

# **GAF Section** Newsletter

GENDER IN AQUACULTURE AND FISHERIES SECTION
OF THE ASIAN FISHERIES SOCIETY

2025 ISSUE 5

Stories from Major Events since our last edition GAFS Contributions to Global Consultations

New Projects, Reports and Research



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### Message from the GAFS Chair



Nikita Gopal
Section Chair
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Warm Greetings from the Gender in Aquaculture and Fisheries Section of the Asian Fisheries Society!

GAFS continue to provide a platform to share knowledge and advocate for greater gender equality and inclusion in fisheries and aquaculture and we stay committed to this long term goal.

Our Past-Chair, Dr. Meryl Williams received two prestigious awards, the Margarita Lizárraga Medal Award from the FAO, and the International Institute of Fisheries Economics & Trade 2024 Distinguished Service Award. Many Congratulations!! She continues to inspire, mentor, and guide us and is a true champion for ALL WOMEN in fisheries.

GAFS members have participated in 21st International Institute of Fisheries Economics & Trade (IIFET) Conference in July 2024 in Penang, Malaysia. GAFS also organized a one-day Pre-Conference Workshop during IIFET on "Integrating Gender into Fisheries and Aquaculture Economics and Trade Research" which was very well received by participants. GAFS is also currently undertaking a project "Making nature-based climate solutions (NbCS) in aquaculture in Southeast Asia monitoring more gender-responsive: What gets measured gets done", supported by IDRC, implemented by Asian Institute of Technology (AIT) in partnership with Cambodian Institute for Research and Rural Development (CIRD), and The University of the Philippines Visayas (UPV). It is also carrying out a consultancy on women in inland fisheries for a global

conservation organization. GAFS also made a submission to the FAO Consultation on the 10th Anniversary of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication.

This Newsletter carries all news related to GAFS contributions, stories from major events since our last edition, New GAFS Projects, Recognitions and celebrations and New Research and Projects.

### **Message from the Editor**



Madu Galappaththi
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GAFS Newsletter Editor

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Welcome to the Fifth Edition of our Newsletter! We bring you an exciting collection of new stories and updates showcasing the variety of GAF undertakings on various topics and around the globe.

A big thank you to all the contributors for your article submissions and GAFS Executive for all the support in putting the Newsletter together!

These are the highlights of this Edition. We've included several stories on GAFS contributions to global consultations and recent major events, highlighting how we continue to advocate for gender equality and create spaces to hear from fisherwomen first-hand about what they want.

Our feature article this time is about the GeNA project – Gender in NbCS Aquaculture, a new GAFS-led collaborative research project. The project aims to develop a reflexive and context-specific gender monitoring framework for nature-based climate solutions (NbCS) in aquaculture, simply because what gets measured gets done.

We also have several stories featuring novel and policy-relevant insights from new research focused on various topics and contexts, including about gender-based taboos and women's experiences in octopus fisheries, seaweed aquaculture and dried fish industry.

We are also thrilled to share more information about our flagship conference GAF9 2025 on the theme 'transforming aquaculture and fisheries for gender justice'. Please check out the announcement in the upcoming events section

and be sure to submit your proposals for special sessions, panels, and workshops by 31 March 2025.

Last but not least, we are delighted to report on our newly enhanced website: <u>Genderaquafish.org/</u> and we invite you to experience the seamless features that it provides.

As always, we look forward to hearing about the GAF undertakings that you participate in and contribute to. Please stay connected and let us know how you are continuing to advance gender equality in aquaculture and fisheries and beyond!

# GAFS contributions to global consultations

# GAFS' consolidated submission to the FAO Consultation on the 10th Anniversary of the SSF Guidelines

#### **By Kafayat Fakoya**

Gender in Aquaculture and Fisheries Section

In July 2024, GAFS submitted a consolidated contribution in response to the FAO consultation on the 10th anniversary of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). The Call for Submissions was open on the FAO Global Forum on Food Security and Nutrition platform from 19 October to 11 December, 2023. The Call was organized on the request of the FAO's Fisheries and Aquaculture Division and in the context of the stocktaking of the 10 years implementation of the SSF Guidelines. The consultation results were expected to inform the 36th session of the FAO Committee on Fisheries (COFI) and the 2024 SSF Summit on the 10th anniversary of the SSF Guidelines.

GAFS' submission highlighted the gaps, constraints and challenges encountered from a gender perspective and included a series of recommendations for improvements in implementing the SSF Guidelines. Please see pages 57-63 in the report found in this link for the complete submission: <a href="https://assets.fsnforum.fao.org/public/resources/2024-01/PROCEEDINGS EN Call%20for%20Submissions 10%20YEARS%20SSF%20GUIDELINES.pdf">https://assets.fsnforum.fao.org/public/resources/2024-01/PROCEEDINGS EN Call%20for%20Submissions 10%20YEARS%20SSF%20GUIDELINES.pdf</a>

GAFS would like to extend a special thank you to all those who contributed to this submission, including the case studies from India, Philippines, Indonesia, Nigeria and Thailand!

## Women-led shellfisheries are integral to mangrove conservation and SDG 13 on Climate Action

#### By Kafayat Fakoya

Gender in Aquaculture and Fisheries Section

The International Science Council (ISC) and the World Federation of Engineering Organizations (WFEO) are co-organizing partners of the Scientific and Technological Community Major Group at the United Nations. They aim to integrate science and technology in global policy processes, such as the implementation and monitoring of the 2030 Sustainable Agenda. During the High-Level Political Forums (HLPF), the Major Group of the S&T Community stressed that Member States are not leveraging the full potential of the scientific and engineering community to discover and implement workable ways to reach the Sustainable Development Goals (SDGs).

The SDGs are still off track, with the goals of ending extreme poverty, ensuring food security, and addressing climate change and biodiversity loss remaining significant challenges. Buoyed by the recent renewal of the UN Secretary General's

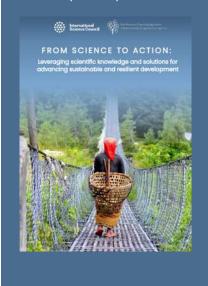
Science Advisory Board and the exciting prospects the Group of Friends on Science for Action will bring to the global policy process, the ISC & WFEO submitted a recent paper to the 2024 HLPF titled "From science to action: Leveraging scientific knowledge and solutions for advancing sustainable and resilient development". The paper reiterated the calls for policymakers and global leaders to take immediate action, leveraging and integrating scientific knowledge, and rethinking and reorienting technology and innovation to implement and achieve the 2030 Sustainable Agenda. This involves addressing cultural values and local needs, shifting the narrative from identifying problems to implementing action. They are mobilizing to identify solutions urgently, shifting the narrative from identifying problems to implementing action.

One of the key messages of the overall paper is that integrating insights from natural sciences,

social sciences, humanities, engineering, Indigenous, local, and practitioner knowledge is essential for addressing complex sustainability challenges. In addition, participatory and multistakeholder approaches are important to make sure that projects are in line with local needs and values. They also improve feasibility, fairness, and cultural acceptability, which has positive effects on many sectors and stakeholders.

Through case studies, the ISC highlights the acceleration of the SDGs. The case study "Low-hanging fruit: A women's knowledge-based approach to blue carbon restoration and conservation in West Africa" highlights the importance of interdisciplinary and transdisciplinary approaches in addressing global challenges like climate change, biodiversity loss, and socio-economic inequalities. It further highlights the role of women-led shellfisheries in driving blue carbon restoration and conservation in West Africa, which is crucial for achieving at least eight Sustainable Development Goals (SDGs). These include No Poverty, No Hunger, Clean Water and Sanitation, Decent Work and Employment, Climate Action, Life Below Water, and Life on Land. The case study underscores the need for inclusive and deliberative engagement between science, policy communities, and local communities to foster trust in scientific approaches.

Please see the full case study on page 10 of the report in this link : https://council.science/wpcontent/uploads/2024/07/HLPF-2024-compressed.pdf



# Stories from major events since our last edition

# IYAFA Regional Workshops in Asia, Africa, Europe, and Latin America and the Caribbean send strong messages on what women in fisheries want By Kyoko Kusakabe

#### Gender and Development Studies, Asian Institute of Technology, Thailand

The needs and expectations of women in fisheries as well as the new developments around their activities were brought into sharp focus in a series of regional workshops that took place from 2022 to 2023 in Asia, Africa, Europe, and Latin America and the Caribbean to mark the 2022 International Year of Artisanal Fisheries and Aquaculture (IYAFA). The workshops were organized by the International Collective in Support of Fishworkers (ICSF) and were attended by fishers, researchers, development professionals and other partners dedicated to improving the fisheries sector.

The women fishers spoke out during these workshops, shared their experiences, pointed out the issues they face and developed recommendations for gender equality. The discussions stressed that women are more organized and are the ones who push the fisheries organisations forward. Key learnings highlighted that women develop and use clean technologies

for fish processing, they increasingly use digital platforms for sales, and that their contributions in terms of income diversification help sustain fishing as an occupation. Another key learning was that women's organizations are moving beyond fishing issues to discuss gender-based violence, health, and human trafficking issues, a realization that creates a wider solidarity around the need for gender equality in fisheries and in society at large.

Another highlight of the workshops was the formulation of their own action plan for each of the four regions. These action plans helped the women fisher better articulate their concerns and discuss a path forward in achieving gender equality, inclusion and well-being for women in fisheries.

