Tourism livelihoods in Smøla, Norway

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Abstract

Tourism in islands and archipelagos provides numerous advantages and disadvantages. This paper analyses a previously unpublished case study of island tourism livelihoods from the archipelago of Smøla, Norway, examining the pros and cons of implemented or proposed tourism livelihoods based on a snapshot from 2008-2009. Smøla's tourism livelihoods are categorised by nature, technology focusing on the wind farm, fishing and hunting, cultural landscapes, culture, and history. As with many other island and archipelago case studies, the most suitable approach could be tourism-supplemented, rather than tourism-dependent, livelihoods with the principal challenge being finding the right scale for Smøla's tourism livelihoods. This paper does not provide a theoretical contribution, but adds a spatially and temporally focused case study to the literature.

Keywords

cultural landscapes, nature, tourists, wind farms

Background

Tourism in island and archipelago locations provides advantages and disadvantages, bringing income and opportunities to live there balanced by dependency on external interests, high resource levels demanded by visitors, environmental implications including the energy cost of travelling to the island, and differing values between the island residents and visitors (Baldacchino, 2016; Duffield and Long, 1981; Graci and Dodds, 2010; Wilkinson, 1987). Research and management plans for islands analyse how tourism can:

- lead to local conflicts about an island's future, such as over protected areas (Bragagnolo et al., 2016 for the Azores);
- generate differing interpretations of heritage (Grydehøj, 2010 for Shetland, Åland, and Svalbard);
- modify, undermine, and reinforce identity (Bożętka, 2013 for Wolin Island, Poland);
- alter, create, and revive heritage for tourism (Ronström, 2008 for Gotland), sometimes specifically to (ironically) aim for authenticity (Grydehøj and Hayward, 2011 for the Isle of Wight); and
- support the development of island cultural products, such as linguistic and culinary products and services (Baldacchino, 2016 for archipelagos around the world).

This paper adds a previously unpublished case study to the literature of archipelago and island tourism, analysing the pros and cons of implemented or proposed tourism livelihoods.

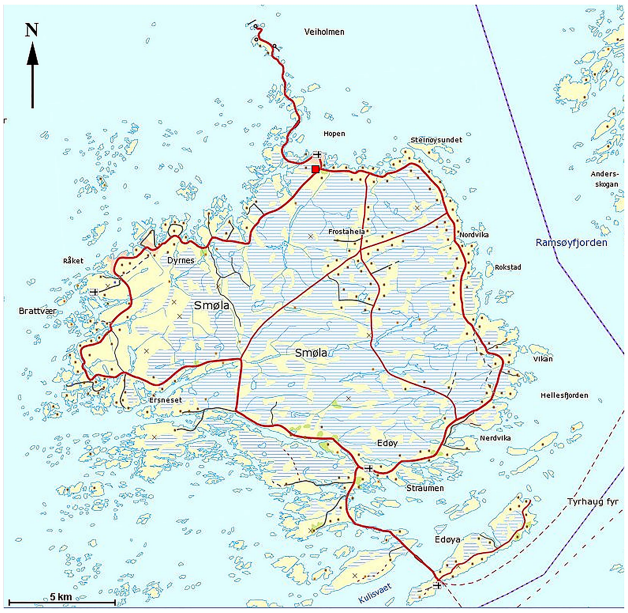

Fig 1. Map of Smøla (copyright Norwegian Mapping Authority; compass added by the authors).

Smøla is an archipelago in central Norway lying at approximately 63.2°N and 8.1°E, 120 km straight west of Trondheim (Figure 1). The pros and cons of Smøla's approach to tourism are presented and analysed as a focused case study for which a snapshot was taken in 2008-2009. The data and discussions emerge from a futures project for the island involving a series of participatory visioning workshops with the islanders to examine possible scenarios for their environment, life, and livelihoods until 2025 (Thomassen et al., 2008; Thomassen et al., 2011). These workshops were supplemented by multiple visits to the island, many informal interviews and discussions with islanders, public statistics, and technical literature. As a snapshot approach to a single case study, this paper does not contribute theoretical insights to island studies or to tourism research, nor does it engage directly with theoretical constructions of islandness or tourism. Instead, it represents on-the-ground suggestions and analyses for island cultures in the context of tourism for a specific location as examined at a specific time.

This paper's next section provides background on Smøla followed by a description of the tourism-related discussions which were taking place in and for the municipality at the time of this research. The final section analyses future tourism possibilities for Smøla especially with regards to balancing tourism income and manageability without harming Smøla's features which attract tourists.

