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Virtually the Reality: Negotiating the Distance between Standards and Local Realities When Certifying Sustainable Aquaculture

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Abstract: To account for the many challenges of increasingly global industries, remote regulation measures such as sustainability standards have become continuously more important as a means to ensure global accountability and transparency. As standard certification is assessed through audits, the legitimacy of these standards rests on uncritically evoked norms of auditing, such as independence and objectivity. In this paper, we seek to investigate the claim of these norms as a prerequisite for the audit process of sustainability standards. Based on interviews and fieldwork in the salmon aquaculture industry, we explore how it is possible to concurrently uphold the standard and account for the different conditions of the many local realities. Our findings point to the interactional character of audits, often downplayed for legitimacy purposes, and how this is vital to achieve both 'distance for neutrality' and 'proximity for knowledge production'. We argue for increased transparency concerning the human element of sustainability auditing, thus acknowledging the significance of reciprocal knowledge production when using standards as a route towards sustainability.

Keywords: sustainability; certification; standards; audit; objectivity; knowledge production

1. Introduction

As the aquaculture industry continues to grow, there has been a proliferation of private regulatory initiatives, such as sustainability standards, aimed at ensuring responsible and sustainable production [1,2]. These voluntary programs come in addition to national regulations, which are intended to enable aquaculture companies to both improve their production processes and display these improvements to consumers, retailers, and national authorities [3,4]. By demonstrating compliance with the indicator requirements of set standards, aquaculture companies can become certified according to numerous schemes that address various topics related to responsible production, e.g., animal welfare, food safety, environmental conservation, and social assurance [5]. Compliance is typically assessed through inspections and a thorough review of documentation conducted by a third-party auditor.

Many of these schemes operate internationally, applying the same set of requirements regardless of where an aquaculture company's production is located. The legitimacy of these standards is to a large degree based on certain assumed attributes of certification and the audit process, such as independence, objectivity, transparency, effectiveness, and generalizability [6,7]. However, as the many different and multifaceted local realities will not always fit into predetermined categories, standards cannot by any means be treated as complete representations of reality [8], as these attributes would suggest. This is especially pertinent in the case of sustainability standards due to the complexity and

overall lack of general consensus as to what sustainability is and how it can be accomplished [9,10]. Further complicating the matter is the uncertainty and complexity, or rather 'wickedness', of the many externalities of aquaculture production [11–13], which these standards are attempting to address.

Auditors navigate in a terrain where a central axis is drawn between maintaining a distance to the auditee to preserve neutrality, and proximity needed to acquire knowledge about the auditee's particular local context. Departing from this standpoint, we seek to investigate the claim of independence and objectivity as a prerequisite for the audit process of sustainability standards. Firstly, how is objectivity and independence enacted during the audit process when standards can never fully capture the complexities of reality? Secondly, what role does 'distance for neutrality' versus 'proximity for knowledge production' play in the meeting between auditor and auditee, and how, if possible, can these be balanced? These questions are explored through interviews and fieldwork, with findings illustrating the significance of the interactional character of audits and the need for more transparency concerning the human element of sustainability auditing. While this study focuses on salmon aquaculture, there is reason to believe that our findings are applicable beyond this industry, as many industries are experiencing an increase in similar certification pressures and audit processes [14].

2. Theoretical Background

We find ourselves in a time of certification where "all" things are to be labeled, measured, evaluated, and compared [14]. For aquaculture production, as with other global industries, there are numerous rationales for an increase in standardized means of regulation such as certification. With production scattered around the world, similar practices and protocols should allow for global accountability, transparency, and risk mitigation [15,16], promoting and facilitating trust between producers, suppliers, retailers, and consumers [17]. Another product of certification is increased traceability through standardized information systems, which in turn can improve food safety and general transparency [18].

While these private certifications are voluntary, many are increasingly becoming de facto mandatory due to commercial pressure and market access requirements [19]. The proliferation of standards and auditing of larger industries has been referred to as an 'audit explosion' [14], which is causing organizations to be transformed into more 'auditable' entities [20]. With roots in the financial sector, auditing involves making an organization's performance externally verifiable through systematic evaluation of its practices [6], which presupposes practices that are readily available for the external assessor. This entails converting complex realities into unambiguous measures, providing quantifiable targets through the superficiality of 'thin description', as coined by Theodore Porter [21].

