



**Food and Agriculture
Organization of the
United Nations**

FIRO/C1098 (En)

**FAO
Fisheries and
Aquaculture Circular**

ISSN 2070-6065

A REVIEW OF WOMEN'S ACCESS TO FISH IN SMALL-SCALE FISHERIES



Cover photograph:
Women fish processors in Sokone, Senegal.
© FAO/R. Lee

A REVIEW OF WOMEN'S ACCESS TO FISH IN SMALL-SCALE FISHERIES

by

Angela Lentisco

Consultant

Department of Fisheries and Aquaculture

Food and Agriculture Organization of the United Nations

Rome, Italy

Robert Ulric Lee

Department of Fisheries and Aquaculture

Food and Agriculture Organization of the United Nations

Rome, Italy

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-108857-9

© FAO, 2015

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via www.fao.org/contact-us/licence-request or addressed to copyright@fao.org.

FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.

PREPARATION OF THIS DOCUMENT

This document has been prepared for the Fishing Operations and Technology Branch (FIRO) of the Fisheries and Aquaculture Department of the Food and Agriculture Organization of the United Nations (FAO).

The main purposes of the document are: (i) to identify the extent to which women have access to productive tools; and (ii) how this access is related to improved fisheries governance and food security. To these ends, Angela Lentisco (international consultant) conducted a desk study, and Robert Lee (FIRO) provided technical guidance and edited the document. The funding for the document came from the FAO Regular Programme.

The document will also contribute as resource material for the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of National Food Security and Poverty Eradication, and for the Global Assistance Programme to support their implementation.

This document was peer reviewed by many persons who have been advocating for better integration of gender in fisheries. They are cited in the Acknowledgements section of this document.

FAO. 2015.

A review of women's access to fish in small-scale fisheries, by Angela Lentisco and Robert U., Lee. Fisheries and Aquaculture Circular No. 1098. Rome, Italy.

ABSTRACT

Women play a critical role in every link of the value chain in small-scale fisheries, although their best-known roles are in processing and marketing of fish and other fishery products. This perception of the highly gender-segregated division of labour (men fishing / women processing) has shaped the generalized approach in supporting development initiatives for small-scale fisheries. More often than not, this approach targets men as fishers, and women as processors and marketers of fishery products. However, this generalization has also made fisheries governance blind to women's other valuable inputs to the sector. In fact, their roles can and should go beyond post-harvest and marketing. However, the lack of utilization of their additional contribution has deterred, for example, women's participation in fisheries resource management and policy decision-making.

The present review aims to move policy attention beyond the generalized, and perhaps limited, perception of women as fish processors and marketers and in this way enhance their participation in fisheries resource management and decision-making. The study describes the different ways women have access to fish in small-scale fisheries: as primary users (when they fish by themselves or they finance fishery operations), secondary users (when they access fish through kinship or other close relationships), and tertiary users (when they use capital to buy fish directly from fishers or traders). The review provides case studies to illustrate some of the issues that tend to keep women in marginalized positions along the value chain. Factors and processes that can contribute to improve women's participation and decision-making in small-scale fisheries, such as those that challenge conventional approaches based on traditional or "typical" gender roles and obsolete institutional arrangements, are also given. The document also discusses how participation can be improved by raising awareness on gender equality issues along the value chain through applying a gender lens, by providing appropriate support to women's organizations, including formal recognition of their professional activities, by understanding the socioeconomic context and the particular needs of small-scale fisheries, by giving due attention to power and power relationships, and by taking greater account of the contribution of women in fisheries. As neither women nor men form homogenous groups, the challenge is even greater for women to have access to productive tools and services, which if secured can give them a greater say and control over fisheries resources, thereby increasing their social capital and financial capital. These reflections can be introduced in existing resource management arrangements such as co-management or community-based management, and can probably empower women and improve their participation in fishery resource management decision-making.

The reflections in this review can and should be used as guidance and discussion material to develop interventions under the Global Assistance Programme in support of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication.

CONTENTS

PREPARATION OF THIS DOCUMENT	iii
ABSTRACT.....	iv
ACKNOWLEDGEMENTS	vi
1. INTRODUCTION.....	1
Purpose and use of the review	1
Background.....	2
2. GENDER EQUALITY AND WOMEN’S ROLES IN FISHERIES.....	4
Recognizing women’s roles in fisheries	4
Moving beyond the perception of women as fish processors	6
Gains from involving women in resource management	7
3. WOMEN’S ACCESS TO FISH	10
Introduction	10
Women as primary users of fish resources	10
Nigeria.....	11
Thailand.....	12
Cambodia	12
Bangladesh	12
Pacific islands.....	13
Solomon islands	13
South Africa	14
The United Republic of Tanzania	14
Mozambique and the United Republic of Tanzania	15
Women as secondary and tertiary users.....	15
Vulnerability of small-scale marine fishing communities to HIV/AIDS in Cameroon	16
The importance of social cohesion in reducing vulnerability of women and youths at Lake Chilwa, Malawi	17
Gender and microfinance services in Benin.....	18
4. FACILITATING WOMEN’S ACCESS TO AND CONTROL OF FISHERIES RESOURCES – FACTORS AND PROCESSES	19
Case studies where women have gained participation in resource management and access to the resources	19
Organizing women clam collectors in Tunisia.....	19
Professionalization of women shellfish collectors in the north of Spain	19
Aquaculture as an opportunity for empowerment	20
Haenyo, the female divers of Jeju Island	20
Gender issues and the Tara-Bandu in Timor-Leste.....	21
Improving women’s participation in the colonia de pescadores, Brazil.....	21
Integrated lake management in Uganda’s fisheries.....	21
The importance of social capital in Ghana’s fisheries.....	22
Identifying factors and processes to improve women’s participation in fisheries resource management and decision-making	22
5. CONCLUSIONS AND RECOMMENDATIONS	27
Conclusions	27
Recommendations (by stakeholder Group)	27
BIBLIOGRAPHY	31

ACKNOWLEDGEMENTS

The authors would like to thank Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN) LinkedIn members, especially Nisha Onta, Sofia Giranda, Vera Weill-Halle, Pelle Gatke, Naima Imam Chowdhury, and Leena Kirjavainen, for their support in providing information. In addition, particular thanks go to Jennie Dey De Pryck, and the FAO Fisheries and Aquaculture Branch Library for its bibliographic support.

Appreciation is given to the participants to the 4th Gender Symposium of the Asian Fisheries Society, including Taiwo Mafimisebi, Poh Sze Choo, and Nikita Gopal, as well as Marilyn Porter, for their thoughtful comments.

Special thanks go to Jose Alberto de Santiago, University of Santiago de Compostela (Spain), for his thoughts on women's participation in resource management in the north of Spain. Thoughtful discussions were held with Enrique Alonso, Simon Funge-Smith and Daniel Campagne that helped to provide more depth to the study. Sincere thanks go to Katrien Holvoet for her thoughts and support in obtaining literature on HIV/AIDs in fishing communities in Africa. Particular appreciation goes to Daniela Kalikoski, Yvette Diei Ouadi, Nicole Franz and Susana Siar for their useful comments and the conceptualization of this study, and to Sakchai McDonough, for his support in developing the diagrams contained in this review. The authors are especially grateful to Meryl Williams for her in-depth revision and useful comments on the previous version of this review.

1. INTRODUCTION

PURPOSE AND USE OF THE REVIEW

The small-scale fisheries sector is gaining wider international attention, through the development of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines), which were endorsed in 2014 during the Thirty-first Session of the FAO Committee on Fisheries. The SSF Guidelines have a chapter (Chapter 8) dedicated to gender equality and they also augment the Code of Conduct for Responsible Fisheries, which was silent on women and gender.

