



(En)Gendering Change in Small-Scale Fisheries and Fishing Communities in a Globalized World

Katia Frangoudes¹ · Siri Gerrard²

Received: 8 September 2018 / Accepted: 20 September 2018 / Published online: 28 September 2018
© The Author(s) 2018

Introduction

This thematic collection, entitled “(En)Gendering Change in Small-scale Fisheries and Fishing Communities in a Globalized World”, emerged many years ago and finally materialized, thanks to the support of the Cluster “Women & Gender in Fisheries” of Too Big To Ignore, and the Working Group “Gendered Seas” of Ocean Past Platform (OPP) a European Union COST Action. In order to fulfill the idea, researchers from various disciplines and practitioners from different continents, working on women and gender issues in fisheries and coastal communities, were brought together at several occasions to discuss issues pertaining to gender in fisheries. The outcome of the networks has culminated into a series of articles presented in this publication, with additional papers to be published in the second thematic collection of Maritime Studies (MAST) in 2019.

The two issues of this thematic collection of the Maritime Studies (MAST) journal manifest the results attained through different research programs, with discussions on various topics. The main objective of the thematic collection is to

bring together examples of feminist-based research and work highlighting a variety of theoretical and methodological approaches that examine the material, social, and cultural realities of women and men in fisheries. It also explores the underlying construction (and at times reconstruction) of gender as a social category in fishery contexts. In this publication, the reader will find ten articles from different parts of the world (Canada, Europe, Asia, and the Solomon Islands) and one review of the book by Margaret Willson on Seawomen in Iceland. Some of the articles focus particularly on women’s participation in different parts of the fishery chain, in decision-making and management of resources, and also on sea tenure and gender, working conditions in the processing industry, households’ strategies to secure livelihoods, and other themes that support the current movement promoting gender equality at all levels in various countries and regions. Different themes and concepts are deployed to analyze gender and women’s involvement in fisheries, such as intersectionality, livelihoods, empowerment and agency, fishery households’ strategies, resources management and governance, entrepreneurship as well as cultural capital. Given this thematic diversity, and the theoretical and conceptual depth of the articles, we have presented them through a case-study type, which manifests the complexity involved in “gender and women in fisheries” studies, and their interconnectedness with coastal communities. In different ways, the articles offer insights into knowledge gaps and ways to encourage greater inclusion of gender into fisheries research in general. The following sections touch on some of these issues and summarize key messages and lessons from the articles.

The special issue is part of the “Women and Gender in Fisheries” cluster of the Too Big To Ignore: Global Partnership for Small-Scale Fisheries Research, based at Memorial University, St. John’s, Canada. The partnership is funded by the Social Sciences and Humanities Research Council of Canada (grant number 895-2011-1011) and by the Working Group “Gendered Sea” of the Ocean Past Platform, COST Action-European Union.

✉ Katia Frangoudes
Katia.Frangoudes@univ-brest.fr

Siri Gerrard
siri.gerrard@uit.no

¹ Univ Brest, Ifremer, CNRS, UMR 6308, AMURE, IUEM, 29280 Plouzane, France

² Centre for Women and Gender Research, University of Tromsø, The Arctic University of Norway, Tromsø, Norway

Women in Small-Scale Fisheries, Fishery-Related Activities, and Fisheries Communities

Research on women and gender is not new in the study of fisheries. It has been around for at least four decades with the

first studies conducted on women (e.g., Gerrard 1975, 1983, 1986; Holtedahl 1986; Porter 1991) and later on gender. Over time, feminists and gender researchers, as well as researchers from other disciplines, became interested in the gender niche and have provided significant contributions to the studies in this area (e.g., Bennett 2005; Kleiber et al. 2014; Frangoudes and Keromnes 2008; Frangoudes 2013a; Yodanis 2000; Williams 2008). However, research on women and gender has not been equally visible across sub-disciplines. It is mostly within the social and culture sciences that researchers have brought important contributions by underlining the importance of gender and gender relations in order to better understand human interactions within fisheries and coastal communities. A gender lens has had great influence in agriculture and agricultural research compared to fisheries research where the development and acceptance of gender topics and perspectives have taken a long time to materialize.

Nowadays, gender research in fisheries and coastal communities covers themes like fisherwomen, women in fishing households and processing work, seaweed collectors, gatherers of other species like shellfish (e.g., Frangoudes et al. 2013b; Gopal et al. 2017), and gender relations. In spite of the significant participation of women in sea-related activities, researchers have not yet adequately reflected the interest and importance of this topic. Articles focusing on women and gender in fisheries had difficulties to be published in high impact fisheries journals. This situation is changing thanks to the fact that international conventions and agreements related to natural resources have now endorsed gender equality as one of their objectives (e.g., Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication 2015; UN 2018). Additionally, national and transnational research (e.g., EU Research Programmes) and development agencies (e.g., UN bodies) also request the inclusion of gender in research and development programs. This thematic collection owes much to this greater attention to gender equality in fisheries.

