



Certifying the public image? Reputational gains of certification in Norwegian salmon aquaculture

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ABSTRACT

The Norwegian aquaculture industry faces pressure from stakeholders, the public, and government to ensure sustainable production. Sustainability is closely linked with solving key environmental challenges. Standards such as those created by the Aquaculture Stewardship Council (ASC) are universal and generally provide what is known as additionality to state regulation, such as more comprehensive requirements, with the goal of enhancing sustainability. Acquiring certification can be expensive, but it has been shown that the industry spends large amounts of time and resources to voluntarily become ASC certified. In this article, we study the motivations for ASC certification. In line with previous work, we find several motivations for obtaining certification, even though it is no guarantee for financial gains like premium prices or better market access. Still, it may be just as valuable for industry actors to use certification to create room to maneuver so as to be prepared for future market claims, changes in regulations, and increased pressure for more sustainable production. Furthermore, certification is perceived as having the potential to improve producers' and retailers' reputation and standing both locally and globally. Certification and the use of labels can be tools in reputational management. By reducing complexity and uncertainty in communication, certification labelling can help consumers improve their product choices in terms of sustainability. Industry actors in this study express approval of certification and desire the potential reputational gain that comes from it; however, our findings suggest that this potential has not been fully realized. The industry experiences challenges in communicating with the local and global public and lacks influence on what is communicated to consumers through retailers. Therefore, it appears that those actually reaping the potential reputational gains of ASC certification are the non-governmental organizations behind the creation of the ASC and the retailers that demand ASC-certified salmon.

1. Introduction

In Norway, production of farmed salmon started in the 1970s. The industry has since grown rapidly, resulting in the country's having the highest per capita aquaculture production in 2016 (Garlock et al., 2020). However, due to governmental restrictions on growth, production volumes have been flat in recent years. While there are strong ambitions for further growth, this depends on solving challenges related to sea lice and escape of fish, which are the key challenges guiding regulation of the Norwegian aquaculture industry (Føre and Thorvaldsen, 2021; Hersoug, 2015; Olaussen, 2018). Politically, sustainability in the Norwegian salmon aquaculture industry is thus related to environmental issues,

which to some degree displace other commonly agreed-upon sustainability issues and dimensions (Olsen and Osmundsen, 2017; Osmundsen et al., 2020b).

Despite its apparent success, the aquaculture industry faces criticism and demands from both the authorities and the public, the content of which varies by country and stakeholder group (Flaherty et al., 2018; Grunert, 2005; Olsen and Osmundsen, 2017; Schlag, 2010, 2011). The common features of these concerns often lie in how the industry is regulated and whether the industry abides by prevalent rules and regulations.

Many consumers meet the industrial production of farmed salmon with concern or skepticism (Kaiser and Stead, 2002), even though the

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market demand for salmon remains strong. As Flaherty et al. (2018) point out, the public has been subject to effective campaigns from environmental non-governmental organizations (NGOs), disclosing several problematic aspects of fish farming. Such information has put pressure on both the industry and public decision makers that regulate it. The public focus on sustainability has furthermore been intensified through critical media attention (Amberg and Hall, 2008; Olsen and Osmundsen, 2017; Schlag, 2011) and has influenced policy, leading to stricter regulations.

Aquaculture production and regulation has been described as a “wicked problem”, due to lack of firm knowledge and a great extent of uncertainty about the consequences of aquaculture production and proposed policies and solutions (Osmundsen et al., 2017; Rittel and Weber, 1973). In addition, as a young industry whose production is based on natural resources, it is especially vulnerable in terms of trust and legitimacy. How the aquaculture industry is perceived by other actors (e.g., the general public, consumers, market actors, regulators, governments, and NGOs) is important for companies' evaluation of their vulnerability and standing with stakeholders. Producers are sensitive to negative messages and are constantly striving to reduce vulnerability (Lee, 2009). This vulnerability is enhanced when the industry also faces a great deal of uncertainty (Kaiser and Stead, 2002). Public and governmental demands for sustainability are important for the industry's development and its opportunities for future growth. As Young et al. (2019) point out, a range of social-ecological factors can limit aquaculture expansion, including interactions with other sectors, access to suitable environments, and policy and regulatory gaps.

To improve and demonstrate their social legitimacy, aquaculture companies must respond to public pressure for more sustainable production. As the business-society relations are increasingly complex, companies must manage their social legitimacy by addressing issues concerning their social and environmental impact in response to this complexity (Carson, 2019). Consequently, there has been a drive toward technological developments that minimize environmental impacts (Kumar and Engle, 2016). Furthermore, the industry has sought third-party auditing through various types of certification programs. Once it has obtained certification, an aquaculture company can communicate to retailers and stakeholders that its production process and thus its products are in accordance with specific requirements, such as responding to specific sustainability issues. Since 2012, Aquaculture Stewardship Council (ASC) certification has quickly become a popular program for salmon producers. A rapid expansion of this standard has been seen throughout the industry and in all the main salmon-producing countries.

Certification schemes build and complement international standards that aim to add to existing regulations, helping consumers, retailers, and producers make environmentally conscious choices. Luthman et al. (2019) refer to the concept of additionality (see Garrett et al., 2016) as a method and measure to compare national regulations and the content of the ASC salmon standard to study whether implementing that standard will add to already existing regulations. With low additionality, there is less divergence between state regulation and what is required for ASC certification. Even though some standards refer to national public regulations as a minimum requirement, standards aim to situate themselves above and beyond national regulations (Amundsen, 2020; Osmundsen et al., 2020a). Standards such as the ASC must be universal in the sense of being mobile across contexts (Espeland and Stevens, 1998) and reduce transaction costs in a global economy (Busch, 2000, 2011) by contributing to cross-contextual and international commensurability. They are expensive and hard to acquire, yet the industry voluntarily invests significant time and resources to have their fish farms certified (Amundsen and Osmundsen, 2020).