We invite you to follow this link to learn more about the regional action plans: <a href="https://icsf.net/yemaya/iyafa-asia-africa-europe-and-latin-america-and-the-caribbean-workshops-what-women-want/">https://icsf.net/yemaya/iyafa-asia-africa-europe-and-latin-america-and-the-caribbean-workshops-what-women-want/</a>



Group photo from Asia Workshop: IYAFA 2022-Celebrating Sustainable and Equitable Smallscale Fisheries, 5 to 8 May 2022, Bangkok, Thailand. Photo Credit: ICSF



Group photo from Latin America and the Caribbean Workshop: IYAFA 2022-Celebrating Sustainable and Equitable Smallscale Fisheries, Brazil, 2-5 November 2022. Photo Credit: ICSF



Group photo from Africa Workshop: IYAFA 2022-Celebrating Sustainable and Equitable Smallscale Fisheries, 15-18 February 2023. Photo Credit: ICSF



Group photo from IYAFA Regional workshop: Getting the story straight and envisioning a fair future for small-scale fisheries in Europe, 13-16 November 2023, Galicia, Spain. Photo Credit: ICSF

# Integrating gender proves a popular theme among economics researchers and practitioners

#### By Kyoko Kusakabe

Gender and Development Studies, Asian Institute of Technology, Thailand

A recent workshop that explored the topic of integrating gender into fisheries economics and trade met with great success. The workshop, a full-day event led by several of our GAFS colleagues in advance of the International Institute of Fisheries Economics and Trade (IIFET) Conference 2024 held in Penang, Malaysia, aimed to enhance the capacity for the integration of theoretically informed gender analysis in economics and trade research within fisheries and aquaculture. The workshop was fully booked and was attended by a diverse audience from across all geographic regions. With men comprising nearly 40% of the

audience and with participants ranging from beginners to experts in gender analysis, the workshop enabled a space for rich and engaging discussions and mutual learning among the likeminded researchers and practitioners.

Please see this story for more details, including the workshop materials: <a href="https://www.genderaquafish.org/stories/workshop-on-integrating-gender-into-fisheries-and-aquaculture-economics-and-trade-research.htm">https://www.genderaquafish.org/stories/workshop-on-integrating-gender-into-fisheries-and-aquaculture-economics-and-trade-research.htm</a>

We thank the participants and contributors who made this event a success!



Gender Workshop participants, 15 July 2024.

## **Small-Scale Fisheries Global Summit 2024**By Kafayat Fakoya

Gender in Aquaculture and Fisheries Section

The second Small-Scale Fisheries Global Summit was held from 5 to 7 July, 2024 at the Headquarters of the Food and Agriculture Organization (FAO) in Rome, Italy. The summit was co-organized by the FAO, the International Planning Committee for Food Sovereignty (IPC) Working Group on Fisheries, the General Fisheries Commission for the Mediterranean (GFCM), the Small-Scale Fisheries Resource and Collaboration Hub (SSF Hub), and SwedBio. The summit brought together close to 300 participants, consisting of small-scale fisherfolks and organizations, academia, non-governmental organizations and support organizations.

shared With filled with an agenda plenary sessions, parallel sessions, and short presentations, the summit presented an excellent opportunity to reflect on the achievements of the past ten years to advance the implementation of the SSF Guidelines and the struggles. For example, an interactive review of the GFCM Regional Plan of Action for Small-Scale Fisheries showed that strong support from governments professional organizations, alongside GFCM's technical assistance, has contributed to advancing the SSF project.

John Kurien, a renowned fisheries scientist, delved into the history of small-scale fisher movements, detailing over 50 years of struggles

and sacrifices made to recognize artisanal fishers as legitimate rights holders, decision-makers, and stewards of healthy aquatic environments, tracing the movement's early days and significant contributions. One of the highlights was the emergence of the Ocean Tribunal for small-scale fisheries. The IPC presented a people's tribunal report conducted by IPC members in Asia, South Africa, and Brazil. These tribunals were praised as effective participatory tools for protecting small-scale fisher rights and denouncing rights violations. The need for greater accountability and trust building was also emphasized. The environmental non-government organizations were chastised for a lack of transparency and trust, particularly when they seek information in fishing communities but do not provide feedback or share the results of their analyses and collaborate on subsequent actions.

Ratana Chuenpagdee, another well-known fisheries scientist and the Director of Too Big To Ignore Global Partnership also championed a call

to action by researchers and academics to support advocacy and voice of fishing communities. Pip Cohen, co-lead of Turning Tides, a facility that support the rights and tenure of coastal and shoreline communities, noted that only 8.3% \$1.2 billion funds dedicated in 2020 went to small-scale fisheries and coastal communities. She proposed a new culture of supporting local governments and organizations and also announced an Oak Foundation-supported international giving facility.

Regional sessions were held with discussions on priority concerns including tenure rights, gender and social development. During Africa sessions, language groups were formed to discuss upcoming events to ensure the voices of SSF are heard. Key topics discussed during these sessions included recognizing women's role in the sector, ending destructive industrial fisheries, and prioritizing marine tenure rights for small-scale fishers and their groups in every region.

#### **Asian Fisheries and Aquaculture Forum (14AFAF)**

The 14<sup>th</sup> Asian Fisheries and Aquaculture Forum (14AFAF) organized by Asian Fisheries Society (AFS), Malaysia, ICAR and Asian Fisheries Society Indian Branch (AFSIB), Mangaluru,was held from 12-15

February 2025 at New Delhi, India. The Asian Fisheries and Aguaculture Forum (AFAF) is a scientific forum organized by the Asian Fisheries Society (AFS) once every three years to understand the global trends and address issues and challenges faced by the fisheries and aquaculture sector. The main purpose of this Forum was to provide an international platform for eminent scientists, young researchers, and other stakeholders across the globe to share their research experiences and innovative ideas. By facilitating



Dr. Nikita Gopal and Prof. Alice Joan G. Ferrer chairing the Technical Session

the exchange of a diverse range of knowledge and expertise, the 14<sup>th</sup> Asian Fisheries and Aquaculture Forum (14AFAF) with the theme 'Greening the Blue Growth in Asia-Pacific' aimed to address key issues towards developing sustainable fisheries and aquaculture.

Dr. Nikita Gopal, Chair, GAFS, gave the Lead Talk on "Rethinking gender research in the era of big aquaculture and fisheries transformations" co-authored with Meryl J. Williams in Technical Session 11: 'Gender in Fisheries & Aquaculture' of 14<sup>th</sup> AFAF. Members of GAFS also presented papers in various Technical Sessions of the Forum.

### **New GAFS Projects**

# Monitoring gender transformations for nature-based climate solutions (NbCS) in aquaculture: Charting the path to equity and sustainability in the era of climate change

#### By Kyoko Kusakabe and Veena N.

Gender and Development Studies, Asian Institute of Technology, Thailand

The Gender in Aquaculture and Fisheries Section (GAFS) has been growing slowly and steadily over the past two decades. In the recent past, GAFS has encouraged more collaboration among GAFS members to strengthen the movement, especially in new and emerging areas of aquaculture and fisheries. The Gender in NbCS Aquaculture (GeNA) project titled "Making nature-based climate solutions in Southeast Asia monitoring more gender responsive Asia: What gets measured gets done" supported by the International Development Research Centre's (IDRC) AQUADAPT program is one such effort. The project is being administered from the Asian Institute of Technology in partnership with the Cambodian Institute for Research and Rural Development (CIRD), and The University of the Philippines Visayas (UPV).

The GeNA project builds on GAFS recent professional partnership activities, especially the conference sessions on climate change and other crises, the contributions to the 2016 FAONACA FishAdapt conference (Williams et al.,

2019), and the 2019-2020 project "Dialogues in Gender and Coastal Aquaculture: Gender and the Seaweed Farming Value Chain" (Gopal et al., 2021). Going beyond the dialogue approaches, GeNA project will develop a reflexive and context-specific gender monitoring framework for NbCS in aquaculture. The gender monitoring schema will test the processes by which women and men participate in NbCS aquaculture that help achieve transitions to greater sustainability under climate change and will be piloted at three sites: Philippines (on seaweed culture), Thailand and Cambodia (on rice-fish culture).

Although women's roles are recognized in NbCS aquaculture, women's engagement is not monitored and evaluated in rigorous ways, especially under the current conditions of rapid transitions under economic, climate and social changes. Considering that NbCS is a new field that has come up in response to climate change, it is critically important to highlight gender issues in the NbCS aquaculture projects right now to ensure an equitable distribution of benefits to

marginalized groups in such projects. There is, hence, a need to develop a gender monitoring schema that would guide the process of operationalization. For this, the GeNA identified team process monitoring as a suitable tool as it not only captures implementation process, but also identifies adjustments to be made on the basis of data and analysis from the field while also recognizing the most impactful interventions on an on-going basis.





GeNA project members

The lack of data as well as a lack of holistic understanding of gender relations in aquaculture leads to serious gaps in monitoring and evaluation (M&E) schemes that wish to include gender outcomes, including in NbCS aquaculture. At the same time, M&E frameworks tend to focus narrowly on project-based outputs and outcomes, usually at the end of the project or period, leaving little room for learning and revised implementation through constant monitoring. The gendered impacts of climate change in aquaculture are also under-recognized and cannot be monitored until baselines are established.

Through an examination of literature on M&E as well as on gender and aquaculture, GeNA project found overlapping gaps in knowledge as well as in tools. The discussions within the GeNA team identified the need to integrate not only the contextual differences into monitoring activities, but also the political economy of the NbCS aquaculture system itself, including

social structure and systems and the ecology of power relations in the community and society. Further, reflexivity is central to the gender monitoring schema since it covers both physical (material) and psychological aspects of life which are differentially affected by gender groups depending on contexts such as culture, tradition, power dynamics, ecology and climate change.

Keeping context and reflexivity as the cornerstones of gender analysis, this project aims to study the impact of NbCS aquaculture projects on women, men, and marginalized groups as well as on mitigating climate change. The basic premise is that women's knowledge and wisdom gained from generations of closely working with nature, will be useful in mitigating climate change, and developing NbCS technological innovations as well. The pilot projects will be used to test the schema and using the feedback from the monitoring process, the schema will be further refined and fine-tuned.