Thanks to the specific focus on women, as well as the interconnection between women, gender relations, work, and community, this thematic collection highlights geographic differences based on particular histories in various areas, diverse “materialities” (e.g., natural resources, technologies, material items like boats), different social and cultural conditions, and so on. Topics include intersecting issues such as labor and migration, changes in job opportunities (e.g., paid and unpaid contributions of women in fisheries and aquaculture), organizations including unions and participation in the public sphere, property rights in fisheries, resources management, and capacity building. Such a broad focus is needed to help us challenge, discuss, and further develop concepts and perspectives introduced and used by gender and feminist researchers. It is also necessary to capture the geographic

diversity of women’s and men’s experiences in fisheries and coastal communities. Gender research has drawn on multiple disciplines, and this MAST thematic collection on gender, fisheries, and coastal communities offers a perfect opportunity to collate, confront, and reconcile these very different perspectives.

Unfortunately, research on gender/women in fishery and aquaculture contexts is often hampered by limited data (e.g., Harper et al. 2017; Kleiber et al. 2014; Frangoudes 2011), predominantly because fisheries research has been slower than others to recognize the importance of gender within their purview. Few cultural and social researchers (for example, ethnologists, anthropologists, and sociologists) were studying sexual or gender division of labor within fisheries, even though research on households and communities highlighted women’s presence in fisheries, as important workers for the fishing boat, in processing plants and the household (e.g., Gerrard 1975, 1986; Porter 1991). Natural sciences have always been the main domain that drove fisheries research, making stock assessment and fisheries resource management the core issues examined for many years. This is the reason why decision-makers were more prone to design policies that spoke of resource management rather than in terms of culture and social aspects. These key factors still lag behind in policy-making, as resources and management mainly focused on what happens at sea, which seems to have spread the idea that fisheries are exclusively a male domain.

This may explain the lack of sex-disaggregated fisheries data in many countries. Women’s work in fisheries, aquaculture, and shellfish harvesting is rarely found in statistics (e.g., Frangoudes 2013a; Kleiber et al. 2014, 2017; Santos 2015). Women’s contribution to the economy of the fishing households or enterprises is even less documented (e.g., Frangoudes and Keromnes 2008; Frangoudes 2011; Zhao et al. 2013).

For example, according to the latest State of World Fisheries and Aquaculture Report (SOFIA 2018) published by FAO, 59.6 million people were engaged in the primary sector of capture fisheries and aquaculture in 2016. Out of this, 19.3 million were in aquaculture and 40.3 million in fisheries. The FAO estimates that women represent nearly 14% of all people directly engaged in the fisheries and aquaculture primary sector. The same report tells us that the low percentage of women can be explained by variations in the reporting of sex-disaggregated data in many countries and regions. Some of the countries reported men only or did not specify women or gender at all. Therefore, it is difficult to know exactly how many women are involved in fisheries and aquaculture. In Asia for example, women represent 15% of the total employment in capture fisheries while men represent 78% (SOFIA 2018). It means that 7% of the fishery-related people are unspecified. With its 15%, Asia is the area reporting the highest employment of women in fisheries and aquaculture at the global level.

The lack of attention to women may be related to the poor recognition of the importance of small-scale fisheries, an area where women's contribution is vital, much more than in ownership of large-scale vessels and aquaculture units. Yet, the lack of attention to small-scale fisheries has inevitably led to women's marginalization and invisibility. Some best practices can be learnt from Japan, a country that has been providing the FAO with sex-disaggregated statistics since 1970 (SOFIA 2018). Some positive prospects look welcoming, with the international endorsement of the FAO SSF Guidelines, among women and gender researchers, as well as environmental and non-governmental organizations' activists. In the best-case scenario, the SSF guidelines will contribute to and inform about the improvement of gender and women's equality and equity, and the general situation of women in fisheries. By including this principle, the SSF Guidelines recognize women's participation all along the value chain, as well as the centrality of gender in other intersecting issues, for example, human rights, wellbeing, food security, and climate change (e.g., Kleiber et al. 2017; Badjeck et al. 2010). The fear is that such guidelines "will be forgotten" after a period of time, like many other equality efforts in other areas (Aasen 2006). We hope that this thematic collection will inspire projects financially supported directly by the FAO or other international donors in order to promote gender equality and equity within the small-scale fisheries and related activities, including post-harvest, such as processing, value-adding, and marketing, where women play significant roles.