While earlier research has shown that the main motivations for companies seeking certification are access to markets and financial gain (Boyd and McNeven, 2011; Bronnmann and Asche, 2017; Bush et al., 2013; Lee, 2009; Roheim, 2008; Vogel, 2008), many also argue that

certification has the potential to counter negative assumptions and strengthen a company's public image (Bronnmann and Asche, 2017; Busch, 2011; Busch, 2018; Vandergeest et al., 2015; Vormedal and Gulbrandsen, 2018). Just as certification may be viewed as a mechanism by which companies add value to their products in a global market and enhance sustainability, it can also help improve risk communication as part of what Power (2007) refers to as “reputational management,”¹ a strategy to improve corporate reputations. However, whether the aquaculture industry makes use of its obtained certifications in efforts to improve its public image is unclear. And while the obtained label by itself represents quality approval by a third party, some topics and issues addressed by certification schemes are perhaps perceived as more relevant than others in such endeavors. In addition, the ownership and management aspects of specific schemes can be important for how relevant certification schemes are in strengthening a firm's public image (Nilsen et al., 2018).

Considering all of the above, the aim of this paper is to study the industry's motivation for obtaining ASC certification. The article discusses implications of key motivations, particularly in relation to reputational gains for the salmon aquaculture companies. We investigate how the companies see certification as relevant for rebutting public critique and how, or why not, this is utilized to improve their reputation.

2. Theory

2.1. Reputation management

The notion that businesses must be attuned to stakeholders' needs, concerns, and expectations in order to be considered legitimate and appropriate players in the local, domestic, and global economy is increasingly important. While the idea itself is not new (Shocker and Sethi, 1973, as cited in Bice, 2014), it is becoming increasingly recognized and anticipated in both the corporate world and civil society (Kolk, 2004, 2010 as cited in Bice, 2014). Businesses aim to demonstrate their relevance and legitimacy to society and often do so by linking their activities and practices to sustainable development (Bice, 2014). Sustainability reports, including corporate social responsibility (CSR) initiatives, often employ definitions of sustainable development, such as the triple bottom line (Davidson, 2011; Kuhlman and Farrington, 2010) or the quadruple bottom line (Alibasic, 2018), to conceptualize and substantiate their claims of good practices.

In the literature, these issues fall under different concepts, such as reputation management (Power, 2007), social acceptance, social approval, and societal support (Alexander and Abernethy, 2019), CSR (Overduin and Moore, 2017; Owen and Kemp, 2013; Parsons et al., 2014), social licensing (Boutilier, 2014), and legitimacy (Boutilier and Thomson, 2011; Cullen-Knox et al., 2017). Here, we employ the concept of reputation management to describe the means by which Norwegian salmon producers attempt to strengthen the public image of a company and increase social support and acceptance.

The management of reputational issues depend on how stakeholders' perception of an organization is interpreted. The paradox of reputational management is how external forces define and evaluate organizational reputation. Power (2007: 150) states, “*even though it may be odd to make individuals and departments responsible for reputation, organizations themselves have been constituted as responsible actors which must be responsive to how they are perceived.*” How an organization is experienced by others is undoubtedly difficult to manage, yet it is an increasingly important object of concern. Among other things, societal judgement can influence access to resources, including production sites for aquaculture companies, as access to production sites/the coastal area in Norway is

¹ As presented by Power (2007: 129), who also states that reputation has become a “governing risk object for large organizations and is infused with both fear and opportunity.”

regulated by the municipalities and their sea area plan (Hersoug et al., 2021).

Reputation and CSR are closely connected in the aquaculture companies' pursuit of good reputational risk management. Organizations must be responsive to how they are perceived. It is not sufficient to let stakeholders and society define their reputations; the companies themselves must demonstrate their social responsibility in their efforts to meet society's expectations (Power, 2007). CSR encompass a diverse array of external social and environmental factors: it now comprises the entire ethical character of an organization and its governance.

According to Carson and Rønningen (2016), companies address threats to their social legitimacy by using social and environmental values in brand-building and strengthening their reputation. Traditionally, Norwegian companies' social responsibilities have been institutionalized in laws and regulations. As issues of ethical and environmental responsibility, food safety, and food security have gained increased importance in a globalized market, Norway's food producers and retailers have experienced a shift toward more explicit expressions of social responsibilities (Ursin et al., 2016).

To demonstrate their social responsibility to consumers and to the public, companies can add value through processes like certification. As Grunert (2005) explains, *adding value* here means competing in more than just efficiency and quality control. Companies “*add value to food products to the extent that those consumers at whom the final product is targeted actually perceive these products as better – perceive them as having more quality*” (Grunert, 2005: 370). However, previous research is generally inconclusive on the effects of such initiatives and to what extent labelling can be an effective tool for improving social acceptance (Weitzman and Bailey, 2018). According to Roheim (2009), sustainable labelling can lead to an improved public image for a retailer, but Ailawadi et al. (2014) and Bhattacharya and Sen (2004) found that environmental friendliness is a less effective CSR effort. Obtaining a price premium for certified products is the main motivation for achieving certification (Bronnmann and Asche, 2017; Smith et al., 2010), even though it appears that a causal relationship between CSR efforts and financial performance is difficult to prove (Vogel, 2008). In addition, it is unclear whether labelling improves consumer choices or actually contributes to greater confusion among consumers (Roheim et al., 2018); previous studies indicate that consumers lack knowledge and might have different understandings of what the various labels mean (Aarset et al., 2004; Schlag and Ystgaard, 2013).

Impacts on the environment and improvements in overall sustainability are also difficult to verify (Boyd and McNevin, 2011) and challenging to ascribe to the certification of specific sites (Amundsen et al., 2019). Salmon aquaculture activities occur near other activities and in open water pens and thus face the risk of impacts from other farms and activities in their surroundings. Compliance with certification schemes could reduce impacts at the farm level; however, certification does not always consider indirect impacts, such as other from nearby sites that are poorer performers (Jonell et al., 2013). Actual impact on environmental performance is for many reasons difficult to assert (Tlusty and Thorsen, 2017).