Smøla, Norway

Smøla's terrestrial, coastal, and marine geology are well-described (Gautneb and Roberts, 1989; Redfield et al., 2004). The island emerged from the ocean after the last ice age, about 10,000-11,000 years ago. At that time, global sea level was approximately 40m below the present-day sea level (Dickinson, 2009), but northern Europe was just starting its isostatic uplift as the heavy glaciers melted, permitting the land to rebound. The land rising relative to the changing sea level led to the emergence around the Smøla area of, first, a shallow sea dotted with skerries and islets and then to a small archipelago of islets and small islands. During this phase, no evidence exists of permanent settlement in Smøla, although it might have been periodically visited for resource exploitation (Berg, 1981).

The earliest known settlements in Smøla date to approximately 8,000 years ago, based on sea level shoreline dating. These settlements belong to the Mesolithic Fosna culture comprising subsistence hunters and gatherers. Most Neolithic finds and artefacts from Smøla are closely linked to agricultural subsistence, so the settlements soon transformed from hunters and gatherers to a more agrarian society (Berg, 1981). There have been no findings in Smøla from the Bronze Age through to the Roman period, but continuous settlement is presumed (Hansen and Juhl, 1995). From the Early Iron Age onwards, evidence exists for continuous settlement of the island, including grave mounds and cairns.

Fisheries gained importance during the late medieval period, leading to an increase in the importance of Smøla's northern areas, especially for the fish trade. Fish prices rose towards the middle of the seventeenth century, but then dropped, leading to a decline in the number of inhabitants in Smøla's fishing villages. Meanwhile, farming increased across the archipelago. In the second half of the eighteenth century, the fishing villages regained importance, which continued through the nineteenth and twentieth centuries. By the end of the twentieth century, modern fishing techniques and equipment meant that fishers no longer needed to rely on fishing villages dispersed throughout the

archipelago (Hansen and Juhl, 1995). Instead, outlying settlements have been abandoned, consolidating more central villages.

Today, the municipality and archipelago of Smøla comprises nine principal inhabited islands, all connected by roads with causeways and bridges, and more than 5,000 uninhabited islets, holms, and skerries across 281.9 km^2 in land area. The population is approximately 2,000 representing a decline of around one-fifth over the past two decades and a decline of approximately one-half since World War II. None of the population is classified by Norway's government as living in urban areas. Eighty percent of the population lives on the main island of the archipelago, also called Smøla.

Small-scale agriculture and commercial fisheries are the most important livelihoods in Smøla, with 31 percent of the population working in public administration and most of the rest in enterprises. Large bogs have been drained and cultivated with Smøla being a significant carrot producer, plus there are some dairy farms. At the time of this research, about 14 percent of the population was employed in the fishing industry, covering fish farms as well as open ocean fishing. There is some employment in the mechanical industry and in a window factory.

Since 2001, Smøla has been an *omstillingskommune* which means that it is classified as having low employment rates or long-term economic development and enterprise restructuring problems. Smøla kommune (2006), the local authority, laid out a strategic economic plan for the following twelve years which discusses some perfunctory suggestions to expand tourism.

Smøla has neither an airport nor any land transportation routes to the mainland. Two ferries, one of which takes vehicles, serve Smøla, docking on the archipelago at Edøy at the south end which is then connected to all of Smøla's inhabited islands by paved roads across bridges and causeways. A ring road circles the main island of Smøla and two paved roads cross through the interior. A few dwellings which are not inhabited year-round have been built on islets accessible only by boat. Private or hired boats and helicopters would also have access to Smøla, although helicopter landing is strictly limited in Norway and is not normally available for recreational purposes. The one official helipad on the archipelago is located near the health centre and there are nine main docks or harbours scattered around the islands.

During this research, Smøla had approximately 650 beds for visitors available for the entire year, most of which tended to be fully booked for much of the year before the year began. This context must be considered when proposing ways of expanding tourism, because visitor facilities do not exist on the island for a significant expansion of overnight stays.

Smøla's tourism livelihoods

Smøla's tourism livelihoods are presented in the following categories: nature, technology focusing on the wind farm, fishing and hunting, cultural landscapes, and culture and history. Evident overlap appears amongst many of these categories.

Nature

Smøla was designated as an Important Bird Area in 1989, especially for one of the world's largest and densest

populations of white-tailed sea eagles (*Haliaeetus albicilla*), and for wintering seabirds, including several species of divers, grebes, and sea ducks (Swenson and Follestad, 2004; Thomassen, 2015). The white-tailed sea eagle is on IUCN's Red List of Threatened Species but was downlisted to 'Least Concern' status on the list in 2005. Other species —including a dense and increasing breeding population of greylag geese (*Anser anser*) and grey herons (*Ardea cinerea*) —are common in numerous locations around Smøla, as are otters (*Lutra lutra*) (Pistorius et al., 2007). Smøla's blanket bogs are a particularly important habitat, especially for the eagles (Dahl et al., 2012). Learning about and viewing the bogs could be part of the naturalist experience for tourists visiting Smøla.

