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# When social sustainability becomes politics – perspectives from Greenlandic fisheries governance

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## Abstract

This article approaches the topic of social sustainability as a discourse which holds potential for affecting fishery policy and investigates the extent to which this potential has actually materialised. The article identifies an Arctic social sustainability discourse and asks how it interacted with Greenlandic fisheries governance in the period from 2010 to 2012 when a major individual transferable quota (ITQ) reform was introduced into one of the largest coastal fisheries in Greenland: the coastal Greenland halibut fishery. The analysis is based on an impact assessment study of the ITQ reform, a self-reflexive discourse analysis of the social scientific production of truths relating to “Arctic social sustainability” and participant observation of the policy-making process. The article concludes that in the planning of the ITQ reform, the “truths” provided by the social sustainability discourse were deemed less relevant than the ones provided by competing discourses on biological and economic sustainability. The article suggests the possibility that the social sustainability discourse was dismissed because it was equated to a previously dominant political stance in Greenlandic fishery policy which the ITQ reform was meant to replace.

**Keywords:** Greenland; Social sustainability; Fisheries; Policy-making; Social science; Arctic communities; Social Impact Assessment

## 1. Introduction

The problem of how to understand social sustainability and related concepts has framed the social scientific research agenda for decades. As a field of scientific enquiry social sustainability is particularly attuned to policy-making in the sense that social sustainability studies often seek to provide policy-makers with relevant information. Such studies often respond to a range of concerns emerging as a response to current developments be it a specific policy or general “unprecedented change”. There are often ambitions to let the concept of social sustainability function as a tool to monitor policies and inform decision-makers. Drawing on Zizeck and Mouffe, Davidson (2009) even argues that in a time of post-politics where consensus prevail over neo-liberal regimes and most issues are perceived and treated technocratic, social sustainability can open up basic discussion of where we want to go with society. When debates today are not taken due to lack of imagination of place-based politics as to their external

effects or due to cynicism in social consciousness, it is argued that social sustainability may help social issues enter the field and politics being activated (Davidson 2009).

Whereas social scientific studies have researched into how to define and understand social sustainability (Pepperdine and Ewing 2001; McKenzie 2004; Koning 2002; Scott et al. 2000), and while many studies implicitly assume (AHDR 2004; ASI 2010) that they can bring policy-relevant knowledge to decision-making tables, only few studies have actually asked the self-reflexive question: So *does* the social sustainability discourse, as produced by the social sciences, actually influence policy making? Has it, for example, managed to open up basic discussions of where we want to go? (Davidson 2009). And how can the social scientists working to produce relevant conceptualisations of “social sustainability” understand the actual effect of their collective endeavour within a political context? These are the themes of interest in this article.

### Method and analytical framework

This article investigates the question of how a social sustainability discourse may *actually* interact with policy-making. The study presented is a case study of how an “Arctic social sustainability discourse” interacted with Greenlandic fisheries governance in the period from 2010 to 2012 when a major ITQ reform was introduced into one of the largest coastal fisheries in Greenland: the coastal Greenland halibut fisheries. As a case study it cannot by nature provide a generalizable answer and the character of the interaction between discourse and policy must be expected to vary depending on different planning regimes as well as the form and presentation of social sustainability discourses. Nevertheless, this case is perhaps a particularly representative one.

This case is selected because it draws together a set of problems that are representative for many of the debates within both western fisheries governance and social sustainability discussions. On the one hand, ITQ reforms constitute a general fisheries governance technique in western-world fisheries, but the popularity it enjoys as a technical fix (Degnbol et al. 2006) to wicked problems (Jentoft and Chuenpagdee 2009) is often contested by local communities and social scientist researchers based on equity issues and the impacts it has on local communities (Carothers 2010; Bromley 2008; Pauly 2008). On the other hand, as a region generally portrayed as undergoing fundamental change, the Arctic has been researched in terms of a range of social sustainability issues such as participation and the continuity of livelihood – not least in relation to everyday natural resource use and the decentralised settlement patterns. In Greenland, further discussions on social sustainability concentrate on the use and governance of marine living resources (Rasmussen 1999; Sejersen 2003).

Through the case of the ITQ reform of one of Greenland’s largest coastal fisheries, it thus become possible to investigate the interaction between some very elaborated social sustainability discussions on one hand and the introduction of a very prevalent type of fishery reform on the other. The case-study combines three complementing methods: 1) A social impact assessment (SIA) of the ITQ reform in relation to Upernavik community 2) Discourse analysis of studies producing knowledge on social sustainability in general, and in the Arctic and in Greenland in particular, including the SIA mentioned above 3) Ethnographic participant observation of decision-making processes in relation to the ITQ reform.