We invite you to read more about the GeNA project in this link: https://gena-project.ait.ac.th/



#### References:

Gopal, Nikita, P.S. Swathi Lekshmi, Betty Nyonje, Fridah Munyi, Francis Okalo, Kyoko Kusakabe, Kafayat Fakoya and Meryl Williams. (2021). Dialogues in Gender and Coastal Aquaculture: Gender and the Seaweed Farming Value Chain. Final Project Narrative Report submitted to SwedBio. ICAR-CIFT, Kochi, India. Available online at: <a href="https://www.genderaquafish.org/dialogues-in-gender-and-coastal-aquaculture-gender-and-the-seaweed-farming-value-chain/">https://www.genderaquaculture-gender-and-the-seaweed-farming-value-chain/</a>

Williams, M.J., Angela Lentisco, Mary Barby Badayos-Jover, Carmen Pedroza-Gutiérrez, Kalpana Giri, Susana Siar, Nikita Gopal, B. Shanthi, Alice Joan G. Ferrer, Marieta Bañez Sumagaysay and Arpita Sharma. (2019). "Gender as the missing link for improving climate change adaptation in fisheries and aquaculture," in Johnson, J., De Young, C., Bahri, T., Soto, D. and Virapat, C., eds. Proceedings of FishAdapt: the Global Conference on Climate Change Adaptation for Fisheries and Aquaculture, Bangkok, 8–10 August, 2016. FAO Fisheries and Aquaculture. Proceedings No. 61. Rome, FAO. pp: 196-209

### Recognitions and celebrations

#### Dr. Meryl Williams receives two prestigious awards

By Kafayat Fakoya and Madu Galappaththi

Gender in Aquaculture and Fisheries Section

We are delighted and honoured to share that Dr. Meryl Williams, GAFS' ExCom Member and the Immediate Past Chair, has received two recent awards:

### 2024 Distinguished Service Award from the International Institute of Fisheries Economics & Trade (IIFET)

This award recognized Dr. Williams' numerous contributions to and profound impact on the global fisheries community, made throughout her exemplary career dedicated to improving economic, gender and social inclusion in fisheries and aquaculture. Dr. Willaims' remarkable leadership and dedication to as a global scientist promoting interdisciplinary approaches, trailblazing role in promoting gender equality in the field of fisheries and aquaculture as well as the ground-breaking work in introducing economics into global tuna fisheries conservation

and management are among the many other achievements being celebrated through this award. Dr. Williams received this award during the IIFET 2024 Conference held from 15-19 July, 2024 in Penang, Malaysia, where Dr. Williams delivered a keynote address.

Please read the full award announcement here to learn more about Dr. Williams' achievements and contributions: <a href="https://iifet.oregonstate.edu/dr-meryl-williams-receives-international-institute-fisheries-economics-trade-2024-distinguished">https://iifet.oregonstate.edu/dr-meryl-williams-receives-international-institute-fisheries-economics-trade-2024-distinguished</a>



#### Margarita Lizárraga Medal Award from the FAO

Dr. Williams has also been awarded the Margarita Lizárraga Medal Award during the opening of the Committee on Fisheries (COFI) 36th Session held at the headquarters of the United Nations Food and Agriculture Organisation (FAO) in Rome, Italy. This medal acknowledges distinguished the service in the application of the Code of Conduct for Responsible Fisheries. Dr. Willams received the medal in recognition of her exemplary career and dedication to improving the fisheries sector, including in developing countries.



Please read here to learn more about this award; <a href="https://www.aquaculturewithoutfrontiers.org/meryl-williams-award-8-july-2024-rome-italy/">https://www.aquaculturewithoutfrontiers.org/meryl-williams-award-8-july-2024-rome-italy/</a>

Warm congratulations, Dr. Williams! We couldn't be more proud of your achievements!

#### Dr. Nikita Gopal honoured with Asian Fisheries Society Merit Award

Dr. Nikita Gopal, Chair, GAFS has been honoured with the prestigious Asian Fisheries Society Merit Award. The award recognizes her significant contributions as Chair of the Gender in Aquaculture and Fisheries Section. Prof. Liping Liu, President of the Asian Fisheries Society, presented the award during a ceremony held in connection with the 14th AFAF in New Delhi on February 14, 2025.



### **New Research and Projects**

## The Multi-dimensional Perspectives of Gender-based Taboos on Fisherfolk in the Global South

#### By Ayodele Oloko<sup>1</sup>, Sarah Harper<sup>2</sup>, Kafayat Fakoya<sup>3</sup> & U. Rashid Sumaila <sup>1,4</sup>

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- <sup>4</sup> School of Public Policy and Global Affairs, University of British Columbia, Vancouver, BC, Canada

There is increasing evidence that informal institutions and socio-cultural dimensions, such as taboos and traditional ecological knowledge, can be particularly effective in promoting marine conservation (Peterson et al., 2010; Elegbede, et al. 2023). This interdisciplinary body of scholarship emphasizes the crucial roles that cultural taboos play at various levels in diverse social and environmental contexts (Oloko et al.,2022; 2024a). For example, Cox and colleagues

(2014) conducted a case-study meta-analysis that identified numerous ways in which taboos interact with key socio-ecological system and governance variables, such as user restrictions, cultural appropriation, social monitoring, and social capital. The increased recognition of taboos in fisheries resource management and governance has fostered a more harmonious relationship between local communities and their environment (Veitayaki, 2004). However,



Fishermen in Limbe, Cameroon

Foale and colleagues (2011) propose that traditional management systems and taboos should be designed to manage relationships between social groups, with a greater emphasis on gender perspectives for effective fisheries sustainability.

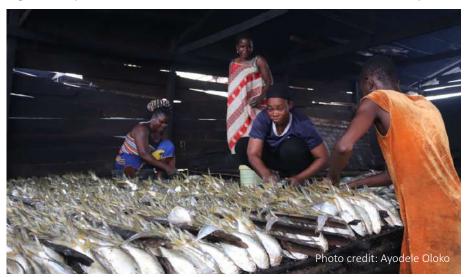
This perception often contributes significantly to understanding gender inequalities in small-scale fisheries (SSF) (Oloko et al., 2024b). SSF typically exhibit a gendered division of labor, with men traditionally capturing fish and women playing crucial roles in pre- and post-harvest activities, particularly in fish trading and processing (Harper et al., 2023; Mangubhai et al., 2023). For instance, women finance fisheries in West Africa (Bennett, 2005), female wholesale buyers dominate in Madura, Indonesia (Niehof, 2007), and women in Langa Lagoon in the Pacific Islands produce shell money and jewelry (Sulu et al., 2015). However, management plans

and fisheries statistics often overlook or undercount these activities as employment (Rice et al., 2024). In Peru, for example, fishery development plans primarily support management initiatives that focus on men when implementing decisions (Harper et al., 2013).

Women's plight is associated with discriminatory processes, exacerbated by cultural taboos, traditional beliefs, laws, and norms governing their humansea interactions. These factors

position them at the lowest end of fish value chains (FAO 2006). Given that fisheries are sometimes referred to as a last-resort occupation (Onyango and Jentoft 2011), women's comparatively low participation in fish value chains contributes to gender inequities in income and often entraps them in poverty (Weeratunge et al., 2010).

Gender inequality in SSF is part of the broader systematic marginalization of poor working women (Lawless et al., 2021). This inequality not only undermines women's contribution to food security but also undervalues their role in sustainable marine resource management (Branch & Kleiber, 2015). This has exacerbated unequal economic power relations within systems, further patriarchal perpetuating gender hierarchies and discrimination in SSF (Fröcklin et al., 2018). Such gender injustices in fisheries are experienced globally, especially in countries of the Global South. For example, in



Women fish processors in Limbe, Cameroon

Mali, many women traders are members of fish traders' associations but remain marginalized by restrictive cultural taboos and social norms, such as inequalities in fish trade, governance structures, and access to resources (Geheb et al., 2008).

Cultural, socio-economic, and political factors have influenced women's involvement in fish marketing (Overa 2011). Studies by Torell and colleagues (2019) indicate that, beyond traditional beliefs associated with fishing taboos, the exhausting and laborious nature of fishing discourages women's active participation. Conversely, male participation in fishing has faced fewer taboos and traditional practices. While this may contribute to men's dominance in both artisanal and coastal fishing ventures across the Global South, their predominance has generally been associated with, and potentially exaggerated by, the physical demands and risks of fishing (Shalli, 2017). Consequently, the role of taboos in reinforcing gender roles, stereotypes, and inequalities in coastal fishing communities

in the Global South remains understudied and poorly articulated.

Our research on gender taboos in fisheries highlights the need for further investigation into women's access to marine resources and ways to enhance equal access. A gendered approach from a socio-cultural perspective is essential to address common misconceptions about gender and other social attributes such as class, norms, and taboos that influence women's productivity in fisheries (Oloko et al., 2024a). The intersectionality of gender taboos and norms in this article underscores sociocultural and economic dynamics that exacerbate inequalities by isolating gender as a separate agency, thus limiting its potential to contribute to sustainable fisheries and management. We argue that integrating gender into small-scale fisheries requires addressing how power relations and local norms are gendered and sustained, as this is crucial for advancing gender equity.

Please read the full open-access article here: <a href="https://doi.org/10.1007/s40152-023-00340-2">https://doi.org/10.1007/s40152-023-00340-2</a>

Home > Maritime Studies > Article

# The multi-dimensional perspectives of taboos on gender roles of fisherfolk in the Global South

Review | Open access | Published: 04 December 2023 Volume 23, article number 1, (2024) Cite this article



#### References

Bennett, E. 2005. Gender, fisheries and development. Marine Policy 29: 451–459. <a href="https://doi.org/10.1016/j.marpol.2004.07.003">https://doi.org/10.1016/j.marpol.2004.07.003</a>.

Branch, T.A., and D. Kleiber. 2015. Should we call them fishers or fishermen? Fish and Fisheries 18 (1): 114–127. https://doi.org/10.1111/faf.12130.

Cox, M., S. Villamayor-Tomas, and Y. Hartbert. 2014. The role of religion in community-based natural resource management. World Development 54: 46–55. <a href="https://doi.org/10.1016/j.worlddev.2013.07.010">https://doi.org/10.1016/j.worlddev.2013.07.010</a>.

Elegbede, I., et al. 2023. Marine and coastal resources. In Encyclopedia of sustainable management, ed. S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, and R. Abreu. Cham: Springer. <a href="https://doi.org/10.1007/978-3-030-02006-4">https://doi.org/10.1007/978-3-030-02006-4</a> 304-1.

FAO. 2006. Gender policies for responsible fisheries, 12. Rome: FAO.

