

## Into the (Gendered) Blue: New Perspectives on Gender Equality and Participation in Blue Growth

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### Abstract

In the context of the global adoption of the blue economy agenda, new challenges and opportunities emerge for gender mainstreaming in traditional male-dominated maritime industries. This thematic issue mobilizes knowledge on barriers and structural hindrances faced by women in the blue economy, from exclusionary workplace norms and hierarchies to inadequate support for work–life balance. These hindrances discourage women’s entry and retention in industries like fisheries, aquaculture, maritime transportation, and marine research. Lessons from the Nordic countries, which have significantly advanced gender equality and adopted numerous policies to enhance gender inclusivity, show that in the absence of effective implementation and evaluation of policy impacts, policies alone are not effective. Using gender as an analytical perspective reveals the importance of language and discourses in advancing gender inclusion, highlights issues of intersectionality across national borders, and exposes the need for blue justice alongside blue economy agendas. The collection of articles underscores the need for both systemic change and localized, tailored interventions. The methodological contribution exemplifies how discourse analysis unpacks societal norms, while ethnography reveals on-the-ground experiences of exclusion and resistance. Furthermore, tracking career trajectories provides data-driven insights into workforce retention, while interviews analyze the nuanced motivations and challenges women face. It is concluded that the agendas of the blue economy and gender equality could be indeed compatible, however, it must be acknowledged that the way these two can be simultaneously pursued remains a challenge that needs action.

### Keywords

aquaculture; blue economy; blue growth; blue justice; fisheries; gender; marine research; maritime transportation; seafarer; sustainability

## 1. Introduction

At the onset of the 21st century, the world's oceans are once again in the spotlight, as nations strive to pursue continued economic growth while respecting the natural boundaries of the planet. The vision of a vibrant and prosperous ocean space, teeming with cutting-edge and highly profitable industries that offer local employment opportunities and are boosted by research and technological innovation, was termed the “blue economy”, a term that is often used interchangeably with “blue growth” (Martínez-Vázquez et al., 2021). Blue economy is defined by the World Bank (2021, p. 8) as “the sustainable use of ocean resources for economic growth, improved livelihoods, and job creation while preserving the health of ocean ecosystems.” Over the last decade, the use of the concept has grown exponentially, and today blue economy plays a central role in policies and negotiations over the use of the oceans at national and international levels (Voyer et al., 2018). In the context of the EU, the blue economy agenda is also predicated on the promotion of economic growth and the improvement of life and social inclusion. This is done without compromising the environmental sustainability of the oceans and their natural resources, which are dwindling due to human activity (European Commission, 2020). Encompassing the improvement of life and promoting social inclusion, the blue economy is in line with the EU Gender Equality Strategy 2020–2025 and its objectives of closing gender gaps in the labor market, achieving equal participation across different economic sectors, and advancing gender balance in decision-making and in politics. Regarding social inclusion, the blue economy is also enshrined in the EU's Cohesion Policy, launched in 2000 (EU Council, 2000), which aims to support the social inclusion of marginalized people, including women in the labor market.

According to the latest *EU Blue Economy* report (European Commission, 2024), seven maritime sectors of the blue economy in 2021 directly employed close to 3.6 million people and generated around €623.6 billion in turnover and €171.1 billion in added gross value (European Commission, 2024). These seven sectors are: marine living resources (fisheries); marine non-living resources (oil, gas, and minerals); marine renewable energy; port activities; shipbuilding and repair; maritime transport; and coastal tourism. Despite the important economic output, the contribution to employment in maritime sectors has decreased from 2.3% in 2009 to 1.8% in 2021. However, blue economy statistics on employment broken down by gender are not publicly available and are unlikely to be collected for all seven maritime sectors. The words “women” or “gender” are absent in the 48-page report. Furthermore, the database of the EU Blue Economy Observatory, established to monitor and analyze the economic indicators of the seven principal maritime sectors in the region, presents statistics of employment without gender disaggregation. These examples illustrate that the EU follows a human-rights approach for which gender equality is a subsection of social policy and excluded from economic issues (Crowley & Sansonetti, 2019), and while mainstreaming gender in the EU blue economy agenda remains a slow ongoing process, research and knowledge on the economic benefits of gender equality and guidelines on how to achieve it are crucial for strengthening policymakers' engagement.