As to the reputational gains of certification, Carson and Rønningen (2016: 190) question whether the pursuit of social legitimacy and CSR initiatives can potentially “fail to address the level where the challenge against social legitimacy is most precarious”; further, challenge the companies' possibility of obtaining a social license. That is, when Norwegian aquaculture companies turn to certification schemes as part of their reputational management, this is an initiative with a global scope, while a given company's most daunting challenges may be local, such as their standing in local communities, which can be crucial in gaining access to new production sites. If certification and other CSR initiatives distance companies from the local community, e.g. by focusing mainly on the global sustainability risks defined by the certification standard, this could also pose reputational risks and weaken the ties between companies and local communities (Carson and Rønningen, 2016).

Matter and Fanning (2019) question whether the use of social license by progressive groups protesting resource-intensive development represents a shift in the role of social license, turning the table against the companies themselves.

2.2. Sustainability

In a time when climate change and the environment are at the top of the agenda, the concept of sustainability has a very intuitive appeal. However, its content is complex, and its implications are not clear. Some have argued that sustainability might end up as an empty word without consequences (Kaiser and Stead, 2002). Still, its moral appeal is strong, and the concept has gained a central place in the political and public spheres. Concerns about sustainability in aquaculture have increased during recent decades, and it has become important for questions of regulation, industry growth, and the very legitimacy of the industry. Alongside an increased environmental focus in general, there has been a rise in public awareness and demands of the industry (Prein and Scholz, 2014). There are competing views among the industry and the public about the industry's sustainability (Carson and Rønningen, 2016). While the industry narrative focuses on the global challenge of a growing population in need of food, fish as a healthy food, and job creation in rural areas, more critical stakeholder groups focus on a broad narrative related to environmental challenges (Osmundsen and Olsen, 2017). In the global discourse on aquaculture, concerns range from the local to the national and even the global level, from effects on wild stocks in specific rivers to broad socio-economic impacts (Asche et al., 1999; Bush et al., 2013; McDaniels et al., 2005; Whitmarsh and Palmiere, 2009).

By using market-based mechanisms such as consumer and retailer choice, the overall goal of certification is to move the industry toward environmental improvements and enhance sustainability (Tlusty, 2012; Ward and Phillips, 2008). The main idea is that demands for certification can result in changes in the farmed salmon industry's sourcing, purchasing, and producing practices. Certification can also be a mechanism for the industry and other users of the certification label to reduce unwanted risk (Busch, 2011), whether that risk relates to production, market demand, or reputation.

Producers and retailers selling seafood can also use certification schemes as a CSR initiative. For retailers like supermarket chains, certification can be an opportunity to “position themselves as protectors of consumers, and consumer preferences, and as caring members of the global community” (Busch, 2011: 229). By including the use of sustainable seafood as part of their CSR profile, retailers seek to give the impression of companies with high ethical, social, and moral standards (Alfnes, 2017). As these large firms are highly risk-averse and subject to public protests and pressures, it is important for them to protect their reputations and brands (Vogel, 2008). Firms are not only held accountable to their stakeholders, “but also to a broader community of citizens who are affected by their decisions and behavior” (Vogel, 2008: 269). Hence, in striving for improved sustainability, the aquaculture industry must respond to demands from local to global levels and from consumers, retailers, and the public affected by production. What is deemed important for each stakeholder group might not be the same across geographical or governmental levels, but all the concerns are connected by the overall concept of sustainability.

2.3. Global standards and certification

The Norwegian regulatory framework is comprehensive, and even though authoritative decision making is traditionally a prerogative of sovereign states (Haufler, 1999; Vogel, 2008), there has been an expansion of voluntary global business regulation since the 1990s, such as global standards, certification schemes, and labeling initiatives. In particular, there has been an increase in voluntary sustainability standards in an attempt to manage the social and environmental impacts of global supply chains.

In their pursuit of more sustainable production, aquaculture companies can choose to implement even more stringent requirements than are contained in national regulations² (Vogel, 2008; Washington and Ababouch, 2011). The standards and labels attempt to cover the many emerging challenges in aquaculture and relate to issues such as food safety, organic production, and sustainability (Nilsen et al., 2018). The rise of these sustainability standards has been found to be an attempt to manage the environmental and social impacts of global supply chains (Lambin and Thorlakson, 2018). The expansion of legitimate authority in the global economy and the increasing use of regulatory instruments such as market-based instruments, soft laws, and self-regulation are some of the reasons for the recent growth of such voluntary regulations (Vogel, 2008). Endorsement by a third party of a firms' production practices is valuable to ensure consumers of the quality of production (Hatanaka and Busch, 2008), even though consumers are largely unaware of the content of schemes. The certification process provides an assurance of certain attributes such as commensurability, objectivity, transparency and not the least the fault-finding approach of the auditor (Amundsen and Osmundsen, 2020), and lends these qualities to the producer.

Public pressure and campaigns from NGOs and interest groups demanding better standards for worker rights and environmental protection, a perceived lack of sufficient regulation or ineffectiveness of the public regulation have all been proposed as important reasons for the development of this type of global self-regulation (Carson and Rønningen, 2016; Scherer and Palazzo, 2011; Vogel, 2008; Washington and Ababouch, 2011).³ In addition, with more demanding and critical consumers, Grunert (2005) explains how quality differentiation among food products has become necessary to satisfy contemporary consumers, who are more fragmented in their food choices. Retailers are also important drivers for certification. As Vandergeest et al. (2015) point out, retailers share responsibility for the products they sell and are thus exposed to reputational risks if those products are regarded as unsafe or produced under environmentally unsustainable conditions. Improved traceability and tighter control over suppliers, which can be achieved through certification, can be a form of risk insurance from a corporate perspective (Gibbon and Ponte, 2005).

Arguments for the emergence of certification schemes include a perceived lack of sufficient regulation or the need for more global consistency in regulating the industry (Busch, 2011; Washington and Ababouch, 2011). Labels from these certification schemes are intended to provide the consumer with the necessary attributes to make an informed decision when purchasing seafood (Alfnes et al., 2017). As such, certification is a form of trust. However, trust can be said to shift from one party to another without solving the issue of trust itself. Instead of questioning whether one can trust the producer, the very existence of certification can raise the question of whether one can trust the certifier or accreditation agency (Busch, 2011).