Foale, S., P. Cohen, S. Januchowski-Hartley, A. Wenger, and M. Macintyre. 2011. Tenure and taboos: origins and implications for fisheries in the Pacific Fish. Fish 12: 357–369.

Fröcklin, S., N.S. Jiddawi, and M. de la Torre-Castro. 2018. Small-scale innovations in coastal communities: shell-handicraft as a way to empower women and decrease poverty. Ecology & Society 23: 34. <a href="https://doi.org/10.5751/ES-10136-230234">https://doi.org/10.5751/ES-10136-230234</a>.

Geheb, K., S. Kalloch, M. Medard, A.T. Nyapendi, C. Lwenya, and M. Kyangwa. 2008. Nile perch and the hungry of Lake Victoria: Gender, status and food in an east african fishery. Food Policy 33: 85–98.

Harper, S., D. Zeller, M. Hauzer, D. Pauly, and U.R. Sumaila. 2013. Women and fisheries: contribution to food security and local economies. Marine Policy 39 (1): 56–63. https://doi.org/10.1016/j.marpol.2012.10.018.

Harper, S., Kleiber, D., Appiah, S., Atkins, M., Bradford, K., Choudhury, A., Cohen, P.J., de la Puente, S., de la Torre-Castro, M., Duffy-Tumasz, A., Fakoya, K., Fent, A., Fröcklin, S., Gopal, N., Gough, C., Gustavsson, M., Hapke, H.M., Hellebrandt, L., Ferrer, A.J., Johnson, J.L., Kusakabe, K., Lawless, S., Macho, G., Mangubhai, S., Manyungwa-Pasani, C., McDougall, C., Ojea, E., Oloko, A., Pedroza, C., Randrianjafimanana, T., Rasoloniriana, R., Robson, L., Romeo, C., Salgueiro-Otero, D., Snyder, H., Soejima, K. 2023. Towards gender inclusivity and equality in small-scale fisheries.In: FAO, Duke University & WorldFish. 2023. Illuminating Hidden Harvests: the contributions of small-scale fisheries to sustainable development. Rome, FAO; Durham, USA,

- Duke University; Penang, Malaysia, WorldFish.
- Lawless, S., P.J. Cohen, S. Mangubhai, D. Kleiber, and T.H. Morrison. 2021. Gender equality is diluted in commitments made to small-scale fisheries. World Development 140: 105348.
- Mangubhai S, Barclay KM, Lawless S, Makhou N.2023. Gender-based violence: relevance for fisheries practitioners. Fish Fisheries. 10:1–13.
- Niehof, A. 2007. Fish and female agency in a madurese fishing village in Indonesia. Moussons 11: 185–209.
- Oloko, A., Fakoya, K., Ferse, S., Breckwoldt, A. and Harper, S. 2022. The Challenges and Prospects of Women Fisherfolk in Makoko, Lagos State, Nigeria. Coastal Management. <a href="https://doi.org/10.1080/08920753.2022.2022969">https://doi.org/10.1080/08920753.2022.2022969</a>.
- Oloko, A., Harper, S., Fakoya, K. et al. 2024a. The multidimensional perspectives of taboos on gender roles of fisherfolk in the Global South. Maritime Studies 23, 1. https://doi.org/10.1007/s40152-023-00340-2.
- Oloko, A., Teh, L., Le Billon, P. et al. 2024b. Making the case for gender-inclusive fisheries governance, policies and climate adaptation. Discov Oceans 1, 33. <a href="https://doi.org/10.1007/s44289-024-00038-1">https://doi.org/10.1007/s44289-024-00038-1</a>.
- Overå, R. 2011. Modernisation narratives and small-scale fisheries in Ghana and Zambia. Forum for Development Studies 38 (3): 321–343.
- Peterson, R., D. Russell, P. West, and J. Brosius. 2010. Seeing (and doing) conservation through cultural lenses. Environmental Management. 45: 5–18. <a href="https://doi.org/10.1007/s00267-008-9135-1">https://doi.org/10.1007/s00267-008-9135-1</a>.
- Rice ED, Gondwe E, Bennett AE, Okanga PA, Osho-

- Abdulgafar NF, Fakoya K, Oloko A, Harper S, Kawaye PC, Chuku EO, Smith H.2024. The future of gender research in small-scale fisheries: Priorities and pathways or advancing gender equity. Fish Fish. 00:1–8. https://doi.org/10.1111/faf.12814.
- 00:1–8. <a href="https://doi.org/10.1111/faf.12814">https://doi.org/10.1111/faf.12814</a>. Shalli, M.S. 2017. The role of local taboos in the management of marine fisheries resources in Tanzania. Marine Policy 85: 71–78.
- Shalli, M.S. 2017. The role of local taboos in the management of marine fisheries resources in Tanzania. Marine Policy 85: 71–78.
- Sulu, P.J., H. Eriksson, A.M. Schwarz, N.L. Andrew, G. Orirana, M. Sukulu, J. Oeta, D. Harohau, S. Sibiti, A. Toritela, and D. Beara. 2015. Livelihoods and fisheries governance in a contemporary Pacific Island setting. PloS One 10 (11): 1–25.
- Torell, E., Bilecki, D., Owusu, A., Crawford, B., Beran, K. and Kent. K. 2019 Assessing the impacts of Gender Integration in Ghana's Fisheries sector. Coastal Management 507–502.
- Veitayaki, J. 2004. Building bridges: the incorporation of traditional knowledge into ecosystem management and practices in Fiji, Paper presented In: Proceedings of the Bridging scales and epistemologies: linking local knowledge and global science in multi-scale assessments, Alexandria.
- Weeratunge, N., K.A. Snyder, and P.S. Choo. 2010. Gleaner, fisher, trader, processor: understanding gendered employment in fisheries and aquaculture. Fish and Fisheries 11 (4): 405–420. <a href="https://doi.org/10.1111/j.1467-2979.2010.00368.x">https://doi.org/10.1111/j.1467-2979.2010.00368.x</a>.



# **Beyond the Catch: Gendered Experiences of Octopus Fishery Closures in Zanzibar**

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#### Introduction

Our research draws on periodic octopus closures, a rapidly spreading collaborative (co-) management marine conservation initiative in the Western Indian Ocean and beyond (1-4). They involve closing local coral reef-based fishing grounds (often 20% of the area) to octopus or all types of fishing for three months or more (ibid). Octopus closures represent a participatory management approach which increasingly emphasized globally, especially in tropical small-scale fisheries, as a means to meet global conservation and sustainable development goals (5,6). The purpose of these closures goes beyond benefits associated with increased octopus (or other species) biomass. These closures are seen as a tool to engage local resource users in conservation and to empower communities to better organize themselves within this sphere (e.g. creation of committees, developing local bylaws, engaging with environmental education).

While research on octopus closures often focuses on the ecological and economic impacts of these closures, our two recently published papers (see references 7,8) explore closure affects via (non-) compliance and multidimensional ideas of wellbeing from a qualitative interpretive perspective

#### Background to the case

We worked in Zanzibar. a semiautonomous archipelago off the coast of Tanzania with a history of traditional octopus closures (and fishing-ground closures more generally), and similar to much of the Western Indian Ocean, where women have been the historical octopus hunters (9–12). Today, octopus is both consumed exported internationally, locally and Zanzibari production has doubled since the 90s (13,14). Both women and men target octopus, usually during low tides, using

### An octopus closure opening day in Zanzibar, 2019 (Credit: E. Drury O'Neill)



The seascape can be seen dotted with people fishing for octopus and others waiting onshore



The octopus is sexed, measured and weighed



Fishers wait for their octopus to be accounted for



Octopus landings post recording procedure, already turned inside out and beaten on the sand. A large-scale trader was present with large sacks to take the majority of the landings to Stone Town, smaller octopus went to the nearby village

Note: This is not one of our selected sites but a neighbouring area. The area had been open for a couple of hours when we arrived and the crowds had already dispersed.

low-tech tools such as wooden or metal sticks. hooks and spears. Women typically footfish or 'glean' while men can also snorkel/freedive along the reef edges (13-15). This reflects the broader Western Indian Ocean region, where in many places women access octopus only in the intertidal zone due to socially constructed rules, perceptions, and duties embedded in the various local cultures (16,17). They often don't learn to swim or have access to fishing boats because of these gender expectations, thus larger octopus in deeper closed waters remain inaccessible on opening (1,2,14,18). Similar gendered roles flow downstream in the octopus value chain with differentiation of trading and processing roles between different types of actors i.e. locally based small-scale traderwomen (who typically dry and fry for customers), larger-scale more capital rich tradermen (who are typically mobile and linked to higher value markets e.g. tourism, export), smaller-scale tradermen (who are often locally based but collect for the larger-scale male buyers) (19-21).

#### **Theory & Methods**

Our study of (non-)compliance (a topic chosen due to its importance across sites to research participants) draws on theory from sociology, anthropology and cognitive sciences and a subsequent theoretical framework was used to interpret how participants justified, motivated by or dispositioned towards rules, rule makers and rule breakers (22,23). In our work on human wellbeing, a more hollistic way to understand protected area impacts, we take a threedimensional (material, relational and subjective) social wellbeing approach (24-26) to trace the flow of benefits, costs and burdens from closures at three sites in Zanzibar and explore how different types of fishers and traders perceive impacts. Using an intersectional lens allowed us to not simply focus on "women" but explore people's intersecting relational structures (e.g. gender, value chain roles, livelihood strategies) which shape participants' abilities to benefit from the closure and thus their wellbeing (27). Our data collection methods included storytelling circles, photo-elicitation tasks and focused discussions which prioritized participants' emic descriptions and understandings of closures. We iteratively qualitatively coded data in MaxQDA.



Story circles during data collection with octopus fisherwomen

#### **Key Findings**

A multidimensional wellbeing: Materially, (fisherwomen, footfishermen, all aroups tradermen, traderwomen, and skindivers) at all sites recognised benefits in terms of harvests at the openings of the fishery closure. By social group, fisherwomen cited the greatest material benefits, more easily meeting their basic needs. Tradermen experienced various market issues at material costs to them (e.g. low prices, illegal buying at opening). Material wellbeing costs to traderwomen were also linked to these market issues while for skindivers, the main octopus fishers, lost access to their fishing grounds.