The discourse analysis is conducted as an analytical literature review. It shortly summarises reviews of how studies of social sustainability and related concepts first developed internationally. It then reviews how a range of significant studies in the Arctic and in Greenland have defined a range of themes and/or dilemmas to consider when engaging with social development issues in Greenland and the Arctic. With the discursive analytical review, we are implicitly interested in the way the social sciences as a scientific community have facilitated the production of a selected range of truths through this literature (Foucault 1976).

Our next analytical interest is understanding the effect of this “Arctic social sustainability discourse” vis-à-vis other competing development discourses in Greenlandic fishery policy-making. The subsequent study of how social sustainability knowledge interacted with the ITQ reform design is based on participant observation of the policy-making process as well as direct and self-reflexive participation *in* the policy-making practice.

Participant observation was practiced as a part of field research on decision-making in Greenlandic fisheries governance (Jacobsen 2014) where author one observed and participated in the every-day work of the Ministry of Fishing, Hunting and Agriculture on average 3 days a week over a four month period. She engaged in conversations with staff and management on a daily basis, observed six of seven meetings of the working group formulating the regulation introducing the ITQ reform and collected oral and written summaries of past discussions. Furthermore, through her on-going residence in the community, she had opportunities to discuss the development of the regulation after the initial fieldwork period ended.

During this period, the research team proposed the idea of conducting a preliminary SIA of the planned ITQ reform to the working group. The proposition was welcomed and Upernavik was recommended by the working group due to its representativeness as a community with many small, outer settlements with limited income opportunities outside of fishing and hunting. In July and August of 2011 author two conducted fieldwork in Upernavik, Tasiusaq, Innaarsuit, and Aappilattoq in the Upernavik district together with a student helper/interpreter from Upernavik. They conducted both formal and informal interviews with ten fishers and hunters, five members of the local community, including town hall staff, and the director of the local fish buying/fish processing company. Additionally, a literature review of social sustainability themes in the Arctic was included in the SIA to discuss potential impacts. The preliminary SIA (Delaney et al. 2012) was delivered to the ministerial working group, a wide group of relevant stakeholders, as well as the media (Hendriksen et al. 2011). The research team subsequently stayed in contact with the ministerial working group and studied the draft regulations to see if/how perspectives from the social sustainability discourse were included. The research team's participatory participation *in* policy-making is self-reflexively analysed by the authors as we approach our own practice and the final SIA product as a reproduction of the discursive reality offered by the social sustainability studies in Arctic and Greenland. This self-reflexive approach thus allows us to analyse our own practice as a case of introducing the “Arctic social sustainability discourse” into policy-making.

The article is structured so that it opens with a review of the dominant themes of social sustainability starting from the universal level to the regional Arctic level and down to the national Greenlandic level. Based on this review, a conclusion on the

typical type of truths facilitated by the “Arctic social sustainability discourse” is presented. Next follows an analysis of the conclusions presented in the SIA in order to compare it to the “Arctic social sustainability discourse”. Based on participant observation of the decision-making process we then conclude what actual effect this “Arctic social sustainability discourse” in the shape of the SIA eventually had on the decision-making process leading to the ITQ reform and discuss possible explanations for this.

## **2. Identifying an arctic discourse of social sustainability**

Up through the 2000s, thorough reviews of different definitions and ways of measuring social sustainability have emerged (e.g., Pepperdine and Ewing 2001; McKenzie 2004; Koning 2002). The history of the concept links to that of the sustainability concept in general, which came out of the 1960s in response to concerns about environmental degradation. The Bundtland report (WCED 1987) introduced the theme of “rural community sustainability” that encompassed social, environmental/ecological and economic sustainability. An early way of approaching the social dimension was through the development and monitoring of the Gross National Product (GNP) while later discussions put focus on measurements that made more sense locally (Pepperdine and Ewing 2001). While social sustainability was the least explored of the three sustainability dimensions to start with, it has been argued from a social sciences perspective that it is also a topic that is social at its core addressing for example “*how societies can shape their modes of change*” where social sustainability is defined as “*the viability of socially shaped relationships between society and nature over longer periods of time*” (Koning 2002:66–67 referring to Becker, Jahn and Stiess 1999:4). With reference to Philip Sutton, McKenzie emphasises that “*sustainability is always about maintaining something. To understand the concept...you need first identify the focus of...concern*” (McKenzie 2004:5–6). Within its relatively short life-span, the concept of social sustainability has been re-modelled to accommodate many different foci of concerns and today, the concept not just gains its relevance from former end-of-the-world scenarios and concern for the carrying-capacity of the world that inspired the definition of the Bundtland Commission. It also speaks to greater social transformations related to for example globalisation, urbanisation, risk, inequality, quality of life and governability (Koning 2002).

