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Understanding the role of environmental quality attributes in food-related rural enterprise

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Highlights

- Food-related rural enterprises are increasingly offering products with labels such as ‘quality’, ‘green’, or ‘ethical’ and ‘sustainability’ to justify high premiums for their products.

- Thus, environmental quality attributes are becoming prevalent and important business strategy for rural food-related enterprises in the selected communities.

- Adoption of environmental quality attributes as a source of competitive advantage is influenced to a large extent by resources provided by government agencies and existing institutional framework towards sustainability and regional competitiveness.

- Implications for rural enterprise competitiveness and future research on the interphase between sustainability and rural enterprise competitiveness highlighted.
Understanding the role of environmental quality attributes in food-related rural enterprise competitiveness

Abstract

This paper examines the role of environmental quality attributes in food-related rural enterprise competitiveness in Denmark, using qualitative interviews. The results of the analysis demonstrate that in the quest to minimize small-market and location limitations, food-related rural enterprises are increasingly offering products with labels such as ‘quality’, ‘green’, or ‘ethical’ and ‘sustainability’ to justify high premiums for their products. Thus, environmental quality attributes are becoming prevalent and important business strategy for rural food-related enterprises in the selected communities. The results also establish that undertaking sustainable activities has been influenced by institutional policies that reward environmental conservation with subsidies and other resources. These findings contribute to our understanding of the growing relevance of environmental quality attributes in food-related rural enterprise performance.

Keywords: Environmental quality attributes; competitiveness; rural food-related enterprise; environmental sustainability, Denmark

1. Introduction

Decisions intended to achieve competitiveness by large or small, urban or rural-based enterprises are influenced to a great extent by economic logic. However, the environmental impact of unsustainable enterprise operations has led to growing demands for the adoption of strategies that address social and environmental issues (Arena et al., 2015; Alberici and Querci, 2016; D’Amico et al., 2016; Shaukat et al., 2016; Yamoah, 2019). This trend confirms an earlier proposition by Joseph DesJardins that ‘ecological sustainability could become the central social responsibility challenge for business’ (DesJardins, 2007). Despite positive research evidence on the impact of embedding sustainability efforts in enterprise performance, enterprise owners at all levels are often reluctant to locate sustainability at the centre of their business strategy (Mazutis and Eckardt, 2017) for fear of becoming less...
competitive. Whereas larger enterprises have resorted to the use of corporate social responsibility programmes (CSR) to address social and environmental challenges (see Strand et al., 2015; Setó-Pamies and Papaoikonomou, 2016; Janker et al., 2019), rural enterprises such as food-related firms lack the requisite resources to engage in these programmes (Princic and Floyd, 2003; Kusyk and Lozano, 2007; Evans and Sawyer, 2010). However, it is important to note that there are growing doubts and concerns about CSR as an effective vehicle to singularly deliver environmental sustainability outcomes (Husted and Salazar, 2006; Orlitzky et al., 2011). In the light of such resource limitations on the part of rural enterprises (Evans and Sawyer, 2010) and widespread public distrust about business intentions for CSR (Orlitzky et al., 2011), there is a need to expand the research focus of rural enterprise strategy and environmental sustainability to gain insights that serve the mutual interests of both rural businesses and society. One critical but little researched area that has implications for the triple bottom line—that is, social, environmental (or ecological), and financial aspects (Elkington, 1999)—is the interplay between environmental quality as an enterprise resource and small business competitiveness. Of special interest to this paper is the context where environmental quality attributes are regarded as competitive attributes of a rural enterprise, such that these attributes deliver economic, environmental, and social goals—and are not considered as merely auxiliary or voluntary sustainability activities. Therefore, this paper seeks to explore the expanding frontiers of environmental sustainability and rural enterprise competitiveness research by theorizing and empirically testing how environmental quality attributes are utilized as key food-related enterprise resources and to assess their contribution to competitiveness.

The aim of this paper is to understand the role that environmental quality attributes play in competitiveness and rural enterprise organizational performance within the context of food-
related rural enterprises. Theoretical and empirical insights on the role that environmental quality attributes play in rural food-related enterprise performance could serve as a catalyst for increased investment into the sustainable food industry. Indeed, engendering more green investments to explore competitive advantage will be analogous to speaking the traditional rural enterprise language of providing private benefits to rural enterprise owners. This will be a sharp departure from the current trend of exerting stakeholder pressure on rural food-related enterprises to engage in social and environmental responsibility (Helfaya and Moussa, 2017)—a phenomenon driven by more altruistic and coercive motives rather than being presented as a strategic business advantage. It is worth noting the recommendation of Orlitzky et al. (2011) that the economic theory of strategic CSR, underpinned by the provision of private value to enterprises, holds the best prospects for advancing enterprise engagement in environmentally sustainable operations.