Intersectionality and Fisheries

Intersectionality highlights the interplay between gender, class, age, race, ethnicity, nationality, educational level, and the social categories in various areas and places (e.g., Shields 2008). This concept or perspective is used by some of the authors as a theoretical framework and applied in analyzing the role of women in the fish processing industry in Iceland (Yingst and Skaptadottir 2018) and in small-scale fisheries in Kerala, India (Hapke and Ayyankerill 2018). It also serves to improve understanding about environmental changes and adaptation strategies in an ecologically and economically vulnerable lagoon, i.e., Chilika in India, and to understand women's and men's roles in resource management (Khan et al. 2018). The papers show for example how women and men working in the same industrial plants can have different practices and perceptions because of cultural barriers that restrict women, or because of their different education level, class, or ethnic affiliations.

Yingst and Skaptadottir (2018) examine similarities and differences concerning work, the division of labor and various aspects of job satisfaction of Icelandic, Filipino, and Polish women employed in fish processing plants in the Westfjord area of Iceland. Applying an intersectional perspective, the

authors emphasize how gender, nationality, and level of education interplay, and demonstrate how the recruitment of labor in the highly gendered processing plants has moved from relying on local women to hiring mainly female workers from other countries. Differences in nationalities have an impact on women's views concerning the long-existing gender division of work. Women from the Philippines consider men's work as heavier and agree to the gender division of labor, unlike Icelandic and Polish women who question why women are excluded from men's jobs with higher wages and higher prestige. The article also notes that nationality, level of education, and language skills combined have a significant influence on the degree of job satisfaction. All women, irrespective of nationality and education, stress the importance of having good wages. The paper emphasizes the importance of properly qualifying and defining the concept of women in the industrialized Icelandic processing industry and how the conditions prevailing in the countries of origin clearly shape their opinion about their present work. Elaborating on their conclusions, the authors say that further studies are needed about the division of work, job satisfaction, and quality of life among women with different nationalities and educational backgrounds.

Hapke and Ayyankerill (2018) focus on how the global fish-food economy is dominated by technological changes and innovations and by increased global demand for seafood. In Kerala, India, these changes have an impact on fishing, on men's and women's work, and on the collective life of three communities practicing different religions. The paper shows how gender and religion lead to different coping strategies related to economic changes in the various households, and how these coping strategies are shaped by the intersections of local gender norms, different ideologies due to different religions, and processes of globalization in the entire fishing sector. Both external and internal conditions contribute to create different strategies for men and women as a result of varied configurations of gender, work, culture, identity, and economic processes.

Khan et al. (2018) use the intersectional perspective to investigate some gendered implications of environmental and industrial (aquaculture) changes in the small-scale fisheries system of the Chilika lagoon in India. The authors discuss how women from two different communities belonging to two different castes have different perceptions about the key drivers of change in the lagoon. They also focus on how environmental changes impact household livelihoods as well as men's and women's coping strategies. The article brings out different ways of coping with environmental changes and illustrates that the low caste women had a higher rate of employment and were migrant laborers. Out-migration is a new phenomenon, especially for women according to the authors. The paper relates social and economic changes to environmental changes while at the same time discussing the deep

consequences of change for fishers' caste-based culture, gender roles, and division of labor.

Women's Empowerment, Fisheries Governance, and Management

The second group of papers deals with fisheries governance and resources management (Rohe et al. 2018, Gallardo and Sauders 2018, Harper et al. 2018), including Marine Protected Areas (MPAs) (Kleiber et al. 2018). From these articles, particularly those on MPAs, it appears that women tend to use certain marine spaces differently from men, as they mainly engage in shellfish gathering or fish harvesting on foot near the shore, without using boats, and as a result, they have been affected by legislative contexts that did not recognize these distinct marine spaces. The cases of the Solomon Islands (Rohe et al. 2018) and Philippines (Kleiber et al. 2018) show that regulations and rules of resource management often overlook women's work and needs because their activity is perceived as less valuable compared to men's fishing operations. The articles also show that the women's participation in decision-making bodies related to resources is limited, as fisheries is considered as the men's domain, and therefore discussions and decisions about sea-related resources are left to men. Women complain that the process of MPAs designation does not take into account their concerns. Gallardo and Sauders (2018) using a case study of Chilean seaweed gatherers demonstrate that women can obtain the same visibility as men when fisheries law includes gender equality and allows women to manage resources. Similarly, Harper et al. (2018) speak about resource management and the role of Canadian Heiltsuk women during a conflict in the herring spawn fishery between Canadian authorities and the indigenous community.

In their study of the Roviata lagoon in the Solomon Islands, Rohe et al. (2018) show how women and men play different roles in resource management and governance. The authors describe gender relations in fisheries following the closure of an important fishing area in the late 1990s. By describing the distinctive marine spaces occupied by men and women in the Roviata lagoon, the authors explain that the women have been the most affected segment by the closure, even though their catches are important for both family subsistence, and to supply the demand for seafood that has sharply increased in the recent years. Since the traditional patriarchal setup of decision-making bodies within the fisheries institutions is dominated by their male counterparts, women have limited access to express their concerns about the closure. In this regard, women's ideas and decisions are seldom taken into consideration by the men who participate in the management bodies. The authors stress that both women and men should be included in resource management if sustainable development is really aspired for. Alas, the managers advocate a view on gender and

equality that reinforces the local customary system based on patriarchal rules.