By obtaining certification, companies can demonstrate that they go beyond compliance with legal requirements and voluntarily commit to standards demanded by stakeholders and market actors. By meeting the expectations of such social actors, firms attempt to manage stakeholders' impressions (Bansal and Clelland, 2004). Yet, previous research is inconclusive as to the consequences of certification schemes and consumer preferences for certified seafood (see, e.g., Ankamah-Yeboah et al., 2020; Boyd and McNeven, 2011; Grunert, 2005). Certification and similar initiatives also risk being criticized for serving as a tool for 'greenwashing', mainly improving the image of the industry without

improving the industry itself (Kazancigil, 2007). The efforts of communicating their sustainability efforts, such as certification, through sustainability reports can also be seen as an attempt to enhance their reputation but does not necessarily mean that companies are sustainable (Stubbs and Cocklin, 2008; Nygård, 2020). CSR communication can trigger stakeholders' skepticism (Schlegelmilch and Pollach, 2005) but can also have a positive effect on the market value of a company, as demonstrated by Nygård (2020) who studied salmon companies listed on the Oslo stock exchange and announcements of certification and sustainability reporting.

2.3.1. Aquaculture stewardship council (ASC)

The number of certifications schemes have increased in recent years, and they vary in their objectives and scopes, attempting to cover rising challenges in aquaculture (Nilsen et al., 2018). Osmundsen et al. (2020b) provides an overview of several certification schemes and standards chosen by salmon aquaculture producers in Norway, Chile and Scotland, and provides an in-depth investigation of their many requirements. In this paper, we limit our study to the ASC standard for salmon production, which has gained much publicity and rapid popularity. ASC is a non-governmental and not-for-profit organization established in 2009, and its salmon standard was finalized in 2012. The initiative for the ASC came primarily from the World Wildlife Fund (WWF), which coordinated the aquaculture dialogues that led to the various standards used in the current ASC certification scheme. These dialogues included more than 2000 people in developing standards with the intention of minimizing the most negative environmental and social impacts for the key farmed species, such as the salmon standard for salmon aquaculture (WWF, 2020).

The ASC standard for salmon has been met with interest from aquaculture companies, buyers, and policymakers. The Norwegian salmon aquaculture industry was heavily involved in the development of the ASC, and several companies have committed themselves to certify all salmon production by 2020. Buyers also communicate certification goals; for example, IKEA committed to seeing that all their salmon would be ASC certified by 2017. In addition to industry and stakeholder participation, government officials were also included in the standard-development process. This broad stakeholder involvement may be one reason for the rapid popularity of ASC certifications and is certainly a part of how ASC substantiates its claims of legitimacy. In order to achieve certification, a firm must comply with a number of requirements laid out in the standard. Some demands in the ASC salmon standard are stricter than both national regulation and other standards and certification schemes; however, there are differences between regulations in salmon-producing countries. Luthman et al. (2019) found the greatest difference between state regulation and the ASC standard in Chile and the lowest difference in Norway. Further, the process leading to certification and keeping the fish farms certified can be challenging, consuming significant amounts of both time and resources.

3. Materials and methods

The material for this article is comprised of qualitative interviews with actors involved in aquaculture production. The interviews were conducted as part of two large research projects with topics related to aquaculture regulation and sustainability in a Norwegian context as the main focus (project A) and an international project studying the content and use of certification schemes for sustainability (project B).

The data presented here are mainly based on interviews with representatives from Norwegian aquaculture companies; a total of 17 interviews (7 in project A, 10 in project B) were conducted with employees representing different geographical regions and management levels from a selection of small, medium, and large companies. Each interview lasted between one and two hours, depending on the number of participants; some were individual interviews, and some were group interviews (mostly pairs). All interviews were recorded and later

² Here, we mean requirements that do not arise from governmental authorities. Other demands, such as market demands that will be discussed later in the paper, could be an important factor influencing the companies' certification decisions.

³ Haufler (1999, 2001) is a pioneer in this field, one of the first political scientists to publish research on this new global civil regulation (Vogel, 2008).

transcribed and anonymized, in accordance with ethical approval. All interviews were given a unique identification code, which is referenced in all quotations. As some interviews had several participants, the same interview code can include different informants.

Semi-structured interviews allowed for open conversations around the topics of certification, reputation, and regulation in general. Interview guides were used during all interviews. The guide for project A focused on topics related to sustainability, the regulatory framework and processes, perceptions of the industry, and how interactions between the industry, authorities, and the media could influence regulations and perceptions.

In project B, certification schemes and sustainability standards were the main focus of the interview guide, allowing for more detailed information from the companies' thoughts and experiences with ASC certification, their motivations for certification, and their perceived and experienced implications of it. Unlike project A, project B only included companies experienced with certification schemes. Combined, these interviews provided inputs from companies with substantial experience with certification schemes and from those with none. Analysis of the interview data focused on identifying key motivations for certification and the possible implications of these motivations.

4. Results

Representatives from the aquaculture companies argued that certification is an important part of their work toward a sustainable aquaculture industry. The motivations the informants described for obtaining certification can be divided into three categories: market and financial benefits, sustainability and production improvement, and improved reputation and social legitimacy. Within each category, there are several arguments that are related and partly congruent. One motivation could also lead to another motivation; for example, access to new markets could provide financial benefits later and improved standing among stakeholders in these markets, even though the company's main motivation at the time of the interviews was to secure market access.

4.1. Motivations for market access and financial benefits

Several companies pursuing certification emphasized how they seek certification for the potential premium price when selling their salmon, stating that most of the time, *"you make more money if you have it"* (320). On the other hand, certification does not guarantee a premium price because the market demand for ASC salmon varies, as illustrated by this company representative:

It depends on the demand when the fish is slaughtered. [...] There can be high demand for ASC fish, and then suddenly nothing. It's not all the clients down in Eastern Europe that are willing to pay three NOK extra a kilo. Therefore, they get ASC-certified fish for a lower price because we need to sell it. (320).