In the Arctic, and in Greenland, social science researchers have engaged in discussions of social sustainability and affiliated concepts that are adapted to the characteristics of the region’s development. At the level of conceptual developments, one of the most encompassing endeavors has probably been the pan-arctic Arctic Human Development Report (AHDR) of 2004 and the subsequent development of Arctic Social Indicators (ASI) in 2010. The mission of the AHDR was to explore livelihood and welfare in the Arctic and identify issues relevant to the Arctic next to those identified by the Human Development Index of the United Nations. The method was a literature review of existing social scientific discourse about the Arctic communities and as such, the results can also be said to reflect the prevalent research foci of the social scientific community. The report provides a synthesis of existing knowledge to assess the current state within a wide range of spheres including demography, culture, economy, political systems, legal systems, resource governance, community viability, human health and

well-being, education, gender issues and circumpolar international relations and geopolitics. A range of Arctic issues was identified and these evolved around control of destiny, cultural continuity and a close relationship to nature and land. As a follow-up to the AHDR, the Arctic Social Indicators project (2010) discussed a range of arctic social indicators and their potential for measuring Arctic well-being over time for policy purposes.

Another encompassing conceptual project concerned with livelihood and well-being was the *"Survey of Living Conditions in the Arctic (SLICA): Inuit, Saami and the Indigenous Peoples of Chukotka"*. This project set out to develop a new research design to measure living conditions and individual well-being relevant to Inuit, Saami and other indigenous peoples. The initiative came from Statistics Greenland under Greenland Selfrule, deeming that new measurements of living conditions designed specifically to the Arctic region was needed. A 1997 survey of living conditions based on the Scandinavian model had presented dilemmas that were difficult to explain in conventional well-being terms: Why do many people choose to remain in their communities despite poor housing conditions and low material standard of living? Conventional economic indices provided insufficient explanation. Based on consultation with indigenous groups and researchers from various disciplines, alternative indicators were developed around the role of household production, mixed cash-local harvest economy, family relationships, spirituality, social adjustment and support and ethnic identity. The survey concluded that production activities, the presence of production opportunities (i.e. fish and game, jobs) and a sense of local control were all associated with satisfaction with life as a whole (Poppel et al. 2007). Whereas SLICA does not operate directly with the concept of social sustainability, the concepts it developed dovetails with other discussions of social sustainability in the Arctic under the aforementioned Arctic Council program on the social aspects of sustainable developments – such as the importance of faith control, production opportunities and connection to land.

The continuation of local livelihoods itself has received further attention in discussions of social sustainability in the Arctic and in Greenland in particular. As such, Arctic community studies express concerns similar to fishing community research that discusses social policy impacts in terms of impacts on fishery dependent communities (e.g. Symes 2000; Jacob et al. 2005). Nutall has, for example, been concerned with the continuation of local livelihoods and cultures claiming that the viability of arctic coastal communities depends on the long-term sustainability of local livelihoods and economies based on the resources of the sea. Threats to the continuation of these livelihoods and economies are identified as the restructuring of fisheries including a shift from local to international enterprises and the redistribution of wealth from traditional actors to more powerful global players; overfishing and national subsidies to the fishing industry; international restrictions on market sale of sea mammals; changing community dynamics resulting from a transition from hunting to fishing where fishery to a lesser extent than hunting depends upon and reproduces relations based on kinship; concentration of power and wealth, enclosure of commons and exclusion of women resulting from ITQ regimes; negative climate change effect on fish stocks and persistent organic pollutants in the Arctic sea (Nutall 2002).