Kleiber et al. (2018) discuss gender in relation to MPAs and Community Based Marines Resources Management within local fisheries communities of Central Philippines. They identify the impact of MPAs on the fishing activities of women and men, assess the level of satisfaction with regard to MPAs as a conservation tool, and examine the extent of male and female participation in MPA management. The authors note that the way MPAs are designed and managed only takes into consideration men's needs. This is due to social and cultural norms that make women's activities less valuable and visible because they mainly cater to family sustenance. The boundaries of the MPAs were modified in two of the 12 communities to facilitate women's activities. In all the cases, both women and men indicated that they were satisfied with the MPAs, probably because these conservation tools impact positively households' livelihoods.

Gallardo and Sauders (2018) focus on the experience of women in Coliumo, Southern Chile, who organized themselves and were granted exclusive user rights on maritime areas near the shore under the Territorial Use Rights for Fishing (TURFs) system established in this country. Women mostly organized themselves, through agency and capacity building during conflicts related to the allocation of TURFs, as a response to the marginalizing decisions that were being implemented. In this phase, women became good negotiators, professional gatherers of seaweed, and effective managers of their area and its resources. According to the different interviews conducted in the region, women appear to be better managers of TURFs than men, who give more attention to fishing operations at sea. Thanks to their ability to manage TURFs and TURF resources, women seaweed gatherers were able to increase their income. The case of the women gatherers of Coliumo demonstrates that, when laws and policies give more attention to women and gender equality, it is easier for women to be empowered, not only as fishers and workers but also as resource managers.

The paper by Harper et al. (2018) focuses on indigenous Heiltsuk women in British Columbia, Canada, and their capacity to organize and stage a protest against the Canadian authorities' decisions that modified the management of the herring spawn fishery. The authorities' decisions collided with the Heiltsuk people's traditional use of the resource and thus threatened their livelihoods. Struggling against the decisions, the women organized themselves and took the lead, by going even further than men in the negotiation process with the authorities. They succeeded by using their traditional caring roles, notably by transmitting their culture in the public space.

In this way, they unified the community and claimed their rights. Through their action and agency, Heiltsuk women were able to transform the governance of the social ecological system of herring. This article demonstrates that empowerment

and agency of women are an important response mechanism to community problems in situations where men are not able to unify and solve the problems.

These four examples from different countries and continents show that women in specific situations use their knowledge acquired through their traditional and new practices and succeed through negotiations as managers of the TURFs system and as professionals. They also show that in places where policies factor in women's involvement in fish harvesting, women show high capacity to manage the resources and to formulate rules (Frangoudes et al. 2013b).

Collaborative livelihood practices and household pluriactivity in small-scale fisheries

Some articles of this thematic collection deal with the livelihood perspective and gender. In fisheries communities facing resources fluctuation or depletion, households must develop different strategies to secure livelihoods. The use of the livelihood approach seeks to improve rural development policy because it tries to identify what the poor have instead of what they do not have, and also understand people's inventive solutions adopted to secure livelihoods (Allison and Ellis 2001). Two papers in this thematic collection (Barclay et al. 2018; Salmi and Sonck-Rautio 2018) show that livelihoods are diverse and are made up of multiple activities with the aim of achieving the desired outcome. It also highlights that livelihood opportunities for women are different from those of men (Johnson 2013; Barclay et al. 2018; Salmi and Sonck-Rautio 2018). Adaptive strategies taken by fishing households to secure livelihoods is a feature found in the global North and South. In Northern countries, alternative livelihoods are often found in the search for a salary-based job for the woman, so that the man may continue fishing (Salmi and Sonck-Rautio 2018). In Southern countries, households' livelihoods may derive from a wider range of opportunities including fish harvesting, migrant labor undertaken by members of the household, petty trade, farming, and other activities (Barclay et al. 2018; Hapke and Ayyankerill 2018; Khan et al. 2018).

Barclay et al. (2018) in their paper examine gender and shell money and jewelry in Langalanga, Solomon Islands traditional division of labor women were expected to work within the household, occupied with tasks related to the family and the manufacturing of shell money. Men, on their side, harvested fish and dived to gather shells at sea. This traditional division of labor changed due to external factors and resources depletion in particular. In this changing situation, men let women dive, trade shell money, and manage the family earnings. Women let men engage in the manufacture of shell money since the shell business brought a better income to the household compared to men's traditional fisheries activities. However, the development of women's new skills challenged the local culture. The paper dealing with five households also

looks at multiple aspects on how gender, place, civil status, and class lead to different adaptations for the village people.