This paper contributes to existing knowledge through its revealing account that environmental quality attributes are increasingly becoming popular competitive variables that rural food-related enterprises rely on for growth and survival. This theoretical contribution presents a potent means to breaking the prevailing rural food-related enterprise owners’ inertia associated with environmental sustainability investments, as the insights provided here are in accord with the traditional rural food-related enterprise investment paradigm of adding private value to owners’ agricultural investments. It is common knowledge that despite positive research evidence on the impact of embedding sustainability efforts in enterprise performance, business owners at all levels—including rural food-related entrepreneurs—are often reluctant to locate sustainability at the centre of their enterprise strategy (Mazutis and Eckardt, 2017). Therefore, the understanding provided through this study holds a number of benefits for both rural food-related enterprises and society: first, it
‘speaks the language’ of rural enterprises (underpinned by ownership interests); second, it enables rural enterprises to circumvent resource limitation barriers; and third, it holds the promise of yield outcomes beneficial to all stakeholders. Thus, this novel approach of researching environmental attributes as a core, not auxiliary, rural food-related enterprise objective and the subsequent results has a greater chance of acceptability by rural enterprise owners and a high prospect of attracting requisite investment into the rural and countryside sustainable industry. The insights emanating from this study on the role of environmental quality attributes in rural enterprise competitiveness are a case of theory lagging behind practice, as the findings show that environmental quality attributes have been one of the main and, in many cases, a thriving competitive resource for some food-related rural enterprises in Denmark for a considerable number of years. This further affirms the importance of this study and its timely contribution to environmental sustainability and rural food-related enterprise competitiveness research.

The remainder of the paper is structured as follows: Section 2 presents a theoretical discussion on competitiveness and the role of environmental quality attributes in enterprise competitiveness, within the context of rural food-related enterprise context. This discussion provides the context in Section 3 for the salient research questions, which draw on recommendations of Orlitzky et al., (2011) to position environmental quality attributes as key resources to deliver competitiveness and to advance environmental sustainability and rural enterprise competitiveness in particular. This is followed, in Section 4, by the research methods, including a description of the case communities. Section 5 then provides full details of the study results and a discussion based on the data analyses, allowing for a discussion of implications and for an outlining of future research areas. Section 6 provides concluding remarks.
2. Competitiveness and environmental sustainability: A theoretical perspective

As the contemporary marketplace is ‘characterized by infinite choice and intense competition’ (Hracs et al., 2013, p. 1144), it has become imperative for businesses, irrespective of their size and location, to embark on strategies capable of enhancing their competitiveness. An emerging strand of studies has linked competitiveness with environmental innovation (Forsman, 2013), sustainability (Ainscough et al., 2012), and green marketing (Moravcikova et al., 2017). But extending research enquiry, in the context of rural enterprises, to the specific area of environmental quality as a core competitive resource is not only limited but rare. Apart from the widespread emphasis on addressing environmental destruction in the literature, other studies suggest that environmentally friendly practices mark a strategy for enterprises’ competitiveness (Leonidou et al., 2013; Papadas et al., 2018). For example, DiPeso (2000) argues there is a possibility for enterprises to increase profits, reduce costs, achieve competitiveness, and offer high-quality products through environmental protection and pollution prevention. Such advantages can be beneficial to new and existing small rural enterprises seeking to control costs, attract customers, and become socially responsible (Hozik, 2016). It is interesting to note that most of these studies have observed environmental sustainability programmes, innovations, and investments as additional competitive resources and not as exclusive factors.

The majority of small rural enterprises are marked by their inability to introduce disruptive innovation in the market, as they usually do not command the resources to drive, for example, research and development or expensive marketing campaigns (Arthur and Hracs, 2015; Steiner and Atterton, 2015). This is coupled with the challenge of small markets,
geographic remoteness, and low population densities of many rural areas (Arthur and Damoah, 2015; Steiner and Teasdale, 2017). Notwithstanding these factors, the existing literature suggests that small food enterprises in rural areas that are struggling to interface with conventional markets have devised a re-territorialization approach as a competitive strategy, targeted at creating value and increasing market share. This strategy includes producing differentiated products imbued with attributes of environment quality, safety modes of production (inputs and farming practices), authenticity of means, sustainability, healthiness (organic, local species, animal welfare, locality), short distance between place of production and selling point, identity, and tradition (Berti and Mulligan, 2016). This echoes the view that ‘food markets are becoming more differentiated on the basis of a range of socially constructed food quality criteria’ (Marsden, 1998, p. 107). Indeed, this strategy provides a framework for understanding how rural food enterprises utilize environmentally sustainable practices to compete on the market. It also demonstrates how rural enterprises attempt to be innovative and overcome their remoteness by capitalizing on new and underdeveloped production opportunities in their communities to expand the supply of rural products (Abrhám et al., 2015).