Informants also state they would like to certify all their fish farms if they could, but they recognized that this was not feasible because they do not comply with ASC standards at all sites. One of the companies, which had already certified many sites, reported they wanted to obtain ASC certification for all their sites. However, due to lice problems and the very stringent ASC requirements for lice treatment, that was not currently possible. At the same time, this company also explained how expensive ASC certification is, compared to other certification schemes:

We pay for the audit, we pay for the travel and accommodation for those who write reports, and [we pay] the certification fees. But the ASC is in a class by itself. It's very expensive. [...] the audits take so many days and there are so many people involved, and then there are fees for writing reports and different things. (321).

ASC certification is indeed very costly; several companies noted the

large amounts of money and resources they invested to comply with ASC requirements: *"There is enough work for one person full time, just for the ASC. You have to do the preparations, audits, periodic audits, and hold stakeholder meetings that are required twice a year – per site"* (320). Somewhat surprisingly, they focused on how most of these resources are spent on audits, preparing for audits, and paperwork to ensure that they are meeting all the criteria in the ASC standard. The informants, however, did not indicate that the changes they might need to implement in their production processes as either time consuming or costly compared to the administrative costs. This might be because many Norwegian fish farms already comply with the ASC production standards. Furthermore, even though it is expensive for companies to obtain and maintain certification, our informants still argued that the gains outweighed the costs. If this were not the case, they would not put in so much effort: *"You have higher costs because of it, but the gain [from having the certification] is still so great that it is worth doing."* (320). The potential premium price was pointed out by more than one company, however; some informants also suggested the premium price benefited the retailer rather than the producer: *"This development is controlled by the market, because they will get paid better"* (308), and *"I guess it is the market controlling this; until now the salmon producers do not gain from it"* (306). This relates to the next main motivation, which is about access to markets, market demands, and potential future market demands.

The financial gains from ASC certification were viewed as important not only for revenues for the fish they produce now but also to a large extent for a position in a future market and to conform to demands from existing markets. *"It gives us access to the market, such as IKEA [...] who suddenly asked for ASC, and then we did not have it. We had to hurry and get it [...] in order to keep such a large customer. It is a lot about having the right customers and fulfilling their demands"* (320). Certification may thus be motivated by the competitive advantage given to the certified companies. As a direct effect, another informant explained that they were forced to consider ASC certification, even though they had not yet made a final decision: *"It [ASC certification] is definitely an important topic. We sell our fish to (company name), and they want everyone to get there [certified] gradually"* (306). At the same time, our informants stressed that it is also problematic to work toward just one standard, as no standard includes every demand from all market actors: *"But it is so different, the fish going to Carrefour have some demands, while others have different demands. There is no standard that captures everything, which makes it challenging to work toward just one"* (306). Choosing standards to comply with was thus based on both demands from existing markets and what the companies anticipated to be demands from market actors in the future or demands from markets they wished to access.

For international companies and global market actors, certification can also be motivated by the benefit of providing certified salmon that has recognition value in the international market. The ASC certification scheme is perceived as a standardization of regulations that makes both production and the product internationally comparable by enhancing transparency, independent of the country of production. For IKEA, which sells seafood in 47 markets (ASC, 2018), this recognition value can be important. From a long-term view, the improved dialogue with local communities and stakeholders that comes with certification may give companies **a competitive advantage in terms of access to new sites and favorable standing with stakeholders**. Having ASC certification could also give companies an advantage if future market demands coincide with standards that companies already meet thanks to their adherence to ASC protocols.

4.2. Motivations for internal control and production improvement

From the global context focusing on market actors and sales opportunities to the local context focusing on site performance and company production standards, there was a general motivation among interviewees to improve their company's performance. Informants from several firms pursuing certification emphasized a desire to improve their

production processes beyond national regulations, reflecting a desire to constantly improve production practices. One informant who worked at a large international company described the process of certification as **an important learning process** for the company as a whole. The different standards are extensive, and even though some of the demands were described as “silly” or excessive, they also included areas and processes the company viewed as important and necessary to include in their work practices or internal control systems.

This was also reported by an informant from another international company. It was always about looking to “do better,” which meant constantly seeking improvements in its production protocols, and certification schemes could help with that goal. This was related to ASC in particular, as informants also highlighted how they believed there would not be another certification scheme that would replace ASC in popularity: *“There are many standards. It is mainly for developing good internal control systems. The customers require that you have a system. [...] We gradually wish to construct our internal control system using the ASC standards. That is the one [standard] we believe that will matter; at least that is what they say.”* (306). Informants also stressed how ASC is viewed as the most demanding and comprehensive standard: *“If you have ASC, you maintain everything else, and then some”* (320). The ASC salmon standard's requirements are extensive enough to cover what buyers and markets want. This makes it easier for companies and buyers to choose among the schemes available: *“Rewinding the story to the beginning, we saw that there was a lot more hassle back then from different customers on different standards, but it seems that the ones we have now cover their requirements. So, I do not expect that there will be something big now”* (321).

The aspect of **standardization** within companies was also a frequent topic in the interviews. As several Norwegian companies are international and have branches in several countries, certification also serves as a minimal standard across subsidiaries (and in different regions within Norway). Complying with the ASC standard contributes to a uniform production process across the company, at the local, national, and international levels. It is thus seen as a useful tool internally at many firms. This potential is realized even when a company does not certify all its fish farms. One informant reported wishing to improve company standards on the basis of the procedures and checklists provided by the ASC. This would be done for every site in the company, not only those that are certified. The company would even use some of the requirements from the ASC standard to improve its internal standards: *“We have incorporated the requirements in our own system, but it is for our own benefit”* (321). Certification may thus increase a company's control and coordination across regions, countries, and different regulatory regimes. In addition, certification schemes may serve to supplement perceived shortcomings in national regulations. This was emphasized when informants talked about how their companies could improve their sustainability performance.