Salmi and Sonck-Rautio (2018) focus on the division of labor and women's and men's strategies in the small-scale fisheries of Finland, Europe. In this kind of fisheries, the household is a central and significant work unit for livelihoods in general. The study is an example of how women's and men's roles have changed over the years. In the past, collaboration in fisheries was prevalent within the communities, and women contributed more directly to fishing activities. Later, women, including fisher's wives, were employed in industrial fish plants. Sometimes women were directly involved in the processing and marketing of household fishery products. Even though wives are visible at the local level, they remain invisible in official statistics since the tasks mentioned are not registered. In addition, small-scale fisheries are in decline, and therefore, it is difficult to sustain livelihoods. Some of the household's members opt for other livelihood strategies, for example becoming employees in public or private companies. Women's regular salaries often sustain the household's livelihood and thus enable men to continue to fish.

Gender Identities and Seawomen

Small-scale fisheries are highly diverse. Culture and values underpinning men and women identities frame this diversity as much as material conditions, resources or livelihoods, do. And beyond women in fisheries, there is a case to be made about all women who go to sea.

Gustavsson and Riley (2018) focus on "culture, values and meaning underpinning gender identities" in small-scale fisheries in the Llyn Peninsula, Wales, UK. By gendering the everyday life in fisheries, families, and communities, the authors show how culture and values shape women's and men's positions. By applying Bourdieu's (1986) theory about capitals as a theoretical concept, the authors show that these perspectives can be useful for understanding livelihood strategies. The examples given are about how men are connected to fishing practices and fishing spaces, mainly at sea, in other words to cultural capital, male capital, and fishing capital. Women are connected to land-based activities, also related to emotional capital in the form of caring, homemaking activities, including undergoing loss of leisure and holidays to facilitate men's fishing. In this way, women indirectly play an important part in generating the household's economic capital. Based on such analysis, the authors argue for a deeper and more detailed observation and discussion of all spaces associated with fishing, boats, homes, and other aspects, to fully understand the complexity of small-scale fishing.

Gerrard (2018) presents the book *Seawomen of Iceland*, written by the American anthropologist Willson (2016). It narrates how Icelandic women have been involved in fisheries and other sea-related work, and brings forward examples of

women's sea-related activities hundred years back. Women have been fishers and skippers, which contradicts the common perception that fishing is men's work. Modernization and technological intensification of fisheries forced women to quit the industry, but they came back after the Second World War. Now they perform other jobs on board fishing and commercial vessels. The essay also points to the fact that there are few books, reports, and articles, about what Willson calls seawomen, who are mainly women fishers and sailors, at least in the Nordic countries. These books are often written in the native languages and thus have restricted distribution outside the national borders. The essay also tells us that a women oriented lens, not restricted to fishing and fisheries, widens the scope of maritime studies.

Reflections on How Research on Fishery and Coastal Communities in a Globalized Context Has Enriched Gender Studies

The studies in this MAST thematic collection offers a wide coverage of women engaged in many forms of fisheries and shell and seaweed gathering activities from across the world including Canada, Chile, Finland, Iceland, India, Wales, the Philippines, and the Solomon Islands. The articles discuss several themes concerning women and men in coastal and ocean spaces, e.g., public planning and projects (like MPAs), Territorial Use Rights in Fisheries (TURFs), women's organizations, and women's work in fishing and fishery households. They bring in interesting empirical evidence about the involvement of women in small-scale fisheries and also women's contribution in industrial processing plants, their agency and capacity in decision-making as well as their multiple roles in fishing households.

The articles apply theories and concepts developed or used within the feminist social science disciplines, like gender roles and identities, how women's situations are changing, gender, gender relations and power relations in households, communities, and specific institutions. To different degrees, the authors highlight a strict gender regime and a high degree of gendered work, with women's work being mostly on or close to land and men's work at sea, often far out. There are also examples of women's successful participation in management (MPAs and TURFs) and in certain conflicts (between the Canadian authorities and the Heiltsuk community). The Heiltsuk case shows how women use their gendered, local knowledge like caring and apply it in the negotiations with the official authorities. Such examples where women used their specific gender experience and managed to bring new arguments into fishery political discussions are known in other countries too, for example, Norway (Gerrard 1995; Frangoudes et al. 2014; Kleiber et al. 2017).

Many of the findings in these and other articles show how a distinct gender pattern tends to evolve depending on the circumstances of particular fishing communities. Yet, it is not clear whether such changes last over a period of time or whether they are related to specific short-lived events. What is obvious is that women act in new situations because of new restrictions, often making inroads into their lives via changed policies emanating from new local, national, or globalized structures. These studies bring descriptions and analysis of new situations and areas into the field of research on women, gender relations, and differences in women's attitudes. For instance, the study from Iceland illustrates that women from different countries have different opinions about women's and men's work in the processing plants.