This review aims to complement the SSF Guidelines by amplifying the importance of taking a value chain approach in small-scale fisheries to address gender equality issues. In particular, the review looks at the ways in which women have access to fish in small-scale fisheries, and provides an overview of women's other contributions and roles in different parts of the value chain, beyond processing and marketing. The authors acknowledge that this may not be necessary in all value chains or relevant to every link of the value chain; however, it is a helpful exercise to identify the entry points for gender equality in the context of small-scale fisheries.

Despite the general consensus that more is needed, the knowledge base on how to develop future interventions to take gender considerations into account is quite extensive, but suffers from being spread among many different publications and documents from research and development project studies.

This paper presents a review of some of the available published material and provides guidance based on case studies and lessons learned from practical experience. It draws attention to particular areas of work on which practitioners and policy-makers that are working towards achieving sustainable and gender equitable fisheries can focus. It is hoped that the content will be used to contribute to wider policy dialogues and improved policies and strategy and, finally, in concrete actions in favour of women's equality in the fisheries sector. A broader recognition of gender issues in fisheries from a social equality perspective, and along the fisheries value chain, will provide greater opportunity to empower women and improve their participation in decision-making in small-scale fisheries.

The review is organized as follows. This chapter provides a brief overview of gender equality considerations depicted by the literature, and the limited attention that fisheries policy gives to women's contributions, the recognition of their roles in post-harvest and marketing, and the need to understand women's full involvement in order to improve their full participation in decision-making. Chapter 2 provides an overview of some of the roles of women along the value chain in small-scale fisheries, beyond post-harvest, and also provides examples of how natural resource management can be improved by enhancing women's participation in decision-making. Chapter 3 describes the different ways in which women have access to fish, either as primary, secondary or tertiary users, with case studies that illustrate their different contributions. Areas of vulnerability and marginalization within the different links of the value chain are highlighted. Chapter 4 also uses case studies to identify and explain some of the factors and processes that need to be in place to improve women's participation in fisheries resource management, their access to resources, productive tools and services, and their active participation in decision-making. Chapter 5 concludes with a summary of the findings of this review and recommended course of action.

BACKGROUND

The theme of gender equality in fisheries has been present in academic literature for more than 30 years.¹ However, it has received more attention from sociologists and anthropologists than fisheries managers and policy-makers, who have mainly focused on fisheries resources and the harvesting segment of the value chain. The fact remains that conventional research and monitoring has been based on the collection of survey data on numbers of gear, canoes, fishers, landing data, ecosystems, productivity and economic performance rather than on social equity considerations.

Female stakeholders in the fisheries sector were, until recently, invisible in the statistics collected and provided to fisheries managers and policy-makers. In recent times, more literature has been directed to making women's roles more visible. For example, Williams (2008) and Weeratunge and Snyder (2009) describe the diverse gendered division of labour in fishing communities, and their involvement and importance in fisheries processing and trade. This was also evident in the Global Symposia on Women in Fisheries, the gender-aqua-fish forums on social media, and more recently, the Asian Fisheries Society's 4th Global Symposium on Gender in Aquaculture and Fisheries, held in Yeosu, the Republic of Korea on 1–3 May 2013, among a number of other meetings of the same genre.

In addition, the Sustainable Fisheries Livelihoods Programme in Africa (SFLP, from 1999 to 2006) and the Regional Fisheries Livelihoods Programme in Asia (RFLP, from 2009 to 2013), two projects implemented by the FAO, have also integrated and promoted the role of women² through numerous studies, policy guides workshops and country-specific interventions (for more details, see FAO [2007] and Arenas and Lentisco [2011]) where the important role of women in the fish value chain was highlighted and improved. At the same time, these projects looked beyond women's roles as fish processors, seeking ways to involve them more directly in fisheries management.

Other projects and efforts have stressed the important role of women in fisheries, but mainly from the perspective of their contributions to processing and marketing. Governments, projects and policies have reinforced the notion that women's position and main role is in the processing sector. Over the years, these efforts have resulted in women benefiting from training in processing and marketing, through grants and credits to acquire processing equipment, and capital funds to buy fish and pay for transport.

As a result of these better-known roles in post-harvest activities, women are starting to receive increased attention in policy-making and fisheries management, but mainly on matters associated with their post-harvest expertise. In Africa, particularly around the Great Lakes, women have been participating more actively in managing the Beach Management Units (BMUs), promoting hygienic and food safety aspects of the landing sites (Dey de Pryck, 2012), but the focus has been mainly on post-harvest roles. In the Gambia, women have been involved with the National Fisheries Post-Harvest Operators Platform and participated in the formulation of the Fisheries Act (FAO, 2007). Examples such as these, where women are starting to become involved in fisheries management owing to their post-harvest roles, are however more exceptions than the rule.

More often than not, fisheries governance continues to be blind to women's other valuable inputs to the sector. Their contributions often go beyond post-harvest activities and marketing, such as pre-harvest operations (e.g. preparing nets, boats, capturing bait and fry),

¹ This includes the change in the approach from "women in fisheries" to the more recent "gender and fisheries". Further explanation on this change and what it entails can be found in Williams, Williams and Choo (2002).

² For the purpose of this publication and to simplify the reading thereof, the focus is on the different access to resources of women with regard to men in general. It is necessary to note that any serious gender study would make visible the heterogeneity existing among women, such as class, age, ethnicity, religion and social structure. As such differences are context-specific, they are not covered in the text in much detail.

fishing by themselves and selling or buying for their household consumption. Women processors and marketers also contribute considerably to food security in their communities.

Women's unequal place in fisheries value chains highlights the need to implement international agreements that aim to create greater gender equality, such as the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and other instruments that specifically incorporate gender equality in small-scale fishing communities, such as the SSF Guidelines. However, the implementation of these agreements to tackle gender inequality in fisheries value chains faces major hurdles, including limited understanding of women's access to fisheries resources, coupled with the little attention given to aspects of voice, power and power distribution, women's own lack of awareness of their potential, and a lack of knowledge and experience on interventions that have shown themselves to actually work.

Policies and interventions that aim at empowering women in every link of the value chain need to look beyond improving women's post-harvest roles, and expand the support provided by creating more opportunities for greater participation in fisheries governance. In the particular case of small-scale fisheries, this could be done through the conventional community participation in resource management initiatives, such as: enabling greater access and/or control of productive tools and services,³ guaranteeing their rights to access to fisheries resources, upgrading and enhancing their technical skills and improving access to credit. Theoretically, if women had greater control and access to fish resources through productive tools, services, etc., they would have a stronger right as a resource user and therefore could participate more actively and effectively in fisheries governance and management. However, as further explained in this document, other factors and processes also need to be in place to ensure women's direct control and access over tools and resources, and improve their participation in decision-making.

To fully enhance women's roles in fishery resource management (e.g. by being owners of boats and gear, by participating in fisheries organizations and by having a more active role in decision-making at all levels), it is necessary to develop the capacity of women in different links of the value chain and to find ways to overcome and challenge institutional and sociocultural barriers. An important first step would be to identify the factors and processes that need to be promoted in order to start tapping women's potential in fisheries governance. The act of mainstreaming gender in governance policy and strategies, documenting the processes applied and deepening gender dialogues would greatly assist in defining good practices and in learning by practising.

In spite of recent efforts to improve women's participation in fisheries governance, examples of translating good intentions into real action and true participation have been few and on a small scale. More discussion is also needed on how to improve women's roles along the fisheries value chain, particularly in scenarios of already depleted, degraded and data-poor fisheries. Most importantly, however, is the fact that women must be at the centre of the discussion, helping to find and define these processes and solutions.