Rasmussen identifies issues of Greenlandic social sustainability in the context of five conflicts in Greenlandic planning: Centralization versus decentralization (identified as

the most prominent conflict); small versus large scale production; whether to look towards renewable or non-renewable resources for development; monopoly versus market economy and self-reliance versus dependency. Rasmussen argues that defining the concept of social sustainability is a continuous process and the key is to develop ways of measuring it. In Greenland, he adds, there is no need to start from scratch as there is a development process to build on: *“there is an income structure and therefore also a formal economy which is very dependent either on transfers or single sources which makes it vulnerable. But there is also a strong informal sector which is stabilizing the development process i.e. reducing vulnerability and there is a strong subsistence sector which reduces vulnerability further”* (Rasmussen 1999: 227). Thus, Rasmussen is particularly concerned with how to enhance stability. As positive factors he identifies the subsistence economy, a robust settlement structure and a continuation of local communities. As threats he identifies campaigns against traditional survival methods of sealing and whale hunting together with dependency on transfers. In relation Greenlandic marine resource management, Sejersen (2003) has linked social sustainability to the inclusion of local perspectives and local knowledge and to fairness in distribution of access rights.

Based on this review, we observe that social sustainability as a concept may have come to a place in its history where, first emerging from a reaction to the negative consequences of western civilization, it has since been shaped to match a range of different concerns. In the Arctic context discussions of social sustainability and/or social and human development have been quite encompassing and effort has been put into developing definitions and indicators that reflect prevalent concerns in the Arctic. These are generally broad, and yet there is a special emphasis on issues of self-control, production opportunities, connection to land and continuation of local livelihood and culture. It can hardly be denied that these issues stand in relation to the region's recent history of external impacts and policy responses: centralization of settlements, shifts in dominant modes of production, and loss of local control. They are indeed foci of “concerns”.

The point made that social sustainability is about sustaining something therefore seems as relevant as ever in the Arctic and Greenlandic case. Local livelihoods have received particular attention in this regard. In a general fisheries management context, it has been argued (Johnsons 2006) that small-scale fisheries tend to be attributed characteristics necessary for social sustainability where they have come to represent counter-narratives to the three dominant narratives informing social and economic development: modernization, state socialism and globalism. But, Johnsons adds, the categorization is problematic and the target should be to pursue the values that the category is said to represent rather than the category in itself. In the Arctic discussions on social sustainability there appears to be a shared recognition of the significance of local livelihoods and the smaller-scale modes of production that are often connected with them – particularly the hunting and subsistence activities. To conclude that they represent counter-narratives to modernization, state socialism and globalism will, however, be imprecise: authoritative works in the Arctic have explicitly argued that these local ways of lives have incorporated modernity and that they are interacting with the capitalistic system of the formal economy (Dahl 2000; AHDR 2004). Nevertheless, the local communities still stand out as something not entirely mainstream after this



incorporation and it cannot be denied either, as shown in the literature review above, that a certain unease prevails that local livelihoods can only take so much (AHDR 2004:211–212).

As a discourse, the Arctic excursions into issues of social sustainability are particularly attuned to producing truths about issues of livelihood, social participation, justice and equity. Arctic discussions reflect these discussions in their regional focus, where they are specifically attuned to producing truths about the positive significance and importance of local livelihoods, local resource usage and local inclusion into decision-making processes in the Arctic. Greenlandic discussions are further attuned to producing truths within the context of some very fundamental conflicts in Greenlandic development and they tend to point to the significance of a robust subsistence economy, a robust settlement structure and a continuation of local communities as a stabilizer of a vulnerable formal economy. They are, for related reasons, also particularly attuned to producing truths about the significance of local inclusion and distributional justice in natural resource governance and as such, they are eventually highly suitable for producing truths from local perspectives' that are thought and meant to be very relevant to the governance of Greenland's fisheries.

### **3. Introducing arctic social sustainability discourse into policy-making: a case-study**

#### **The fishery and the ITQ reform**

In 2011 the Greenlandic Ministry of Fishing, Hunting and Agriculture formulated a new regulation (Greenland 2011) that introduced an ITQ system into the coastal Greenland halibut fishery that has hitherto been regulated on an Olympic basis (free fishing by all until the shared quota was exhausted). Over a thousand licenses were at the time been granted to "small entities" such as dog sledges, dinghies, snow mobiles together with boats of cutter size, thus reflecting a fishery with a large number of participants and interests. The stated goals of the new regulation was to secure biological sustainability and increase the profitability of the fishing fleet by reducing the number of participants (Greenland 2011). The means was 1) an ITQ system whereby entities over 6 meter were granted ITQs and 2) a closure of new access to the fishery conducted by entities under 6 meter. The common total allowable catch quota (TAC) was to be divided between these two segments through a fixed allocation key.