Few naturalists, including birdwatchers, come to Smøla specifically to see white-tailed sea eagles or other species. Most interest is for general bird-watching; however, Smøla offers little in terms of naturalist activities, for either the expert birdwatcher or for the casual tourist, compared to other sites in Norway, Europe, and the world. Tours are given mainly by owner-operated small businesses with the proprietor pursuing other livelihoods simultaneously, such as providing accommodation or working for the municipality. Smøla does not have any specific bird cliffs, seabird colonies, or mass nesting sites. The birds are scattered all over the island and not all the summering birds are on the island during the winter or vice versa.

In January 2009, a new protection plan for Smøla was approved (Smøla kommune, 2009), covering eight nature reserves and two areas for landscape preservation over a total of 270km^2, of which 188km^2 is the sea. The plan's aim is to protect Smøla's nature, highlighting the international importance of Smøla for birds and otters. The kelp forest is also internationally important, being a significant reason for the island's biodiversity and biological production. The protection plan mentions cultural icons, such as the Kuli stone described below, and explicitly tries to balance the land preserved for nature, culture, and history with local economic interests. The wind farm is part of these considerations, as described later.

The area around Rosvoll in Smøla's southwest exemplifies the discussions regarding natural landscapes around naturalist-related tourism for the archipelago, especially hiking and viewing the landscape (Figure 2). One concern is the expansion of treed areas, especially birch, which impinge on the mainly unforested ecosystem which many naturalists expect to see in Rosvoll. These trees are not being deliberately planted, but are naturally growing and expanding their distribution. A question arises regarding the management form that the 'natural' landscape should undergo to maintain its visitor appeal. With much of Rosvoll's attraction being views while hiking, should trees—including Sitka spruce plantations—be removed in order to retain that appeal? Alternatively, should the landscape (which is culturally constructed anyway due to human activity over past millennia) be permitted to evolve naturally, including likely ecosystem alterations due to climate change (Tømmerås et al., 2003)? As well, quietness is part of Rosvoll's attraction. At the moment, parking at the access point is large enough for only a few vehicles. Expanding this access and making Rosvoll more popular could detract from the tourist experience.

Fig 2. Rosvoll's scenery (photo by Ilan Kelman).

Invasive species are a concern for Smøla. The red alga *Heterosiphonia japonica* was introduced in 1994 and has become established along all of Smøla's coastlines and the surrounding area (Husa et al., 2004). The invasion of the American mink (*Mustela vison*) might have affected the numbers and breeding sites of seabirds and waterfowl over the long-term, although low mink numbers have been observed in recent decades, perhaps due to competition with otters (Bevanger and Ålbu, 1986; Bevanger and Ålbu, 1987). Increased traffic from tourist vehicles and tourist footwear could augment the threat of other species being introduced, although this risk might be dwarfed by species migrations around Norway due to climate change (Tommerås et al., 2003).

Wind farm

The first large-scale wind farm in Norway was opened in September 2002 on Smøla's western side by the Norwegian company Statkraft. 68 wind turbines have a capacity of 150 MW. They are expected to produce an average of 450 GWh annually feeding into the main grid in the Trondheim area. The turbine towers are 70m tall with three turbine blades each 41.5m long. The wind farm covers 28 km2 and has two access gravel roads, protected by electronically controlled barriers with warning signs and information in Norwegian, which lead to a road network of 28 km servicing all the turbines.

The potential negative impacts of the wind farm are the same as those considered, analysed, sometimes confirmed, and sometimes debunked for other island locations such as Orkney, Scotland (Meek et al., 1993) and Wolfe Island, Ontario (Beston et al., 2015). The most obvious impact is visual (Figure 3). Beyond the aesthetics, wind farm construction entailed a large network of gravel roads with a large gravel area beside each turbine that was initially needed for installing turbine components and which now serves as parking spaces for maintenance and equipment vehicles (Figure 4). Only wind farm employees have access to the wind farm's roads with vehicles, although the roads are open to others for cycling and walking, especially to experience the nature of blanket bogs without walking over the bogs. The roads and parking spaces fragment the moorland habitat while introducing vehicle and human

disturbance across the entire area. Noise from operating turbines is audible in the human hearing range throughout and adjacent to the entire wind farm area and people approaching the turbines can feel the throbs from the turning blades.

Fig 3. The visual impact of Smøla's wind turbines (photo by Ilan Kelman).

Fig 4. Access roads through the wind farm (photo by Ilan Kelman).

