S. (2016) *Leisure Landscapes: on emergence, transitions and adaptation*. Groningen: InPlanning. <http://dx.medra.org/10.17418/PHD.2015.9789036784238>
- Hartman, S. (2018) Resilient tourism destinations? Governance implications of bringing theories of resilience and adaptive capacity to tourism practice. In: Innerhofer, Fontanari & Pechlaner (Eds.) *Destination Resilience – Challenges and Opportunities for Destination Management and Governance*. Abingdon: Routledge
- Healy, R.G. (1994). The 'common pool' problem in tourism landscapes. *Annals of Tourism Research*, Vol. 21, No.3, pp.596-611.
- Heslinga, J. (2018) *Synergetic tourism-landscape interactions: policy, public discourse and partnerships*. Groningen: University of Groningen.
- Heslinga J. en Sijtsma F.J. (2017). *Gedrag vaarrecreanten op de Waddenzee – seizoen 2016*. Juni 2017. ETFI, Leeuwarden. I.s.m. Ik pas op het Wad (samenwerking van Rijksoverheid, Waddengemeenten, Waddenprovincies, natuurverenigingen, vaarrecreatie-organisaties en de Waddenzeehavens).
https://rijkwaddenzee.nl/wp-content/uploads/2017/07/1.-Gedrag-en-beleving-vaarrecreanten_DEF-min.pdf
- Kamann, D. J. F., Strijker, D., & Sijtsma, F. J. (1998). A 'Reverse Network Engineering' Framework to Develop Tourism Using a Lifestyle Approach. *Tijdschrift voor economische en sociale geografie*, 89(3), 310-319.
- Loorbach, D. & Rotmans, J. (2006). Managing transitions for sustainable development. In X. Olshoorn & A. J. Wiczorek (Eds.) *Understanding industrial transformation; Views from different disciplines* (pp. 187-206). Dordrecht: Springer.
- Loorbach, D. (2007). *Transition management: New mode of governance for sustainable development*. Zeist: AD Druk.
- Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, 50, pp. 370-396.

Maxwell, S., Fuller, R., Brooks, T. & Watson, J., 2016. The ravages of guns, nets and bulldozers. *Nature*, 536(7615), pp. 143-145.

McCann, P., & Acs, Z. J. (2011). Globalisation: Countries, cities and multinationals. *Regional Studies*, 45(1), 17–32.

Meijles, E., Daams, M.N., Sijtsma, F.J. en Vroom, M. (2017). Monitoring vaarrecreatie op de Waddenzee – seizoen 2016. ETFI, Leeuwarden. I.s.m. Ik pas op het Wad (samenwerking van Rijksoverheid, Waddengemeenten, Waddenprovincies, natuurverenigingen, vaarrecreatie-organisaties en de Waddenzeehavens). <https://rijkwaddenzee.nl/wp-content/uploads/2017/07/Monitoring-vaarrecreatie-op-de-Waddenzee-klaar.pdf>

Meijles, E., Daams, M.N., Sijtsma, F.J. en Vroom, M., Ens, B. en van der Zee, E. (2017). Vaarrecreatie en natuur in de Waddenzee – seizoen 2016. ETFI, Leeuwarden. Juni 2017. I.s.m. Ik pas op het Wad (samenwerking van Rijksoverheid, Waddengemeenten, Waddenprovincies, natuurverenigingen, vaarrecreatie-organisaties en de Waddenzeehavens) <https://rijkwaddenzee.nl/wp-content/uploads/2017/07/Recreatievaart-en-natuur-in-de-Waddenzee-klaar.pdf>

Milne, S., & Ateljevic, I. (2001). Tourism, economic development and the global_local nexus: Theory embracing complexity. *Tourism Geographies*, 3(4), 369_393.

Orsi, F., & Geneletti, D. (2013). Using geotagged photographs and GIS analysis to estimate visitor flows in natural areas. *Journal for nature conservation*, 21(5), 359-368.

Parra, C. (2010). Sustainability and multi-level governance of territories classified as protected areas: the Morvan regional park case. *Journal of Environmental Planning and Management*, 53(4), 491-509.

Pine, B. J. & Gilmore, J.H. (2011). *The experience economy: updated edition*. Boston: Harvard Business Review Press.

Portney, K.E. (2003). *Taking Sustainable Cities Seriously: Economic Development, the Environment, and Quality of Life in American Cities*. Boston, MIT Press.

Ritzer, G. (Ed.). (2009). *McDonaldization: the reader*. Pine Forge Press.

Roncken, P. A. (2018). *Shades of sublime: a design for landscape experiences as an instrument in the making of meaning* (Doctoral dissertation, Wageningen: Wageningen University).

Sijtsma, F.J., de Jong, F., van Dijk, J., de Vlas, J. (RIKZ) en Wolff, W.J. (2005a) Analyse belangrijkste problemen en uitdagingen van de Wadden – Samenvattend eindrapport, 2005. Economics and Business Science Shop, Groningen. EC 153

Sijtsma, F.J., de Jong, F., van Dijk, J., de Vlas, J. (RIKZ) en Wolff, W.J. (2005b). Analyse belangrijkste problemen en uitdagingen van de Wadden – Hoofdrapport, 2005. Economics and Business Science Shop, Groningen. EC 154

Sijtsma, F. J., Daams, M. N., Farjon, H., & Buijs, A. E. (2012a). Deep feelings around a shallow coast. A spatial analysis of tourism jobs and the attractivity of nature in the Dutch Wadden area. *Ocean and Coastal Management*, 68, November, 138–148.
doi:<http://dx.doi.org/10.1016/j.ocecoaman.2012.05.018>.