Many of the studies from small-scale fisheries confirm the existence of pluriactivity: in Finland by means of women's work in the private or public sector, in the Solomon Islands by means of shell-money. The articles also confirm increased mobility for job searching, and therefore multi-place connections within the fishing population. Such wide-ranging connections are particularly true in the Chilika case study described by Khan in response to the loss of fishing areas.

The thematic collections include studies on how women's actions contribute to changed power relations between women and men, as in the Heiltsuk communities in Canada, where women used their caring experience to trigger change in the fisheries decisions. Several of the articles bring in more knowledge about women's empowerment processes at household, community, and management levels. Other studies, for example, about mobility for job searching in the Roviata Lagoon, Solomon Islands or in Coliumo, Chile, show also a mismatch between women's work and women's influence in fishery institutions, well known in feminist fishery-related research from other parts of the world (e.g., Gerrard 1983; Munk-Madsen 1996; Power 2005). A definitive gap between research knowledge and follow-up via political and administrative action is a problem highlighted in most articles, especially since studies on women and their lack of influence carried out in one part of the world seem to have little relevance in other parts of the world.

Research on women in fisheries is contextual and has to be carried out at specific places, with probably a follow-up to reach other influential actors politically and administratively, on a long-term basis and not through one-time attempts.

Some of the articles can also be analyzed within the framework of political ecology, focusing on women and gender relations, and thus enriching also the feminist literature. The article from Chile, guided by a feminist political ecology approach, examines women as actors, gender relations, and power structures in the context of small-scale fisheries. It also shows how ecological conditions can change through policy interventions and market linkages. It illustrates how a women's organization can lead to more sustainable fishing

in the area. Focusing on women, gender relations, and women's organization in small-scale fishery settings would give us more insight into some of the challenges that hamper progress towards achieving this goal (Frangoudes et al. 2014). In addition, these studies weave threads between sites and scales to produce a more nuanced understanding of the socio-ecological dimensions of political economic processes (Sundberg 2015).

Other strengths of gender-focused research include the ability to demonstrate how social identities and symbols and values are constituted through relations with nature and everyday material practices. The article from Walsh fisheries provides an example of such relations. Perspectives dealing with livelihoods, capital, intersectionality and power are further developed in many of these articles. Most of them use materialities as a variable, important for women's and men's practices. The relation between gender, social structure, and materiality can be a topic that offers great potential for further studies.

Some topics relevant to gender are obviously missing from this thematic collection: women's organizations acting for women's rights, defense of fishing communities and fisheries, ownership of fishing rights, to name a few. Fish trade, food security, climate changes, and disasters are other gendered research topics, which are not discussed here. But the second thematic collection on gender, scheduled for 2019, will cover some of these.

Acknowledgments We thank all anonymous reviewers as this series would not have been possible without their dedication and professionalism. We also thank Derek Johnson and Remy Källér for the support given to us during the long process and the editorial board of MAST. A big thank to Ratana Chuenpagdee, the leader of TBTI, for supporting this publication and Alicia Said for the English editing.

Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

References

- Aasen, Berit. 2006. Lessons from evaluations of women and gender equality in development cooperation. *Report*. Oslo: Norwegian Agency for Development Cooperation [Norad], 2006 Dec. 19 p. (Synthesis report 2006/1).
- Allison, Edward H., and Frank Ellis. 2001. The livelihoods approach and management of small scale fisheries. *Mar Policy* Elsevier 25: 377–388.
- Badjeck, Marie-Caroline, Edward H. Allison, Ashley S. Halls, and Nicholas K. Dulvy. 2010. Impacts of climate variability and change on fishery-based livelihoods. *Mar Policy* Elsevier 34: 375–383.