Between 2002 and August 2005, the wind farm had only 20 turbines and no dead sea eagles were found. After the second phase opened in August 2005 with the other 48 turbines, collisions started, leading to 21 known sea eagle

deaths and 22 known ptarmigan deaths through to January 2009. A research and monitoring program is documenting the frequencies and species of bird mortality and how the wind farm influences bird travel and breeding patterns (Bevanger et al., 2008; Cole and Dahl, 2013; Dahl et al., 2012; Dahl et al., 2013; Follestad et al., 2007; Kuijken , 2009; May et al., 2013; May et al., 2017; Solli, 2010).

The wind farm provides approximately 15 jobs directly and up to 30 jobs indirectly, according to the wind farm's business office. Business tourists also come to Smøla specifically to see the wind farm, because at the time of this research, it was the largest one in northern Europe. In 2007, delegations from 17 countries came to Smøla to see the wind farm. As wind farms expand across Europe, the popularity of Smøla as a wind-farm tourist destination might decline as it becomes less unique. Nonetheless, the archipelago is a destination for Norwegian school groups, particularly from non-coastal locations who follow the pattern of spending one day touring the wind farm and one day on the sea. This form of school-based tourism is likely to continue, as an annual field trip for each year's class within the school's routine.

A possibility exists of charging for wind farm tours which could incorporate a surcharge for the 'opportunity' to climb up to the top of a turbine via the ladder inside the pole. Care is needed in pursuing such ideas, because realistically these 'opportunities' are unlikely to generate extensive enthusiasm and might not bring in much income, especially when it is easy to view the wind farm without entering the site. Climbing the ladder requires a high degree of physical fitness and tolerance for heights in long, narrow spaces. The company operating the wind farm requires legitimate and elaborate safety routines for people climbing up turbines and would rightly be concerned about liability—even if lifts were installed, which would be expensive. Depending on cost, a non-operating turbine designed for tourists, perhaps with a lift inside, could be considered. The tourism revenue generated might not make up for the cost of that turbine or for the loss of space for, and electricity-related income from, one more operating turbine.

A visitor centre could potentially be developed, providing information and interpretation regarding wind power, related energy measures, sea eagles, and impacts of wind energy on wildlife and landscapes. Displays could include the use of radar and cameras for studying bird collision rates; devices to reduce bird collisions; and images from real-time cameras pointed at sea eagle nests. The advantage of the latter is that it is difficult to get close to breeding sea eagles without disturbing them. Sea eagle photo safaris are popular with tourists visiting Smøla, so a wind farm visitor centre could be the starting and ending point for such tours.

While no expectation exists that such tourism would be lucrative or would necessarily create new jobs, the wind farm's business office expects that it could supplement tourism-related income and could be a tourism marketing opportunity. This expectation could be fair or optimistic considering the evidence from other locations regarding the mixed effect of wind farms on tourism (e.g. Gipe, 1995; Klaassen et al., 2005).

The wind farm is a major feature in Smøla, providing electricity for the region, taking up land, and killing birds, although the significance of the long-term impact is not yet known. The wind farm provides a small gain in livelihoods, including the ongoing research projects into wind farm impacts on birds (Bevanger et al., 2008; Cole and Dahl, 2013; Dahl et al., 2012; Dahl et al., 2013; Follestad et al., 2007; Kuijken , 2009; May et al., 2013; May et al., 2017; Solli, 2010), which bring dozens of researchers to Smøla for extended stays throughout the year.

Fishing and hunting

Smøla has hunting and fishing tourism, with the latter being far more popular than the former. Most fishing is sea-

fishing, although there are some lakes that support freshwater fishing in the main island's interior. For sea-fishing, approximately 2/3 of the visitors are non-Norwegian with Germans said to be the dominant nationality, although exact nationality-based data are not retained across Smøla. Fishing tourists stay from one week to one month per visit.

Much fishing tourism caters to tourists who want little more than a cabin or a room, especially where they can cook for themselves. Using their own fishing equipment and bringing or hiring a boat which they pilot themselves, they do not seek catering, hospitality, or touring services. Instead, they clean and cook their day's catch for that evening's meal. Rather than a holiday of relaxation without daily chores, these tourists are seeking an isolated, quiet environment in which they can engage in leisurely activities different from their normal routine. Many of these tourists find Smøla via word-of-mouth and they return to the same accommodation at the same time every year.