Consumer behaviour in recent times appears to be stimulating environmental quality productions in rural enterprise communities. The demand of eco-minded consumers on the market has raised major concerns and rural enterprise opportunities (Hozik, 2016). This is evident in the increase in consumers’ demand and willingness to pay a high premium for environmentally friendly products from enterprises committed to positive environmental and social change (Henderson, 2015; Hozik, 2016; Golob and Kromegger, 2019). Besides consumers’ influence in the production of green products, regional institutions also play a role. For example, a tenet of the Lisbon Strategy, launched in 2000, was to promote
competitiveness in the European Union (EU). As part of achieving this goal, EU member states are encouraged to turn environmental challenges into growth opportunities and make efficient use of their natural resources (Balkyte and Tvaronaviciene, 2010). Furthermore, in line with the principle of sustainable development launched by the Rio Earth Summit, reforms in the EU’s Common Agricultural Policy (CAP) objectives to support rural development support the idea of incentivising environmentally compatible farming practices through direct payments (Recanati et al., 2019). These institutional policies have obvious implications for enterprises, motivating them to protect the environment while at the same time stimulating them to extract value by exploring environmental credence for differentiation on the market.

While small-to-medium-sized enterprises have relied on their unique networks, others have combined this strength with the competencies of both their owners and staff to achieve competitive advantage (O’Donnell et al., 2002). The latter is analogous to the view of Avermaete et al. (2004) that innovations, particularly in small firms, are chiefly dependent on the capabilities of their workforce and their ability to obtain information and other inputs from outside the firm. This means that competitiveness of small rural enterprises can be dependent on collaborative processes involving different internal and external actors.

In a nutshell, rural enterprises can develop environmental quality attributes to increase competitiveness, guarantee better market positions, reduce costs, and differentiate their offerings, thereby earning high profits relative to their competitors. This is reliant on rural enterprises’ capabilities to exploit resources from internal and external environments. Irrespective of the resource that is employed to achieve rural enterprise competitiveness, environmental considerations have become a consistent factor worthy of consideration.
Nevertheless, the emerging research evidence on the positive impact of embedding sustainability efforts in rural enterprise performance, coupled with limited resources for sustainable production, has not minimized rural enterprise owners’ anxiety about investing in environmental sustainability programmes. Meanwhile, rural enterprise stakeholders—consumers, citizens, governments, and policy makers, continue to express concern about environmental degradation and the urgent need for management action to minimize negative effects. Thus, examining the interaction between environmental quality attributes and rural food-related enterprise competitiveness is both critical and timely. This study, therefore, investigates how environmental quality can be explored to enhance rural food-related enterprise competitiveness. Of special interest is how food-related enterprises in rural settings capitalize on environmental quality to enhance their competitiveness. Given the dynamic and transient nature of competitive advantage, the ability of rural food-related enterprises to be proactive—adopting innovative environmentally friendly strategies as an important competitive factor to differentiate them on the market—can be crucial to their survival. Thus, researching the interplay between competitiveness and environmental sustainability from the perspective of environmental quality attributes as a core rural food-related enterprise resource fills a research gap and can also direct future research enquiry.

Based on the above premise, this study seeks to resolve the following salient research questions:

1. How are environmental quality attributes adopted and utilized as sources of competitive advantage for rural food-related enterprises?

2. How do regional institutional policies and accessing external resources influence the adoption of environmental quality attributes as a competitive advantage strategy for rural food-related enterprises?
3. Materials and methods: Research design and description of case communities

The analysis presented here is grounded in qualitative interviews. This method of data collection was driven by the exploratory nature of our research questions. Given our goal to explore the key variables relating to the role that environmental quality attributes play in competitiveness and organizational performance of food-related enterprises, the use of open-ended interviews was considered a suitable methodological choice (Brink and Svendsen, 2013). We conducted 28 in-depth interviews (19 with enterprises and 9 with key informants) in three rural municipalities in Denmark: Thisted (also known as Thy); Morsø (also known as Mors); and Bornholm. These municipalities are characterized as remote rural areas, based on the Danish classification system of rurality (Ministry of Food, Agriculture and Fisheries, 2012). Their geographical locations also provide an interesting basis for comparisons, as one is based on mainland Denmark and the other two are island regions. Prior to the selection of our respondents, we consulted some local residents and officials at tourist offices and read activity profiles (in pamphlets and on websites), and through that we created a list of relevant enterprises. The enterprises approached in each of the three rural communities were small in size and focused on food-related activities. To further contextualize this data, we also conducted nine interviews with key informants who hold positions related to tourism, food branding, and economic development in the three case communities.