³ Productive tools are defined here as boats and fishing gear, technology, etc., and services relate to capacity building, technical skills, credit, microfinance, etc.

2. GENDER EQUALITY AND WOMEN'S ROLES IN FISHERIES

RECOGNIZING WOMEN'S ROLES IN FISHERIES

A number of international agreements call for the wider recognition of the rights of women and the importance of achieving gender equality in all sectors. In 1979, the UN General Assembly adopted the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which set internationally legally binding principles and standards for realizing women's rights. In 1995, the Beijing Declaration was adopted by the fourth World Conference on Women, reflecting a new international commitment to the goals of equality, development and peace for all women everywhere. In addition, the Rio+20 outcome document, *The Future We Want* (2012), defined the new Sustainable Development Goals. These international commitments, thanks to their umbrella programmes, are now filtering into the fisheries and aquaculture sectors.

For example, although the Code of Conduct for Responsible Fisheries (FAO, 1995) was considered gender blind, by not specifically mentioning women/gender issues (Williams, 2010), the more recent (and complementary) Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (FAO, 2015) provide a clear opportunity to raise the profile of gender in small-scale fishing communities worldwide (Box 1).

The fact that, for the first time, a chapter was devoted to gender mainstreaming in the FAO flagship publication, *The State of World Fisheries and Aquaculture* (SOFIA) (FAO, 2012a) is also a clear signal that gender equality principles are now more important than ever for policies in the fisheries sector. In addition, the FAO Policy on Gender Equality clearly states that to achieve its mandate on food and nutrition security, FAO must work towards gender equality in all its areas of its mandate, including fisheries. Many more positive actions leading to changes and further support can be expected in the near future – as long as strong political commitment remains among governments, civil society and, particularly, women themselves.

After all, women are already strongly present in the sector. The *Hidden Harvest* report (World Bank, FAO and WorldFish, 2012) found that women make up 47 percent of fisheries supply-chain workers, which is equal to about 56 million jobs in the harvest and post-harvest sectors. Just in the harvest sector, FAO (2012) estimated that 5.4 million women worked either as fishers or fish farmers (data of 2008). Women account for half of the workforce in inland fisheries, while in Asia and West Africa, 60 percent of the seafood is marketed by women. FAO (2012) also estimated that at least 30 percent of the people employed in fisheries (harvest and post-harvest) were women. If one considers that most of women's contributions go unrecognized, then the actual figures could be higher than expected, and they could even surpass 50 percent (Weeratunge and Snyder, 2009). However, one of the difficulties in raising the profile of women in the fisheries sector is due to the serious lack of gender-disaggregated data related to fishing activities along the value chain. Most of women's activities, income-generating or not, belong to the informal sector (Weeratunge and Snyder, 2009). This lack of data reinforces the remnant perspective among fisheries managers that fisheries is a male domain (Williams, 2008; Weeratunge and Snyder, 2009; Harper *et al.*, 2012), which has traditionally translated into policies in the fisheries sector that have focused on the "fish" as an economic product, and the "fishermen" as a labour force, being unconcerned with other dimensions of the sector, such as livelihoods, gender roles, and power relationships within households and communities. The very name "fisherman" reinforces this well-embedded social notion. This has recently been improving in some countries, as seen in Brazil, where the government is giving more attention to women's participation in the fisheries sector (Kalikoski and Vasconcellos, 2012), and Cambodia, through its now published and promulgated gender-specific mainstreaming policy for the fisheries sector (Fisheries Administration, 2007).

BOX 1

Summary of the relevant articles related to Gender Equality of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication**Article 2. Nature and Scope:**

2.2. These Guidelines are relevant to small-scale fisheries both in marine and inland waters, i.e. men and women working in the full range of activities along the value chain, and pre-and postharvest activities. The important linkages between small-scale fisheries and aquaculture are recognized, but these Guidelines principally focus on capture fisheries.

Article 3. Guiding Principles:

2. Respect of cultures: recognizing and respecting existing forms of organization, traditional and local knowledge and practices of small-scale fishing communities, including indigenous peoples and ethnic minorities encouraging women leadership and taking into account Art. 5 of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW).

3. Non-discrimination: promoting in the small-scale fisheries the elimination of all kinds of discrimination in policies and in practice.

4. Gender equality and equity is fundamental to any development. Recognizing the vital role of women in small-scale fisheries, equal rights and opportunities should be promoted.

Article 7 on Value Chains, Post-harvest and Trade:

7.2. All parties should recognize the role women often play in the post-harvest subsector and support improvements to facilitate women's participation in work. States should ensure that amenities and services appropriate for women are available as required in order to enable women to retain and enhance their livelihoods in the post-harvest subsector.

Article 8 entirely devoted to Gender Equality, stating that:

8.1 ... [G]ender equality requires concerted efforts by all and that gender mainstreaming should be an integral part of all small-scale fisheries development strategies. These strategies to achieve gender equality require different approaches in different cultural contexts and should challenge practices that are discriminatory against women

8.2... Women should be encouraged to participate in fisheries organizations, and relevant organizational development support should be provided

8.3. States should establish policies and legislation to realize gender equality and, as appropriate, adapt legislation, policies and measures that are not compatible with gender equality, taking into account social, economic and cultural aspects. [...]

8.4. All parties should encourage the development of better technologies of importance and appropriate to women's work in small-scale fisheries"

Other articles making reference to women include: 5.3, 5.12, 5.15, 5.18, 6.2, 6.4, and 6.9.

Nonetheless, much more can be done to improve gender-related data in the sector, especially in small-scale fisheries. This can be achieved by specifying in more detail information related

to men and women involved in fisheries and their respective roles: financing, gear, maintenance, processing, marketing, etc. (Harper *et al.*, 2012). More attention should also be given to filling information gaps⁴ within the sector, especially with the use of appropriate gender-analytic tools (Holvoet, 2008; WorldFish Center, 2010a; Lentisco and Alonso, 2012), and the use of a value/supply chain approach to fisheries (Bavinck *et al.*, 2005; Dey de Pryck, 2012). It is also

⁴ For example, in the areas suggested by Weeratunge (2009).

important to note that, although the focus should rely on gathering and improving the data gathering of the sector, lack of data should not be used as an excuse for inaction (Harrison, 1995). Instead, there is a need to apply a gender lens (Williams, 2008) by designing interventions directly aimed at empowering people, women and men in small-scale fisheries.

MOVING BEYOND THE PERCEPTION OF WOMEN AS FISH PROCESSORS

The persistent perception of the fishing sector, with a highly gender-segregated division of labour (men fishing / women processing) has shaped the generalized approach to fisheries management, targeting men for fishing and resource management initiatives, and women as processors and marketers of fisheries products.

This perception is reinforced by the important role that women play in fish processing plants in developed and developing countries, and particularly historically with women as fish traders in some developing countries, as for example those prompted by the colonial hut tax which obliged fishers and their wives to process and trade fish for money as pay in Sierra Leone (Hendricks, 1983). In the small-scale fisheries, women's roles are dominant in the post-harvest sector. They process fish products: drying, salting, smoking, making fish balls or fish/shrimp sauce, etc., which they either sell to generate a supplementary income for the family, or use directly for household consumption. Women do work on offshore industrial fishing vessels, particularly on the processing floors of factory vessels (Lee, personal communication), but more generally, they work in processing plants and in marketing activities on land. However, the perception that women play a major role in industrial processing plants overlooks the fact that they have very little power in such plants. They may provide the majority of the labour, but they have little say in supervision and management.