In response to concerns that over-fishing, especially freezing large amounts of catch to take home, could potentially cause a decline in the near-shore fisheries, each person is now limited to taking a maximum of 15 kg of fillets off the island. There is no substantive monitoring of this regulation and tourists are permitted to eat as much as they want while on the island. Impacts from this effectively unregulated fishery, if any, are not known, nor is information available on possible consequences of expanding the fishing because local monitoring of fish stocks has not occurred. This dearth of data is problematic when planning for more lucrative fishing-related livelihoods, such as through emulating approaches in other locations with China's Changshan Archipelago being an example (Su et al., 2017).

Fish farms can have major negative impacts (see also Liu et al., 2011), especially the spread of disease and salmon lice to wild fish (Thomassen, 2015). Infectious Salmon Anaemia was first documented in Norway in 1984 (Jarp and Karlsen, 1997) and has badly affected the fish farming industry in the Faroe Islands and Scotland (Jarp and Karlsen, 1997; Raynard et al., 2001). Escapees from Norwegian salmon farms have generated trouble in potentially outcompeting wild fish at the spawning grounds while contaminating the genetic makeup of wild fish (Naylor et al., 2005; Sheridan, 1995). Opening fish farms to tourism might be a positive or negative public relations exercise, depending on public perceptions (Broom, 1998).

In contrast to Smøla's fishing tourists' profile, most hunters are from elsewhere in Norway, come to Smøla for a weekend, and take home their quarry rather than eating it immediately. Hunters form a strong bond with the farmers because, by hunting on cultivated land, they control and scare away geese that regularly eat the grass being grown for livestock feed. A connection has usually been established previously because the hunters were originally from Smøla or have friends and family who live there. Many stay with people they know, rather than booking a room.

Hunting is less prominent today than in previous generations due to changes in when the geese are in Smøla. Until around 1980, sea grass formed most of the diet of the greylag geese which are the dominant waterfowl hunted in Smøla. Around 1980, sea grass almost disappeared from around Smøla and northwards along the Norwegian coast (see further analysis later). Looking for food, the geese discovered the grass being farmed. Consequently, farmers would support hunting tourism, as described above; however, the best time for eating the grass is in mid-summer, whereas sea grass was abundant into the autumn. Thus, the geese have shifted the time of their southwards migration to take advantage of the best part of the grass growing season. The geese tend to arrive in June and July, leaving before autumn (Pistorius et al., 2006). Since most hunters use weekends for hunting and do not wish to spend their regular June-July summer holiday in Smøla, interest in goose hunting has declined.

Red deer (*Cervus elaphus*) are hunted in Smøla and their population is increasing, so red deer hunting could expand. In 2007, 60 red deer were killed in Smøla despite an annual quota of 75. Smøla municipality offers a reward for each mink killed, because it is an invasive species, an option which might attract more hunters.

Yet a significant part of Smøla's attraction for hunting and fishing is the low number of others engaged in similar activities. If the popularity of hunting and fishing increased, then the previous regulars might be upset because they no longer have their isolation and routine. Care is needed to balance increased tourism income from hunting and fishing with the reasons why people come to Smøla for these activities.

Cultural landscapes

Smøla's landscape reveals a combination of human and natural influences. As noted earlier, since the island emerged from the sea after the last ice age, humans have occupied and used the area. The historical landscape from the earliest periods of livelihoods differs considerably from the present day cultural landscapes, due to mainly the rising land and the bog growth.

Bog growth has caused several metres of peat to cover what was once habitable and inhabited areas. Several wooden poles have been found at the bottom of the bogs, although the only known measured find depth is at 2m below ground level (Berg, 1981). Many Neolithic artefacts have been found 1-2 m below ground level. The excavation depths imply that the present-day landscape has changed significantly from the Stone and Bronze Ages, with a significant part of the contemporary landscapes being due to human activity, hence they are cultural landscapes.

The dominant historical human activities influencing Smøla's landscape have been logging for construction, peat harvesting for burning, fishing and bird hunting for food, and agriculture. The lack of trees in vast areas of moor is partly due to the wind, temperature, and salinity and is partly due to extensive human use. Some small ponds and canals, now attracting waterfowl, were cut by humans while extracting peat (Moen, 1999).

More recently, the sea currents around the archipelago have been drastically altered by the construction of bridges and causeways. One sudden change just before the sea grass died in 1980 was the building of the 10 km long road to Veiholmen in Smøla's north, mainly along causeways but including a few bridges. This infrastructure impeded most of the sea's flow, and hence nutrients, around the islands and islets between Hopen and Veiholmen (Figure 1). Lack of specific monitoring of the flow and nutrients before and after the construction make it difficult to quantify these changes, so establishing a causal chain from the building of the road to the disappearance of the sea grass around Smøla might not be possible.