This process of simplification is often subject to 'black-boxing', where all precursory discussions and disagreements are hidden from public view in order to legitimize the outcome [22,23]. This has in turn led to a naturalization of standards and their classifications, which entails becoming an accepted and taken-for-granted form of knowledge, endorsing the perception that their measures are to be considered objective [24]. The legitimacy and credibility of sustainability certification is further substantiated through the use of third-party auditors, as they represent an independent actor with no apparent stake in the process [25]. An auditor has a fault-finding approach, and is expected to unravel issues not compliant with the standard. Following this logic, the role of the auditor therefore depends on the existence of beliefs about impaired independence. Similarly, Cook et al. [6] find that certain norms of auditing, such as transparency, objectivity, and effectiveness, are evoked uncritically as necessary for achieving 'good' audits.

The common misconception that standards with third-party audits are independent and free of interpretation has been countered by two key arguments centered on the fact that while standards emanate from the idea of objectivity, they are both made and managed by people. Firstly, the audit process necessitates critical choices as to what is being measured and what constitutes compliance [14,26]. Those that develop sustainability standards have, to a large degree, the power to define what a sustainable industry looks like, as the choices they make concerning what issues to include and

exclude have ontological implications [27,28]. The standard owner's distinct purpose, proprietorship, and process of development will also be echoed in the focus of each standard [29]. In other words, the standardization of sustainability is a concretization and operationalization of the concept, i.e., an attempt to make a complex phenomenon tangible and obtainable [24].

Secondly, despite the intent of being applicable across sites, companies, and countries, a standardized list of requirements will never be entirely transferable [8,20]. Standards will necessarily provoke different local responses and adaptations in how they are implemented [30], and an auditor will have to translate the different company procedures and actions into the standardized template. Although this speaks to the importance of the auditor as an intermediary agent, the inescapable human element of the audit process tends to be downplayed to strengthen the certification's credibility as neutral and independent [31]. As Power [14] accurately points out, there is an important distinction to be made between organizational and operational independence, where the former speaks to the auditor's official engagement and the latter to the actual audit process. Power describes this process as both "interactive and judgmental" [14] (p. 40), pointing to the necessary negotiation that is needed to decide which are the criteria that compliance involves.

In this discussion of independence and objectivity lies the dilemma of degree of flexibility, i.e., the difficult balance of upholding the standard versus considering the local context. An overly stringent approach will lead to less certified companies and, in effect, the standard's label becoming less relevant. On the other hand, an overly lenient approach will water down the label and make it less trustworthy [7]. However, it is important to discourage a polarized understanding of the audit process, as it is not a question of whether independence and objectivity can or should be achieved. On the contrary, Cook et al. [6] argue that the audit process must be seen as an arena in which attributes such as these are enacted—constructed, negotiated, and reconstructed—through the interaction between auditor and auditee. The conceptualization and framing of what the audit is and will lead to, thereby, becomes a mutual engagement between the two parties [7,31].

How this mutual shaping of the audit unfolds will to a large degree depend on the auditor, and how they utilize their discretionary space. There is, however, limited research on how this discretionary space manifests in practice. Building on the above perspectives, this paper seeks to address this gap in the literature. We do this by framing the question in terms of distance versus proximity, where the former allows a greater degree of neutrality and the latter opportunities for knowledge production. This spectrum does not just refer to the actual distance between auditor and auditee, which can range from remote assessments of documentation to physical on-site inspections. It also concerns the degree of involvement and interaction during an audit, e.g., comprehensiveness of observations, manner of communication, encouragement of discussions and negotiations, and the possibility for building rapport between auditor and auditee.

Some degree of neutrality is crucial, not just for legitimacy of the standard but for the commensurability of those certified. A certification label will have little value if there is no generalizability. On the other hand, aquaculture is a complex industry and there is much debate as to how it can become more sustainable. We therefore argue that the process of sustainability certification must serve the additional purpose of creating learning opportunities. By advising companies on how they can best comply with the standard requirements, the auditee can improve its operations in the process [31]. Similarly, auditors can gain crucial insight from those with the practical expertise and experience, which, in addition to aiding the auditor in their work, can serve as input to the standard owners in the continual revision of standards [7]. We observe the necessity of a more in-depth understanding of the reciprocal process in knowledge exchange in sustainability auditing, which can facilitate a continual improvement of the processes involved.