The interviews lasted between 45 and 90 minutes and were recorded, transcribed verbatim, and coded according to dominant themes. Following a content analysis protocol (see Janker and Mann, 2018), we included verbatim quotations as part of the content analysis since these quotations are the most appropriate way to reveal how participants expressed meanings and experiences in their own words. These responses were augmented by personal observations from the interviews, including impressions about locations, products,
respondents and the internal and external environments of the enterprises. We also followed up with some respondents through telephone conversations and further contextualized the interview data by analysing documents such as municipality maps, enterprise brochures, flyers, posters, policy documents, and photographs.

**The three case communities**

The island of Bornholm lies in the Baltic Sea, 32 km from Sweden, close to the southern Swedish coast, and about 160 km east of Copenhagen, Denmark’s capital. It covers an area of approximately 589 sq km and has a coastline of 158 km. The total population is 39,695 inhabitants, with 67.5 inhabitants per sq km (Statistics Denmark 2017, Tables 6). Bornholm has a unique natural landscape, very distinct from that of mainland Denmark. Bornholm is characterized by hills, waterfalls, dramatic rocks, rocky coastlines, rift valleys, sandy beaches, harbours, lakes, wildlife, and exotic botanical species (Arthur and Hracs, 2015).

In addition to its physical landscape are various cultural heritage sites, including medieval round church buildings, fishing villages, the iconic herring smokehouses visible in most towns and cities on the island, fortresses, and the famous medieval Hammershus castle ruin. For centuries Bornholm has featured various craft arts and smoked herring production (Prince, 2017). Tourism is a key industry in Bornholm, as it contributes significantly to Denmark’s economy. According to VisitDenmark (2015), the island accrued 1.9 billion DKK from tourism revenue, placing it sixth among Denmark’s ten most popular tourist destinations by revenue. Annual tourist inflows to Bornholm are approximately 750,000 people during the summer season; these are primarily Danes and Germans, who stay over in hotels and campgrounds and often return during every summer holiday (Prince, 2017). The island has become known for its food enterprises through the production of culinary, gourmet foods (Orange, 2015) and enterprises specialized in small-scale industrial
processing of specialized food and drinks. The island is seeking to become a 100% sustainable and carbon dioxide neutral society by 2025 through the use of only sustainable and renewable energy (Bright Green Island, 2017). Among the island’s various environmentally friendly ventures is the Green Solution House, the world’s first hotel built with reusable or biodegradable materials, which was officially opened by Denmark’s Crown Prince Frederik in April 2015 (Orange, 2015). In general, Bornholm is considered to have built a strong brand that covers several enterprises, with growth potential in smaller niche productions and larger exporting industries, as well as in tourism (Arthur and Hracs, 2015).

…………………..Insert map of Denmark here…………………..

Thisted Municipality is situated in the North Jutland Region in the far north-west part of Denmark and covers an area of 1093 sq km (Radzi, 2009). Geographically, Thisted is bounded to the west by the North Sea, and its southern and eastern boundaries are formed by the Limfjord. On 1 January 2017, Thisted had a population density of 40.8 inhabitants per sq km and a total population of 43,826 inhabitants, representing the fourth largest population in the North Jutland Region (Statistics Denmark, 2017, Table 6). Although a sparsely populated area, experiencing population decline over time, it is nevertheless striving to become a competitive and attractive region in North Jutland. Thisted is an area of several natural resources, including Denmark’s first national park (Thy National Park) and a number of sandy beaches. The Thy National Park contains lakes, a game reserve, and a wide range of plants and wildlife. Although manufacturing is of importance to Thisted, it is generally absent from the area of the Thy National Park, where the dominant sectors of employment are represented by agriculture and service activities such as farms, hotels, restaurants, and other agro-based business services. Over the years, the park’s distinctive scenery has
become a potential source for branding and marketing various high-quality foods in the area (Landsbygruppen Thy, 2008). As we shall see below, the Thy National Park is used by local food-related enterprises as part of their environmental sustainability strategies and to market their products (Arthur and Damoah, 2015). The municipality has approximately 1,700 enterprises, offering employment to many people in various sectors, including in food-related activities. It is also Denmark’s leading ‘green’ municipality and noted for having all its electricity generated from renewable energy sources (Radzi, 2009).

Morsø Municipality is situated also in the north-west part of Denmark, borders very close to the eastern part of Thisted, and is approximately 390 km from Copenhagen (Arthur and Hracs, 2015). Compared with Thisted, Morsø is small in area, although it is the largest among all the islands on the Limfjord in Denmark. The area’s land size is approximately 367 sq km, and the municipality has a total population of 20,665, making it one of the least populated municipalities in the North Jutland Region. Nevertheless, its population density of 58.6 inhabitants per sq km makes it the fifth largest in the whole of the North Jutland Region (Statistics Denmark, 2017, Table 6). Morsø is connected to its neighbouring communities through transport infrastructures, hence facilitating socio-economic activities with its neighbours and beyond. This is evident in the bridge connections between Morsø and Salling, through the Sallingsund Bridge on the south-eastern side of the municipality, and also with Thy through the Vilsund Bridge on the island’s north-western side. There are also ferry links to Thy from the south-west of the island and from the north of Morsø. Although agriculture is the traditional source of livelihood in Morsø and farming still remains important, the island is famous in Denmark for its artists and craftsmen and for mussel fishing and processing (Morsø Turistbureau, 2010).
4. Uncovering the state of environmental quality attributes in rural food-enterprise competitiveness