Despite the importance of these post-harvest roles and the need to further strengthen them, women's involvement in fisheries is not only limited to the post-harvest sector. A literature review on the theme of women/gender and fisheries reveals that women can actually be quite active in river and inland, near-shore and subsistence fisheries.⁵ In small-scale fishing communities, women are also the main caregivers of the fishing household, responsible for food and nutrition security and, in many cases, responsible for family finances (Williams, 2010). This role should not be underestimated as it places a large burden on women, not only as processors and traders but also as mothers and caregivers for both the young and for older people. The census study carried out by Kalikoski and Vasconcellos (2012) in the estuary of Patos Lagoon, Brazil, highlighted the importance of women's activities outside the fishery in maintaining fishers' households, especially during failed fishing seasons caused by the amount of freshwater flowing into the lagoon during the rainy season, which altered the spawning seasons and thus overall production.

Many of women's roles and contributions to the fisheries sector have been invisible and undervalued for too long, resulting in women remaining in a marginalized position and excluded from decision-making mechanisms. One can only note the very recent creation in January 2011 of UN Women as testimony to the long overdue attention for gender and women's equality. More recently, gender is starting to be integrated as a cross-cutting issue in many projects. With this widespread characterization of women as fish processors, traders and caregivers, the approachable way of taking gender issues into account has been by targeting women⁶ through post-harvest activities and household support. This generalization of gender roles has resulted in the provision of processing tools and/or credit, and sometimes livelihood diversification support options (rearing livestock, weaving, etc.) to women. Such activities can be considered **low-conflict**, meaning that they do not question strategic gender

⁵ As seen in the four Gender and Fisheries Symposiums of the Asian Fisheries Society (Williams *et al.*, 2001; Choo, Hall and Williams, 2006; Williams *et al.*, 2012).

⁶ A strong (and wrong) perception remains that gender issues equals women issues. This is because the research focus tends to be on the less powerful, but this should mean the focus of women's position and roles in relation to men (Bennett, 2005).

concerns but only pragmatic concerns (Moser, 1989). They allow women to remain in the socially acceptable female domain of the household and in their “normal” roles of processor and/or marketer. The objective of these activities has been to improve women’s income, in the hope that besides having the boxes of “women” and “gender” ticked in the project management checklists, women would also benefit from them. However, interventions of such types have rarely been organized to understand and/or to question power and power relations within households and in communities, and, as a result, they have done little to increase women’s voices in the sector.

Despite the importance of the post-harvest and livelihood support that women provide,⁷ the areas where women are more absent, compared with men, are in resource management, decision-making, access rights, ownership of gear and boats, as well as mobility for accessing markets. These areas are most relevant for their empowerment, and without them, any other gains are liable to be lost quickly, especially when external support is withdrawn.

Policies and interventions for the development of fisheries continue to be unable to deal with the complexity of gender issues (Harrison, 1995), especially when one considers limited time-bound resources and trying to achieve clear defined outcomes, which unintentionally result in gender blindness (Brugere, 2013).

GAINS FROM INVOLVING WOMEN IN RESOURCE MANAGEMENT

Documented examples where women have been more actively involved in fisheries management are difficult to find, despite the fact that there are potential gains for the user groups themselves. Westermann, Ashby and Pretty (2005) indicated, through their study of 33 rural programmes in 20 countries of Latin America, America, Africa and Asia, that having women represented in resource management groups improves collaboration, solidarity and conflict resolution within the groups.

This is most likely also the case in some fisheries. For example, in Cambodia, women were found to be better advocates of transparency and for more inclusive participation in fishing communities, and communication and conflict management (Gätke, 2008). Drivers such as better communication, conflict resolution and equitable access may ultimately translate into better resource management, even though their initial concern may not have been environment protection but more towards community cohesion (Funge-Smith, personal communication).

Through women’s greater participation, ultimately their needs and priorities are better understood and therefore better represented. In general, women also tend to pay more attention to livelihood needs such as equitable distribution of resources and other matters related to poverty reduction (Gätke, 2008). The benefits of women’s inclusion in decision-making go beyond fisheries resource management. It also includes fostering community well-being and economic growth, increasing awareness of domestic violence, increasing attendance at school among children, and their (women’s) participation in local politics (Gätke, 2008; Dey de Pryck, 2012; SOFA, 2011). Women are also prompt to organize themselves with the purpose of improving local conditions in their communities (da Cal Seixas Barbosa and Begossi, 2004). Through increasing women’s control over natural resources, it is conceivable that there will be improvements such as increasing women’s bargaining power within the household, increasing not only their welfare but also child nutrition and health (Duflo, 2012). All these factors contribute to the achievement of the Millennium Development Goals, and societal well-being. However, to achieve this, development projects in the fisheries sector need to integrate gender considerations and focus on women’s empowerment. Otherwise, the economic development achieved through these projects could backfire and lead to a “loss of empowerment” (Choo and Williams, 2014).

⁷ For a comprehensive review on good practice policies to eliminate gender inequalities in fish value chains, see de Pryck (2012).

There are three additional considerations as to why it is important to take women into account and involve them in resource management. First, women, through their work in the household or other subsistence fishing activities (such as gleaning) or other diversified income activities outside fisheries (WorldFish Center, 2010a), may be subsidizing men's fishing activities, keeping men fishing for an otherwise unprofitable resource (owing to declining stocks or high fuel costs) (Harper *et al.*, 2012). Second, women also have an ecological impact through their fishing pressure on resources, especially but not only in invertebrate harvesting (Kleiber, Harris and Vincent, 2014), and these impacts need to be taken into account. Third, women's predominance in fish processing is unquestioned; however, there is a lack of information on how the post-harvest sector drives the impact on aquatic resources (Walker, 2001). There is little evidence available to show whether better post-harvest and processing may result in better prices, and whether this will be an incentive for reducing or increasing fishing effort. Some argue that more post-harvest losses will tend to increase fishing pressure in order to recoup these losses. As women play such an integral role, it stands to reason that a more equitable approach to fisheries governance and management should give more weight to improved resource management and decision-making (Box 2). This would make them more aware of the resource management problems and challenges, and permit them to become part of the solution. This is not only a fairer and more equitable approach, but it may well be the most sustainable avenue for sustainable fishery resources use and societal benefits.

When considering women and resource management, there is also a need to move beyond stereotypes and the tendency to use an approach describing a special link between women with nature, the "feminine principle" implying harmony, sustainability and diversity of the feminine (Shiva [1989], explained in Rico [1998]). Owing to the experiences of women, both biological (pregnancy, breastfeeding, menstruation) and cultural (traditionally taking care of the children), this perspective considers that women have a different natural psyche that makes them natural stewards of the environment, making women and the environment appear as "victims" of development. However, this approach has been replaced by a more comprehensive understanding of gender inequalities. The gender and development (GAD) approach maintains that gender discrimination is mainly due to the gender division of labour, the assignment of childcare and domestic work to women, the unequal access between men and women to the resources and to their eventual benefits, limited women's access and participation in decision-making processes, and inequitable sharing of power. The GAD approach does not only talk