3. Materials and Methods

To obtain a comprehensive understanding of the audit process for sustainability certification, we have examined it from several viewpoints, seeking the perspectives of both the auditor and auditee.

Our analysis is conducted for salmon, one the most important aquaculture species as measured by production growth and value [32]. We have concentrated on the salmon aquaculture industries in Norway, Chile, and Scotland, in regards to choice of both schemes and informants, as these are three of the largest producers of salmon. We attended audits for three different certification schemes in two different companies. The first fieldwork took place at an audit for Aquaculture Stewardship Council (ASC) pertaining to four salmon aquaculture sites, which lasted five days. There were three re-certifications and one new, where the latter required additional information pertaining to social assurance and therefore a second auditor. The second audit we attended was for two food safety standards—International Featured Standards (IFS) and BRC Global Standards (BRC)—at a processing facility, where we attended two of four days. While this audit concerned the processing of salmon, these food safety standards are not species-specific. Both audits primarily involved reviewing documentation to demonstrate compliance with the many standard criteria. The former also involved the inspection of two of the sites and interviews with the staff at the site up for initial certification, while the latter included several inspections of the processing plant and surrounding areas. Those in charge of the quality department attended the full audits, and were responsible for presenting the necessary documentation and answering the auditor's questions. Managers from other departments were present at different times, depending on the topic at hand.

The fieldwork entailed participant observation [33], consisting of observations of the documentation review process and ensuing discussions, accompanying the auditor on site inspections, attending staff interviews, and conducting informal interviews [30,34] with auditors and company employees to obtain more in-depth explanations and reflections concerning the audit. On request of the companies, recording devices were not used. The notes from the fieldwork were transcribed and anonymized. They were subsequently coded according to topic using N-VIVO.

We also conducted 24 in-depth interviews with some of the major salmon aquaculture producers and accredited certification agencies in Norway, Chile, and Scotland. The interviews with producers were with managers and quality department employees from salmon aquaculture companies: ten in Norway, six in Chile, and one in Scotland. The single interview in Scotland speaks to the difficulty we faced in gaining access to aquaculture companies there. The scope of the interviews included the respondents' experiences with certification, from the decision to work towards a specific certificate through to the implementation process and its effects. Two auditors from, respectively, Norway and Chile were also interviewed, mainly concerning the audit process, in addition to the three auditors we spoke with in the field. Each interview lasted approximately 1–1.5 hours, and were all recorded, transcribed, anonymized, and translated by the authors and other project members. Each respondent was given a unique identification code (e.g., N1–C1), with the first part denoting country (e.g., N1–**, N for Norway, C for Chile, and S for Scotland), and the second representing the company (e.g., **–C1). As with the fieldwork notes, the interviews were subsequently coded according to topic in N-VIVO.

In order to gain a thorough understanding of the different sustainability certifications, we also categorized the indicators in eight of the most prevalent standards according to 28 different topics. This work has resulted in a searchable database of 1916 indicators, with a total of 2830 categorizations. See Amundsen & Osmundsen [5] for details.

4. Results

4.1. Objectivity and Independence

Auditors work within a set framework defined by the standard owners, which typically are independent organizations. The auditors we interviewed stress the countless exams they need to pass in order to be allowed to perform audits for specific standards. Their reports are reviewed, and they are themselves audited by the accreditation bodies to ensure consistency. Most auditors are described by the respondents as meticulous and diligent in following the standards. This corresponds with our

observations from the field, where the auditors spent much time examining the documentation they were presented with, ensuring that it was adequate to comply with the requirement in question.