As social scientists we first observed this work from the sidelines in order to understand the rationalities at play (see also Jacobsen 2013). At the same time we were, due to previous research experiences and studies, aware of other cases around the world where ITQs had been introduced and the dilemmas that ITQ may present (Bromley 2008; Pauly 2008; Macinko and Bromley 2004; Pålsson and Helgason 2000). We were particularly alert to possible impacts on communities resulting from such a structural change. The communities in Northern Greenland that engage in the fishery have few alternatives for monetary income and furthermore, recent prominent social science studies (as reflected in the work on social sustainability in the Arctic above) have documented the importance of the mixed cash/hunting economy and the cultural meaning of fishing and harvesting activities. We therefore, as presented in the introduction, asked the working group if it was interested in our research team conducting a preliminary SIA of the new regulation and the offer was accepted. At the time, the working group was aware of the possibility that the new regulation could have impacts other than the positive one they expected.

### The SIA

The SIA report produced a special type of account of Upernavik community and the likely impacts of the new regulation. The SIA study concluded that *“with a a separate quota for larger and smaller boats, some small-scale fishers will have their quota protected”*. Meanwhile, the SIA noted: *“some small-scale fishers will lose a supplementary, yet vital, source of cash income needed for their mixed economy. Such cash is needed, for example, for hunting (e.g., purchase of bullets, gasoline for transport, etc.) and pay for housing. This income otherwise enables fishers to pay the municipality back for their social transfer payments. Those who have fished under a shared license will not be able to fish from 2012. The lack of area restrictions, (potentially) places Upernavik dinghy fishers at a disadvantage; southern fishers may come north in the summer and help deplete Upernavik’s quota, and then continue to fish in the south where they will have more quota remaining. This can be seen with dinghy fishers and not only the larger boats. The closure of the fishery for new entrants will mean younger men coming in to the fishery will have to wait to be able to fish independently, or not fish at all, with no foreseeable means of employment. The plan potentially sets up inequity between the two groups: the government states explicitly in their management proposal that large boats will be “guaranteed a minimum quota and do not risk that the quota will be fished by other fishers in case of illness, technical problems or the like. Small-scale fishers are not given the same guarantees, of course”* (Delaney et al. 2012; 32).

The study also concluded that the new regulation may also have *“far-reaching impacts at the community level. Upernavik is a northern district with a limited amount of alternative livelihood opportunities. The common suggestion proposed by decision-makers in this regard is the possibility of working in the new industries such as mines, but these options are neither available now, nor are they necessarily desired or healthy. They also do not fit with local culture, as the experiences of Nalunaaq have shown. Nalunaaq is the site of a small gold mine in south Greenland. The mine has been in operation for at least ten years, but it has not succeeded in filling more than half of the 100 jobs with Greenlandic workers. Some of the reasons for the difficulty in keeping Greenlandic workers are cultural; most people do not wish to live long-term in barracks with only short visits home with their families; they also refuse to accept the working conditions found in the mine. If the Nalunaaq mine has failed to attract and keep Greenlandic workers, the question of what success future mines will have should be asked. Still, if the young people or men do decide to leave the settlements for work, the next question is where will they live? Waiting lists for public housing are very long and public housing is also very expensive. In Upernavik, one informant spoke of her mother waiting a very long time for a house from the public housing list, and once one (in very poor condition) was available, the rent was (an expense) well beyond her means”* (Delaney et al. 2012;31–32).

Furthermore, the SIA concludes that *“communities will also be impacted through a further reduction in the traditional practice of sharing meat and food among community members. This practice of meat gift-giving is still important in the North, especially in the settlements. The supplementary income earned through fishing income helps hunters meet these social obligations and customs of generalized reciprocity. The rise of anomie from lack of opportunities combined with stress from changing social conditions such as through not being able to meet obligations of reciprocity, or being forced to migrate for employment should not be underestimated. Anomie is “defined as a state or*



*condition of individuals or society characterised by a breakdown of social priorities and values" (Waldman 2010:1). Migration and movement, combined with "poor social ties and large, unpredictable events" can evoke anomie (Kelly 2003: 468). As Kelly describes (Kelly 2003), Durkheim used the term in his work to "describe a state in which norms are confused, unclear or absent, and where there are large-scale social changes that the individual cannot understand, let alone control" (Kelly 2003: 468). Though Kelly is writing about mental illness and Durkheim spoke of suicides, the concept is an important one for resource-dependent communities, especially in this era of globalisation. In a world in which the life of the individual is shaped by global events which seem to lie beyond the individual's control, feelings of anomie increase (Kelly 2003). Symptoms of anomie can be seen socially through rising crime rates and increased substance (alcohol and drug) abuse. This has been documented in declining resource dependent communities such as in fisheries, forestry, and mining (Wilson et al. 1998). Thus, it would appear Upernavik residents could be faced with feelings of anomie in the future, just as Greenlandic society could probably be said to have faced it in the past with its history of colonization and forced migration (From et. al. 1975)". (Delaney et al. 2012; 33).*