Smøla's underlying geology (e.g. Gautneb and Roberts, 1989; Redfield et al., 2004) remains relatively intact, because quarrying has been conducted at only a very small scale at a few sites. Quarrying on Skjølberg for iron and copper occurred briefly in the eighteenth century and then in the 1930s for iron. The oldest preserved kettle in Norway, made from copper, was found on Bygdøy which shows limited traces of copper mining. Much of Smøla's geomorphology is also relatively intact, although many sections of the coastline, especially around buildings, have been altered by sea walls, harbours, breakwaters, and other structures, along with the bridges and causeways connecting the inhabited islands.

Conveying to tourists the human impact on Smøla's landscapes might be challenging. Many visitors have pre-conceived notions and pre-defined interests, seeking, for example, pristine nature or wilderness, especially in the North American sense (e.g. Nash, 2001) and potentially presuming that Smøla offers what they seek. They often hope to find local culture and history as interpreted through museums or signposts rather than as seen through landscapes. Using Smøla's landscapes for tourism is an opportunity to bring in more visitors, but runs into the challenges of melding the

natural and human landscape aspects while balancing interest in natural influences and features with interest in the human and cultural aspects.

Culture and history

Veiholmen in Smøla's north (Figure 1) is Norway's largest active fishing village south of the Arctic Circle. It is particularly important for processing the fish used for making the delicacy *baccalao*. Because the settled area is exposed to the open sea and the weather coming off the ocean, small wooden houses have been built densely packed, creating unique village scenery (Figure 5). The location is easy to drive to and then is small for wandering around, so is amongst the most popular trips for Smøla tourists. The village has responded by providing overnight accommodation similar to fishing huts along with restaurants where local fish meals are served. Consequently, tourism is changing the cultural offerings. Meanwhile, the market is expanding for second homes for richer people from outside of Smøla.

Fig 5. Veiholmen's cultural heritage (photo by Ilan Kelman).

Smøla has two small museums. Three separate buildings comprise the Smøla museum: Rosvoll rectory (424 visitors in 2008), Sanden on Veiholmen which is an eighteenth century building displaying fishing village life (360 visitors in 2008), and Ragnes old school (24 visitors in 2008). The second museum is the Norwegian bog museum which had 83 visitors in 2008. The low number of museum visitors compared to the number of visitors to Smøla is a combination of (i) most visitors, mainly the fishers, not having museum visits as a high priority and (ii) the museums' infrequent opening times.

One possibility to promote Smøla's culture and history would be to create a self-drive trail highlighting the human-environment interaction through time across Smøla with self-guided visits through the museums. For this to work, staff time would be needed to create and maintain the information while unmonitored museum visits by tourists would need to be acceptable, rather than worrying about theft or vandalism.

One of Smøla's main historical attractions is the Kuli stone, an inscribed stone from around 1000 AD ± about 50 years which dates the introduction of Christianity to Norway while being the first known use of the term 'Norway' to refer to the area (Spurkland, 2005). The original stone is in a Trondheim museum with a replica standing at the discovery location on the island of Kuli in Smøla, making it incongruous that tourists might travel to Smøla to see the original site but a facsimile stone. The Edøy Church, one of the oldest churches in Norway dating back to the late twelfth century with an extension completed in 1695, is open regularly in July only, mainly due to lack of funding for staff.

Scaling up Smøla's cultural and historical tourism could be challenging. Opportunities exist for expansion, but supporting staff and facilities are not immediately available. Expansion might also detract from the Smøla experience sought by current tourists.

Other tourism possibilities

Existing attractions garner tourist interest, have plenty to offer, and could potentially expand significantly, but these attractions might not be able to cope with markedly heightened popularity. While elevated tourist income could fund more staffing, longer opening hours, and monitoring and maintenance, the plans on paper do not address these aspects in detail. Caution would be warranted to ensure that expanding tourism does not damage the sites and experiences which tourists come for.

Other possibilities for tourism livelihoods vary widely, but do not yield clear-cut opportunities. Smøla's dialect of Norwegian is of interest to linguists (e.g. Strahan, 2001), but could hardly form a tourist draw, even for Scandinavian speakers. Similarly, Smøla's brief and peripheral appearances in literature—for example, *Kjærleikens Ferjereiser* by Edvard Hoem in 1974, made into a film in 1979—or contributions to genealogy (e.g. Bongard, 2005) lend little to tourist marketing possibilities. The play *Fru Guri av Edøy* (*Ms Guri from Edøy*), describing the life on an Edøy farm 800 years ago, received a new site for outdoor performances for the 2009 summer tourist season.

Kelp harvesting (Christie et al., 1998) could potentially provide a tour, to learn the history of the technique and to watch, or to participate in, it being completed. This option would more likely be an add-on to existing tourist industries than creating a new tourism market. It is not certain that kelp harvesting tours would be fruitful enough for operators to invest much. Additionally, kelp harvesting might affect the wider ecosystem, so highlighting this activity for tourists might not benefit the archipelago overall.