How sustainability is operationalized in ASC and why this is important as a motivation for the companies was related to the companies' influence on the development of the ASC. Several companies, from Norway and other salmon-producing countries, were part of **industry initiatives** such as “salmon dialogues” or a “global seafood initiative,” in which stakeholders commit to certain goals. The involvement of a wide range of stakeholders in shaping the ASC standards is regarded, from the industry's perspective, as important for the ASC program's success and why the salmon standard is viewed as more comprehensive than other standards. Involvement in the process leading to the standards created a **commitment** from the companies involved. In addition, it also fosters competition, inasmuch as no firm wants to be outperformed by its competitors. Becoming certified may thus be a consequence or central aspect of such collaborations between the industry actors. Participation in developing the certification, like its adoption, could also give good standing with the initiating organizations, such as the WWF, according to one informant from an aquaculture company: *“This has everything to do with reputation. It is good for reputational issues that one can collaborate with such organizations”* (306). Even

though this company could not obtain ASC certification, it still tried to implement some of the ASC standards in their internal control system, as it believed the importance of the ASC would increase in the future and that demands from ASC could eventually be integrated into national regulations.

The interviews also showed that certification is closely related to how the company representatives' define sustainability and pay attention to it. Discussions with informants showed that, while improved sustainability from an environmental perspective was important for the companies, there was a desire for an increased public focus on social and economic aspects, such as the fact that the industry creates jobs and contributes economically on both the local and national levels. In this matter, both the process of developing the standard – in collaboration with important stakeholders – and the results of the standard – improving production processes – contribute to which measures informants view as important for enhancing sustainability.

4.3. Motivations for improved reputation and social legitimacy

Considering the possible reputation gain of collaborating with important stakeholders and the broadening of the sustainability concept, the interviews showed that companies were motivated by **making visible to the public and stakeholders that their commitment to being sustainable was not mere talk but real action**. By obtaining ASC certification, these firms felt that they could prove that they acted on stakeholder concerns about and demands for sustainability.

The aspect of **transparency** is relevant for making that commitment visible through action. At both the national and local levels, the company representatives emphasized how ASC certification made them more transparent and open. They related this to social pressure, including from the media. The company representatives stated that they are always striving to develop and improve their practices. Procedures and company standards have thus improved because of public pressure and demands to comply with the ASC standard. However, transparency did not mean that the companies' communicated all their production information to the public. Rather, the public is given access to certain information about companies' production processes and site information on all certified localities, either through the ASC or via company web-pages and sustainability reports. One informant stressed how the industry must also improve its communication with the public in order to gain reputational improvements:

Whether we use the standard, or are certified or not, is the choice of each company, but there is a lot of knowledge we could use and make visible to the public and use in order to make ourselves more easily accessible on the things we are working on. I think that is very important. And in this way, we could also obtain more acceptance, which is important to be sustainable, as I believe that if people had a better understanding of what we are doing, they would also deem us as more sustainable than they do today. (305).

One way of improving the communication with the public and improving the company's standing in local communities is through stakeholder meetings. One ASC criterion requires the company to invite stakeholders to a bi-annual stakeholder meeting for each site that has been certified. The aim is to inform and communicate with the local community. Some of the certified companies interviewed reported limited attendance at these meetings. However, the company is not required to report attendance to ASC, just to present meeting agendas in audits. Information about the content of the dialogues with stakeholders is therefore not available; nor is this matter followed up in audits. Still, a representative from a large company stated that these meetings were important in communicating with the local community. Meetings were also held prior to certification, although they are now carried out more systematically: *“it has been intensified because of the standard. As a result, we have now put this into a system”* (307). Other informants, mainly from

small- or medium-sized companies, stated that their standing with the local community was strong and argued that this is related to their originating from and being closely involved in the same community, in addition to being a business providing jobs and income. For these companies, stakeholder meetings were seen as unnecessary, as they already communicated well, in several arenas, with local stakeholders. The rationale behind the demand for stakeholder meetings was acknowledged by our informants: providing legitimacy to the ASC standard on the importance of improving social sustainability.

Communication with the public is thus an important part of the overall motivation for **improving reputation issues**. One citation illustrates this: “*All this is about reputation. It has a lot to say for your reputation that you can collaborate with these types of organizations (certification organizations and stakeholder groups such as the WWF)*” (306). The informant emphasized that, by taking part in the salmon dialogues developing the ASC salmon standard and by complying with that standard, the industry is demonstrating a will to collaborate with the founding partners of ASC. These stakeholders are deemed important, so collaborating with them provides legitimacy to both the ASC and the companies obtaining ASC certification.

The involvement of these NGOs in initiating the ASC standard also regarded as having a value in terms of pushing the industry to undertake important improvements more rapidly than the national regulations would require:

I would claim that some NGOs have done a better job than authorities have done. The national authorities tend to come around afterward. [...] [thinking about certification schemes] Bellona, the WWF and environmental organizations who have a public focus and comes with critiques. It is certain that, for the last five years, there have been quantum leaps improvement in safety and environment. And this would not have happened unless somebody had been “breathing down our neck.” (305).

Still, there were concerns regarding how information is spread to consumers and with how consumers will be able to evaluate such information. One informant stated that consumers do not relate to the ASC. Our informants assumed consumers in general lacked knowledge of certification schemes and their labels. An informant from a company that chose not to become certified said, “*when I think of myself as a consumer, what do I know about all the different certification schemes when I go food shopping? These certification schemes are probably just made for business to business*” (303). This statement reveals real skepticism as to whether certification can contribute to improving the reputation of a company or product due to a lack of knowledge of what certification entails. Consumers might not know about the label and, even if they do, they might not be fully informed about what the label means in terms of the production of salmon. Yet, the informant also suspected that reputational gains were part of the motivation for other companies when deciding to certify their production.

