

“It’s All About the Scenery”: Tourists’ Perceptions of Cultural Ecosystem Services in the Lofoten Islands, Norway

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ABSTRACT. The Lofoten Islands in northern Norway face challenges from increasing visitor numbers, congestion, environmental impacts, and growing host-visitor tensions. Benefits include increased local employment and growing revenues. Future tourism policy requires better documentation of the non-economic benefits and values associated with tourism in Lofoten; this information is important to the development of policy and management processes. We conducted 45 in-depth interviews with domestic and international visitors, using the cultural ecosystem services (ES) framework to ascertain the core elements of the tourism experience, as well as views on management needs and development. We probed reflections on place, aesthetics, recreational opportunities, inspiration, social relations, cultural heritage, knowledge, spirituality, and identity by offering a combination of statements and questions. All these categories of cultural ES were important to most visitors. However, the importance of the landscape was paramount. Policy implications include the need to include landscape in ES assessments, to map places of especially high scenic value, and to use the ES framework more extensively to identify and compare non-economic and economic tourism values and benefits.

Key words: Norway; Lofoten; tourism experience; cultural ecosystem services; scenery; policy

RÉSUMÉ. Dans le nord de la Norvège, il y a des défis à relever aux îles Lofoten en raison du nombre croissant de visiteurs, de la congestion, des incidences sur l’environnement et des tensions de plus en plus grandes entre les visiteurs et les gens de la région. Parmi les avantages, notons le nombre d’emplois et les revenus à la hausse. À l’avenir, il faudra une meilleure documentation au sujet des retombées et des valeurs non économiques liées au tourisme à Lofoten en vue de faciliter la formulation des politiques touristiques. Cette information jouera un rôle important dans l’élaboration des politiques et des processus de gestion. Nous avons réalisé 45 entrevues approfondies auprès de visiteurs du pays et d’ailleurs en nous appuyant sur le cadre de référence des services écosystémiques (SE) culturels afin de valider les éléments fondamentaux de l’expérience touristique et recueilli des points de vue en matière de développement et de besoins en gestion. Au moyen de déclarations et de questions, nous avons stimulé des réflexions au sujet des lieux, de l’esthétique, des possibilités de loisirs, de l’inspiration, des relations sociales, du patrimoine culturel, des connaissances, de la spiritualité et de l’identité. Toutes ces catégories des SE culturels revêtaient de l’importance aux yeux de la plupart des visiteurs. Cependant, c’est le paysage qui a pris le plus d’importance. Parmi les incidences sur les politiques, notons la nécessité de tenir compte du paysage dans les évaluations des SE, de mettre en évidence les lieux qui ont une valeur panoramique particulièrement grande et de se servir du cadre des SE à plus grande échelle afin de déterminer et de comparer les retombées et les valeurs économiques et non économiques sur le plan touristique.

Mots clés : Norvège; Lofoten; expérience touristique; services écosystémiques culturels; paysage; politiques

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INTRODUCTION

The Lofoten archipelago in northern Norway is a world-class nature tourism destination experiencing increasing attention and visitors. Although the islands have a long tourism history (Mehmetoglu et al., 2001; Steen Jacobsen and Dann, 2003) and a well-established position in both the domestic and international markets, their popularity seems to be increasing. Recent years have seen a marked increase in the number of visitors, revenue generation, and

marketing (Fabritius and Sandberg, 2012; Kristoffersen and Midtgard, 2016). Furthermore, the tourism industry has largely succeeded in prolonging the season for what had been a summer destination; now, tourists come almost year-round, not least because of a new focus on winter attractions such as northern lights, Arctic weather, and the cod fishery.

Lofoten offers a more or less complete nature tourism destination in terms of attractiveness and opportunities for activities and experiences. The natural resource base

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is a relatively pristine and clean environment, rugged mountains, bays and beaches, all accessible from small winding roads, with airports for smaller and medium-sized commercial aircraft and many forms of access from the sea for vessels ranging from passenger and car ferries to cruise ships. Cultural heritage resources include picturesque villages, fishing boats, drying racks for fish, and docking facilities, all blended into the landscape (Denstadli and Steen Jacobsen, 2011). Accommodations for most budgets are found throughout the archipelago. Almost every conceivable nature-based tourism activity is offered as an organized tour: hiking, climbing, skiing, fishing, kayaking, seabird safaris, and whale watching. Lofoten has also gained international attention by pioneering cold-water surfing/kiting, as well as establishing one of the northernmost golf courses in the world (Kristoffersen and Midtgaard, 2016).

As in many other resource-rich regions, there is a complex social, cultural, economic, and political backdrop to the vast opportunities Lofoten offers for tourism development. The growth in both domestic and international tourism during recent years also brings tensions between visitors and host communities and increasing environmental problems. During the summer, traffic congestion is a mounting problem on the winding network of narrow roads with limited capacity; campsites are often overcrowded, and people camp on private property, and even in graveyards, without permission. Overcrowding, sanitation problems, and littering are rampant in certain areas (Lofotposten, 2017; VG, 2017).

Northern coasts are affected by many of the same forces that challenge rural regions in general, such as urbanisation, the gradual depopulation of entire rural regions, centralisation of governance systems and public services, and difficult choices about development. In northern Norway, tourism is often viewed as a panacea for providing jobs and improving the local economy (Amundsen, 2012). However, Lofoten also experiences constraints and conflict over goals related to resource-dependent development. Probably the greatest current political and social controversy is the debate over offshore petroleum exploration. The core question is usually framed as a choice between oil and gas development on one hand, and traditional fisheries and tourism on the other. There is a huge amount of uncertainty around local costs and benefits, risks and consequences of potential oil spills, and to what extent these options are compatible or incompatible strategies (Misund and Olsen, 2013; Kristoffersen and Dale, 2014).