BOX 2

Integrating post-harvest into fisheries management and decision making processes

In the Gambia, the National Fisheries Post-Harvest Operators Platform, with about 1 550 mostly female members, signed agreements with government, non-governmental organizations (NGOs), microfinance institutions and other development partners to receive assistance in information, guidance, services and technical support. The Platform participated in the formulation of the 2007 Fisheries Act, which recognizes the importance of artisanal fisheries to the economy. As a result of the Platform's activities, the country's poverty reduction strategy now includes post-harvest issues in fisheries. The women enhanced their activities with credit schemes provided to all members at more affordable rates and are now sharing communal, renovated fish-processing facilities under a pay-as-you-go system. The women now have new fish-smoking houses and better equipment. The renovation of eight, and construction of two newly built, fish smoking houses and drying racks for the women has enhanced their productive capacities, reduced post-harvest losses and improved the quality of fish produce. The women also received training on how more effective processing and better hygiene can help them to preserve and sell more of what is caught. They are now more aware of such issues as sustainable fisheries management, waste collection and hygiene in processing and storage. They also received functional literacy training, which was necessary for more effective participation in decision-making.

about women, but emphasizes the social/gender relationships and power distributions. The GAD perspective allows differentiation among women and the importance of taking into account the particular contextual factors: lifestyles, livelihoods, class, ethnicity, religion, age, economy, etc. Women are not seen just as victims of environmental degradation, but also as important users and consumers of natural resources, and therefore equipped with important knowledge and understanding that, when properly taken into account, will improve fisheries resource management. Women and men are part of the problem of environmental degradation and, therefore, they must be mobilized together to improve resource management and community well-being. Box 3 presents examples of how women have become more involved in resource management and decision-making and livelihood processes.

BOX 3

Putting gender mainstreaming into action: improving women's roles and participation in decision-making in Quang Nam, Quang Tri and Thua Thien Hue Provinces, Viet Nam

The Regional Fisheries Livelihoods Programme (RFLP)¹ used gender mainstreaming as a strategic approach, and introduced it during all stages of programme interventions. The RFLP worked to improve women's representation in decision-making, improving livelihoods in fishing communities and improving the management of the resources. Pre-assessment of the specific concerns and experiences of both women and men was a precursor to understanding the potential of introducing gender mainstreaming.

Baseline surveys were carried out to determine the division of labour between marine and lagoon-based fisher households. It was found that in marine fishing households, only men went to sea and that the wives and children were hardly engaged in any income generation. However, in lagoon fishing households, men and women fished together and sometimes their children accompanied them. It was not unusual for these women to work 12 hours a day fishing, marketing, and repairing fishing gear, in addition to household work and child care. The baseline also revealed many young people preferred migration to cities (with the hope of better incomes) over fishing.

In general the fisheries associations, fishers, women and government staff, probably because of lack of awareness, had little understanding of fisheries co-management and gender mainstreaming, and women were even less informed and did not consider these useful or even needed. To overcome these issues, the project provided training on gender mainstreaming through the Women's Union in three provinces. Training for both men and women consisted of understanding gender roles and stereotypes, identifying and addressing gender issues in the fisheries sector, and building confidence related to gender concerns in the community. It was necessary to contextualize and tailor gender mainstreaming for fisheries.

The term "fisheries association" was commonly and erroneously thought to be a community-based organization for men who fish. Therefore, fisheries associations were male dominated with less than 15 percent females. To overcome this, the RFLP targeted livelihood incentives to increase women's membership and this resulted in women members significantly increasing from 12 to 471 members.

Catches and incomes were declining. After analysis, the RFLP facilitated new livelihoods options with the groups and provided small animals (pigs and chickens) to kick-start the activities. However, this meant more work for the women until male fishers saw the advantage of the new activities. They soon became willing to spend time helping with traditionally "women's activities" so that the women could dedicate more time to livelihood income-generating activities.

¹ FAO. 2013–2014. Regional Fisheries Livelihood Programme for South and Southeast Asia (RFLP). Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP). In: FAO Fisheries and Aquaculture Department [online]. Rome. Updated 15 September 2013. [Cited 17 September 2014]. www.fao.org/fishery/rflp/en

3. WOMEN'S ACCESS TO FISH

INTRODUCTION

Women may access fish by themselves, by going fishing or gleaning in the intertidal zones, by obtaining fish from their husbands, other family members, other relationships, or by buying the fish directly from fishers or traders. Even when they do not fish themselves, some of the more business-minded women often finance fishing trips with the agreement that they will have first choice of the catch.

The following section provides a classification depending on how women access fish. Women **primary users** are those women who have direct access to fish by fishing themselves. Women **secondary users** refers to women who obtain fish from members of their kin or others, or through the ownership and management of productive tools that they control and can rent to others. Women **tertiary users** buy fish directly from fishers or traders. This categorization is important in order to better understand that women's dependence on previous links in the value chain can be a reason for increased vulnerability and marginalization of women, and it serves to suggest entry points to improve their participation in decision-making.

WOMEN AS PRIMARY USERS OF FISH RESOURCES

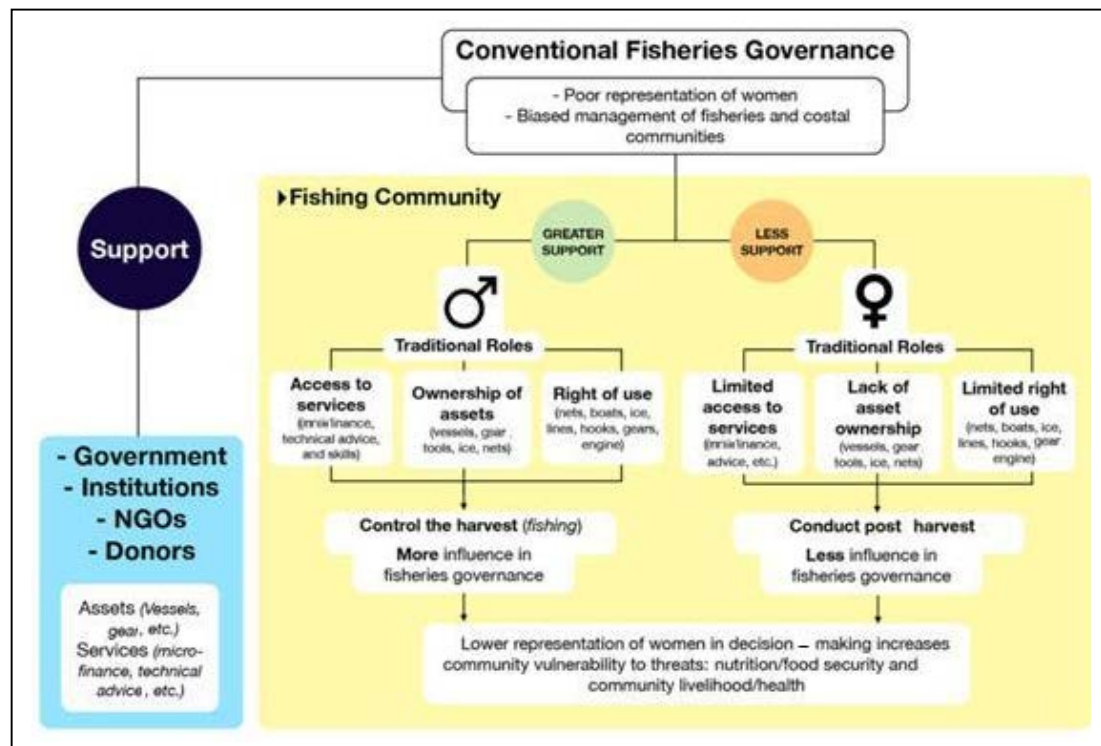
Governments and development assistance donors have provided support to the perceived traditional roles of men (fishing) and women (post-harvest). As a consequence, women have been excluded from fisheries management, and they have received little support in owning actual fishing assets, securing rights to fishing grounds or accessing services such as capacity building, technical advice and microfinance. The lack of women's representation in decision-making increases community vulnerability to threats related to food security, nutrition and community well-being.