Relationally, all groups presented losses to a certain extent due to the conflicts, largely over non-compliance and largely by men, particularly at openings. Fisherwomen were particularly affected, as poaching reduced their fishing opportunities and strained relationships with those stealing from the closed areas. Gender relations were further impacted as the access and capture of benefits/resources associated with octopus landings were continuously appropriated by men (e.g. skindivers going out to deeper reefs on opening days before appropriated time). Participants highlighted that there was no/little consideration for other groups of people such as elderly, children, and women, and their differing access and capabilities in octopus fishing at opening events. Gender relations saw only little improvement with the recognition of increased representation of women in meetings and new opportunities to become guards.

Subjectively, the female groups were the most satisfied with the resulting benefits that flowed

their way, including incomes, nutrition-access, basic needs, benefits for children, and community benefits, despite various costs to other wellbeing dimensions. Tradermen's satisfaction was most evident around octopus sizes and abundances that is important for them and their export market links. Conversely, skindivers and footfishermen were dissatisfied/upset by poaching and the fact that others (e.g. migrants, neighbours, guests) benefited from their closure.

Inequity in the process: Questions of equity were extensively used to frame wellbeing impacts of the closure, at multiple levels and between multiple groups or types of people (See Figure 1). Gender relations within the closure system often reinforced/deepened inequities between groups, for instance, younger men's ability to access deeper waters during openings gave them an advantage in catching larger octopus. While the closures facilitated greater community involvement in decision-making, gender disparities persisted in participatory processes.

Despite women's higher attendance at meetings, their contributions were often limited due to relative-levels of education, societal attitudes that viewed them as passive attendees rather than active participants, and culturally ingrained norms that discouraged them from speaking out. The Shehia Fishing Committees, the primary local institutions responsible for implementing the closures, remained largely male-dominated. At opening events inequities most starkly emerged, between differently-abled fishing groups, between those locally-based vs visitors/ outsiders, between larger-scale male traders and female traders (with limited access to markets, products and resources such as transport, credit or storage). It was during these opening times that wellbeing impacts were most felt by participants—from intense social conflict over broken rules to major boosts in catches (also seen across periodic closures in Caledonia, Hawaii, Solomon Islands, Philippines, (28)), nutrition and deep celebratory happy interactions.

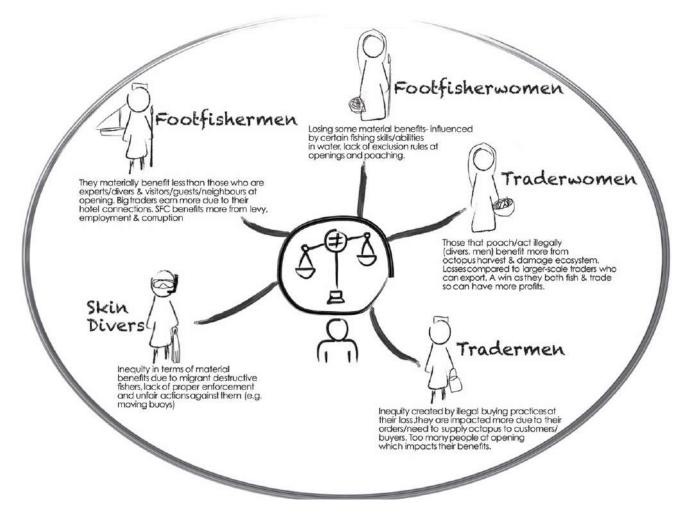


Figure 1: Inequities—a short illustration of the main types of wins/loss in terms of (in)equity for each participant group type across sites.

### The gendered nature of responses to authorities, rules & (non-)compliance:

Gender as a category, amongst many other axes of difference, was articulated by participants through their struggles with non-compliance and ability to benefit from the closure. For example 'men' were blamed for non-compliance, evading meetings and the male poachers (the skindivers) in particular manifesting their 'god given right' to fish. In the Zanzibari context, skindivers have a lower social status to fishermen with vessels (29) while at the same time, legislation at multiple scales (local up to national) marginalizes them by outlawing their main method of harvesting (spear fishing) (30). Closure regulations target their main species (octopus) (31) while directly enabling others not previously engaged with

octopus to benefit through the creation of opening events. Upon consideration, skindivers' poaching could be seen as a token of resistance against unjust regulations or lost claims (32,33). The attention given to the Zanzibari skinivers by other participant groups as well as gender as a category more generally, in a non-compliance frame of reference, highlights the need to properly and meaningfully engage with 'lowerstatus' or unrecognized groups like skindivers', or footfisherwomen (20,34-36). Not doing so can mean unknowingly provoking non-compliance while increasing the burden on others' shoulders, for example, for fisherwomen to provide school uniforms or fees through a diminishing fishing income as a result of overexploitation.

## Key recommendations for enhancing the equity and effectiveness of octopus fishery closures

- Adopt context relevant conflict resolution strategies i.e. multistep formal and informal processes for resolving disputes, which recognise the nuances of conflict.
- Opening days should be managed extra carefully and accommodate different levels of specialization and/or types of engagement in the octopus fishery with specific exclusion or entry rules such as women-first or women-and-children-only areas, diver-designated reefs, visitor-only areas or times.
- Make time/space for open-ended qualitative discussions enacting active listening with smaller groups of people living at conservation sites (i.e. not just fishery organizations or leaders or larger "community" meetings) to gauge their feelings/interests/reactions to the process over time.
- Take the time to engage these smaller groups/different types of people living at conservation sites in environmental education and awareness raising of the benefits but also disadvantages of conservation.
- Manage with care and deliberation how people feel about the state/those who represent the state and thus how and where state actors engage with the conservation intervention.
- Make sure to publish or spread information on the different closure activities like apprehensions, fines, meetings for the creation of bylaws or rules in a fair and visible way e.g. bulletin boards, for more trust in implementers and increased agency for participants.
- Commit to connecting disparate groups, whom normally would not interact, for facilitated discussions on the intervention, with deliberate inclusion of lower ranking/less prominent groups e.g. the male skin divers, as a means to building social trust.

For more details on this research, including an in-depth discussion on gender relations, see the two papers below (also included as refernces no 7 and 8):

Drury O'Neill, Elizabeth, Tim Daw, Lorna Fatma Khamis, Salim Slade, Nassor Mbarouk, Jineth Berrío-Martínez, Andrew Wamukota, Rosemarie N. Mwaipopo, and Emilie Lindkvist. "Multidimensional Human Wellbeing in Periodic Octopus Closures in Zanzibar." Ecosystems and People 20, no. 1 (December 31, 2024): 2412616. https://doi. org/10.1080/26395916.2024.2412616.

Drury O'Neill, Elizabeth, Tim M. Daw, Mwambao, Rosemarie N. Mwaipopo, and Emilie Lindkvist. "The Complexity of Compliance— Diverse Responses to Octopus Fishery Closures in Zanzibar." People and Nature n/a, no. n/a. Accessed November 4, 2024. https:// doi.org/10.1002/pan3.10742.

For Stories written based on the research participant transcripts, see reference no. 37 and for information about a feedback trip where research was shared back to participants for validation in the form of a theatre play, and through workshops to practitioners and governmental actors see references no. 38 and 39. For a video summary of the compliance paper, see here: https://www.youtube.com/ watch?v=feeFBjen5F8



FORMAS :

#### References

Stockholm Resilience Centre

Benbow S, Humber F, Oliver T, Oleson K, Raberinary D, Nadon M, et al. Lessons learnt from experimental temporary octopus fishing closures in south-west Madagascar: benefits of concurrent closures. African Journal of Marine Science. 2014 Jan 2;36(1):31–7.

Stockholm

Oliver TA, Oleson KLL, Ratsimbazafy H, Raberinary D, Benbow S, Harris A. Positive Catch & Economic Benefits of Periodic Octopus Fishery Closures: Do Effective, Narrowly Targeted Actions 'Catalyze' Broader Management? PLOS ONE. 2015 Jun 17;10(6):e0129075.

Rocliffe S, Harris A. Scaling success in octopus fisheries management in the Western Indian Ocean [Internet]. Zanzibar: Blue Ventures; 2015 [cited 2016 Apr 19]. Available from: <a href="https://blueventures.org/publication/">https://blueventures.org/publication/</a> scaling-success-in-octopus-fisheries-managementin-the-western-indian-ocean/

Silas MO, Kishe MA, Mgeleka SS, Kuboja BN, Ngatunga BP, Matiku P. The octopus fishing closures positively impact human wellbeing and management success; case of Tanzania. Ocean & Coastal Management. 2022 Feb;217:106022.

Basurto X, Virdin J, Smith H, Juskus R. Strengthening Governance of Small-Scale Fisheries: Initial Assessment of the Theory and Practice [Internet]. Oak Foundation: Nicholas Institute for Environmental Policy Solutions at Duke University; 2017. Available from: <a href="https://www.issuelab.org/resources/28270/28270.pdf?download=true&">https://www.issuelab.org/resources/28270/28270.pdf?download=true&</a> ga=2.262775813.84442305.1533057318-1280054509.1533057318

FAO, editor. Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication. Rome; 2015. 18 p.