From a tourism perspective, our study is motivated by two salient challenges. One is that tourism in Lofoten may already have reached or exceeded capacity in key areas, be they social, cultural or environmental. Experience preferences among visitors may not be satisfied; some host communities appear to experience stress and disturbance from the massive visitation in the peak season, and human activities cause physical impacts and pollution in certain locations. The tourism industry needs to join forces

with the environmental management sector in assessing how to deal with congestion, overcrowding, littering, sanitation, disturbance, potential degradation of experience opportunities, and declining visitor satisfaction. Some of these impacts can be addressed by providing necessary infrastructure and facilities; however, it may be necessary to control and restrict tourism in parts of the season, or in particular locations.

The other challenge is to understand what are the key attractions, values, and benefits from the visitors' perspectives, and how this information can be more effectively fed into land-use planning and management processes. In development debates, the economic aspects of tourism (i.e., market-mediated values and benefits) are relatively easy to document. In Lofoten, these are significant, with approximately 500 000 visitor days (including overnight accommodation) annually, and several hundred people employed by tourism companies (Kristoffersen and Midtgaard, 2016). However, the non-material values that form the core of the tourism experience, and the human benefits that flow from these, are much harder to measure and integrate into decision-making processes. Identifying the values and benefits that can accrue from cultural heritage and social contexts (Swensen et al., 2013; Wickler and Narmo, 2014) may be crucial, both for making good decisions about the best directions for tourism development and for conscious deliberation about trade-offs between tourism and other economic sectors.

In this paper, we explore the perceptions of tourists through the lens of the ecosystem services (ES) framework. The ES framework is becoming increasingly influential in land-use planning and policy-related debates, and has through numerous studies (e.g., de Groot et al., 2010; Satz et al., 2013) proved a useful approach for comparing the material and non-material benefits of ecosystems. Tourism and recreation has long been considered an important cultural ecosystem service. However, using the concept of ecosystem service to analyse tourism experiences is far less common. The ES framework may offer a means to clarify the trade-offs between tourism and other resource utilization activities. Our focus is predominantly on the cultural ecosystem services (CES), which we use to ascertain how visitors to Lofoten perceive and judge key elements of the tourism experience. The objective of the paper is to describe tourists' narratives around Lofoten's CES and discuss some of the policy implications of this kind of information.

Concepts

There is a vast amount of nature-based tourism research that targets attractions, experience preferences and opportunities, and benefits. Some of this research has focused on the Lofoten–Vesterålen region (Ris, 1993; Mehmetoglu et al., 2001; Steen Jacobsen and Dann, 2003; Fyhri et al., 2009; Bertella, 2011; Steen Jacobsen and Tømmervik, 2016). Considerable tourism research has been

carried out in the greater Arctic and sub-Arctic regions, including studies of tourism patterns, impact, policies, planning, visitor management, and development (e.g., Stewart et al., 2005; Kauppila et al., 2009; Hall and Saarinen, 2010; Fay and Karlsdóttir, 2011; Hagen et al., 2012; Timothy et al., 2016); stakeholder attitudes (e.g., Chen, 2015); Indigenous tourism (e.g., Notzke, 1999); and responsible tourism behaviour and codes of conduct (e.g., Mason, 1997; Mason et al., 2000), as well as the rapidly growing Arctic cruise industry (Johnson, 2002; Stewart and Draper, 2008; Dawson et al., 2014; Olsen and Nenashva, 2018).

Moreover, a large body of research labels tourism and recreation as “standard” CES. However, few studies have attempted to measure experience attributes and preferences as elements of CES. The ES framework started as an attempt to demonstrate and assess how society depends on ecological life support systems (e.g., MA, 2005; Ring et al., 2010). The early conceptual and methodological development centred on an instrumental, ecological-economic way of valuing environmental assets and their associated services and benefits. Originally, the ES framework appeared as a potentially holistic approach to compare and analyse values associated with the environment. The typology of provisioning, regulating, supporting and cultural services has been extensively linked to, and problematized, in relation to biodiversity conservation, land use and landscape management, and environmental accounting. It has also been used in Lofoten previously to document various marine resources (Magnussen, 2012).

However, one problem with much of the earlier ES research is the conflation of values, services, and benefits; different studies suggest different structures and typologies (e.g., Hein et al., 2006; Fisher et al., 2009; Martínez-Harms and Balvanera, 2012). In this study, we position ourselves within the logic proposed by Haines-Young and Potschin (2010), who distinguish between ecological processes and structures and the actual benefits that people derive from these. They conceptualize a cascade structure that flows from biophysical structures to functions, services, benefits, and ultimately human well-being. Defining what is a significant function—or ecosystem service—evolves from an understanding of the spatial context of social choices and values. In this framework, the geographic locations (and knowledge of the geophysical properties and processes) and the material and non-material values assigned become important. Equally important in the cascade model is the recognition that ES do not exist independent of people’s needs (Haines-Young and Potschin, 2010). Our study focuses on the lowest level of the cascade, the level of benefit and value that feed human well-being.