Sijtsma, F. J., de Vries, S., van Hinsberg, A., & Diederiks, J. (2012b). Does “grey” urban living lead to more “green” holiday nights? A Netherlands case study. *Landscape and Urban Planning*, 105, 250–257.

- Sijtsma, F. J., Heide, C. M. v. d., & van Hinsberg, A. (2013a). Beyond monetary measurement: How to evaluate projects and policies using the ecosystem services framework. *Environmental Science and Policy*, 32, (Oct.), 14–25. <http://dx.doi.org/10.1016/j.envsci.2012.06.016>
- Sijtsma, F. J., Farjon, H., van Tol, S., van Hinsberg, A., van Kampen, P., & Buijs, A. E. (2013b). Evaluation of landscape changes: Enriching the economist's toolbox with the Hotspotindex. In W. Heijman, & Heide, C. M. v. d. (Eds.), *The economic value of landscapes*. Chapter 8, pp. 136–164. Routledge: London.
- Sijtsma, F. J., Broersma, L., Daams, M. N., Mehnen, N., Oostra, M., & Sietses, A. M. (2014). A socio-economic analysis of the international Wadden area. Analysis carried out through the Wadden Sea Long-Term Ecosystem Research (WaLTER) and University of Groningen. URSI Report 345. University of Groningen/WaLTER, Groningen.
- Sijtsma, F., Broersma, L., Daams, M. N., & Werner, G. (2015). Tourism Development in the Dutch Wadden Area: Spatial-Temporal Characteristics and Monitoring Needs. *Environmental Management and Sustainable Development*, 4(2). DOI: 10.5296/emsd.v4i2.8561
- Sijtsma, F. J., van der Bilt, W. G., van Hinsberg, A., de Knecht, B., van der Heide, C. M., Leneman, H., & Verburg, R. (2017). Planning nature in urbanized countries. An analysis of monetary and non-monetary impacts of conservation policy scenarios in the Netherlands. *Heliyon*, 3, e00280 (1–30). <http://dx.doi.org/10.1016/j.heliyon.2017.e00280>
- Sijtsma, F. J., Heide, C. M. v. d., & van Hinsberg, A. (2011). Biodiversity and decision-support: Integrating CBA and MCA. In A. Hull, Alexander, E., Khakee, A., & Woltjer, J. (Eds.) *Evaluation for participation and sustainability in planning*. Chapter 9, pp. 197–218. Routledge: London.
- Sijtsma, F. J., Dijk, J. v., & m.m.v. R. Wortelboer. (2010). *Meerwaarde uit het Waddengebied - Over blijvende ecologische verstoring en over versterking van natuur door economische activiteiten*. Rapport Waddenacademie, Leeuwarden.
- Sijtsma, F.J., Werner, G.J., Wadden Sea Council administrative staff and Lourens Broersma, 2008. *Recreatie en toerisme in het Waddengebied - Toekomstige ontwikkelingsmogelijkheden en hun effecten op economie, duurzaamheid en identiteit*. Analysis report relating to Advies 2008/05, Wadden Sea Council, Leeuwarden. http://www.waddenacademie.knaw.nl/fileadmin/inhoud/pdf/03-Thema_s/Economie/200805_analyserapport_RenT.pdf
- Swyngedouw, E. (2005) Governance innovation and the citizen: The Janus face of governance beyond the-state, *Urban Studies*, 42(11), pp. 1991–2006.
- UNFPA: United Nations Population Fund. (2007). *UNFPA state of world population, 2007: Unleashing the potential of urban growth*. New York: United Nations Population Fund.
- United Nations, Department of Economic and Social Affairs, Population Division (2015). *World urbanization prospects: The 2014 revision*. (ST/ESA/SER.A/366).
- Urry, J. (2002). *The Tourist Gaze*. London: Sage.
- Vries, S., de Buijs, A. E., Langers, F., Farjon, H., van Hinsberg, A., & Sijtsma F. J. (2013). Measuring the attractiveness of Dutch landscapes: Identifying national hotspots using Google Maps. *Applied Geography*, 45, 220–229. dx.doi.org/10.1016/j.apgeog.2013.09.017

Vugteveen, P., van Katwijk, M. M., Rouwette, E., & Hanssen, L. (2014). How to structure and prioritize information needs in support of monitoring design for Integrated Coastal Management. *Journal of sea research*, 86, 23-33.

Waligo, V. M., Clarke, J., & Hawkins, R. (2013). Implementing sustainable tourism: A multi-stakeholder involvement management framework. *Tourism management*, 36, 342-353.

Wolf, I. D., Hagenloh, G., & Croft, D. B. (2012). Visitor monitoring along roads and hiking trails: How to determine usage levels in tourist sites. *Tourism Management*, 33(1), 16-28.

Wu, J. (2013). Landscape sustainability science: ecosystem services and human well-being in changing landscapes. *Landscape ecology*, 28(6), 999-1023.