Drury O'Neill E, Daw T, MWAMBAO, Slade L, Khamis F, Mbarouk SN, et al. Multidimensional human wellbeing in periodic octopus closures in Zanzibar. Ecosystems and People. 2024;

Drury O'Neill E, Daw T, MWAMBAO, Mwaipopo R, Lindkvist E. The Complexity of Compliance – diverse

- responses to octopus fishery closures in Zanzibar. People and Nature. 2024;
- Mkumbukwa AR. The History of Use and Conservation of Marine Resources in Zanzibar: Nineteenth Century to the Present [Internet] [PhD]. [Bayreuth International Graduate School of African Studies]: Universität Bayreuth; 2014. Available from: <a href="https://epub.uni-bayreuth.de/3317/">https://epub.uni-bayreuth.de/3317/</a>
- Rocliffe S, Harris A. The status of octopus fisheries in the Western Indian Ocean. London: Blue Ventures; 2016.
- Jack-Kadioglu T. Mtende and Kiwengwa Community Facilitated Historical Reef Closures. Zanzibar: MWAMBAO Coastal Community Network; 2017.
- Slade L, Breuil C, Greboval D. Working Paper on Scoping for Octopus management in Zanzibar. 2019;19.
- Sauer WHH, Gleadall IG, Downey-Breedt N, Doubleday Z, Gillespie G, Haimovici M, et al. World Octopus Fisheries. Reviews in Fisheries Science & Aquaculture. 2021 Jul 3;29(3):279–429.
- Berrío-Martínez J. Exploring complexities of fishery closures using octopus movements: an individual-based modelling approach [Internet]. [Sweden]: Stockholm Resilience Centre, Stockholm University; 2022 [cited 2023 Jan 18]. Available from: <a href="https://www.diva-portal.org/smash/get/diva2">https://www.diva-portal.org/smash/get/diva2</a>:1677919/FULLTEXT01.pdf
- Guard M, Mgaya YD. The artisanal fishery for Octopus cyanea Gray in Tanzania. AMBIO: A Journal of the Human Environment. 2002;31(7):528–36.
- Wosu A. The social-ecological dynamics of fisherwomen's behaviour in northern Mozambique. [Internet] [PhD]. [Scotland]: University of Edinburgh; 2017. Available from: <a href="https://www.era.lib.ed.ac.uk/handle/1842/31249">https://www.era.lib.ed.ac.uk/handle/1842/31249</a>
- Wosu A. Access and institutions in a small-scale octopus fishery: A gendered perspective. Marine Policy. 2019 Oct 1;108:103649.
- Humber F, Harris A, Raberinary D, Nadon M. Seasonal Closures of No-Take Zones to promote A Sustainable Fishery for Octopus Cyanea (Gray) in South West Madagascar [Internet]. London: Blue Ventures; 2006 [cited 2024 Aug 13]. Available from: <a href="https://blueventures.org/wp-content/uploads/2021/03/seasonal-closure-ntz-promote-sustainable-fishery.pdf">https://blueventures.org/wp-content/uploads/2021/03/seasonal-closure-ntz-promote-sustainable-fishery.pdf</a>
- Drury O'Neill E, Crona B, Ferrer AJG, Pomeroy R, Jiddawi N. Who benefits from seafood trade? A comparison of social and market structures in small-scale fisheries. Ecology and Society [Internet]. 2018 Jul 23 [cited 2018 Jul 23];23(3). Available from: <a href="https://www.ecologyandsociety.org/vol23/iss3/art12/">https://www.ecologyandsociety.org/vol23/iss3/art12/</a>
- Fröcklin S. Women in the Seascape: Gender, Livelihoods and Management of Coastal and Marine Resources in Zanzibar, East Africa. 2014;
- Fröcklin S, de la Torre-Castro M, Lindström L, Jiddawi NS. Fish Traders as Key Actors in Fisheries: Gender and Adaptive Management. Ambio. 2013 Dec;42(8):951–62.
- Boonstra WJ, Birnbaum S, Björkvik E. The quality of compliance: investigating fishers' responses towards regulation and authorities. Fish Fish. 2017 Jul;18(4):682–97.
- Cepić D, Nunan F. Justifying non-compliance: The morality of illegalities in small scale fisheries of Lake Victoria, East Africa. Marine Policy. 2017 Dec 1;86:104–10.
- Gough I, McGregor JA, editors. Wellbeing in developing countries: from theory to research. Cambridge; New York: Cambridge University Press; 2007. 399 p.
- York: Cambridge University Press; 2007. 399 p.
  Johnson DS, Acott TG, Stacey N, Urquhart J. Social
  Wellbeing and the Values of Small-scale Fisheries.
  Springer; 2018.
- Acott TG, Johnson DS, Stacey N, Urquhart J. Reflections on Social Wellbeing and the Values of Small-Scale Fisheries: Implications for Research, Policy and Management. In: Johnson DS, Acott TG, Stacey N,

- Urquhart J, editors. Social Wellbeing and the Values of Small-scale Fisheries [Internet]. Cham: Springer International Publishing; 2018 [cited 2021 Nov 23]. p. 317–32. (MARE Publication Series). Available from: https://doi.org/10.1007/978-3-319-60750-4\_14
- Galappaththi M, Collins AM, Armitage D, Nayak PK. Linking social wellbeing and intersectionality to understand gender relations in dried fish value chains. Maritime Studies. 2021 Dec 1;20(4):355–70.
- Cohen PJ, Foale SJ. Sustaining small-scale fisheries with periodically harvested marine reserves. Marine Policy. 2013 Jan 1;37:278–87.
- Woroniecki S. Challenging and Defending the Status Quo-Therole of power relations for social-ecological systems transformation in MACEMP Zanzibar [Internet]. 2013 [cited 2021 May 4]. Available from: <a href="http://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-91118">http://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-91118</a>
- The Revolutionary Government of Zanzibar. Zanzibar Fisheries Policy First Draft [Internet]. Smartfish; 2014. Available from: http://www.tzdpg.or.tz/fileadmin/documents/dpg internal/dpg working groups clusters/cluster 1/agriculture/2. Ag policies and strategies/Zanzibar Ag policies/3. 2014 Zanzibar Fisheries Policy first draft 18 June 2014 .pdf
- Fisheries Policy first draft 18 June 2014 .pdf
  Sindano G. Report of the Controller and Auditor General
  otn The Financial Statements of South West Indian
  Ocean Fisheries Governance and Shared Growth
  Program (SWIOFish) [Internet]. Dar es Salaam: World
  Bank; 2019 [cited 2021 Nov 17]. Available from:
  https://www.google.com/search?q=SWIOFISHAudit-Report-FYE-30th-June-2018&oq=SWIOFISHAudit-Report-FYE-30th-June-2018&aqs=chrome..69i
  57j69i60.409j0j7&sourceid=chrome&ie=UTF-8
- Fabinyi M. Fishing in Marine Protected Areas: Resistance, Youth and Masculinity. In: Fishing for Fairness [Internet]. ANU Press; 2012 [cited 2021 Jul 11]. p. 149–70. (Poverty, Morality and Marine Resource Regulation in the Philippines; vol. 7). Available from: http://www.jstor.org/stable/j.ctt24h9fn.13
- Scott JC. Weapons of the Weak: Everyday Forms of Peasant Resistance. Reprint edition. New Haven: Yale University Press; 1985. 392 p.
- de la Torre-Castro M, Fröcklin S, Börjesson S, Okupnik J, Jiddawi NS. Taking gender seriously in natural resource management an example using marine spatial planning in tropical seascapes. 2014 [cited 2016 Jan 10]; Available from: <a href="http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A694549&dswid=293935">http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A694549&dswid=293935</a>. Le D, Gill D, Pakiding F, Mascia M, Glew L, Ahmadia G, et al. Environmental Conservation and Social Equality: Distributional Impacts of Marine Protected Areas in Eastern Indonesia [Internet]. 2024 [cited 2024 May 22]. Available from: <a href="https://www.researchsquare.com/article/rs-3848635/v1">https://www.researchsquare.com/article/rs-3848635/v1</a>
- Stiepani J, Jiddawi N, Mtwana Nordlund L. Social-ecological system analysis of an invertebrate gleaning fishery on the island of Unguja, Zanzibar. Ambio [Internet]. 2022 Aug 9 [cited 2022 Aug 17]; Available from: <a href="https://doi.org/10.1007/s13280-022-01769-1">https://doi.org/10.1007/s13280-022-01769-1</a>
- Storytelling Series [Internet]. OctoPINTS. 2021 [cited 2024 May 7]. Available from: <a href="https://octopints.wordpress.com/storytelling-series/">https://octopints.wordpress.com/storytelling-series/</a>
- Lindkvist E, Drury O'Neill E, Daw T. Open research feedback session by the OctoPINTS project in Zanzibar [Internet]. Stockholm, Sweden: Zenodo; 2022 Nov [cited 2024 May 7]. Available from: <a href="https://zenodo.org/records/7644714">https://zenodo.org/records/7644714</a>
- Drury O'Neill E, Daw T, Lindkvist E. A play of voices in marine conservation: Human experiences of fishery closures in Zanzibar. [Internet]. Stockholm Resilience Centre; Available from: <a href="https://octopints.wordpress.com/wp-content/uploads/2022/12/drury\_oneill\_et\_al\_play\_script\_2022.pdf">https://octopints.wordpress.com/wp-content/uploads/2022/12/drury\_oneill\_et\_al\_play\_script\_2022.pdf</a>

# Gendered Patterns of Social Networks and Knowledge Systems within the Seaweed Industry in the Philippines

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The Philippines has been one of the leading producers of eucheumatoids, seaweed varieties of Kappaphycus and Eucheuma, for nearly five decades. Seaweed farming serves as a major livelihood for men and women in coastal communities, particularly in the Central and Southern regions of the country. The industry is composed of three key players - seaweed farmers, traders/exporters, and processors who are interconnected within a social network established and sustained by social and economic transactions. Social relations in the seaweed industry were extensively explored in the studies that we conducted in 2020 and 2021 as part of the GlobalSeaweedSTAR programme funded by the UK Research and Innovation-Global Challenges Research Fund (UKRI-GCRF). In these studies, we examined the diverse roles of key stakeholders, the nature of their interactions, and access to essential resources (i.e., Suyo et al., 2020) and discussed how these factors influence risk perceptions and management strategies throughout the seaweed value chain (i.e., Suyo et al., 2021). These findings underscored the critical role of social networks and gender dynamics in sustaining livelihoods and the industry as a whole.

While empirical evidence shows that relationships among industry actors shape the Philippine seaweed industry, there is more to discuss regarding how patterns of information sharing build knowledge systems within it. To further examine this dimension, we utilized data collected through focus group discussions (FGDs) and key informant interviews (KIIs) in Bohol, Tawi-Tawi, and Zamboanga, Philippines with focus on how seaweed farmers shared and used information gathered from their interactions with other stakeholders. Gender disaggregated data was collected to gain insights into the distinct experiences and knowledge gaps that have social and economic impacts, particularly for seaweed farmers. These findings were published as chapter in the book Tropical Phyconomy Coalition Development: Focus on Eucheumatoid Seaweeds released by Springer Cham in May 2024.