The link between the ES framework and human well-being is currently much discussed (e.g., Boerema et al., 2017; Braat, 2018; Diaz et al., 2018). A general critique argues that the ES framework is an overly optimistic model that tries to force market and non-market-mediated values into a single ontology (e.g., Gómez-Baggethun et al., 2013;

Silvertown, 2015). The debate has been particularly strong around the CES category (Kumar and Kumar, 2008; Chan et al., 2012), which rests largely on immaterial and non-market-related values (Daniel et al., 2012). One trend in this debate is the increasing focus on linking CES to well-being and quality of life, since the cultural services epitomise many of the non-material values seen as central to a good life (e.g., Costanza et al., 2007; Hernández-Morcillo et al., 2013). This is also recognized on a policy level; the Intergovernmental Science-Policy Platform on Biodiversity and ES (IPBES) highlights a good quality of life as the core of the conceptual ES framework (Diaz et al., 2015).

Another significant conceptual development of particular relevance to the benefits level in the cascade model is that CES can be seen as expressions of relational values; that is, values and meanings that emerge when humans interact with one another and their surroundings (Chan et al., 2016), rather than values of nature that are either intrinsic or instrumental. From a relational perspective, opinions about what constitute appropriate uses of nature develop over time. People rely on preconceived preferences and attitudes when they judge their actual experiences in natural areas. Understanding cultural ecosystem services is particularly relevant since they reflect the non-material values people attribute to the environment. Framing tourism motivations and experience preferences in an ES framework can also be a way of articulating key values for a more complex policy-setting discussion.

METHODS AND DATA

Study Area

The Lofoten archipelago (Fig. 1) in northern Norway comprises seven main islands and multiple smaller islands over an area of 1300 km². Six municipalities house approximately 26 000 residents in small- and medium-sized towns (Statistics Norway, www.ssb.no). There are no exact numbers on how many tourists come to Lofoten in a year. However, the number of overnight stays has been recorded over a number of years. This statistic comes from the records of 15 hotels, 6 units with facilities for mobile homes and camping, and 45 units with smaller houses/cabins (*rorbuer*) and apartments (Kristoffersen and Midtgard, 2016). The number of overnight stays was approximately 460 000 in 2016, representing roughly 40% foreign visitors and 60% domestic tourists. The actual number of tourists is lower than the number of overnight stays, since most visitors stay more than one night. On the other hand, a fair number of overnight stays are missing from these statistics, since some people either stay overnight in private homes or camp outside registered campsites (Madsen et al., 2015; Kristoffersen and Midtgard, 2016). Visitors access Lofoten by ferries, cruise ships, road, and air. One of the noteworthy trends in Lofoten is the gradual increase in visits over the last several years, and its development from being primarily