Because women usually lack representation in fisheries associations and fisheries management bodies, they are usually excluded from decision-making, particularly for the type of decisions that directly affect the resource they depend on. With such a striking absence of women in decision-making bodies at all levels, it is easy to understand why women's needs are not being represented in the sector (Duflo, 2012). Figure 1 shows the conventional fishery governance structure.

The next question that arises, based on the dependence on previous links in the value chain, is: If women had **direct access** to fish and productive tools, would their lives and the livelihoods of small-scale fishing communities improve? Would it promote social and economic advancement, and improve their involvement in resource management? Would their profit margins also improve?

In some small-scale fishing communities, there are women who fish and/or finance fishing operations. Women processors often finance fishing operations in order to secure access to fresh fish (R. Lee, personal observation in West and Central Africa). However, there is a lack of reliable statistical data to give a consistent picture of the types of fishing, the gear used, and fishing grounds where women fish, as most studies on this subject are relatively short-term (Walker, 2001). More information is needed to better understand the type of direct access that women have to fisheries resources. Information about comparative profit margins in the value chain is lacking, as is reliable gender-disaggregated data on boat ownership or on rights distribution to use fishing grounds (Weeratunge and Snyder, 2009; Dey de Pryck, 2012).

FIGURE 1
Conventional fisheries governance



The following cases examine the contextual and differential gender division of labour in fishing communities. The aim of these studies has largely been to contribute to the “women also fish” discourse, bringing women’s roles out of their invisibility (Weeratunge and Synder, 2009), and not so much to understand better gender relations and power structures, which would require a comparative analysis of women’s roles against those of men, and with other women (Weeratunge and Synder, 2009).

Nigeria

In a recent study carried out in Nigeria, researchers compared women who were very active in artisanal fish capture with those involved in marketing. Taiwo Mafimisebi and colleagues in their study in Ondo State, southwest Nigeria, found that, when comparing women fishers who fished in protected waters,⁸ almost all with just primary education levels with women fish marketers with secondary education levels, the women fishers achieved greater profits than the women marketers (Mafimisebi, Ikuemonisan and Mafimisebi, 2013). Some of the more wealthy and educated women own motorized fishing boats and the catch was shared with the crew in the ratio of 3:1 (owner to crew), while the owner supplied petrol and food. Women artisanal fishers who have canoes may also hire them out to fellow women to fish on their behalf at an agreed fee or under a sharing formula for the catch (Mafimisebi, personal communication).

Direct access to productive tools and the fishery resource makes women less reliant on receiving regular fish supplies from primary producers. Being a primary producer has advantages in bargaining power. Women have the capacity to manage fishing operations, although they may not do the actual fishing.

⁸ Rivers, streams, estuaries, lakes and mangrove freshwater swamps.

Thailand

A study carried out by Sriputinibondh, Khumsri and Hartmann (2005) in northern Thailand highlighted the diverse range of fisheries-related activities that women were involved with, including fishing. Men were the main fishers, but women also fished by themselves where there were no men in the family. However, a strong perception persisted that women had not enough strength and were not physically suited for fishing, or that they should not do it alone (too risky). Men outnumbered women in gear maintenance 5:1. As a consequence,

Depending on the type of gear used, the perception of women's strength and doubts about their ability to fish may impede their access to credit and decision-making and, therefore, to fisheries management and vessel/gear ownership.

fisherwomen had less access than men to credit, decision-making, and training. However, women had other important fisheries and non fisheries livelihood activities such as cage culture and fish processing, rice cultivation, weaving, livestock, and vegetable gardening.

Cambodia

A study carried out in Cambodia (Sopanha *et al.*, 2008), revealed that women were engaged in a variety of fisheries-harvest activities, small-scale capture fisheries, gathering aquatic plants and animals, and aquaculture. In the Tonle Sap region, women did not go fishing with their husbands to remote fishing grounds, but they still fished on fishing grounds nearby their households, allowing them to take care of their household responsibilities. Similarly, in coastal areas, the women collected crabs and other coastal aquatic resources nearby. This was different from the Mekong River floodplain region, where the fishing activities were concentrated in a short period between September and December, and it was important for each household to maximize the income from fishing. In this case, it was normal for women to go fishing with their husbands, undertaking supporting roles such as operating boats, taking fish out of the nets, and sorting and cleaning fish. However, in Stung Treng, women did not go fishing as it was not the main activity of the villages and because it took place at night.

In different fishing seasons, extra labour is required and women may travel longer distances and for longer periods accompanying their husbands. However, in other seasons, and depending on the ecosystem and on local culture, it may be more socially acceptable for women to fish close to the household, in order to attend household needs.

Bangladesh

A case study in Bangladesh (Sultana, Thompson and Ahmed, 1998) described the increasing role of women involved in fisheries. Initially fishing was an occupation done only by Hindu men, and some old and widowed women who caught fish for household consumption. However, owing to the high levels of poverty, now any poor woman irrespective of religion, age or marital status can be found catching shrimp fry in the coastal area. About 80 percent of the shrimp fry work collection is carried out by women and children, while some Hindu women will catch fish with hand nets in shallow waters, paddy fields and in coastal areas. This is often not considered by the women themselves as "fishing".

Increasing poverty levels can lead to more women going into fishing, even if it goes against religious/cultural beliefs and customs. Perceptions may also change at the prospect of gaining a higher income for the family by involving women more actively in fish production. Aquaculture may be a source of employment, including the collection of fry and seed. Aquaculture should be carried out in a sustainable manner, with a gender lens and without child labour.

Despite these roles, the participation of women in fishery resource management remains small. The increase in women in the sector seems to be linked to the increasing demand for shrimp fry for aquaculture development in Bangladesh.

Pacific islands

A study carried out in the Pacific Islands (Lambeth *et al.*, 2001) showed that fishing beyond the reef has traditionally been the domain of men, while women have collected invertebrates within lagoons and inshore areas. With the development of commercial fisheries, most initiatives focused on supporting men's activities offshore, while women received little or no support to manage their own inshore resources, despite the fact that 70–80 percent of the inshore catch (including reefs, estuaries and freshwater) was for subsistence. Fisheries agencies were increasingly concerned about declining catches of fish and invertebrates in the most accessible inshore areas, but few had the staff or resources to address these problems. Women also seemed to perceive that what they do is not “fishing”, and that fisheries agencies only deal with men's activities. It is also against the social norm for women to ask for government assistance. Lack of attention to gender may be as a result of this norm. However, this is changing with governments starting to focus more attention on gender mainstreaming, with the creation of institutions as in the case of Samoa.⁹ Below is a summary of the description by Lambeth *et al.* (2001) of some gender-based characteristics by country, and the importance of women in subsistence fishing activities.

Women's perception of themselves indicates an important area for improvement. They may not see themselves as fisherwomen or fish workers. They glean mainly for subsistence and have an impact on the near-shore reef systems and lagoons. Involvement of women in fisheries management, and education about the ecosystems that they use will go a long way in maintaining the healthy near-shore ecosystem. If government support is demand-driven (as it often is), women may be left out of government programmes that could support them, just because they are not aware that they can demand assistance. There is a need for them to better understand their important role in fisheries and resource management.

In **Tuvalu**, the introduction of outboard motors changed the structure of the fisheries from coastal to fishing farther from land. The collection of shellfish, invertebrates and crabs by women became less important for food security, and women collected more for enjoyment. However, they still remained the main processors and marketers of fish and fish products.