Seaweed farmers comprise approximately 98% of the total number of stakeholders in the seaweed industry (DA-BFAR, 2022). They are primarily vulnerable to risks related to seaweed production (e.g., pest infestation and diseases) and trade challenges such as price fluctuations (Suyo et al., 2021). Gender disparities exacerbate these issues, with women often limited to preand post-harvest roles and lacking access to resources such as trainings and markets. These findings emphasize the importance of expanding and strengthening social networks through gender inclusive approaches in order to foster an inclusive, resilient, and sustainable seaweed industry.

Our study highlighted the role of women and the gender disparities across the seaweed supply chain, emphasizing the implications of social networks for knowledge systems and sustainability of the seaweed industry. In this chapter, we highlighted two key points:

# 1. Gendered patterns of social connections and knowledge sharing

Respondents' narratives revealed the uneven distribution of information and resources in the industry. The position of women and men in the seaweed value chain significantly determined the type of information they received, the resources available to them, and consequently, their ability to adopt sustainable practices. Generally, seaweed farmers relied heavily on their experience due to limited access to trainings and resources that could enhance their industry knowledge. They relied mostly on information gathered from other farmers

and village traders which often proved to be inadequate.

Gender dynamics play a crucial role in shaping knowledge systems and influencing stakeholder behaviors and practices in the seaweed industry. While formal learning opportunities exist, farmers face varying levels of access to these activities, as they are offered by different agencies and organizations targeting specific areas or groups across regions. Women are often excluded from participating in formal learning opportunities leaving them reliant on informal networks for information. They tend to depend on personal experiences and interactions with village traders, often receiving insufficient or filtered information.

Socialrelationshipsinfluencehowknowledge is shared and applied within the seaweed industry. The patron-client system continues to dictate industry processes, with traders and processors adjusting their requirements based on farmers' capacities rather than strictly adhering to national quality standards for raw dried seaweeds. While this dynamic appears to be constraining, these informal relationships help bridge the economic gaps resulting from weak governance and lack of comprehensive policies in the seaweed industry. Women, however, are disproportionately affected by this process because they face additional barriers such as societal norms that limit their access to a number of opportunities and resources that would enable them to improve the quality of their seaweeds.

Risk management strategies underscore how social and economic relations are woven into the knowledge systems. Traders and processors provide financial support to farmers to mitigate risks, but women often lack access to such resource because of their limited roles in the supply chain. The dependence on informal ties creates cyclical patterns of dependence and reinforced existing inequalities between the industry actors, leaving women particularly vulnerable to climate hazards and economic shifts. As such, addressing these disparities through gender sensitive interventions is vital for promoting equitable and sustainable knowledge systems across the seaweed industry.

## 2. Gendered dimensions of access to resources

The knowledge systems of seaweed farmers are highly influenced by the size and quality of their social networks. Social relationships facilitate exchange of information and sharing of skills and resources among different actors in the seaweed industry. These networks serve as platforms for sharing experiences, insights, good practices, and innovative methods that promote industry resilience and sustainability. Gender disparities shape the nature and effectiveness of these networks.

Three key factors, namely, the patron-client system, geographical location, and gender, collectively determine access to and distribution of resources and services within the seaweed supply chain. These factors are interlinked and directly influence market access and mobility. Information, such as farmgate prices, industry standards, and seaweed varieties is crucial but the patron-client system creates a concentric and hierarchical flow of information, often leaving seaweed farmers dependent on information filtered through several tiers thereby limiting their understanding of industry dynamics. Gender, in particular, serves as a filter, influencing access to information, formal training opportunities, markets, and decisionmaking spaces. Women navigate smaller, less resource-rich social networks compared to men, which restricts their ability to engage fully in farming operations and management and access larger markets.

Geographical location also affects mobility and market access for seaweed farmers. Those closer to towns benefited from a broader range of market options compared to farmers in farflung island villages. Logistical barriers such as inadequate infrastructure, lack of transportation options, and high delivery costs created reliance to market intermediaries. Seaweed farmers in remote island communities often lacked access to essential resources such as training programs and financial services which further hindered their ability to stay informed and adapt to changing market conditions. Women in these areas are particularly disadvantaged, as their mobility is often further restricted by societal norms.

In summary, gender disparities were evident across the industry with constraints on women's mobility manifesting in two key areas: access to seaweed farms and market opportunities. Societal norms and values influenced women's behavior and decisions, including their involvement in seaweed farming activities. While women assist in farming, their roles are often restricted to pre- and post-harvest tasks. They also experienced greater social and economic imbalances due to their reduced participation in formal learning opportunities and minimal participation in other segments of the supply chain. Despite these, women reported to have better access to financial services, such as loans, based perceptions of being more reliable payers compared to men.

### Conclusions and Policy Recommendations

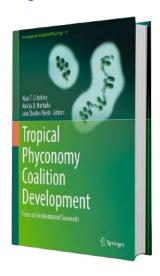
A clear understanding of the current knowledge base through an analysis of stakeholders' perceptions and social networks is essential for crafting gender-responsive policies. This approach aids in uncovering what farmers, traders, and processors already know and the strategies they have adopted to address different industry risks. Importantly, it also highlights how gender shapes these dynamics, uncovering disparities in access to information, formal learning opportunities, and decision-making process. Addressing these gaps can help policymakers in developing targeted interventions that enhance knowledge sharing, improve resource allocation, and foster resilience within the industry.

Despite the significant contribution of women to the seaweed supply chain, they often face systemic barriers such as bounded mobility, narrow social networks, and lack of involvement in trainings and decision-making. These gendered constraints hindered their ability to fully participate in broader knowledge-sharing opportunities or adopt effective risk management strategies. Recognizing these barriers is important in formulating gender-sensitive interventions that are tailored to address the specific needs and challenges of women and men. For women, this may include increasing access to technical trainings, providing avenues for enhanced mobility through infrastructure

development, and offering a platform for increased participation in decision-making.

To realize this, we highlight the importance of acknowledging the intersecting factors that amplify vulnerability such as geographical isolation, small social networks, and gendered social norms. By addressing these layers of constraints, women and men can benefit equitably from capacity-building interventions and other opportunities within the industry. Incorporating principles of gender equity into policies and programs does not only promote fairness but also helps in advancing an inclusive, sustainable, and resilient seaweed industry. Please see the full chapter here: Suyo-Diala, J.G.B., Hurtado, A.Q. (2024). Stakeholders' Perspectives and Gender Relations as Indicators of Knowledge Systems: Empirical Evidence from the Philippine Seaweed Industry. In: Critchley, A.T., Hurtado, A.Q., Neish, I.C. (eds) Tropical Phyconomy Coalition Development. Developments in Applied Phycology, vol 11. Springer, Cham.

https://doi.org/10.1007/978-3-031-47806-2 24.



#### References:

Department of Agriculture - Bureau of Fisheries and Aquatic Resources. (2022). National Seaweed (kappaphycus) Industry Roadmap 2022-2026.

Suyo, J. G. B., Le Masson, V., Shaxson, L., Luhan, M. R. J., & Hurtado, A. Q. (2020). A social network analysis of the Philippine seaweed farming industry: Unravelling the web. Marine Policy, 118. <a href="https://doi.org/10.1016/j.marpol.2020.104007">https://doi.org/10.1016/j.marpol.2020.104007</a>

Suyo, J. G. B., Le Masson, V., Shaxson, L., Luhan, M. R. J., & Hurtado, A. Q. (2021). Navigating risks and uncertainties: Risk perceptions and risk management strategies in the Philippine seaweed industry. Marine Policy, 126. <a href="https://doi.org/10.1016/j.marpol.2021.104408">https://doi.org/10.1016/j.marpol.2021.104408</a>

## Gender segregated access of inland fisherwomen in fish drying in Bangladesh to inputs, wages and services

#### By A. K. M. Nowsad Alam

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#### Introduction

In Bangladesh, drying fish is a traditional practice that supports a large percentage of the people, particularly in rural river-shores areas. Women are essential to this industry, handling a variety of jobs like dressing, sorting, cleaning, drying, packaging, storage and transportation. These women, who labour in difficult conditions for lesser pay and fewer benefits than male counterparts, confront many socioeconomic obstacles despite their contributions (Gopal et al, 2020). Women in fish drying face systemic discrimination that impacts not only their income but also their autonomy, decision-making authority, and access to necessary services. These discrepancies are indicative of larger trends of gender inequality (Nowsad, 2005).

With an emphasis on comprehending the obstacles that impede women's economic growth and well-being, this study aims to investigate the gender-specific opportunities and difficulties within Bangladesh's dried fish business. The study intends to influence policies and programs that can alleviate these disparities and empower women in the fishing industry by bringing attention to these gender dimensions. Data on the everyday experiences, working circumstances, and societal structures that influence women were gathered through interviews and conversations conducted in several places of Cox's Bazar, Brahmanbaria and Kishoreganj.



Figure 1. Women in dried fish processing in Bangladesh

### Socio-economic pattern dried fish women

Women working in fish drying face significant socioeconomic differences from their male counterparts. They put in a lot of work, often more than eight hours a day, but they make far less money, with most women making about 5,672 BDT per month compared to 10,020 BDT earned by men per month. Beyond money, women have little financial autonomy since they usually give their earnings to male family members, who sometimes are unable to make decisions for the home on their own. Deeply ingrained gender norms that limit women's economic independence and influence within the family are reflected in their lack of control over their finances and household expenses.

Gender-based disparities are more noticeable in the workplace. Sixty-two percent of female employees say they are underpaid in comparison to their male coworkers, even though women perform similar work. Women also face extremely difficult working conditions, including lack of separate washrooms, long hours of work, shorter breaks, and additional household duties that strain their bodies and minds. Due to lack of gender-sensitive regulations, many women also experience verbal abuse and disdain at work. The essential need for interventions that promote wage equality, equitable treatment, and supportive working conditions for women is highlighted by these difficult situations.