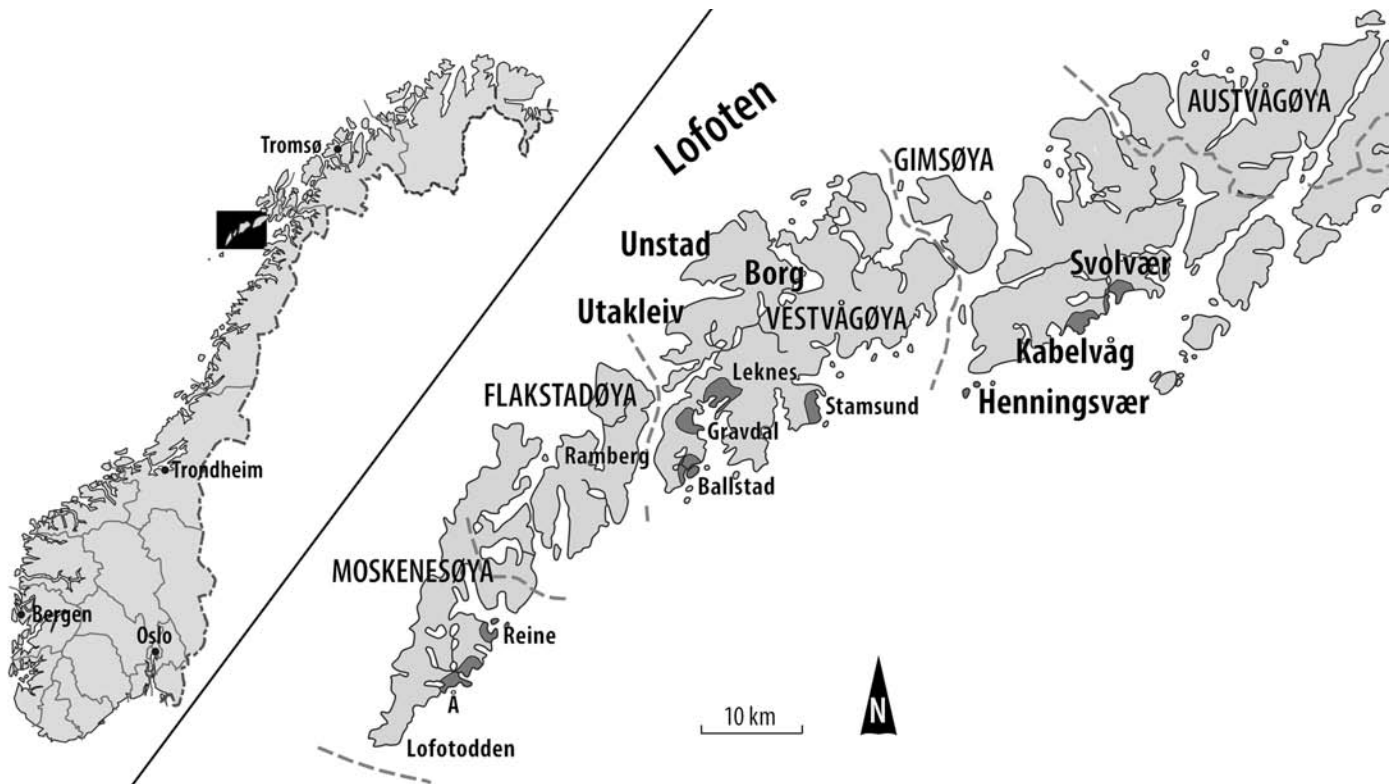


FIG. 1. The Lofoten archipelago (Interview locations in bold).

a summer destination to a year-round destination, although summer remains the peak season.

Data and Analysis

We used a qualitative case study approach and convenience sample to gather data for the study. In the preliminary phase of the project, we selected a number of well-known tourist destinations in Lofoten and contacted tourism companies, hotel owners, and guides before the main season. The objective was to obtain information about suitable interview locations and when and where it would be most practical to interview visitors relative to their travel schedules. We also used this scoping to get some preliminary responses from tourism operators on the questions we wanted to ask and used this to refine the interview guide (Table 1). We then began interviews during two periods in the summer season in six locations: Svolvear, Kabelvåg, Henningsvær, Utakleiv, Unstad, and Borg (bolded in Fig. 1). We chose these locations to reflect diversity in geography and landscape features, in amounts and types of tourism-related infrastructure, and in numbers of visitors. These locations are also focal points for recreational opportunities and activities, and hence the most practical sites to reach visitors for interview purposes. We interviewed a total of 45 visitors: 20 from Norway and 25 from a total of 11 other nations (Switzerland, Canada, France, Russia, Germany, Sweden, the Czech Republic, Slovakia, Finland, Japan, and China). The sample comprised people participating in organized groups as

well as independent travellers; however, we were unable to record the exact distribution between organized and independent groups of travellers. Some informants travelled with groups of friends, some with family members, and others alone. Our aim was not to achieve a statistically representative sample of the tourism population in Lofoten, but to capture as much diversity as possible in nature-based activity patterns and opinions about the cultural ES provided by the Lofoten environment.

We used a semi-structured interview framed around general cultural ES categories (e.g., MA, 2005; Hernández-Morcillo et al., 2013) (Table 1). We tailored questions to the Lofoten context and adapted our conditions to the format of Gould et al. (2015), who developed a protocol for studying CES and place-based values in coastal British Columbia and Hawaii. In that study, they prompted stakeholders to reflect on the dimensions of place value, heritage, identity, non-physical value of activities, spirituality, artistic inspiration, ceremony, education, and bequest/intergenerational values (Gould et al., 2015). These are not typical prompts one would expect tourists to reflect explicitly on—at least not framed in this way. However, asking people to reflect on place-based ES values through these kinds of open-ended questions in more vernacular language has also proven useful in other studies (e.g., Klain and Chan, 2012) and is a good way to operationalize rather abstract variables into something comprehensible and relevant to lay people.

Table 1 shows our modified version used in Lofoten. We did not explicitly use the ecosystem service terminology during the interviews to avoid confusion or unnecessary

TABLE 1. Interview guide. (The formal terminology in the first column was not disclosed by the interviewer to the participants.)

Cultural ecosystem service	Questions prompting reflections
Place	Are there places in Lofoten you think are particularly interesting?
Aesthetics	Are there locations or areas/landscapes in Lofoten that you think are particularly beautiful?
Recreational opportunities	What about the recreational opportunities in Lofoten? Can you say a little about how you compare this area to other places you know?
Inspiration	Are there any places or aspects of Lofoten that have ever given you artistic inspirations or ideas for creative activities?
Social relations	How about the importance of the environment in Lofoten as a context for being with friends and acquaintances? Are there any particular aspects of, or experiences linked to, Lofoten which you have had that you would like your children or others in coming generations to have?
Cultural heritage	There are a lot of cultural artifacts and remains in Lofoten reflecting how people lived in and exploited nature in earlier times. Is visiting cultural sites an important part of your trip?
Knowledge and learning	While you have been here in Lofoten, have you ever had the feeling or experience that nature or the environment has taught you something new?
Spiritual	Spiritual values of a place are difficult to define, but are generally associated with places that are powerful because they inspire you to be aware of forces or entities that are larger than yourself. This can be a basis for both positive and negative feelings like happiness, respect, awe, humility, and perhaps fear. Has Lofoten given you any experiences of this kind?
Identity	Identity is the ideas, relationships, and sense of belonging that help shape who we are, who and where we belong to, the community we are part of and so on. In this sense, you could even say that identity is tied to physical places and the things people do in those places. Are there places in Lofoten that have given you feelings of attachment?

abstraction resulting from academic jargon. In addition to the statements shown in Table 1, we added a couple of questions about perceived management needs and future development towards the end of the interview. The reason for asking about management and development was to see how the perception of values and benefits associated with CES could be affected by the challenges facing Lofoten in terms of resource exploration, tourism congestion, and other environmental impacts.