Not enough whales pass by Smøla regularly to make whale watching viable, such as the whale watching tourism much farther north on Andøy island, plus Norway has to contend with being a whaling country, some of which occurs from Smøla. Whale hunting and whale watching are not irreconcilable, as shown by Andøy's whale tourism activities, but Pacific island experience demonstrates that doing them jointly is not always straightforward (Moyle and Evans, 2008). Nonetheless, scuba diving and seal watching could be other touristic ways of enjoying the seascape. Conflicts could potentially emerge with recreational seal hunting which occurs in Smøla in autumn.

Building hides for bird-watching and bird photography is ongoing, now also with a hide at sea for observing and photographing birds at sea level. Bird hunters and birdwatchers have interests in different species, meaning that no immediate direct conflict results. A potential conflict on principles between hunters and naturalists could occur, with the possibility of enmity being magnified if hunting makes birds jumpy or discourages them from visiting or nesting in Smøla over the long-term.

Finally, living and working on a farm or with a hunting, fishing, or whaling family could augment tourism, especially for visitors from cities or to supplement and extend school group visits. The visit could be a 'how to' or 'hands-on' learning-and-doing experience for the tourists. These endeavours are not clearly or consistently profitable (e.g. Hjalager, 1996). The appeal of this form of holiday is also doubtful for northern Europeans who currently dominate Smøla tourism. Activists might eventually book and then sabotage holidays involving killing animals.

Looking beyond northern Europe and moving towards a more theme park mentality would not find support amongst those living in Smøla. Already, second homes are creating difficulties because richer people purchase properties, driving up prices, without providing adequate support for or input into local livelihoods. A sense of locals being squeezed out of their own homes is emerging, matching the island gentrification felt in other places (Clark et al., 2007). It could be amplified by trying to accommodate tourists seeking a theme park experience (see the analysis by Johnson, 2016 of the Amami islands, Japan) or a 'genuine' live-with-a-farmer or visit-a-farm holiday (see Lee, 2005 for examples for Taiwan). The same difficulty could occur with trying to organise events or festivals in Smøla to attract tourists, thereby commodifying and packaging heritage (e.g. Bunten, 2008) and manufacturing new tourism forms.

Tourism-supplemented, not tourism-dependent, livelihoods

Overall, the main challenge for Smøla's tourism livelihoods is finding the right scale. The attractions garner tourist interest, have plenty to offer, and visits could potentially expand significantly, but the attractions might not be able to cope with significantly increased popularity, particularly if day trips (for example, from the nearby city of Kristiansund) increase because day trips tend to burden resources while providing limited contributions to local life and livelihoods. Expanding tourist activities would further require a commensurate increase in tourist services and facilities, leading to the potential that the tourism overwhelms the locals' day-to-day life.

The commodification problem could manifest, as demonstrated for Jeju Island, South Korea (Bu, 2017). Other potential consequences include numerous vehicles on the roads, too many hikers along the trails, overharvesting of fish, and the environmental impacts of fishing, bog preservation, and boat tours. An alternative could be raising prices in order to focus on an élite market and to boost the 'specialness' of being able to partake in Smøla tourism. Such attempts could lead to cost-of-living increases for locals too, driving them out in the same way as second homes (e.g. Marjavaara, 2007).

These situations are potentially manageable. Environmental conditions could be monitored around Smøla and then restrictions on activities could be imposed if deterioration is detected. Traffic could be limited by reducing the number of non-local private vehicles that are permitted on the island and by providing public transport, although building a railway should not be considered given the environmental impacts as well as Baldacchino's (2008) description of the typical lack of feasibility of railways for service-driven island livelihoods. Sark in the UK's Channel Islands bans cars (Johnson, 2015). Fees to enter hiking trails or protected areas are a theoretical possibility, such as Ecuador's Galapagos Islands charging a US$100 entry tax for most foreign tourists plus a $20 transit control card for non-resident foreigners. Collecting, monitoring, and enforcing fees entails costs, but creates jobs.

In practice, fees and access restrictions would be highly unlikely to be imposed, because Norwegian law provides a right of access (Kaltenborn et al., 2001). Even considering voluntary contributions or restrictions would likely meet

massive resistance from Norwegians and other Scandinavians. As such, no approach is a panacea and some suggestions are impractical. As long as local support is obtained through regular, open, transparent processes, a balance could be sought of tourism supporting livelihoods without causing social or environmental problems.