#### Access to inputs and services

Women face several obstacles in market exchanges that restrict their ability to make

money and support themselves. Gender discrimination affects their ability to engage in fair economic transactions, with 52% female workers report being overcharged for inputs compared to their male counterparts. Gender discrimination frequently leads to unjust pricing and treatment, which hinders women's ability to participate in equitable trade. Many women claim that they are underpaid for similar things as compared to men, which hurts their profitability and makes it harder for them to make a living wage. Around 32% women are impacted by dishonest tactics, such as manipulating product pricing or misrepresenting quality, which further lowers their competitiveness in the market. Their immediate income is impacted by this dishonest treatment, but it also jeopardizes their long-term financial security.

Neglect and disrespect are also prevalent (Figure 2): almost 10% women say that traders treat them dismissively, which causes delays and subpar service. Women who want to do fair business in the marketplace face discouragement because of such situations. These combined difficulties in the dried fish market reinforce gender-based barriers to women's financial independence while also raising stress levels and decreasing feelings of empowerment. The creation of gender-sensitive regulations that guarantee equitable treatment, openness, and encouragement of women's equal involvement in market transactions are necessary to address these problems and eventually support women in gaining more economic autonomy and equity in the sector.

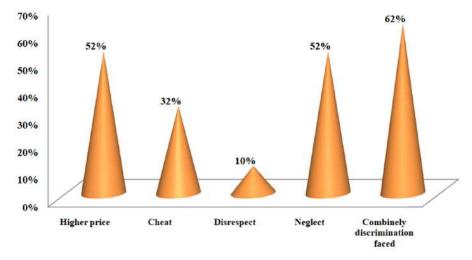


Figure 2. Discrimination faced by women processors at market

### Role of women processors in hygiene and sanitation management

Women are essential to preserving food safety and hygiene in dried fish as they frequently pay attention to such practices than their male counterparts. Their preference for natural pesticides, like turmeric and red chilli powder, over chemical alternatives demonstrate their dedication to better practices. These practices shows a growing concern for the health effects of chemical use and a determination to maintain quality, especially in places like Nazirertek and Choufaldondi of Cox's Bazar. These procedures signals a proactive approach to risk mitigation in production of dried fish.

specific training, particularly in hygiene practices, the study recommends gender-sensitive legislation. The study also highlights the necessity of structural adjustments to advance gender parity and women's empowerment in Bangladesh's dried fish industry.

#### References

Gopal, N., Hapke, H. M., Kusakabe, K., Rajaratnam, S., & Williams, M. J. (2020). Expanding the horizons for women in fisheries and aquaculture. Gender, Technology and Development, 24(1), 9.

Nowsad, A. K. M. A. (2005). Low-Cost Processing of Fish in Coastal Bangladesh. Food and Agriculture Organization of the United Nations, Dhaka, 43 pp.

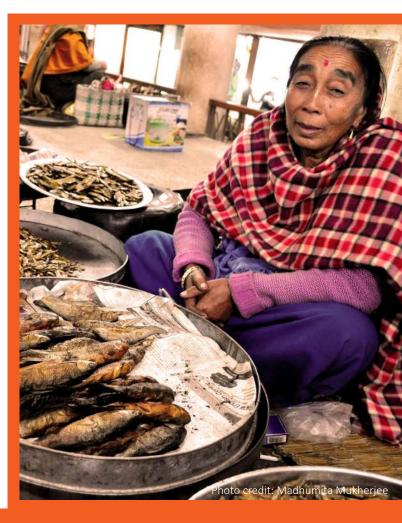
Table 1. Hygiene maintenance by women processors

Location	Wash hand after use toilet	Cover the wounded body parts	Use of hand gloves	Absent at work place when sick
Karimganj	95%	85%	0%	70%
Kulierchar	90%	90%	2%	50%
Lalpur	95%	88%	1%	65%
Nazirertek	97%	90%	3%	70%
Choufaldondi	92%	89%	Less than 1%	60%

Women workers typically follow basic hygiene protocols, such as cleaning their hands and bandaging wounds (Table 1). More education on food safety regulations is necessary, as evidenced by the low usage of more sophisticated protective gears, such as hand gloves, boots and aprons. Targeted training programs that emphasize the value of protective gears could encourage women to participate in more sensitive handling tasks, resulting in safer and cleaner processing environments.

Despite their best efforts, companies frequently take punitive action against women who oppose detrimental practices, which may include firing them or other repercussions. This emphasizes the necessity of gender-sensitive interventions that uphold and defend women's decisions to choose safer production techniques, creating a more salubrious workplace and advancing industry standards for food safety.

In conclusion, to address salary inequalities, improve working conditions, increase women's decision-making authority, and offer gender-



### **Upcoming events**



#### 9<sup>th</sup> Global conference on Gender and Aquaculture in Fisheries

We are delighted to announce our flagship conference GAF9 on the theme 'Transforming Aquaculture and Fisheries for Gender Justice'.

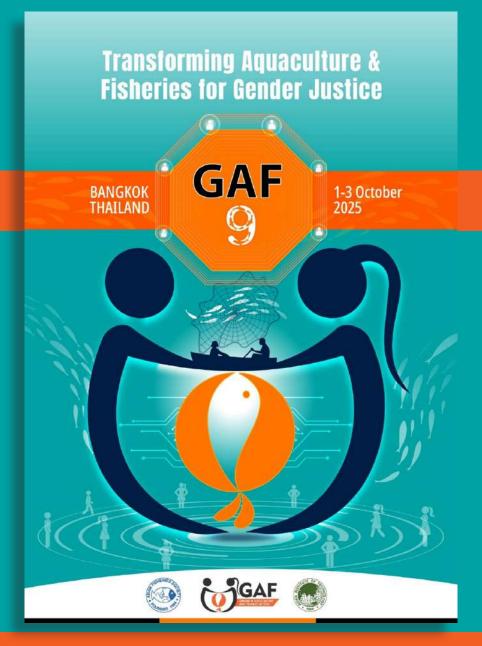
Join us from October 1 to 3, 2025 at the Asian Institute of Technology in Pathum Thani, Thailand.

Registration is now open: <a href="https://gafconference.org/">https://gafconference.org/</a>

GAF9 invites researchers, academics, students and practitioners to share the latest information and knowledge on gender in aquaculture and fisheries while also learning about new opportunities and innovative approaches to achieve gender equality in the aquaculture and fisheries sectors.

Please submit your proposals for Special Sessions, Panels, Roundtables and Workshops by

31 March 2025.



### **Updates since our last edition**

#### **Experience the New & Improved GAFS Website: Genderaquafish.org/**

Sijitha Mary (GAFS Team) and Biju V. G. (Desben Technologies)



We're thrilled to introduce the newly enhanced Genderaquafish.org website, designed to offer a superior user experience that's faster, more secure, and entirely optimized to remove load errors. Our recent upgrades reflect a commitment to not only meet but exceed our users' expectations by delivering a website that's agile, reliable, and equipped with cutting-edge security features. We know that every second counts when you're online, and we're excited to share how our new advancements will make your time with us smoother, safer, and even more enjoyable.

Α major highlight of the updated Genderaquafish.org website is its seamless performance powered by an advanced cloud server. Our previous infrastructure worked hard to deliver content, but as our community grew, so did our need for a more powerful, adaptive solution. With the new cloud server, we're now able to provide a significant boost in loading speeds and eliminate the common load errors that can interrupt your browsing. Our goal was to eliminate any downtime and provide an uninterrupted, smooth experience for every visitor, no matter when or where they access our site.

We've also focused on reducing the likelihood of load errors. With this new system, the chances

of encountering a "Page Not Found" error or waiting for a page to load indefinitely are reduced. Our cloud server optimizes resource allocation to avoid these issues and ensures a stable environment for all users So, whether you're visiting <u>Genderaquafish.org</u> to read stories, access resources, or engage with our community, you'll be able to do so seamlessly, without any hiccups.

Security has been another primary focus for us in this upgrade. The new website includes sophisticated spam filtering to enhance safety and keep your browsing experience focused and secure. Our enhanced spam filtering system actively detects and blocks unwanted or suspicious content, providing peace of mind as you engage with the platform. This feature adds an extra layer of security to protect against spam-related risks, so you can navigate the site confidently, knowing that the content you encounter is free of interference and irrelevant distractions. By keeping spam out of your experience, we ensure that your time on our site is both productive and pleasant, allowing you to focus on the content that matters to you.

Thank you for being a part of the GenderAquaFish community, and welcome to a new era of faster, safer, and more reliable browsing with us!

### **Stories on Genderaquafish.org**

Story	Posting date
Are Plastics Reinforcing Gender Barriers in Fisheries? Exploring a Research Agenda	March 5, 2025
Advocating for Women-Led Sustainable Shellfisheries to Enhance Environmental Stewardship and Climate Action	January 13, 2025
Championing Gender in Fisheries	January 13, 2025
From concept to pilot: gender monitoring schema	December 26, 2024
Workshop on Integrating Gender into Fisheries and Aquaculture Economics and Trade Research	November 4, 2024
Economic outcomes in small-scale fish trade: The role of gender norms	November 5, 2023
A Review of the Multi-dimensional Perspectives of Taboos on Gender Roles of Fisherfolk in the Global South	November 3, 2023
GeNA: Developing gender-responsive monitoring in NbCS aquaculture projects in Southeast Asia	October 5, 2023
Participatory Action Research enhances fish smokers' willingness to adopt social change and technology innovation in Lagos, Nigeria	June 4, 2023
Video tribute to women fishing around the world	March 5, 2023
Amphibious Living Opportunities: ALO for the Sundarbans	January 19, 2023

#### **Communication Channels for GAFS**

GAFS continues its strong internet and social media presence through its website and Facebook and Twitter feeds. Key stories are compiled and relayed to GAFS members in the monthly news digest by email, called "Keeping up-to-date with GAF," by Ms. Sijitha Mary at the Secretariat. GAFS has a number of communication channels where you can stay up to date with our latest activities, get in touch and interact with us.

GAFS website: www.genderaquafish.org

- » GAFS conference website: <u>www.gafconference.org</u>
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