A study of subsistence fisheries in **Samoa** found that 18 percent of all village fishers were females, who harvest about 23 percent of the total weight of seafood (Passfield *et al.* [2001] cited in Lambeth *et al.* [2001]). Considering women are responsible for collecting most of the marine bivalves and other invertebrates in Samoa, they would provide close to 20 percent of the per capita seafood consumption of 71 kg per year (data 2001).

In **Niue**, women are the main collectors of shellfish and invertebrates in the lagoons. (Lambeth and Fay-Sauni [2001] in Lambeth *et al.* [2001]). They also fish for juvenile goatfish during certain times of the year. As in many Pacific islands, it has long been taboo for women in Niue to go out on boats. Although this is slowly changing, their involvement in fisheries is still mostly confined to harvesting from the small reef flats, processing their own and the men's catch, and other marketing activities (Tuara [2000] in Lambeth *et al.* [2001]).

Solomon islands

A study carried out in Solomon Islands (Weeratunge *et al.*, 2011) found that fishing was predominately a male activity (90 percent by men); women were also engaged in fishing, although there were large variations among villages. Men were usually involved in reef and offshore fishing, while women and children predominantly fished close to shore on reefs close to villages, lagoons and mangroves. Women harvested shellfish while men were

⁹ Ministry of Women, Community and Social Development.

engaged in diving and spear fishing. Men were the ones who owned most of the boats, although some women also owned canoes or had access to canoes belonging to other kin. While both men and women owned their fishing lines and hooks, men owned larger numbers of lines, and had better access to fishing spears, engines, nets, boats, sails, and diving gear (masks and fins), in contrast to some women only owning swimming goggles that they used for shellfish fishing. The study also revealed that although women and men were engaged in fish trading in local markets, in the Honiara market, women traded molluscs and crustaceans and low-value fish from the tuna vessels, while men dominated the sale of reef fish.

Women fishers use homemade and low-tech tools, in contrast to men that have better access to and ownership of more sophisticated gear. Women also target low-value species while men focus on higher-value species.

South Africa

A study by Branch *et al.* (2002), aimed at providing a better definition of “subsistence fishers”, revealed women’s and children’s roles in South African fisheries. The paper discussed the Marine Living Resources Act promulgated in South Africa for the protection of the marine ecosystem and the legal recognition of subsistence fishers, with the purpose of protecting the rights of poor people (including women). The results of the study showed that most of the fishers were male and that about one-third of the fishers in rural areas were women (the percentage in the metropolitan area was lower). It was also found that ***female-headed fisher household were less likely to be among the poor than male-headed households***, contrary to other sectors studied in South Africa (Klasen [1997], cited in Branch *et al.* [2002]). Men harvested higher-value rock lobsters and abalone and had access to larger areas, numbers of boats and sophisticated gear. Women’s contribution to catches of these same high-value species in rural areas was significantly higher than in urban areas, and they were the dominant fishers in rural areas fishing for mussels, limpets, winkles and oysters in the intertidal zone. However, this type of fishery was considered to be mainly for daily food consumption by poorer households. The paper covered the division of labour among men, women and children in the fishing harvest, but it did not look into other links in the value chain (processing, marketing, etc.) and did not cover women's access to fishing gear.

Future studies should look more carefully at how power is distributed among fishing communities, especially on who makes decisions, who exerts control over technology, and who has access to fishing grounds, and how this is achieved. It is important to understand the contribution that women fishers make to food and nutrition security, and it should not be assumed that they are only able to process and market fish.

The United Republic of Tanzania

A study done in the United Republic of Tanzania (Porter *et al.*, 2008) cautioned about the need to better understand the process of modernization and globalization, where benefits may not accrue to the fishers or their poor coastal communities. By being excluded from mainstream development, some fishers and communities are becoming poorer and resources are becoming degraded. The study described how fishers saw themselves – fishing was mainly a male activity, although women were also engaged in the fishery in other ways such as seaweed farming, octopus trapping, and netting of small fish in the intertidal zone. However, the type of fishing that women were involved in was not considered as “fishing”. Cultural constraints prevented women fishing from boats, going great distance from home, or diving with scuba gear on the reef. Women were the traditional fishers of octopus; however, when the octopus fisheries became more economically attractive because of demand by international markets, women were displaced by men from their traditional fishing activity. Men went fishing in groups, using new technologies that allowed them to fish longer (such as

scuba equipment) and farther away (with boats). They also ignored women's knowledge on seasonal fishing that preserved the stock. Soon, intermediaries started becoming involved, renting boats to the fishermen and controlling the market. Migrant fishers became interested in this fishery, but did not follow any conservation measures. As expected, all this had a negative impact on the health of the octopus resources and, consequently, on food security in general and particularly on the female fishers. By being excluded from decision-making mechanisms, women were being excluded from the developmental benefits of the market access and opportunities of the fishery on which they had in-depth knowledge.

If the value of women as producers is not recognized, as soon as the resource they gather gains higher relevance in the market, women are the first to be displaced by men.

Not taking into account traditional roles and knowledge, can lead to exclusion of women, which can have very negative impacts on food and nutrition security and on the fishery resources.

Co-management processes can enhance equitable management and conservation of small-scale fisheries and improve food security, especially in those households that rely on women's catch for subsistence.

Mozambique and the United Republic of Tanzania

A study done by Nordlund (2012) in the intertidal area in West Indian Ocean (Mozambique and the United Republic of Tanzania) revealed that harvesting of aquatic animals was mainly done by women. However, they receive no management attention, or any type of formal recognition. The study described how knowledge was transferred from older relatives to women of younger generations – older women taught the young how to harvest, what to harvest and how to be respectful towards the environment. This information was considered valuable for the preservation of the intertidal areas that were used for subsistence and also generated income.

However, women's activity was put at risk owing to conflicts with tourism, new immigrant settlements and coastal development. If the resources in the intertidal zone decrease significantly, this will have a negative effect on food security. There is also a high possibility that ecosystems located adjacent to disturbed intertidal ecosystems, such as coral reefs, will also be affected. The lack of research, monitoring and management for most intertidal ecosystems (with the exception of mangroves and some protected species) is probably due to the low formal understanding of the importance of these areas. These intertidal zones are the main areas where women fish for subsistence and for food security.

WOMEN AS SECONDARY AND TERTIARY USERS

There are many ways that female fish-processors and traders gain access to fish and fish products, as secondary or tertiary users in small-scale fisheries. They may obtain the raw material from their fisher-husbands, who will provide them with fish or fishery products directly from their share, or their individual catch (Williams, Williams and Choo, 2002). These fisher-wives will then be in charge of selling the fish fresh or undertaking some type of processing before selling it. A part of the catch may be consumed within the household, contributing to food and nutrition security, even if at times people are not fully aware of the nutritional value of fish (Murray and Sayasane, 1998).

Women's fishing activity is characterized by gleaning in near-shore and intertidal zones either for household consumption, or to be sold. Their activity is regarded as part of the informal sector, not being accounted for, and inadequately managed. The role of women in intertidal fishing must be recognized.

Conflicts with other users and degradation of near-shore zones threaten food security.

Deeper understanding of the connectivity between intertidal ecosystems and their adjacent reefs, mangroves, lagoons is important for their management.

Women who are single or widowed may face more problems obtaining fish, although in some cases specific laws may exist to ensure that the fishermen's widows have access to fish (Walker, 2001). For example, some territorial use rights in fisheries (TURF) systems in Chile allow widows to receive about 75 percent of the deceased husband's income for the rest of their lives, while their children are also taken care of until they can subsist on their own (Gallardo-Fernández and Friman, 2011).