The underpinning role of women in the economic landscape has been subject to extensive inquiry by sociological and gender research. This research spans from national and sectoral, all the way down to household economies, and has been ongoing for many years. The hidden contribution of women to the national economies through their unpaid household work is a well-known concern. In maritime spaces, the lack of acknowledgment of women's work in the fisheries sector has been extensively documented. However, as Harper et al. (2017, p. 91) report, despite a broad literature focusing on the crucial role of

women in this sector dating some decades ago, “the contribution by women to fisheries economies globally continues to be overlooked.” In consequence of the advent of the blue economy, and its pledge to regard the oceans as the new frontier for economic growth, new challenges have arisen for women and gender equality in the maritime sector. Among key questions that have emerged are how the blue economy will advance gender participation in the maritime workforce, whether a real potential for new employment opportunities for women exists, what factors hinder or advance these opportunities, and how women in real life experience the impacts of the new agenda for the oceans. The thematic issue, *Into the (Gendered) Blue: New Perspectives on Gender Equality and Participation in Blue Growth* aims to address these issues and contribute to the mainstreaming of gender equality in a global society struggling for a just transformation to unfold over the next decades. By highlighting and examining case studies for which gender is used as an analytical category, the thematic issue mobilizes knowledge and opens a discussion that is crucial for guiding this transformation toward gender-inclusive maritime sectors.

## 2. Gender Equality in the Blue Economy: Shared Struggles and Solutions

The articles in this issue collectively highlight shared challenges in achieving gender equality in the blue economy, emphasizing systemic barriers, the need for inclusive policies and practices, and the critical link between social sustainability and workforce retention. Women face structural hindrances, from exclusionary workplace norms and hierarchies to inadequate support for work–life balance, which discourage entry and retention in male-dominated industries like fisheries, aquaculture, maritime transportation, and marine research. Although many regions, especially the Nordics, have adopted policies aimed at improving gender inclusivity, we argue that policies alone are insufficient without effective implementation and evaluation. Ensuring that gender-sensitive policies are operationalized is essential for creating equitable conditions. Moreover, regular assessment of policy impacts is critical to ensure that intended outcomes are achieved, ultimately leading to a more innovative, resilient, and sustainable blue economy. Without these steps, the promise of gender-inclusive strategies will remain unfulfilled, leaving industries unable to address labor shortages or achieve long-term social sustainability.

While the articles share many similarities, other differences provide complementary perspectives on the lack of women in the blue economy, enriching our understanding of this multifaceted issue. For example, studies analyzing media discourse and identity formation illuminate how language and representation shape societal perceptions, while research on intersectionality delves into how overlapping identities exacerbate exclusion. Policy-oriented studies highlight structural barriers, such as inequitable quota systems or gender-blind economic policies, whereas ethnographic and life-history approaches provide deeply personal insights into the lived experiences of women in the maritime sector. Together, these angles capture both the macro-level systemic challenges and the micro-level individual realities, creating a holistic picture of gender inequality in the blue economy.

The varying methodologies further emphasize how different lenses can illuminate distinct yet interconnected aspects of the issue. Discourse analysis unpacks how societal norms are constructed through language, while ethnography reveals on-the-ground experiences of exclusion and resistance. Quantitative approaches, such as tracking career trajectories, provide data-driven insights into workforce retention, while qualitative interviews uncover the nuanced motivations and challenges women face. These diverse methods act as complementary tools, each contributing a piece to the broader puzzle of understanding and

addressing the underrepresentation of women in the blue economy. Together, they underscore the need for both systemic change and localized, tailored interventions.

### 3. New Blue Perspectives

In the first article in this thematic issue, Ekstedt et al. (2025) examine gender disparities in the Nordic blue economy. Despite Nordic countries' reputation for gender equality, women in the blue economy, encompassing fisheries, aquaculture, and maritime transport, face systemic barriers to participation. The authors highlight how women's contributions are often *hindered* by structural barriers, *overlooked* in terms of their potential and contributions, and *undervalued* in their roles and labor. Furthermore, Ekstedt et al. (2025) identify gaps in policy and management systems as barriers to women's contributions, particularly in fisheries and aquaculture. While inclusive policies are important for equal participation, the authors also emphasize the need to transition from policy rhetoric to practical implementation through workplace adjustments, gender-inclusive strategies, and a cultural shift toward recognizing and valuing women's contributions. The authors advance discussions on gender equality in the blue economy by proposing a conceptual framework—hindered, overlooked, and undervalued—to analyze gendered barriers. Such a framework should be of value for many researchers, regardless of geographical context, as a tool to categorize and compare constraints, as well as describe ways to advance equality measures. By calling for practical policy implementations, inclusive measures, and sustained monitoring, the article enriches feminist discourse on economic inclusion and promotes actionable insights to close gender gaps in traditionally male-dominated fields.