In this section we present and discuss the empirical evidence from the three municipalities studied: Bornholm, Thisted, and Morsø. First, we discuss the extent to which environmental quality attributes have become a source of competitive advantage for food-related enterprises in the municipalities; and second, we discuss how external resources and institutions influence enterprises to adopt environmental quality attributes as a competitive strategy.

Environmental quality attribute adoption and utilization as a source of competitive advantage for rural enterprises

Given the growing environmental consciousness among consumers (Golob and Kronegger, 2019)—manifested in attitudes such as the desire to know where their food comes from and how it has been produced (Bessière, 1998)—owners and managers of food-related enterprises in rural Denmark have realized that the mere offering of food products is not the best way to compete and succeed in the market. This has resulted in a relentless changing environment for Danish food enterprises, such as the adoption of environmental quality attributes in niche, rural food-related products or services to ensure food quality and safety (DAFC, 2016). Specifically, these enterprises have resorted to innovative strategies and distinguishing their products with labels such as ‘quality’, ‘green’, or ‘ethical’ and ‘sustainability’ to attract consumers and convince them to pay a high premium. These labels are distinctively communicated through ‘stories’ and are made visible on the Internet and other traditional marketing spaces such as newsletters, flyers, and newspapers. Storytelling, as used in these communities, appears to be a prevalent innovative approach by enterprises
attempting to increase profits to become competitive. As the owner of Spritfabrikken Thylandia ApS explains:

> Storytelling is still a big thing in business today […] Our competitive strength is the story. That is what we can focus on. I think we have a great product […] It’s expensive […] But mainly we have the story […]

Implicit in these stories is an attempt to assure consumers, particularly the environmentally conscious ones, of quality and also of environmentally sustainable production methods. As the manager of Fonfisk Hanstholm A/S explains:

> A growing market trend shows that when consumers go to the market to buy cut fillets of fish, they like to know where [environment] it has been caught, who caught it, and where the boat landed. So, you have to attach a story …

Within our sample, 15 of the 19 enterprises promote their products through storytelling. Of these 15 enterprises, six tell stories that focus on the environmental sustainability qualities of their products. Vilsund Muslinge-Industri A/S, a mussel-processing enterprise located at Nykøbing Mors, has its quality focus on food safety, traceability of raw materials, and—more importantly—environmentally sustainable fishing. It is the first mussel-processing enterprise in the world to have its production practices certified as environmentally sustainable by the Marine Stewardship Council. The enterprise considers its food safety practices, traceability of raw materials, quality assurance of products, and environmental sustainability as key to its operations on the market.
Restaurant Købmandsgården, located at Doverodde in Thisted, tells stories about their environmental friendliness and use of ingredients of an organic nature and locally sourced raw materials in making their food products. This restaurant has been awarded a ‘Green Key’ certificate by virtue of its environmentally friendly approach to business, and this therefore forms part of its stories to consumers.

Thisted Bryghus, which produces beer in Thisted, tells stories about its innovation in being the first to develop organic beer in Denmark and how it subsequently developed other ranges of organic beer products to form part of the brewery’s key products. According to the brewery’s assistant manager, they introduced organic beers purposely to develop a competitive edge and new market ‘niche’ in the locality, as well as in Denmark generally. The brewery also tells a story about its workers going on a picnic to hand-pick Sweet Gail (bog-myrtle) plants, a key ingredient, from the Thy National Park to produce one of their beer brands. The Spritfabrikken Thylandia ApS, another alcoholic beverage producer in Thisted, also uses hand-picked Sweet Gail plants from the Thy National Park. These examples provide evidence that these enterprises operating in competitive markets not only extract value from their ‘geographic entanglements’ (Pike, 2011) in a protected and ‘green’ environment but also assure consumers of the quality in their products.

In other examples, enterprises use stories that lay stress upon environmental sustainability concerns as part of promoting their products’ quality characteristics (e.g. animal health,
animal welfare, organic, environmental consciousness) (Table 1). Thy Lam, for example, uses storytelling about their organic sheep grazing on local and protected sites, including on the historic grave mound sites within the Thy National Park, for marketing their meat products. Similarly, the story of Den Bornholmske Gårdbutik, located in Bornholm, emphasizes that its organic sheep graze on the vegetation surrounding the medieval Hammershus castle ruins. Another Bornholm-based farm, Mønsterård, also tells a similar story of its cattle and horses grazing in local forest areas. Other stories by Mønsterård include environmentally sustainable practices in which the straw and fertilizer from the animals are composted for approximately one year, after which the compost is brought back to the ecologically managed fields and promotes life in the soil for the benefit of future crops.