Producers can promote that they are certified on websites and corporate information documents, but they are not in control of what kind of information is presented to consumers in the global market. When informants from aquaculture companies state there is a market demand, they point to a demand from their buyers and retailers (e.g., IKEA). How these buyers choose to use the ASC label and communicate to consumers about what ASC means will largely be a response to the pressure they experience from consumers in their respective markets. Hence, the reputational gains of certification is more likely to benefit retailers choosing to use and promote the ASC label rather than the producers who does not promote its products in other manners than toward the retailers. On the other hand, Norwegian producers might benefit from the ASC label and the general reputation of having higher production standards compared to other countries which can offer their products also at lower costs.

5. Discussion

5.1. Implications of the ASC certification

The findings in this article show that there are three key motivations for obtaining ASC certification: 1) market access and financial benefits, 2) internal control and production improvement, and 3) improving corporate reputation and social legitimacy. Based on these findings, some implications of ASC certification for the aquaculture industry are discussed below.

5.1.1. Implications for financial benefits and production improvement

First, a desire for financial benefits, in the form of a premium price or the opportunity to strengthen the company's position in and access to a future market or comply with today's market demands, was emphasized as a major motivation for many firms. The retailers play an important role here. For example, IKEA already demand ASC certification for all salmon they buy.

The motivation for market access and financial benefits is not unexpected (see, e.g., [Boyd and McNevin, 2011](#); [Bronnmann and Asche, 2017](#); [Bush et al., 2013](#); [Lee, 2009](#)). Looking at implications related to this motivation, certification could potentially give a more premium price, as seen in Scotland, when companies chose to pursue an organic ecolabel to earn a premium price ([Georgakopoulos and Thomson, 2005](#)). Still, the financial gains of certification do not always materialize in reality. Some informants said that parts of their market were not willing to pay extra for ASC salmon. Consequently, their ASC salmon was sold at the same price as non-certified salmon in times of low demand. Looking forward, informants anticipated ASC's becoming more of a market demand in the future; they predict that ASC will be the “next big thing.” If that turns out to be accurate, ASC will be the certification that will cover the most prominent future demands, both from large market actors and retailers and in the form of national regulations. As companies choose to certify their production processes to meet possible future demands, they seek to create room to maneuver, either to prepare for new market demands or stricter national regulations. As [Luthman et al. \(2019\)](#) reported, the ASC provides less additionality in Norway than in other salmon-producing countries. Thus, as the interviews also confirm, becoming certified may not entail a large amount of change in daily operations for many producers, beyond additional paperwork.

If preparing for stricter national regulation is the main motivation, this should be seen in light of the industry's experience of rapid change in national aquaculture regulation over the last decade. Our informants stated that ASC is more comprehensive than other standards and certification schemes, so obtaining ASC certification would mean that companies are better prepared for any changes in national regulation that might arise. When informants highlight this, they also support and legitimize the ASC standard and implicitly strengthen the significance and thus power of the ASC and those who participated in developing the standard.

Interviewees from both companies that are pursuing certification and those that are not, argued that it is beneficial for them to use selected criteria from the ASC standard to improve their firms' processes and internal control systems. One implication of acquiring certification is thus that it may improve both production and product on a company-wide level, not only at the fish farms that are certified. This view accords with previous studies ([Amundsen et al., 2019](#); [Amundsen and Osmundsen, 2020](#)). While research has shown that certification might not contribute to substantial improvements for the sustainability of the industry as a whole ([Boyd and McNevin, 2011](#)), it has a significant impact on improving production processes at individual firms.

5.1.2. Implications for improving reputation and social legitimacy

Even though improving production practices must be viewed in relation to the motivation of accessing markets and providing traceability, it is also an important argument for regarding certification

schemes as something more than merely a market mechanism. Companies want to improve their production processes in line with demands for sustainability and as a mechanism to increase their environmental standing, social credibility, and overall reputation.

To gain such credibility, companies must deal with the natural environment in a way that conforms to their stakeholders' expectations, in line with what [Bansal and Clelland \(2004\)](#) refer to as "corporate environmental legitimacy." The ASC certification scheme is described as important for pushing the industry toward goals of sustainability, both from market actors but also in line with corporate ambitions. Consequently, ASC certification may impact both reputation and the sustainability discourse in salmon aquaculture. Initiatives like the ASC protocols are a way of demonstrating to the public how companies are socially responsible by using brand-building to demonstrate environmental values and address threats to their social legitimacy ([Carson and Rønningen, 2016](#); [Røvik, 2007](#); [Ursin et al., 2016](#)). However, what is deemed as sustainable and by whom is crucial if this implication is to have a greater impact on reputation.

Environmental issues such as escape of fish and adverse effects of salmon lice are important topics in the sustainability discourse in Norway ([Olsen and Osmundsen, 2017](#)). Given the reputation issues in Norwegian aquaculture, the industry has much to gain by influencing the public's and consumers' negative perceptions of the industry, as this in turn relates to the current debates in the Norwegian context of finding available sites for aquaculture production ([Hersoug et al., 2021](#)). For communication with the local community, the ASC requires companies to arrange stakeholder meetings. However, we found that this has not yet rewarded companies with increased meaningful interactions with the public, as many companies report low attendance at these meetings. An open dialogue with the public is deemed necessary to increase public knowledge about the industry in general and, hence, the industry's efforts to improve its sustainability through certification. At the global level, communication between producers and consumers are mediated by retailers. When retailers communicate with consumers, they can choose whether to use the ASC label and decide what type of additional information to provide in store or through company sustainability reports and websites. Studies on how consumers make use of this information finds that labels can contribute to confusion, rather than being helpful, due to a general lack of knowledge among consumers ([Aarset et al., 2004](#); [Schlag and Ystgaard, 2013](#)). Thus, using the ASC label may not contribute to improving consumers' knowledge and perception of the salmon aquaculture industry, and their ambition to demonstrate sustainability. Hence, the potential reputational gains provided by certification are not exploited to the fullest by the companies in their efforts, or lack thereof, to communicate with the public.