The importance of being, and being perceived as, neutral and objective is emphasized by both Norwegian and Chilean auditors. When describing their own roles, they refer to their Code of Ethics, emphasizing that these have rules regarding impartiality and confidentiality, restrictions concerning the receiving of gifts or owning shares in listed companies, etc. Furthermore, they stress that they are not permitted to perform training for individual companies or in any way enter the role of consultant. To maintain some distance between auditor and auditee, several of the schemes require that a company changes auditor every three to five years, depending on the scheme. The impression of independence seems particularly important in Chile, as explained by a Chilean auditor: "Our [commitment] is only related to presenting the findings. The [rest is up to] the consultancy or the company. Because we are not in charge of implementing the improvements in each company. Only showing what and where the findings are. Nothing more. To be independent" (Auditor C1–C3). Even so, several of the producers state that the audit process does function as a learning process for them. As one explains, "by all means, suggestions for improvements are present in the revisions. And particularly if you have auditors who are experienced and who have been around to other sites. They might tell you, 'in other places they do this and that' without mentioning any [company] names" (Producer N2–C1).

4.2. Discretionary Space

Although there is much focus on objectivity, the final decision of whether a company is given non-compliance falls on the auditor, as the company's activities will not always fit into the standard's predefined boxes. Despite specifications in the standards on what constitutes compliance, there is, for example, more than one way to set up a risk analysis, a common requirement in sustainability standards. This provides the auditor with some flexibility, or discretionary space, in regards to how criteria compliance is evaluated, which suggests that despite the strive for objectivity and complete transferability, who the auditor is will matter. In attempting to bridge this gap between global ideals and local realities, many respondents emphasize the importance of good communication between the auditor and producer. As one producer states, "We can send [the auditors] out [to the production sites] on their own, but our experience is that communication is key. It is not a given that they are able to ask [the workers] in a way that those who are asked understand the question and what they want to know. So, we are there to guide them. Mostly things are in order, but if they misunderstand the question we will get a non-compliance and that generates work for us" (Producer N5–C2). This respondent and others also point to communication issues that may occur with foreign auditors, in cases where site workers are not comfortable speaking English.

For the producers, communication does to a large degree also involve being given room to explain and negotiate when they do not agree with either the auditor's assessment or the standard itself. Not all the producers are comfortable entering into negotiations, but at times feel they have to. One of the producers explains that, "[Sometimes] you can notice that they have their own agenda once they arrive. That, 'here we will find something on 'this''. Because they have a preconceived notion that there is something to find, and then they also find it. But then, we have to be tough and have the courage to oppose it. Through the years, there have been many weird requirements that have proven not very smart, even if one auditor thinks so. Because they have a lot power" (Producer N1–C1). While this respondent refers to the unequal distribution of power between an auditor and a producer in these negotiations, most of our respondents emphasize that they will attempt to negotiate with the auditors when necessary. The auditors, similarly, underline the significance of communication and good dialogue in the audit process. As one auditor puts it, "Communication is extremely important. Sometimes I may be more flexible and less stringent in how I formulate the reports. But that is also a risk, because I am also being audited. All the reports are submitted for review. So, I don't have much leeway, so to speak" (Auditor N1–C5).

4.3. Negotiations and Strategies

Negotiations between auditors and producers can manifest in various ways, both with different intentions and outcomes. The more common intention of the producers is to convince the auditor that they are in compliance with a requirement, when the auditor has stated otherwise. This can involve explaining why their practices work well or are necessary in their local context, or questioning what the standard is actually asking for. One producer states that, "When you do what I do [being responsible for audits of the company], I can promise you that you learn to quarrel on all the definitions, you can earn much leeway that way" (Producer N1–C1). Our findings show that the interpretation of definitions and requirements is an issue that most producers are aware may provide some flexibility. Another strategy to prove compliance is by presenting scientific evidence supporting the company's practices. As one producer explains, "We've had cases with for example stocking densities in hatcheries and been able to provide evidence that 'look, if we take it up to this level instead of that level, it's still okay.' So the way the [standard] would look at that, if it's welfare neutral, okay. If it's welfare positive, of course! But if it's welfare negative, then forget it, it's not going to happen. And that's how they would look at it" (Producer S1–C1).