These respondents make it clear that the stories are intended to show the quality and authenticity of the companies’ meat products and how animals are more natural conservers of the local ecosystem than machines. The following quotation provides an example of what one of the farmers said:

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Everywhere we have the animals, we put up signs telling about the cattle and sheep …

So, when people are out in the nature at Bornholm, they see these signs and they say, ‘OK, that is a nice way to treat the nature here.’ And we think it is a good way to produce meat, because you have the animals in nature, travelling over a short distance in nature to where we slaughter them … They get herbs and grass and what they find in nature. That is the natural food for them, so they produce a better cut both in structure and taste of the meat—at least, I think so, and most people think these are better than those of traditional farmed sheep … And again, we are part of protecting
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the nature at Bornholm. That is not just a story, but that is true because if we hadn’t
had sheep and cattle out here it would be a spoilt nature.

As indicated in the quotation above, the farmer’s view is not a mere story but a case for
demonstrating their differentiation and a basis for charging high prices on the market. The
latter is very much reflected in the following statement by another farmer:

People are willing to pay more … if you have meat that produces a story from birth to
the freezer or kitchen. You must be aware of the scandals that we have had in
Denmark about food. So, more and more people are willing to pay more for a product
that they know all the way from, as you can say, cradle to the grave …

The foregoing is also a testament to how the environmental sustainability and quality
attributes of products attract a high premium on the market, thus illustrating farmers’
attents to harvest new opportunities in business to become more competitive. Although the
storytelling narratives by rural food-related enterprises point to an increasing trend of
adoption and utilization of environmental quality attributes as a competitive resource, this
cannot be generalized as evidence of the attributes being a major source of competitive
advantage—since the study did not capture other pieces of information such as the
marketing budgets and revenue figures of these rural enterprises. It is also important to
underline the fact that the evidence adduced to in the storytelling by rural food-related
enterprises does not represent a holistic view comprising all stakeholders, such as
customers, government, and regional agencies.

Accessing external resources and the influence of regional institutional policies on the
adoption of environmental quality attributes by food-related enterprises
Besides the market being a key determinant of food-related enterprises embracing of environmental quality as a source of competitive advantage, the role of institutions is crucial in Denmark, where local food-related enterprises are encouraged to be competitive through innovations and development of high-quality products (Ministry of Food, Agriculture and Fisheries, 2012). Such encouragement takes its inspiration from the European Commission’s Common Agriculture Policy reform (Dwyer et al., 2007), which advocates, among other factors, that food-related enterprises should inform consumers through labelling about how their products are sourced and produced (including how animals and the environment are treated) (EU, 2012). Enterprises accordingly follow this policy by creating value through storytelling.

There is an increasing motivation for livestock farmers to engage in environmentally sustainable and forest conservation practices, as they are paid by the state to allow their animals to graze in forest areas. Mønstergård is a beneficiary of this policy in Bornholm, where the owner is happy and motivated to send his cattle and horses to graze in a designated local forest area. This conservation initiative is considered crucial by the forest management authorities, as it serves as a means to regulate invasive plant species and preserve the forest’s natural value (The Danish Government, 2014). In addition, the EU through Denmark’s Ministry of Environment and Food seeks to broaden areas of organic farming in Denmark and thus provides subsidies to farmers engaged in organic farming (Ministry of Food, Agriculture and Fisheries of Denmark, 2015). This is targeted at achieving several benefits for the environment and biodiversity. Beneficiaries of this policy such as Mønstergård received subsidies to restructure and operate the farm’s agricultural areas organically and to sell organic food products.
At the local level, authorities in Bornholm, for example, are encouraging businesses and individuals to embrace environmentally sustainable practices. These include nature protection and consuming organic foods and locally sourced foods, while businesses develop new and more sustainable production methods in their operations (Bright Green Island, 2017). This encouragement is captured in the island’s policy of branding itself as a ‘Bright Green Island’, making an ambitious attempt to apply sustainable approaches to all socio-economic and environmental endeavours. Overall, the attributes of quality in the stories of Den Bornholmske Gårdbutik, Hallegård Gårdbutik, and Pølsemageri are highlighted by laying emphasis on sustainable practices. Den Bornholmske Gårdbutik, for example, promotes the fact that the animals engage in nature conservation on the island and travel short distances from the places of production to the slaughterhouse. In essence, these stories emphasize the enterprise’s reduction of carbon dioxide emissions. Hallegård Gårdbutik and Pølsemageri stress their use of local raw materials and avoidance of chemical use in sausage production. This also lends credence to sustainable practices linked with the ideals of Bornholm’s Bright Green Island initiative.