When we asked participants to reflect on somewhat complex statements rather than asking about preferences for specific environmental attributes, we invited mixed answers in that people could highlight values, services, attributes, and benefits. In the following, we have attempted to take these complex expressions and extract the key elements representing the core CES components of tourism discourse on Lofoten. Consequently, the categories we use in the results are our post-fact interpretations of what were more or less continuous conversations and probing between the interviewer and informants. This process can best be labelled as a grounded approach supported by typologies of CES from earlier research in coastal regions (e.g., Gould et al., 2015). All interviews were recorded digitally. The main contents were transcribed, and all relevant parts were categorized into the CES categories we used to structure the interview guide (Table 1).

RESULTS

Place and Aesthetics

Sense of place and aesthetic appreciation of landscape and scenery are salient CES in virtually any nature tourism destination, but often underappreciated or not given sufficient attention in value assessments attempting to encompass economic and non-economic parameters (Potschin and Haines-Young, 2013; Hausmann et al., 2016). The main message emerging from the interviews

is that it is nature, the landscape, and the recreational potential of Lofoten that primarily draw tourists to the archipelago. Although this finding is not based on a statistically representative sample of Lofoten tourists, our informants reported uniformly that scenery was the main attraction. Even though some visitors have a connection to the area through current or former relatives, or found the museums and the culture heritage of Lofoten interesting, these were not deciding factors in whether or not visitors made the trip to the islands. Compared to other motives (categories of CES), the spectacular scenery and recreational opportunities seem to be more important than other attributes or services linked to the environment. Respondents described rugged and lush (“green”) mountains, picturesque beaches tucked in small bays, quaint fishing villages tucked into the dramatic landscape, seabirds, unchecked natural beauty, round-the-clock light (in summer), changing weather patterns, and new landscape features appearing “around every bend of the road.” In most cases, the landscape and seascape were described in general terms such as dramatic, rugged, and lush. More specific landscape or geological attributes were seldom mentioned. Nor did wildlife, either as a general concept or in terms of specific species, emerge as a feature in most of the interviews. A couple of informants mentioned that they had seen the characteristic puffins, and some talked about the desire to see fish and whales. While landscape descriptions tended to be general, the exception was the colours of the sea, which several participants highlighted.

I love the blue shades of the water. The blue is just wow! It reminds me of a lot of Polynesia, kind of the mid-Pacific, but it’s different. It’s a different shade of blue, very powerful.

(Czech man, engineer)

Places such as Henningsvær, Reine, and Å were frequently mentioned by the participants as standing out. In general, participants considered areas from the island

of Vestvågøya and westwards towards the outer end of the archipelago to be most beautiful. The most common expression was that beauty existed everywhere. As one Norwegian stated: “I can’t stop looking at it, it’s so pleasant to look at. I don’t know why, it’s just nice.”

Unique Recreational Opportunities

Recreational opportunities constitute one of the more tangible cultural ES, as they lend themselves to quantification, measurement, and conversion to economic metrics. However, one key message from this study is the need to grasp the complexity and diversity of opportunities in Lofoten as the real value of this region. The particular geography and landscape of the archipelago offer almost unlimited access to activity opportunities. That, coupled with the fact that many informants reported that Lofoten was the most beautiful and special place they had ever visited, attests to the uniqueness of Lofoten as a nature tourism destination. For one thing, the combination of the green mountains with the white beaches and blue-green ocean was perceived as unusual and unexpected at these latitudes. Furthermore, many considered Lofoten unique in terms of recreational opportunities. Many visitors reported that they had rarely experienced a place with such diverse and abundant opportunities for outdoor activities. Lofoten offers hikes, climbing routes, surfing, skiing, kayaking, sailing, fishing, and mountain biking for all levels, from beginners to advanced practitioners. Most of the informants had never experienced anything like the diversity of opportunities found in Lofoten. Some visitors said that in the global nature tourism arena, many areas may offer one exceptional outdoor recreation activity, but that Lofoten was a world-class multiple-opportunity. As a 21-year-old Norwegian male traveller at the surfing beach at Unstad put it,

Best in the world. There are places that are better in a specific activity, but Lofoten offers so much, on any level. Whether you are a beginner or a pro, there is something here for you. There is no limit to this area.

Inspiration

Cultural ecosystem typologies often list “inspiration” as a value, service, and benefit. The surrounding environment stimulates people’s emotions, prompting them to nurture creative impulses and record attractive images of the islands in memory, on film, or in other digital or non-digital media. Several informants spoke about how Lofoten had inspired them to take up artistic activities. The most frequent answer was that people felt more inspired to take good photographs. One Norwegian man described how he had never been an artist, but during this stay in Lofoten, apparently “out of nowhere,” he started drawing the mountains that he was experiencing: “I have never drawn in my spare time during my entire life, but on my last trip I started to draw the mountains around where we are now (Unstad).”

A few visitors had brought equipment for painting, and several told of being inspired to spend more time outside and consider other types of vacation destinations. The local environment appeared to act as a liberating influence on some people’s desire both to express themselves artistically and to record positive (affective) experiences for posterity. We also interpret these expressions as statements of a certain type of connection and attachment to the environment, although the extent and strength of these certainly varied across our informants.