An additional effect of and on tourism livelihoods is the long-standing debate in Smøla regarding whether or not a fixed link—a tunnel, a bridge, or (least likely) a causeway—should be built to the mainland, due to the expected impacts on island life, lifestyle, and livelihoods (Baldacchino, 2007). The fixed link might make access easier, but at Smøla's scale, could promote people driving over for part of the day and not staying overnight. These trips do not necessarily assist livelihoods and could lead to the same challenge of needing simple packages to satisfy the tourists making quick trips while, due to the increased traffic, discouraging those who currently enjoy extended stays for tourism in Smøla.

The diversity, the pros, and the cons of possible approaches for Smøla regarding tourism livelihoods mirror the challenges and opportunities of many other islands (e.g. Baldacchino, 2006; Graci and Dodds, 2010; Scheyvens and Momsen, 2008). Options are far-ranging, building on existing opportunities in tandem with thinking about creating new ones. Examples are supporting an island of second homes and élite tourism, promoting tranquillity, focusing on viewing and enjoying nature such as sunsets and hiking alongside wildlife, emphasising extractive activities such as hunting (including whales and seals) and fishing plus kelp and peat harvesting, and piloting technology such as new forms of wind energy. Some choices might be mutually exclusive, but compromises could be feasible by demarcating certain areas of the archipelago for specific activities or by offering a suite of selections, from five-star hotels to backpacker hostels.

Conclusion

Many questions arise regarding how to move forward. Should a branding and marketing exercise be undertaken to sell Smøla's services, products, and ostensible authenticity, as Jersey has done (Johnson, 2012)? How much do island livelihood models and their critiques (Clark, 2013) apply to Smøla? How could external investment be encouraged without sending too many of the subsequent benefits off-island and without neglecting direct interest in island life?

In considering all such possibilities, further information would be needed regarding how, and how many, tourists could be involved in activities without damaging these activities' basis along with Smøla's residents' views and interests. Many residents remain in Smøla because they prefer to live in a non-urban environment, with regular fishing, hunting, and boating. Many seek more lucrative or more stable livelihoods, recognising the opportunities and concerns proffered by tourism. These categories overlap.

Other ideas being pursued at small scales are renting bicycles and sea-kayaks or boats, sometimes with and sometimes without a local guide. Other possibilities being explored at the preliminary stage include a golf course and quarry tours. The principal challenge is to balance these activities, offering a greater variety to encourage longer stays but determining the balance preferred between more tourists and more tourist income, without tourism reducing the desirability of living on or visiting Smøla. For instance, golf courses frequently require intensive gardening which, if managed improperly, can lead to pesticide and fertiliser runoff into adjacent waterways and then the sea, damaging ecosystems (Balogh and Walker, 1992). Overuse of power boats can scare away wildlife and prevent birds from breeding as has been observed at the Faroese Vestmanna bird cliffs.

Nevertheless, strong advantages emerge from Smøla's current forms of tourism without necessarily needing new ideas or significant extensions or expansions. An exception could be exploring further possibilities for forms of package tourism or for specific tourism marketing strategies. Irrespective, rather than trying to create tourism-only livelihoods, with all the resulting difficulties and dependencies, the best long-term approach might be to continue with tourism-supplemented livelihoods. This approach would keep tourism at a manageable scale, would not create as much dependency on external tourism-related factors, and could avoid major drawbacks associated with tourism livelihoods.

At the time of this study, it appeared that the island's authorities were just at the start of investigating the full range of potential options that exist with respect to tourism, since no clear vision existed. The potential conflicts between conservation (of biodiversity and cultural heritage) and development, between different livelihood strategies, and even within different forms of tourism underline the need for careful planning of land use around the archipelago, especially to generate and maximise cooperation. Overall, the livelihoods future of Smøla seems to be heading towards a form of pluriactivity (as occurs in other archipelagic locations such as in Finland (Salmi, 2005) and the Philippines (Dressler and Pulhin, 2010)), evolving from past pluriactivity of mainly fishing and farming towards adopting other components such as tourism and aquaculture. The lack of a single, dominant tourism vision or branding (compare with Khamis, 2007 for King Island, Australia) may also provide greater scope for continuing life and livelihoods in Smøla, because it is unlikely that temporal fluctuations in the tourism market would synchronise with all the different types of tourism, so residents might always have some level of income and be rapidly flexible to shift amongst livelihoods, an advantage of pluriactivity.

The pros and cons of tourism livelihoods in Smøla, Norway, have been analysed as a snapshot of this single case study in 2008-2009. Many ideas and possibilities exist, but as always, ensuring careful, non-destructive implementation is key. Lessons from island cultures around the world assist in supporting such action, yet further work is needed to connect the people of Smøla with other islanders and with the academic, policy, and practice knowledge already available.

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