- Barclay, Kate, Nicholas McClean, Simon Foale, Reuben Sulu, and Sarah Lawless. 2018. Lagoon livelihoods: gender and shell money in Langalanga, Solomon Islands. *MAST Thematic Collection (En)gendering change in small-scale fisheries and fishing communities in a globalized world*.
- Bennett, Elizabeth. 2005. Gender, fisheries and development. *Mar Policy* Elsevier 29 (5): 451–459.
- Bourdieu, Pierre. 1986. The forms of capital. In *Handbook of theory and research for sociology of education*, ed. J. Richardson, 241–258. New York: Greenwood press.
- FAO. 2015. *Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication*. Rome: Food and Agriculture Organization of the United Nations.
- FAO. 2018. *The state of world fisheries and aquaculture 2018 - meeting the sustainable development goals*. Rome: Licence: CC BY-NC-SA 3.0 IGO.
- Frangoudes, Katia. 2011. Women's contribution in small scale fisheries in the European Union. In ed. Chuenpagdee Ratana. World Eburon: Small-Scale Fisheries Contemporary Visions.
- Frangoudes, Katia. 2013a. *Women in fisheries: a European perspective*. Brussels: European Parliament: BA-01-13-425-EN-C.
- Frangoudes, Katia, and Enora Keromnes. 2008. Women in artisanal fisheries in Brittany, France. *Development* 51: 265–270.
- Frangoudes, Katia, José Pascual-Fernandez, and Begona Marugan-Pintos. 2013b. Gender in Galician shell-fisheries: transforming for governability. In *Governability of fisheries and aquaculture: theory and applications*, eds. Bavinck Maarten, Chuenpagdee Ratana et al., MARE Publication Series 7. Springer.
- Frangoudes, Katia, José Pascual-Fernandez, and Begona Marugan-Pintos. 2014. Women's organisations in fisheries and aquaculture in Europe: history and future perspectives. In *Social issues in sustainable fisheries management*, eds. Julie Urquhart, Tim Acott, et al., MARE Publication Series 9, Springer.
- Gallardo, Gloria Luisa, and Fred Sauders. 2018. 'Before we ask for permission now we give only notice': women's entrance into artisanal fisheries in Chile. *MAST Thematic Collection (En)Gendering change in Small-Scale Fisheries and fishing communities in a Globalized World*.
- Gerrard, Siri. 1975. Arbeidsliv og Lokalsamfunn: Samarbeid Og Skille Mellom Yrkesgrupper i et nord-norsk Ffskevær (Working life and local community - collaboration and divisions among workers in a North-Norwegian fishing village). Magistergrad thesis. Tromsø: Institutt for Samfunnsvitenskap, Universitetet i Tromsø. 290 pp.
- Gerrard, Siri. 1983. "Kvinner i fiskeridistrikter" fiskerinæringas "bakkemannskap?" (women in fishery districts – the fishing industries ground crew). In *Kan fiskerinæringa styres?* ed. B. Hersoug, 217–241. Oslo: NOVUS Forlag.
- Gerrard, Siri. 1986. "Kvinnerns makt og avmakt - et kjønnsrolleperspektiv på forvaltning av faglige interesser" (Women's power and powerlessness - a gender perspective on managing work interests). FDH-Report, (6): 1–197. Alta: Finnmark University College.
- Gerrard, Siri. 1995. When women take the lead: changing conditions for women's activities, roles and knowledge in north Norwegian fishing communities. *Social Science Information* 34 (4): 593–631. <https://doi.org/10.1177/053901895034004004> (downloaded august 27th 2018).
- Gerrard, Siri. 2018. A book-essay on Margaret Willson's book: seawomen of Iceland: survival on the edge. *MAST Thematic Collection (En)Gendering change in Small-Scale Fisheries and fishing communities in a Globalized World*.
- Gopal, Nikita, Meryl J Williams, Siri Gerrard, Susana Siar, Kyoko Kusakabe, Louis Lebel, Holly Hapke, Marilyn Porter, Anne Coles, Natasha Stacey, and Ram Bhujel. 2017. Women in aquaculture and fisheries: engendering security in aquaculture and fisheries. *Papers from the 6th Global Symposium in Gender in Aquaculture and*