In the second article, we shift focus from a Nordic setting to transnational intersectionality. Here, Hägele and Hornidge (2025) examine the pervasive nature of intersectional discrimination in marine science and maritime transportation, emphasizing how inequalities based on gender, age, ethnicity, and social class are amplified in the confined, hierarchical environments of ships and research institutions. They show how these dynamics influence marine knowledge production, often resulting in harassment, leading to either withdrawal or resistance among victims. The authors argue for a shift toward more inclusive, intersectionally aware practices in marine science and shipping, to improve collaboration, knowledge sharing, and retention of diverse talents in these fields. Furthermore, the article expands the understanding of intersectionality in the blue economy by providing detailed empirical insights into how multiple identity markers (for example gender, ethnicity, and age) intersect to shape individuals' experiences of discrimination and harassment. Hägele and Hornidge (2025) introduce the concept of “transnational intersectionality” to account for the global, cross-cultural, and hierarchical contexts of marine science. The findings challenge existing norms and propose actionable steps to create more equitable and inclusive workplaces at sea and in marine research, where both expert scientific knowledge and non-scientific knowledge are highly valued to ensure the progress of marine scientific work.

We then turn our attention to South America and Peru, where Doolittle Llanos et al. (2025) examine the participation of women in Peru's blue economy, focusing on their roles in small-scale fisheries and scallop aquaculture. They highlight the systemic constraints, such as gendered division of labor, male dominance, and precarious working conditions, that shape women's experiences and limit their opportunities for empowerment. The authors argue that simply rebranding economic activities under blue growth is insufficient; instead, achieving blue justice requires addressing structural inequalities and providing equitable

opportunities for all genders. Doolittle Llanos et al. (2025) contribute to ongoing discussions on gender and sustainability in the blue economy by showcasing the lived experiences of women within a specific national context, as well as integrating the concept of blue justice, emphasizing recognition, fair participation, and the redistribution of opportunities. By combining individual life stories with broader socio-political and economic analyses, the researchers challenge the male-dominated narrative and offer a gender-sensitive framework for policy and practice in the blue economy.

The final two articles, while presenting research from a Swedish perspective, do provide food for thought for a larger readership. Based on a register-based follow-up study, a survey questionnaire, and interviews with current students at two maritime upper secondary schools in Sweden, Österman and Boström (2025) emphasize the importance of creating socially sustainable conditions in the maritime industry to address the shortage of skilled seafarers. A holistic approach is essential for attracting, recruiting, retaining, and developing maritime professionals. This approach must encompass individual motivations, organizational practices, and industry-wide initiatives to be effective. Factors such as good working conditions, gender equality, social cohesion, and opportunities for professional growth are identified as crucial for sustaining a skilled workforce. The study also underscores the need to modernize the industry's image to appeal to diverse groups, including women and underrepresented demographics. Their research contributes to maritime sociology and organizational studies by identifying the interplay between individual motivations and structural barriers in maintaining a sustainable maritime workforce. Also, by providing evidence-based recommendations tailored to different career stages of maritime professionals, Österman and Boström (2025) encourage managers and decision-makers to take a decisive step from merely focusing on policymaking, to operationalize policy into practice. Even though some of the recommendations are tailored for maritime transportation, most of them are likely to be of value for other male-dominated sectors both within and outside of the blue economy.

The final article conveys the complexity of professional identity formation within the male-dominated maritime industry. Through a discourse analysis of articles in Swedish maritime magazines, Boström (2025) explores how seafarers are depicted, and the way these roles are shaped through both social norms and individual agency. While traditional masculinity continues to play a significant role in how seafarers are depicted, the magazines also portray alternative subject positions, such as the flexible seafarer and the gender-equal seafarer, which allow individuals to break free from hegemonic masculinity. Still, Boström (2025) calls for more inclusive portrayals of seafarers, particularly in terms of gender-neutral language, to improve recruitment and retention in the maritime industry and address the workforce shortage. The article contributes to the field of gender studies and maritime sociology by analyzing how language and representation in media contribute to professional identity construction. The study's findings are relevant to understanding the intersection of gender, language, and identity in professional settings. Examining how any line of work is perceived externally offers valuable insights for any industry or company striving to attract a more diverse and gender-balanced workforce.

#### 4. Setting Sail Towards the Future

The world's oceans are at a crossroads. On one side of the breakwater, the blue economy is about turning the oceans into sites in which marine industries using highly advanced technologies can efficiently leverage the untapped economic potential of the marine environment and its resources. In this vision for the future, the

pursuit of economic growth is inextricably linked to the preservation of healthy oceans and fair use of marine natural resources. On the other side of the breakwater, gender equality scholars and advocates imagine an ocean where all genders are allowed to contribute equally to the ocean's economies, and all gender rights are recognized, making all contributions and voices valued and respected. In this vision, gender equality is not only a prerequisite for the efficient use of the oceans but a crucial turn to end the notion of marine industries being a male-dominated economic sector. However, these visions for the future of the oceans are not mutually exclusive. We suggest that the blue economy should be regarded as a unique window of opportunity for the achievement of gender equality in maritime economic, social, and environmental realms. To capitalize on this opportunity, it is essential to highlight the multiple ways in which women are hindered, overlooked, and undervalued in traditionally ocean-male-dominated fields and to advocate for the inclusion of all genders. Research must continue to contribute to this direction.

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### Conflict of Interests

The authors declare no conflict of interests.

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