Social Relations

Being able to nurture interactions with important social groups in attractive landscapes and natural areas is often considered a salient CES, again one that is hard to parameterize and measure, but a service and value that can be described through qualitative statements and deliberation. Given the many positive emotions and statements about Lofoten expressed by the majority of our informants, it is not surprising that this area is seen as a favourable arena for meeting friends or family for social gatherings. The recreational opportunities, combined with spectacular scenery, clean air, accommodation opportunities, and relaxing atmosphere make it an attractive place for social interaction. Lofoten provides a suitable venue for friends on a skiing weekend, a large family gathering, or an excursion with children. It is also considered a nice place to make new friends. Several informants reported that the atmosphere is “light” and friendly, and that they were open to making new acquaintances during their stay. As one interviewee put it:

I have made many new friends here when I came here to go to school, and I have met most of them here in Lofoten later. This is really a meeting place...

(Norwegian woman, student)

Cultural Heritage

In most standardized (de-contextualized) CES typologies, cultural heritage is included as a key service. However, in our sample of Lofoten tourists, this service played a lesser role than other cultural ES. Experiencing the history and cultural heritage of the Lofoten region was not articulated as a paramount reason for coming to this region for the majority of the visitors. However, many eventually found their way to the Viking museum at Borg and the fishing village of Å during their trips. Several tourists reported that these visits were a very nice addition to their trip and that they found the history interesting. The topics of history, traditions, and cultural heritage also came up when the interviews touched on preservation of the Lofoten environment and livelihoods. Several informants expressed the view that the old villages and the fishing industry should persist in the future. Cultural heritage was not unimportant, but was linked to other experiences and

played only an auxiliary role in the overall impressions and preferences linked to the region as a destination. However, one informant believed that the history of this area should be considered a resource that could be further developed. He felt everyone could benefit from knowing more about the demanding life at sea and the fishing industry:

The hardships and stories of the lives people had back in the old days should be kept. The oil fund should be able to keep them, call it “resources,” not culture. To keep that, and not ravage the coastal societies should be a priority, rather than buying new F-35 fighter planes.

(Norwegian man, retired)

Spirituality

Spirituality is another highly personal and emotional CES that can be construed as a service, value, and benefit depending on context and the way it is conceptualized. It can denote religious or sacred feelings, or feelings of contentment, empowerment, being connected with the environment, and being part of a greater whole. In our sample, several informants talked about feeling relaxed and being more “in balance” with the pace of the day during their stay in Lofoten. There was also frequent mention of the general pace of life being slower, and that a relaxed everyday pace felt good. Interestingly, we also came upon contradictory feelings: the sense of the environment as a challenge in both negative and positive ways. As well as feeling relaxed, some visitors felt a certain loss of control in Lofoten; they found the surroundings inspiring and beautiful but also perhaps overwhelming or disturbing. The natural environment is so dramatic and grand that some informants felt nature was “in charge,” which resulted in them feeling small and insignificant. Accepting this was hard and humbling. As one informant put it:

I have cried because I have been so far outside my comfort zone, and I have also cried when we have just gone for walks because it is so different and big (expanding my own limits). My brain just shuts down at around 18:00 due to all the impressions I get every day. It is so different.

(Swedish woman)

Knowledge and Learning

Educational aspects of interacting with natural environments are a key component of most CES typologies. In this study, learning about the environment came up as a positive benefit of the trip for a number of informants, although several visitors did not have much to say on this topic. When asked if they had learned anything on this trip, most informants emphasized the practice and traditions of the coastal fishery, wildlife, and geography. In addition, some people evidently had experiences of how to travel in a type of landscape that was clearly novel to them, and had

expanded their skills in moving through unknown terrain. One informant responded that she had learned to think differently about how to move through terrain:

I grew up in a different type of nature where everything is flat. There is no danger there. Here you have rockslides, steep mountains, very small paths. I have learned that nature can be quite different. In the beginning of the trip I thought I could walk up anywhere on a mountain, but I am becoming able to see where in the terrain it would be too steep. Just because it's green does not mean it is possible to walk there.

(Swedish woman)

Identity and Attachment

The shaping and maintenance of feelings of identity is often heralded as a key part of CES, notably in places where people have interacted physically and emotionally over time. However, in this study we did not expect these feelings to be strongly expressed, since most of the informants were first-time visitors to the islands and had no previous interactions to build on. A mere handful of tourists reported that they felt as if Lofoten was part of their identity, or that Lofoten evoked feelings related to a sense of identity. Several of these people (domestic tourists) came from other parts of northern Norway, and what they expressed probably reflected a more general collective sense of identity linking communities along the northern Norway coast. Lofoten might represent the epitome of northern coastal communities and regions, but these respondents did not identify with it specifically. However, for most of the visitors with no particular connection to the region, and uniformly for international tourists, the question of identity was not viewed as relevant. Identity is related to, but not the same as, a feeling of attachment. A few of the visitors we interviewed expressed some form of attachment to Lofoten. In this study, attachment to place or to a type of environment that is experienced as attractive played a part for some of the visitors. It is quite possible to feel attached to a place without feeling that it is part of one's identity. Attachment to place is a complex and multidimensional phenomenon, and the elements ranged from attachment to family to a more general attraction to nature and a sense of being connected to the environment. Those who reported elements of attachment to place were predominantly younger, usually students or those about to become students. While the majority of the visitors included in this study did not feel attached to Lofoten in any particular way, several expressed a growing fascination with Lofoten as a place well suited to their experience preferences; they sometimes expressed this as an emerging sense of attachment:

This is the second time I am here to do the things I really like, surfing and mountain running and such. I am even more excited now and feel this really matches my interests.