Apart from the role of institutions in enterprises adopting environmental quality attributes in their businesses, external resources have also had their share of influence. This echoes the view that the introduction of new ideas on the market is increasingly based on the network in which enterprises are embedded and not only on their own ingenuity (Pittaway et al., 2004). A few of the 19 enterprises in our sample are working with other businesses in their local communities to attract visitors and ensure that they know about specific products they offer. According to the owner of Købmandsgården restaurant, in addition to providing stories to her customers, she has established a network with a tourist transport group in Thisted that encourages tourists to make stops at several affiliated businesses when they are
touring around the community. These visitors enjoy local food at her restaurant as well as
the serene location. There are also synergistic linkages between food-related enterprises in
rural and urban areas. Thy Lam and Den Bornholmske Gårdbutik, for example, supply meat
to restaurants in Arhus and Copenhagen, respectively. These restaurants generate value by
telling their customers about the treatment of the animals (Arthur and Hracs, 2015). Natural
environments in Thisted such as the National Park and the Hammer Hus in Bornholm, as
identified in this research, have also been key external resources used by rural food-related
enterprises.

4. Discussion

In many European countries, the focus of food consumption among certain sectors of the
population has shifted towards symbolic-laden qualities, such as ‘organic’, ‘local’,
speciality’, and ‘high-quality’ (Manniche, 2010; Golob and Kronegger, 2019). This has
created a challenge not just to provide high-quality, environmentally friendly food; there is
also a need for food-related enterprises to develop ways to make such products attractive. In
addition, in Denmark, small or micro-sized food-related enterprises—including those
located in Thisted, Morsø, and Bornholm—which have long been main components of their
respective local economies (also struggling due to their size), face the challenges of
increased competition and geographic remoteness despite their success in utilizing
environmental quality attributes as competitive resources locally.

Consequently, new ways of differentiation and competences to attract larger markets are
required to address these challenges beyond appropriating environmental quality attributes
for competitive advantage. This is because the values derived from the use of environmental
quality attributes are services that ought to be consumed alongside tangible food products in
the local area. The best option will be to replicate their offering within a larger market of
interest, and this requires significant investment capital—usually unavailable to rural food-related enterprises.

The attempt to address these challenges obviously lies with the resources and capabilities available to enterprises. In this respect, some food-related enterprises have identified the environmental quality attributes of their products as useful resources to compete with. But the environmental attributes are meshed with the rural images of the communities. These products, as offered by the enterprises, are targeted at consumers from both Denmark and abroad, who are primarily tourists visiting the area and are seeking to experience a rural idyllic existence (Arthur and Hracs, 2015). However, for an export-oriented company such as Vilsund Muslinger Industri A/S, its strategy on environmental quality is not influenced by the locational challenges but purely by marketing and the quest to achieve competitive advantage on the European and global market stage. Besides its interests in competing on the international market, Vilsund Muslinger Industri A/S promotes the consumption of mussels in Denmark and even sponsors the annual mussels’ festival at Nykøbing Mors. It is evident that in the quest to overcome the issues of small markets and remote location, there is a pervasive agenda by enterprises in the three communities to reinvent themselves as competitive players. They do so through the production and promotion of environmentally sustainable products, but they require further resources both to meet consumer expectations with attractive products and to attract the required investment capital to compete in larger foreign markets.

5. Implications for industry, regional sustainability policy, and future research

The results of this study have implications for rural enterprise competitiveness and future research at the interface between sustainability and rural enterprise competitiveness. The
implications offer rural-food enterprises the potential for a competitive rationale to explore environmental quality attributes to minimize the limitations of small market size and remote location. The study findings also provide revealing positive accounts that regional environmental policy initiatives that reward food-related enterprises for adopting and utilizing sustainable production practices are taking root and can be continued, strengthened, and possibly expanded. A parallel can be drawn between these regional policy initiatives and the important role played by the Indonesian and Malaysian Sustainable Palm Oil schemes (Higgins and Richards, 2019). It is also envisaged that more research attention will be given to explore the role of environmental quality attributes as a source of competitive advantage beyond the exclusive storytelling narratives (point of view) of rural food-related enterprises to the point of view of all other rural food industry stakeholders. The scope of data collected can also be expanded to cover, where feasible, quantitative data such as marketing budgets, annual revenues, and return on investments. Future research could also replicate this study in other industries and business sectors.