As standards for salmon aquaculture often are developed with production in countries like Norway, Canada, and Scotland in mind, and with less regard for the particularities of production in, for instance, Chile, these producers may struggle to comply with specific requirements. A Chilean producer explains, "There are requirements that are difficult to meet and are not in line with what we want to do because the production realities of the northern hemisphere are different from our own [. . .] For example, there are bacterial diseases where 90% of the antibiotics is used only to control that disease, which in the northern hemisphere is different since they do not have any significant bacterial diseases. [Therefore they] use less antibiotics compared to us" (Auditor C1–C4). If the auditor agrees that the chosen practices are suited for the local conditions but cannot grant compliance, the auditor can utilize various means of discretion, depending on the scheme. For example, some standard reports have designated spaces where the auditor can give further explanatory descriptions, such as how external factors might have given poor results on an environmental survey. An auditor can also contact standard owners or accreditation bodies on behalf of the producers to obtain an exemption for a specific site. For instance, some standards require that all pens have smolt from a certified supplier but exemptions have in some cases been given for sites that have proven satisfactory traceability systems. Respondents say that in these cases, some auditors might refuse, while others will approve the request. A company can also request that changes be made in the actual standard, as part of the amendments in the updated version. The auditor will, in this case, give non-compliance but report the change request back to the standard owner. The company can then provide scientific evidence that supports its request.

4.4. Influential Factors

Both the producers and auditors point to several factors that affect the possibility for negotiation. According to the producers, auditors with little experience are more likely to get hung up on "insignificant details" as they do not wish to deviate from the standard. As one producer explains, "On the negative side of things, it is very demanding to work with these revisions. And these auditors are not always very pragmatic. They get hung up on details which, I think, are not very relevant" (Producer N7–C2). Experienced auditors, on the other hand, are accredited with the ability to see how various practices can have the same effect, thereby allowing different solutions. One of the producers explains the difference between auditors with and without experience: "An experienced auditor—there is a big difference between that and an unexperienced one. Those who are auditing for the first time, for example for a big and difficult standard, then you have to be prepared to work through the night. Because they are never finished. They are so afraid to make mistakes, so they dig into unimportant details. While those who are more experienced, they understand the process and even if [the standard] asks for a specific thing, other things might accomplish the exact same thing. In a different way, they

have a better understanding for our processes, and it doesn´t have to be exactly this way or that way. It might give the same effect and be just as good" (Producer N3–C1).

Related to experience, the auditor's familiarity with the site and company is another factor said to aid discussions and negotiations. Both producers and auditors point to how those being audited are often calmer when they know the auditor, making it easier to discuss good solutions. While auditors cannot function as consultants, they can contribute to the learning process for the producers by explaining the origin and intent of a requirement that might seem nonsensical and give suggestions on how to comply with it. One of the auditors explains that, "So we try to discuss, you know, see if we can come up with a . . . I wouldn't say middle ground, but you know what I mean. We of course experience this all the time. 'But we do it like this.' 'Yes, I understand that, and that's good, and you are definitely on the right track. But maybe a bit more like this, because [the standard] wants it like that, because because', and so forth" (Auditor N1–C5). Furthermore, familiarity with the company is also said to enable the auditor to see improvement and understand how a company does things and why, which can help expedite the audit process.

Another factor that is said to affect negotiation is the level of the auditor's technical expertise, in this case in aquaculture. While most certification schemes require relevant education and practical experience in the industry, many respondents point to the unpredictability of auditors for customer standards. These standards are, unlike certification schemes, developed by the producers' customers, usually retailers, and are described by most respondents as exceedingly more specific in their requirements and often more stringent. Many criticize these standards for their nonsensical requirements, often a result of the standard having been poorly adapted from livestock production. Similarly, the customer standard auditors' lack of industry knowledge is cause of much frustration. As one informant explains, "We get people here that have barely ever seen a salmon before" (Producer N1–C6). The lack of industry expertise is said to impede discussions and inhibit any possibility for negotiations when they disagree with the auditor's assessment, a frustration exemplified by several respondents. For instance, a processing facility was closed with immediate effect due to a fish having a muscle twitch after slaughter, which the auditor said was proof that the fish was still alive. Another processing facility was required to have a designated person distribute band aids, and collect and register them at the end of each workday. A site was given non-compliance because a fish farmer was smoking on the boat during a delivery, despite the company's protests that the animals were underwater and could therefore not be affected by the smoke. Another site was asked to install camera surveillance of their employees, despite it being illegal in Norway. What these examples demonstrate is the extreme variation in the producers' experiences of audits, from very professional to the absolute absurd.