*The SIA also noted that "the issue of social grants should also be considered. In Upernavik there is a tradition whereby when a fisher receives a social grant from the municipality, Upernavik Seafood helps ensure this money is paid back in installments each time the fisher sells fish. This means that social grants are used as a sort "thrift institution". As a result of this system, Upernavik appears to have one the lowest social grants per capita in all Greenland. Yet if the hunters and fishers lose their opportunity to sell fish, the social grant averages in the district will increase to at least the national levels, straining municipal resources. Also, the value of the subsistence economy should not be underestimated. A number of vital goods and foods are obtained through hunting and bartering in their informal economy which wages can not make up for. Finally, the vulnerability seen in the form of climate change cannot be overlooked. Often, it is the cumulative impacts which thrust communities over the edge from healthy to struggling communities (Delaney 2007). For example, when fisheries management introduced the cod recovery plan for North Sea cod, it was not only the new regulations which impacted fishers, but the measures on top of other management plans (e.g. plaice and sole long term management plan) and increasing fuel costs. Often one challenge can be met, but cumulative impacts may prove too much. In Upernavik, and indeed all of Greenland, climate change is a serious issue. Changes in wildlife migratory patterns and sea ice coverage, for example, should also be considered when investigating livelihoods and community sustainability" (Delaney et al. 2012;34).*

In conclusion, the SIA thus produced a range of discursive truths echoing the Arctic social sustainability discourse. First of all, it was *at all* concerned with the sustenance of a local community. It articulated the cultural, social and economic importance of the local use of living marine resources to this community and it elaborated on the importance of small-scale fishing activities in upholding not only the mixed economy, but also the national economy. It also articulated issues of equity in access-right regimes, self-determination and community members' ability to influence their own lives. In congruence with the social sustainability discourse on communities facing change, it also approached the Upernavik community as a community facing multiple changes and argued that the impacts of the ITQ reform were likely to be of an accumulative sort.

### The role of the SIA in the policy-making process

The SIA report was handed over to the ministerial working group in February 2012 and distributed to the interest organizations representing the Greenlandic fishers and hunters (the Association of Greenlandic Fishers and Hunters, KNAPK), the fishing companies (Employers' Association of Greenland, GA), the fishing and processing industry (Polar Seafood, Royal Greenland Ltd.), the Committee of Fishing and Hunting within the Greenland Self-rule Parliament and the Municipality of Qaasuitsup hosting the Upernavik community. On October 5th 2011 the research team published a public letter in the Greenlandic newspaper *Sermitsiaq* – a popular medium for politicians and others for presenting opinions - wherein we pointed to the difficult political dilemmas of distribution of rights and wealth entailed by the new regulation and the risk that the expected increase in profits in the formal economy of a few boats may be compromised by the general deterioration of the mixed economy in the hunting and fishing districts if access rights to the fishery is to decrease dramatically (Hendriksen et al. 2011).

The fishery committee in Qaasuitsup expressed an interest in the public letter and suggested to publish it in the local newspaper in Ilulissat as well. The report also led to new dialogue with new members of the working group and with the secretary of the Self-rule committee. But it did not impact the formulation or implementation of the final policy. At one stage a paragraph was included in the working document of the new regulation which stated that it was important to follow up on the impacts of the new regulation (personal observation, R.B. Jacobsen). But this paragraph was omitted in the final regulation (Greenland 2011). We therefore conclude that the SIA here represents *a case of the social sustainability discourse not having an impact on policy-making* in the shape of an ITQ reform of one of Greenland's most important coastal fisheries.

There may be various plausible reasons why the SIA report failed to influence policy. Hansen's recent study of decision-making within Greenland Self-rule (Hansen 2010) holds some interesting perspectives for a discussion as to why the SIA did not have much of effect. Hansen posed a question similar to ours, asking about the inclusion of "environmental knowledge" in the form a strategic environmental impact assessment (SEA) in Greenlandic Self-rule deciding on the best location to build the Alcoa aluminium smelter. Hansen (2010) point to situations in the planning process where the SEA was influential and she identified explanations for this. For one, the assessment process was coordinated so there was interdependence between the time schedules of the two processes. But at the same time, Hansen argued that actors were continuously changing the formal structures for communication and decision-making and thus, one cannot rely exclusively on formal structures to influence on the final decision: Sometimes the formal opportunity given simply comes too late. Hansen's analysis implies a need for a certain flair for when to communicate with other working groups and to keep an up-to-date knowledge about the development of the process.