6. Conclusion

In summary, the findings of the study offer a revealing account of environmental quality attributes as becoming prevalent and important business strategy for rural food-related enterprises in the selected communities. Furthermore, the study has shown that the adoption of these sustainable plans has been influenced by resources provided by government agencies such the forest management authority and by institutional frameworks geared towards sustainability and regional competitiveness (see, Maennig and Ölschläger, 2011). The study thus contributes to rural enterprise competitiveness and sustainability literature and highlights new areas for further research within such an important field.
References


Figure 1 Map of Denmark showing the study areas
Source: http://www.nationsonline.org/oneworld/map/denmark-political-map.htm
### Table 1 Sample of food-related enterprises and their differentiation strategies

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Location</th>
<th>Activity</th>
<th>Year est.</th>
<th>Employees</th>
<th>Ownership</th>
<th>Differentiation strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Den Bornholmske Gårdbutik</td>
<td>Bornholm</td>
<td>Farmers’ market and farm shop</td>
<td>2009</td>
<td>None</td>
<td>Partnership</td>
<td>Telling stories about its organic products, animal welfare, and environmental sustainable</td>
</tr>
<tr>
<td>Vingård Lille Gadegård</td>
<td>Bornholm</td>
<td>Winery</td>
<td>2000</td>
<td>3</td>
<td>Individual</td>
<td>N/A</td>
</tr>
<tr>
<td>Hallegård Gårdbutik &amp; Pølsemageri</td>
<td>Bornholm</td>
<td>Sausage factory and café</td>
<td>1990</td>
<td>Individual</td>
<td></td>
<td>Focusing on organic products</td>
</tr>
<tr>
<td>Svanek Chokoladeri</td>
<td>Bornholm</td>
<td>Confectionary</td>
<td>2007</td>
<td>3</td>
<td>Individual</td>
<td>N/A</td>
</tr>
<tr>
<td>Restaurant Bryghuset Svanek</td>
<td>Bornholm</td>
<td>Restaurant and brewery</td>
<td>2000</td>
<td>8</td>
<td>Individual</td>
<td>Locally sourced products</td>
</tr>
<tr>
<td>Lehnsgaard</td>
<td>Bornholm</td>
<td>Rapeseed oil production and mustard processing</td>
<td>2004</td>
<td>6</td>
<td>Family</td>
<td>N/A</td>
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<tr>
<td>Mønstergård</td>
<td>Bornholm</td>
<td>Crop and animal farming</td>
<td>1996</td>
<td>None</td>
<td>Individual</td>
<td>Organic products and environmentally sustainable production practice</td>
</tr>
<tr>
<td>Vilsund Muslinge Industri</td>
<td>Morø</td>
<td>Mussel processing</td>
<td>1986</td>
<td>40</td>
<td>Partnership</td>
<td>Food safety, traceability of raw materials, and environmentally sustainable fishing</td>
</tr>
<tr>
<td>Tove Køkken</td>
<td>Morø</td>
<td>Café and catering service</td>
<td>1995, 2007</td>
<td>1</td>
<td>Family</td>
<td>N/A</td>
</tr>
<tr>
<td>Thy Lam</td>
<td>Thisted</td>
<td>Sheep farm and farm shop</td>
<td>1998</td>
<td>1</td>
<td>Family</td>
<td>Telling stories about its organic products, animal welfare, and environmentally sustainable production</td>
</tr>
<tr>
<td>Nordh Ørredbutik</td>
<td>Thisted</td>
<td>Fish farm</td>
<td>1969</td>
<td>None</td>
<td>Individual</td>
<td>Ethical treatment of animals, and organic production</td>
</tr>
<tr>
<td>Thy Bondegårdsferie &amp; Gårdsbutik</td>
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<td>Crop and animal farm, farm shop and guesthouse</td>
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<td>None</td>
<td>Family</td>
<td>N/A</td>
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<tr>
<td>Thisted Bryghus</td>
<td>Thisted</td>
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<td>1902</td>
<td>32</td>
<td>Shareholders</td>
<td>Telling stories about its organic products and use of locally sourced ingredients</td>
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<td>Spritfabrikkene Thylandia ApS</td>
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<td>2008</td>
<td>None</td>
<td>Partnership</td>
<td>Storytelling about its locally sourced ingredient</td>
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<td>Fish sales and exports</td>
<td>1986</td>
<td>15</td>
<td>Partnership</td>
<td>Storytelling about product origin and environmentally friendly processing methods</td>
</tr>
<tr>
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<td>Restaurant</td>
<td>1999</td>
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<td>Individual</td>
<td>Telling stories about its locally sourced ingredients, food safety, and environmentally sustainable practices</td>
</tr>
<tr>
<td>Hotel Thinggaard</td>
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<td>Hotel and restaurant</td>
<td>2008</td>
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<td>Individual</td>
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<tr>
<td>Agger fiskbil</td>
<td>Thisted</td>
<td>Fish retailing</td>
<td>2002</td>
<td>None</td>
<td>Family</td>
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</tr>
<tr>
<td>Restaurant Cafe Conrad</td>
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<td>Restaurant and café</td>
<td>1997</td>
<td>1</td>
<td>Family</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: Authors