(Swedish man)

Management Needs and Actions

When we probed for views on preferred development and necessary management plans, different perspectives emerged. A portion of the older foreign tourists clearly missed, for example, access to shorter walking paths and more information about sights, logistics, and accommodations in languages other than English and Norwegian. Most tourists seemed content with the current management interventions, and few expressed a need for further action to ease access to recreational activities and experiences. Younger visitors tended to be more concerned that more facilitation could lead to increased mass tourism, and that mass tourism would threaten what is special about Lofoten. There was a widespread perception that by making experiences too accessible, the tourism industry might shoot itself in the foot. A few visitors argued that one could easily improve access to short walks and make the area more accessible for older people while maintaining the unique experience that Lofoten offers. Linked to questions of accessibility was another concern that virtually every informant brought up during the interviews, namely that no one wanted to see more tourists in Lofoten. The perception was that Lofoten is “filled up” with visitors—a clear indication that visitor numbers are approaching maximum capacity. A great many informants claimed that increasing the number of people in peak season would have a significant negative effect. Many added that what they like about Lofoten is the slower pace of life and reduced stress. With an increase in numbers of tourists, they argued, this aspect of Lofoten would probably disappear.

Future Development

Offshore petroleum development is currently the number one issue in popular media and debate. In our study, some informants were quite aware of this, others not. When we brought up the possibility of oil and gas exploration, we potentially introduced a bias in our prompting for perspectives on future development, since this is a highly controversial issue about which the informants clearly had varied background information. That said, most of the people we interviewed said that oil and gas production would be harmful to the area and should be avoided altogether. This potential scenario evoked strong feelings in several cases. When asked about oil and gas production in the islands, the informant claimed this would be a “crime” and added that “it is rape of mother nature” (Czech male).

On balance, a few informants found the question difficult to respond to and could see good arguments on both sides. Some of these informants had close family ties to the area; they were of the opinion that Lofoten should be populated by, and have room for, more economic activities than just tourism. These informants wanted people from Lofoten to have employment opportunities outside the seasonal service industries. Most of the people who had opinions about oil and gas production were Norwegians. The foreign

informants were largely unaware of the debate. However, when presented with the idea of petroleum exploration, the vast majority expressed concern over its potential impact on Lofoten’s image as wild, pristine, and unique.

DISCUSSION AND CONCLUSIONS

Lofoten is one of the hotspots of nature tourism in the global North (Mehmetoglu and Olsen 2003; Steen Jacobsen and Tømmervik, 2016). It is becoming increasingly important to identify, understand, and monitor the values and assets at the heart of the tourism industry. The tourism sector in Lofoten has undergone important changes in recent years, with rapid growth in visitor numbers, extending seasons into almost continuous year-round cycles, growing infrastructure and logistical problems, congestion, increasing host community–visitor tensions, and indications of visitor numbers approaching unacceptable levels. These changes put demands on the management system to engage in policy discussions on how to preserve the unique character of the Lofoten environment to avoid degrading the very assets that make up this particular destination, and to develop forms of tourism that are acceptable to resident communities. A comprehensive debate about development paths (e.g., oil and gas exploration versus fisheries and tourism) that goes beyond merely calculating revenue potential also needs to take into account and deliberate on the non-economic assets of tourism values and benefits.

People are drawn to Lofoten primarily because of the scenery. That is not to say other CES are unimportant, but they play a part as interlinked components with unique sea and landscape features. In CES terminology, the rugged scenery provides values and benefits such as aesthetically pleasing experiences and a sense of being in a place that is unique and awe-inspiring to most visitors. There seems to be little difference between domestic and international visitors in terms of how they rank this part of the visitor experience. Both emphasized the uniqueness of Lofoten as a nature tourism destination that can offer virtually any type of recreational activity for people of varying degrees of skill, which suggests that Lofoten already enjoys worldwide popularity as a destination capable of providing a range of CES and benefits.

Some studies (e.g., Hausmann et al., 2016) have found identity and attachment to place to be salient CES. In this study, we see a clear distinction between domestic and international travellers in their perceptions of these services. Norwegian travellers, and especially those with some form of attachment to northern Norway, express a sense of identity with the nature and culture of Lofoten, perhaps more as an archetypal northern coastal environment than as a site-specific feeling. Conversely, international visitors, most of whom had come to Lofoten for the first time, expressed little or no sense of identification with the region, and put much more emphasis

on the aesthetics and uniqueness of the archipelago. Most domestic and international visitors highlighted other CES and benefits associated with the environment: spirituality; developing or maintaining good social relationships; education acquired by experiencing fishing, wildlife, and the particular geographical setting; and the inspiration to explore or experiment with artistic activities.

In this study, cultural heritage emerged as a typical “add-on” benefit in the overall tourism experience. Cultural heritage, historic buildings, and reconstructed or living history (fishing villages, museums) have a prominent place in the marketing of Lofoten. They certainly form part of the overall experience of visitors, but are far from the prime reason they travelled to the islands. However, it appears that during their visit, many tourists gained an appreciation for the cultural heritage and a greater understanding of how the relationship between nature and culture has developed in this region.

The majority of the informants voiced opinions on current conditions in Lofoten in terms of visitor pressure and management needs. There was a widely shared perception that visitor numbers are high, that they are close to or in excess of maximum acceptable levels. Some visitors identified a lack of basic visitor facilities, such as information about accommodation and logistics. Other informants spoke forcefully about the need to preserve the pristine character of Lofoten and avoid future petroleum exploration. In sum, what we draw from these interviews in terms of the role of CES and associated benefits is the uniqueness of Lofoten in terms of the scale of the rugged mountain and marine landscape and the richness and diversity of recreational opportunities through the seasons. Cultural history contributes to the “awe-factor” (to paraphrase a common statement in the interviews), but is not a stand-alone attraction.