- Fisheries, 3–7 August 2016*, 11th Asian Fisheries and Aquaculture Forum. Bangkok, Thailand. Special Issue Publication 30S (2017). *Asian Fisheries Science*. https://www.researchgate.net/profile/Meryl_Williams/publication/322243832_Gender_in_Fisheries_and_Aquaculture_Engendering_Security_in_Fisheries_and_Aquaculture/links/5a4da23faca2729b7c8b4759/Gender-in-Fisheries-and-Aquaculture-Engendering-Security-in-Fisheries-and-Aquaculture.pdf (downloaded August 24, 2018).
- Gustavsson, Madeleine, and Mark Riley. 2018. Women, capitals and fishing lives: exploring gendered dynamics in the Llyn peninsula small-scale fishery (Wales, UK). *MAST Thematic Collection* (En)Gendering change in Small-Scale Fisheries and fishing communities in a Globalized World.
- Hapke, M. Holly, and Devan Ayyankerill. 2018. Gender livelihoods in the global fish-food economy: a comparative study of Three Fisherfolk communities in Kerala, India. *MAST Thematic Collection* (En)Gendering change in Small-Scale Fisheries and fishing communities in a Globalized World.
- Harper, Sarah, Charlotte Grubb, Margot Stiles, and U. Rashid Sumaila. 2017. Contributions by women to fisheries economics: insights from five maritime countries. *Coast Manag* 45 (2): 91–106.
- Harper, Sarah, Anne K. Salomon, Dianne Newell, Pauline Hilistis Waterfall, Kelly Brown, Leila Harris, and U. Rashid Sumaila. 2018. Indigenous women respond to fisheries conflict and catalyze change in fisheries governance on Canada's Pacific coast. *MAST Thematic Collection* (En)Gendering change in Small-Scale Fisheries and fishing communities in a Globalized World.
- Holtedahl, Lisbet. 1986. *Hva mutter gjør er alltid viktig. Om å være kvinne og mann i en nordnorsk bygd i 1970-årene (what mother does is always right – to be a woman and man in a North Norwegian communities in the 1970)*. Oslo: Universitetsforlaget 224 pp.
- Johnson, Derek. 2013. Livelihoods in the context of fisheries- a governability challenges. In *Governability of fisheries and aquaculture: theory and applications*, eds. Bavinck Maarten, Chuenpagdee Ratana et al., MARE Publication Series 7. Springer.
- Khan, Noor Fatima, Andrea M. Collins, Prateep Nayak, and Derek Armitage. 2018. Women's perspectives of small-scale fisheries and environmental changes in Chilika Lagoon. *MAST Thematic Collection* (En)Gendering change in Small-Scale Fisheries and fishing communities in a Globalized World.
- Kleiber, Danika., Katia Frangoudes, Hynter Snyder et al. 2017. Promoting gender equity and equality through the small-scale guidelines: experiences from multiple case studies. In *The small-scale fisheries guidelines: global implementation*, eds. Jentoft Svein, Ratana Chuenpagdee, Maria José Barragan Pladines, Nicole Franz. Mare Publication Series 14, Springer.
- Kleiber, Danika., Leila Harris, and Amanda CJ Vincent. 2018. Gender and marine protected areas: a case study of Danajon Bank, Philippines. *MAST Thematic Collection* (En)Gendering change in Small-Scale Fisheries and fishing communities in a Globalized World.
- Kleiber, Danika, M.L. Leila M Harris, and A.C.J. Vincent. 2014. Gender and small-scale fisheries: a case for counting women and beyond. *Fish Fish* 16: 547–562.
- Munk-Madsen, Eva. 1996. From Common Property to all-male property. In *Proceedings of the Workshop Social Implications of Quota Systems*. Vestman Island, Iceland, May 1996. Copenhagen: Nordic Council of Ministers.
- Porter, Marilyn. 1991. Time, the life courses and work in women's lives: reflections from Newfoundland. *Women's Studies International Forum* 14 (1): 1–13.
- Power, Nicole G. 2005. *What do they call a fisherman? Men, gender and restructuring in the Newfoundland Fishery*. Saint John: Institute of Social and Economic Research, Memorial University.
- Rohe, Janne, Achim Schlüter, and Sebastian C.A. Ferse. 2018. A gender lens on women's harvesting activities and interactions with local marine governance in a South Pacific fishing community. *MAST Thematic Collection* (En)Gendering change in Small-Scale Fisheries and fishing communities in a Globalized World.
- Salmi, Pekka, and Kirsi Sonck-Rautio. 2018. Invisible work, ignored knowledge? Changing gender roles, division of labour and household strategies in Finnish small-scale fisheries. *MAST Thematic Collection* (En)Gendering change in Small-Scale Fisheries and fishing communities in a Globalized World.
- Santos, Ana. 2015. Fisheries as a way of life: gendered livelihoods, identities and perspectives of artisanal fisheries in eastern Brazil. *Mar Policy* 62: 279–288.
- Shields, Stephanie A. 2008. Gender: an intersectionality perspective. *Sex Roles* 59: 301–311. <https://doi.org/10.1007/s11199-008-9501-8> <https://link.springer.com/content/pdf/10.1007%2Fs11199-008-9501-8.pdf> (downloaded August 24, 2018).
- Sundberg, Juanita. 2015. The international encyclopedia of geography. https://www.researchgate.net/publication/280741205_Feminist_Political_Ecology, read 15.8.2018.
- UN. 2018. The Sustainable development Goals: Report. UN, New York. www.un.org/publications.
- Williams, Meryl. 2008. Why look at fisheries through a gender lens. *Development* 51: 180–185. <https://doi.org/10.1057/dev.2008.2> <https://link.springer.com/content/pdf/10.1057/dev.2008.2.pdf> (downloaded august 24th, 2018).
- Willson, Margaret. 2016. *Seawomen of Iceland. Survival on the Edge*. Copenhagen: Museum Tusulanum Press, 274 pp/Seattle: University of Washington Press, 312 pp.
- Yingst, Alexandra, and Unnur Dis Skaptadottir. 2018. Gender labour in the Icelandic fish processing industry. *MAST Thematic Collection* (En)Gendering change in small-scale fisheries and fishing communities in a globalized world.
- Yodanis, Carrie L. 2000. Constructing gender and occupational segregation: a study of women and work in fishing communities. *Qual Sociol* 23: 267–290.
- Zhao, Mingua, Marilyn Tyzack, Rodney Anderson, and Estera Onoakpovike. 2013. Women as visible and invisible workers in fisheries: a case study of northern England. *Marine Policy* Elsevier 37: 69–76.