Through certification, aquaculture companies seek to demonstrate to the public that they are willing to go beyond compliance with national regulations to take responsibility for the environmental impacts of salmon production. The process of developing the ASC salmon standard is regarded as valuable for the industry because it demonstrates collaboration with important stakeholders, which increases the legitimacy and value of ASC certification. Our findings suggest that the industry sees organizations like Bellona and the WWF as representatives of the public, so responding to their demands for sustainability make the target standards relevant issues for public critique on important sustainability challenges. A long-term impact of these collaborations could thus improve the industry's reputation among important (E)NGOs.

Furthermore, certification may contribute to broadening the sustainability concept so that it more fully reflects the reality of the aquaculture companies. National debates over governmental regulation of growth in production volumes has a one-sided focus on salmon lice as an indicator of sustainable production ([Olaussen, 2018](#); [Osmundsen et al., 2020a](#)). ASC certification can thus play an important role for the aquaculture companies in contributing to a more holistic understanding of the sustainability concept and broadening the sustainability discourse. This happens through influencing the content of the

sustainability concept and stakeholders' perceptions of the industry as sustainable. ASC certification serves as a strategy for opening up and broadening the sustainability concept by adding social aspects to the more traditional environmental aspects.

Broadening the sustainability concept and discourse also has implications on the consumer side. Currently, research on consumers' choice and knowledge of certification schemes and product labels is somewhat lacking, and the existing studies are inconclusive ([Grunert, 2005](#); [Roheim et al., 2018](#)). Therefore, it is interesting to note that company representatives do not report use of certification in active marketing, despite companies' desire to demonstrate their environmental and social credibility, and improved risk communication in a globalized market. In fact, they indicate that most consumers are not aware of what the labels from certification schemes represents; rather, they point out that this is mainly controlled and used by the large market actors. Still, the aquaculture companies predict that consumer focus will also change and are preparing for a future market. The implication here, which is apparently paradoxical, is that if all firms certify their production before the market actually demands it, it is the companies themselves that will ultimately make certification a regulatory demand in the future.

The strengthened role of certification was caused by public pressures and the threat of stronger regulation ([Haufler, 2001](#); [Vogel, 2008](#)). The ASC has thus helped its founding NGOs and retailers down the line to achieve an increase of legitimate authority in their use of regulatory instruments to govern firms and their actions, whether through self-regulation or market-based instruments, in line with previous research also from other sectors like forest and fisheries ([Auld and Gulbrandsen, 2010](#)). Furthermore, standards can be viewed as a means by which we construct realities or as recipes for reality. As presented by [Busch \(2011\)](#), certifications direct companies to produce outcomes desired by other parties: in this case, retailers, NGOs, consumers and the public. There are many actors who want a say in how the industry should perform and operationalize the concept of sustainability. NGOs like the WWF and ASC have defined sustainability through salmon dialogues with stakeholders, public authorities, and industry representatives. The producers are using ASC certification to meet demands and critiques from a wide range of publics, from local communities to international organizations and a fragmented, global consumer group. As previously noted, this may result in some financial gains, market access, and production improvements; however, it seems that the mechanisms in communicating how ASC can improve the industry's sustainability mainly benefit retailers rather than producers. The producers have a greater potential to gain reputational benefits in their relations with NGOs involved in developing the standards and with retailers requesting ASC-certified salmon.

This increase in voluntary self-regulation to govern firms also reflects an expansion of legitimate authority outside the state ([Vogel, 2008](#)). Many NGOs, like Greenpeace and the WWF, enjoy high amounts of public trust, which can increase their power to define important risks and solutions when communicating with the public.

In their attempts to demonstrate a more sustainable approach, the salmon aquaculture industry is still struggling to improve public opinion. The industry faces criticism from global and local publics, and the key to improving production processes and demonstrating those improvements to the public is to increase public knowledge of aquaculture production and the industry's efforts to become more sustainable. [Tlusty and Thorsen \(2017\)](#) warns about calling or selling products as 'sustainable' as the concept of sustainability is vague and what sustainability will entail may change with increased knowledge and additional experience. Rather, they encourage producers to communicate and demonstrate the achievements and concrete actions made in the effort of limiting risks and impacts on people, communities, animals, and the environment. With ASC certification, the mechanisms enhancing dialogue, communication, and transparency appear to benefit market actors to a great extent, and the according to the informants in this study potential reputational benefits are not being realized by the aquaculture industry. In addition, the process of

developing ASC standards legitimizes and gives power to the NGOs, making the industry itself less influential in defining sustainable salmon aquaculture.

6. Concluding remarks

This paper shows that aquaculture companies' motivations for ASC certification goes beyond market access and financial gain. Through certification, companies seek to communicate that they are committed to sustainability; they have an ambition to meet public concerns by implementing a more comprehensive definition of sustainability to improve their production processes in line with what stakeholders regard as important. Further, by obtaining ASC certification, producers are seeking to improve their reputation and standing in global markets, with public authorities, and with local and global community. When aquaculture companies contribute to the sustainability discourse by participating in the development of the ASC salmon standard and, further, certify farms to that standard, they may also open the door for NGOs to influence, and legitimize their power to influence, the sustainability discourse and how to improve sustainability in the aquaculture industry.

Salmon production and its regulatory regime in Norway is complex and already quite comprehensive. However, many companies have challenges in communicating their practices and thus improving their standing with the public. This also applies to the public's general knowledge of aquaculture production, not just specifically what certification adds to the existing regulatory regime and the impacts of salmon production.

Certification schemes associated with sustainability have the potential to conceal complex and uncertain knowledge of salmon production and its environmental impact by communicating through labels. Retailers can communicate directly to consumers and make ASC salmon a sustainability brand, and as of today, it appears that reputational gains accrue mainly to the retailers that define how to communicate with consumers, through ASC labels and their own sustainability profiles. An important action to better utilize the potential reputational gains for companies is to find better ways to interact with and involve local stakeholders to increase public knowledge and demonstrate the transparency provided by the ASC protocols. For future research, potential reputational benefits should also be studied in relation to research on certification and its actual impact on production, and consumer preferences and knowledge of sustainability labels.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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