All the CES elaborated on in the interviews can, to varying degrees, be seen as expressions of relational values: how the visitors interact and form relationships with the environment. CES can elucidate how people interpret their experiences on these islands. Traditionally, tourism has been understood by distinguishing between inherent and instrumental values of nature, and correlating revenues with consumer preferences and satisfaction. A relational perspective on values generated through tourism represents a new orientation. Few tourists base their choices merely on the inherent value of “things” (environment, destinations) and how those satisfy their preferences. In a relational perspective, a tourist will be concerned not only with preferences but also with values and human interaction. These include actions and habits considered conducive to a good life. In a relational perspective on tourism in Lofoten, key parameters include the scope for outdoor activity, development of meaning and appreciation of non-economic values, appropriateness of behaviour, and considerations of what is authentic (Mehmetoglu and Olsen, 2003). These choices require tourism industry operators, managers, and tourists to act responsibly. Achieving sustainable

tourism in Lofoten will increasingly require solutions in negative externalities of market transactions, i.e., the processes that create environmental impacts and problems such as consumption patterns, transportation, congestion, unsettling of community life in peak seasons, pollution, and littering. A relational perspective on Lofoten tourism offers a more dynamic approach to the human-environment interaction and a stronger focus on the non-material and non-economic values that evolve from the various activities in specific geographic locations. These values highlight the need to facilitate a diversity of outdoor activities that cater to all ages. While more active sports such as kayaking, surfing, and mountain hikes are well provided for (both through operators and available information), respondents sought better information and access for short walks and other less demanding activities. These activities are also crucial for helping tourists interact with the landscape and build a relationship with it while appreciating its beauty and seeking inspiration. Although such accessibility is difficult to commercialize, our study identifies the need for the authorities to invest in this area.

Policy Implications

The findings from this study show that the concept of ES, particularly the category of cultural services, can be used to frame and describe salient non-economic values and benefits associated with tourism. The attraction of scenery captures the CES categories of aesthetics and desirable landscapes. Several studies have documented the attraction of the Lofoten environment to domestic and international visitors, and it comes as no surprise that scenery trumps everything in the tourism experience. However, our interpretation of the core message in these interviews is that the pristineness and grandeur of the scenery are not only the major attraction but the basis for experiencing other positive activities in that environment. A major implication is that many traditional ES assessments leave out or simply ignore geology (physical scenery) and non-renewable resources (such as oil and gas). For tourists to Lofoten, the scenery is a prime motivator, so oil and gas exploration is highly controversial, potentially threatening the quality of ES. Cultural ES tend to be treated as being non-spatial, but other studies have shown that it is possible to map and delineate geographic locations that are particularly important for recreational activities, or exercising traditional and cultural activities and aesthetic experiences (Klain and Chan, 2012). The fact that respondents identified specific views as especially dramatic indicates that this approach could be productive. The attention to scenery also suggests that a focus on protecting certain key views (Shellito et al., 2004) will be particularly important.

Several authors have argued for including a more explicit geographical perspective in the ES concept. If the ES framework is to be strengthened with a broader focus on the services and benefits the landscape can provide, then the spatial extent and character of the

services must be considered explicitly. Strengthening the ES framework with a focus on more landscape services would mean more formal inclusion of spatial aspects and reference to specific landscape attributes and landscape character (Termorshuizen and Opdam, 2009; Potschin and Haines-Young, 2011; Bastian et al., 2014). Geoheritage conservation is a well-established field of study and management (Wimbledon and Smith-Meyer, 2012) that can be creatively coupled with the ES framework. Geoheritage has been operationalized in land-use planning through the creation of geological reserves to protect certain landforms, but it has never been formally incorporated into the ES framework. CES assessment can be made more complete by including landscape features. In fact, excluding geology and landscape features renders ES assessments almost meaningless (Wimbledon and Smith-Meyer, 2012; Brilha, 2016). The ES approach often emphasizes biodiversity and its link to service provision. In our study, however, wildlife and biodiversity in general were seldom explicitly mentioned, providing further evidence of the tourists' focus on scenery.

Since visitor numbers may be approaching the ecological, cultural, and social limits of sustainability, we need to prioritize the most important environmental services, values, and benefits in the tourism system. As environmental experiences undergo commodification through marketing, organized tours, and packaging, it is paramount to identify, document, and protect the non-material and non-economic values and services that often form the core of nature tourism experiences. Cultural ES can seldom be precisely quantified (Boerema et al., 2017), but it is possible to describe and list key features in such a way that they can be compared to other ES, in particular, provisioning services. CES in Lofoten are often intertwined with provisioning services. For example, a fish stock can be a provisioning service that provides food and also a cultural service that maintains traditional harvesting activities or offers a recreational opportunity. The ES framework can explain the values and services associated with Lofoten's resources (from the landscape down to specific locations, species, and cultural contexts) and show how these values and services are interlinked. This linkage will require careful deliberation among a sufficient number of stakeholders, because any resource priority or development path will involve trade-offs between ES (Amundsen, 2012). It is a fair postulate that the tourism industry in the Lofoten region will need to quantify more than its economic revenue potential in future battles with the energy sector and short-term resource uses.

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