In contrast to the official coordination in the case of the SEA, "our" SIA, though welcomed by the committee, was inserted into a planning process that was already long underway. Also in regard to the new regulation of the Greenland halibut fishery, it appears that though the official decision was not made, the final solution was already decided upon: ITQs were to be introduced and the number small-scale fishers were to be reduced as a means to promote biological and economic sustainability (Jacobsen 2013). So in this instance, an apparent case of non-influence may simply be indicative

of the difficulty of affecting a decision already made. Nevertheless, Jacobsen and Raakjær (2012, 2014) shows that it is not uncommon for fishery policies to make an about-face in Greenland.

Meanwhile, Hansen identifies a last, but in our view very interesting, factor for inclusion of environmental knowledge: The final importance of the willingness of other actors to embrace and forward the environmental knowledge produced by the SEA onto the very final steps of the decision-making process: *“Looking at the full decision-making process, it shows that the formal structures did not secure influence for the SEA working group (...) Rather it was due to other actors’ interest in promoting the environmental arguments, which were in support of the site recommended. If the environmental knowledge had been in opposition to the economic recommendations, then the actors representing the environmental considerations in the process would maybe not have had the access to influence the decision-making arenas they enjoyed in practice”* (Hansen 2010:80). Hansen therefore also questions whether the SEA would have been as effective had it been a “showstopper”, in effect, halting the final implementation of the project.

It may be relevant to pursue the “showstopper” explanation further here. What would the Arctic social sustainability discourse have been seen a “showstopper” to in this case? With the ITQ reform of the Greenland halibut fisheries, the Greenlandic government and administration decided to put its trust in ITQs as the best means to restructure the fishery in a way that would benefit society at large the most. In economic terms, it focused on the formal taxable economy as a goal and market mechanisms as the means. In biological sustainability terms it wanted to lower pressure on the TAC policy by reducing the number of participants (Jacobsen 2013). The context of the Greenlandic economy is important to understand this choice: Since 1979 Greenland has gradually been taking over the political decision-making and administration from Denmark. Greenland took over a state infrastructure that was far too costly for its home production relying on the use of its renewable marine resources (Dahl 1986). The running of its modern welfare state has up until today had Greenland depend on transfers from the Danish state. Since the establishment of Home-rule (1979) up to the Self-rule (2009) of today, Greenland has been and is still struggling not only to pay the expenses of a modern welfare state but also to gain economic independence from Denmark. So while fisheries management regimes across the world may have a tendency to aim for general national growth, the incentives for doing so by Greenlandic politicians and public administrators appear to be particularly strong. This observation is not new: Greenlandic nation-building and the development rationalities of an anonymous category of “politicians” and “administrators” have before been identified as one of the main reasons for the deterioration of local livelihoods in Greenland (e.g., Nutall 1992). As Rasmussen (1999) also observed, centralization and decentralization is probably the most prevalent conflict in Greenlandic planning. The Arctic social sustainability discourse could thus have seen as a “showstopper” for further national growth by means of further centralization.

On the other hand, the Arctic social sustainability discourse can also be analysed as already being part of the “show”. For not all aspects of contemporary Greenlandic fishery policy have had a centralizing aim. At the beginning of Home-rule in 1979, the government’s strategy was a dual one of centralised planning and de-centralised investments (Rasmussen 1998; Dahl 1986). This policy resulted from the reforms of the 1960s

and 1970s that brought industrialization and centralization to the country, but which also prompted an elitist political movement towards self-government as a reaction to village closures and the dire social consequences that followed (Dahl 1986). According to Rasmussen (1998) the development policies of the 1980's were characterised by a dual strategy of de-centralised investments as well as the building of an avant-garde off-shore shrimp industry. The small settlements and the smaller-scale fisheries were considered important to Greenlandic development and at the same time, there was a confidence about the availability of local resources. Processing activities were therefore maintained in the larger fisheries dependent settlements. The commercial coastal fishery for Greenland halibut in the Upernavik districts is in fact a result of a investments by Greenland Home-rule in the 1980s to create income opportunities and development in this district. Thus, the recent ITQ reform and the Greenland halibut coastal fishery appears as a confrontation with *what was left* of this sort of "de-centralisation" perspective in Greenlandic fishery policy. With the ITQ reform, considerations of local economies, employment and the sustenance of small, outer settlements moved to the background as concerns for increased fishing entity profitability and efficiency moved to the foreground.