5. Discussion

While our study has focused on salmon aquaculture, our impression is that many of our findings are applicable to other contexts, both other species of aquaculture and other industries (see [3,6,7], for example, from, respectively, the banana industry, forestry, and general environmental auditing). Effective auditing is not premised on whether the auditor operates objectively and independently. Rather, as our findings show, it is premised on the concurrent need to uphold the standard and consider the standard requirements against local conditions. The auditor has a clearly defined role, which entails that deviating from the standard will lead to repercussions. With this role follows a parallel responsibility of translating local practices into the standard's predetermined categories. Consistent with the standardization literature, our study illustrates the difficult nature of this as a consequence of geographical, judicial, and organizational differences, among others. In performing these responsibilities, the auditor is subject to cross-pressure, here manifested as distance versus proximity. The interaction between auditor and auditee is crucial in the balancing of the required distance and necessary proximity of auditing. As established by Cook et al. [6], it is through this interaction that objectivity is enacted rather than achieved. Departing from this view, we have identified

specific manners in which this enactment can occur, through negotiations, means of discretion, and experience and expertise of the auditor.

In order to better comprehend the concurrence of distance and proximity, the output of audits must be seen separately from the process. If a certification label is to have any value, the final reports must be based on a standardized template to allow some degree of transferability and commensurability. On the other hand, the process in which reality is translated into these templates is necessary to establish relevance, and to understand relevance requires proximity. The parallel responsibilities and cross-pressures of auditors can be understood in terms of a double role conflict. Similarly to the civil servants described by Jacobsen [35], auditors are expected to be neutral while also being loyal to the standard currently at hand. Furthermore, auditors are expected to utilize their professional expertise while also setting aside their professional discipline to remain loyal to the standard. According to Jacobsen, this is a necessary dilemma that is not to be resolved since the legitimacy of the entire system relies on the concurrent presence of these contradictory values.

This entails seeing auditors as more than just neutral instruments and thereby recognizing their competency, which underscores the empirical contributions of our findings. By acknowledging the importance of the human element of auditing, it is possible to identify measures that can improve the audit process. Most importantly, this points to the implications of the auditor's qualities and qualifications. As stated by one of the respondents of Eden [7] (p. 1023), "auditing is very much a skill." A good audit process requires an auditor with experience in the field and available means of discretion to uphold the standard while also taking into account the many different local realities. Furthermore, increased transparency concerning the interactional character of auditing will strengthen the appreciation of the specific contributions of both auditor and auditee. This will in turn make it easier to capitalize on the knowledge and expertise of both parties.

As regards the theoretical contributions of our findings, the justification and call for recognition of the knowledge coproduction of audits has implications for how we deal with standards as a route towards sustainability. While sustainability as a collective goal has proven valuable in unifying efforts to meet the challenges of today, its complexities and necessary compromises must be openly recognized to ensure continual progression. Here there may be lessons learned from qualitative research and the inductive nature of grounded theory, as opposed to the quantitative approach associated with auditing. Through in-depth interaction with the auditees, the auditor can engage in qualitative analysis to discover the unknown actualities of the industry. As illustrated by producers presenting scientific evidence to back their claim in a negotiation, the auditees may often have access to more up-to-date knowledge. Therefore, the reciprocal nature of this knowledge production is crucial.

Because 'sustainability' as a goal gives rise to certain expectations, initiatives that use it as a brand or product must be challenged and explored. This paper calls for reflection on the constitution and fundamental characteristics of sustainability standards. These are, to a large degree, based on set metrics that producers must meet, as a way of making the companies 'auditable' entities. Following Tlusty and Thorsen [36], we argue that there needs to be a larger emphasis on continual improvement, recognizing sustainability as a process rather than end destination. This allows for a more accurate representation of the concept, which in turn can facilitate a more open and dynamic approach. As we have shown, continual improvement is dependent on close communication and interaction between auditor and auditee. This can serve to both increase the relevance of existing standards and ensure that what is being measured and assessed actually is a vision of sustainability.

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