Recent studies of Greenlandic fishery governance show that the period of 2009 to 2012 was characterised by a "new paradigm" in Greenlandic fishery governance (Jacobsen and Raakjær 2012). In this period a discourse of "grand reform" set the agenda for reforming the coastal fisheries towards greater economic profitability (Jacobsen and Raakjær 2014). The main problems identified by this grand reform was the fact that current policies wanted the fishery to sustain employment in coastal communities and these obligations – manifested in obligations to land catch and TAC shares reserved for coastal fishers – forced the fisheries to work on an unprofitable basis sustained by publicly subsidies. The actors promoting the grand reform, however, were not to be found among the coastal fishers nor the fish factory workers nor the local communities in the areas depending on the fishery. They were to be found in the large-scale sea-going industry, the ministry of Finance, auditing companies and the banks operating in Greenland (Jacobsen and Raakjær 2014). The ITQ reform presented in this article is aligned with the rationalities of the "grand reform discourse" and was indeed promoted by both the "new paradigm" in the 2009–2013 Self-rule government and the "grand reform" network of actors.

In Greenland at the time of the ITQ reform (2012) it was thus possible to observe the on-going conflict between the continuation and interest of the dispersed coastal settlements and small-scale fishers on the one hand and the interest of national financial administration and the larger scale fishing industries on the other. In a political environment such as the Greenlandic one, social sustainability thereby appear not only to speak to one of the most stubborn dilemmas in Greenlandic planning and politics. It also speaks to one of the most politicized and antagonistic ones as well. We therefore suggest that the non-inclusion of the Arctic social sustainability discourse must be understood within this politicized and antagonistic context through which perspectives shared by the Arctic social sustainability discourse have themselves become a contested political stance.

### Perspectives

In 2009 Symes and Phillipson wrote an article entitled "Whatever became of social objectives in fisheries policy?" in which they argued that social objectives had disappeared from view in the Western world. Instead, neo-liberal discourse emphasizing the expected

automatic trickle-down of national growth, had become dominant. Their article expressed a concern with the viability of coastal communities and argued that social issues ought to inform fisheries policies still and not least in third world countries (Symes and Phillipson 2009). We confirm that in the case of Greenlandic national development policy, social concerns have in fact played a key role in defining a locally fishery-based national development policy since the commencement of Home-rule in 1979. And many of these concerns have been shared by the social scientific discourse on Arctic social sustainability.

Even so, the social sustainability discourse has never been uncontested. From 2009 to 2012, when the ITQ reform was introduced, discourses of biological and economic sustainability were viewed as more relevant, out-competing the rival development discourses which represented concerns commonly associated with the social sustainability discourse. As such, some very different truths about the coastal fisheries and the coastal settlements than those produced from within the social sustainability discourse were eventually highlighted. We therefore propose that it is in fact most fruitful to approach the social sustainability discourse as Symes and Phillipson approached the social objectives in 2009, when they asked whatever *became* of something that was once there. Furthermore, we also support Davidson's finding (2009) that social sustainability holds a potential for politics. In a way, the Arctic social sustainability discourse was part of politics from the very beginning of the ITQ reform process: It was seen as a dominant political stance in Greenlandic fishery policy which the ITQ reform was meant to replace.

#### Abbreviations

SLICA: Survey of Living Conditions in the Arctic; UNESCO: United Nations Educational, Scientific and Cultural Organization; GNP: Gross National Product; MOST: Management Of Social Transformation; AHDR: Arctic Human Development Report; ASI: Arctic Social Indicators; ITQ: Individual Transferrable Quota; TAC: Total allowable catch; SIA: Social Impact Assessment; KNAPK: Association of Fishers and Hunters in Greenland; GA: Employers' Association of Greenland.

#### Competing interests

The authors declare that they have no competing interests.

#### Authors' contributions

ED and RBJ conceived of the problem for the article together. AD carried out the study for and drafted the social impact assessment of the Greenland halibut management plan referred to in the article. RBJ carried out the study of the Arctic social sustainability discourse and how the SIA interacted with the policy-making process. AD drafted the part of the manuscript relating to the SIA. RBJ drafted the parts of the manuscript relating to how the SIA interacted with the policy-making process. Both authors read, edited and approved the final manuscript.

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