Women with access to capital may buy fish and fish products from the market, or directly from the landing sites, taking the catch home for processing and/or selling it in other areas. The areas where they will sell their fish will then depend very much on their own mobility, and their access to ice and to processing techniques for making the product last longer without perishing (Lentisco, 2013).

There are also other ways to access fish in the absence of financial capital. In some countries in sub-Saharan Africa, poor female fish-traders lacking capital, have access to fish products through transactional sexual intercourse, putting themselves at high risk of HIV/AIDS, other sexually transmitted infections, and social exclusion (Béné and Merten, 2008), increasing their vulnerability by stigmatizing women and blaming them for spreading HIV/AIDS in the community (Merten and Haller, 2007). Women who take part in this type of activity are mainly young and single or older widowed/divorced women, revealing the importance of women's marital status for accessing fish. However, married women are also at risk of HIV/AIDS through their husbands or otherwise. For example, in Kenya, it was reported that migrant female fisher folk may be more at risk of HIV/AIDS than non-migrant women, owing to greater engagement in extramarital sexual intercourse. This difference was not observed among the men. It did not matter whether they were migrant fishers or not, but rather whether they indulged in extramarital sexual liaisons (Kwena *et al.*, 2013). The extent of women's social capital delimits their access to fish, as well as their mobility and migration patterns. These aspects have largely been overlooked or not fully understood by policy-makers. The following case studies aim to explain these issues in more detail.

Vulnerability of small-scale marine fishing communities to HIV/AIDS in Cameroon

Poverty, poor fishery-resource management, lack of education and access to infrastructure and transport increase vulnerability, particularly of women and youth. Prevention HIV/AIDS and sexually transmitted infections requires improved knowledge, access to basic information about reproductive health care, education, and family planning, with special attention on migrant fish workers, especially women. Fishery policy-makers need to take these matters into account in their development policies and planning.

The work of Holvoet and Chiambeng (2011) depicted the vulnerabilities faced by small-scale marine fishing communities, in particular to HIV/AIDS in Cameroon, where HIV/AIDS prevalence rates among fisherfolk are very high. Women from poor and food-insecure households, and particularly those that are landless, often become involved in the fisheries sector as a survival and livelihood strategy. This results in increasing the competition for fish for processing and marketing. With diminishing fish resources, lack of credit, and high levels of poverty, sex is demanded or offered as payment for access to the fish. This transactional sex contributes to the high levels of HIV in fishing communities. Other contributing factors relate to the remoteness of fishing communities, with there being little support and access to HIV/AIDS prevention and

reproductive health counselling, prophylactics, and medicines. Lack of access to microfinance, education, cold storage and marketing infrastructure, and potable water are additional challenges faced by these women.

Women were found to be more vulnerable because of unequal power relations caused by their high financial dependence on men. As men dominate the fishing activities and own the fish,

women and youths (girls and boys) have low bargaining power, making them more vulnerable to transactional sex. Fish is not the only commodity in these transactions. Coastal fishing communities were also subject to harassment by authorities in control of security, in particular in relation to boat licences and residential permits for non-nationals. Again, female wholesalers and processors either offered or were coerced into providing sex as a way to reduce or eliminate the harassment or fine.

The decline of fisheries resources has been attributed to the high fishing effort of industrial vessels. Conflicts among fishers, decreasing earnings, increasing unemployment and poverty in households depending on fisheries resources are some of the main causes of the high vulnerability of women. During low productive seasons, access to fish becomes difficult, and “With limited opportunities for income diversification and limited access to other natural resources poverty increases, food security decreases and many of the women/girls and boys resort to high-risk behaviours mainly transactional or paid sex work, to secure their livelihood thereby increasing the risk of infection with HIV/AIDS” (Holvoet and Chiambeng, 2011, p. 9) and other sexually transmitted infections. High levels of mobility and migration also contribute to the vulnerability of women.

The importance of social cohesion in reducing vulnerability of women and youths at Lake Chilwa, Malawi

In a study on Lake Chilwa, Malawi, Zacharias (2009) described how, as fisheries resources and incomes from fishing declined, it became more difficult to sustain the fishing family. To mitigate the lowered incomes, women had to diversify their livelihood activities, but their options were dependent on other actors in the value chain, their roles and the distribution of power. These power structures marginalized women, making them more vulnerable to abuse. Male traders and processors first accessed larger fish, leaving the lower-value fish for women. Transactional sex for fish was also an issue at both study sites. Both women and men stated that there were women who would engage in transactional sex in order to obtain fish. These transactions seemed to happen under two quite different conditions. The women in Kachulu Harbour and Kotamo Village reported that there were business-women coming to Lake Chilwa who would trade sex for fish. The reasons given were the fear to fail in business and a need to keep a certain standard of living. Women in weakened and vulnerable positions sometimes have very few options and engage in transactional sex in order to survive. The other scenario described fishermen who sought out female processors / business women with good incomes. Here, the sexual act was seen as “bonding” to secure further business contracts, with previously agreed terms between the fisherman and the fish processor.

Large numbers of women seeking livelihoods in the processing and marketing of fish increase competition, creating a seller's market and making it easier for vulnerable and poor women and youth, particularly young girls to fall victim to abuse. Finding ways to increase social cohesion among individuals in a community, especially among migrant fishers, can be a way to improve resource management through the building of trust and a sense of belonging, improving overall fisheries livelihoods and reducing vulnerabilities, particularly for female migrants. Interaction with other specialized reproductive health agencies is necessary to address these issues.

Zacharias (2009) described the importance of social cohesion and the sense of belonging in fishing communities. Her study on small-scale fishing communities in Malawi examined the importance of social capital for women's and men's access to fish. Low social cohesion among migrant fishers tended to reduce effective enforcement of law and regulations, while stronger social cohesion, a sense of belonging and the building of trust supports sustainable livelihoods, not individually, but of the community as a whole. In the communities studied,

men were in charge of the fishing operations while both women and men did the processing. In the past, women had fished along with men.

Gender and microfinance services in Benin

The Sustainable Fisheries Livelihoods Programme (SFLP) project in Benin (Djoi, Cakpo and Gnimadi, 2004) found that just targeting women for microfinance activities, without proper consideration of their practical and strategic needs, did not in itself have an intrinsic ability to automatically change the unequal power relations between women and men. Another aspect highlighted in the study was that there were also important differences with regard to

access to fishing gear and the type of gear accessed, as there were very clear gender divisions of roles, with men doing the fishing and women the processing. The study highlighted the importance of developing gender analysis together with socio-economic analyses. It was found that it was important to evaluate the supply chain and marketing aspects by looking at the different stakeholders and their position in the chain, the services they used and/or lacked, and the expenses and income generated through the activity.

Gender analysis should be linked with socio-economic analysis as a way of understanding power structures and wealth categories, with the aim of designing more equitable and integrated interventions

There is great scope for improving and supporting women involved in processing and marketing, through capacity building in business development and entrepreneurship, provision of processing tools, awareness-raising campaigns, child care, and by facilitating the access to credit. However, by being secondary and tertiary users of the resources, they remain dependent on the previous links in the value chain.

4. FACILITATING WOMEN'S ACCESS TO AND CONTROL OF FISHERIES RESOURCES – FACTORS AND PROCESSES

The case studies in Chapter 3 show examples of the different ways women access fish. In small-scale fisheries, women in post-harvest and marketing activities are directly dependent on previous links in the value chain. However, the involvement of women in fishing and processing activities does not guarantee their full participation in decision-making over the resources, and other factors and processes need to be in place. The following sections look into these factors and processes more carefully.

CASE STUDIES WHERE WOMEN HAVE GAINED PARTICIPATION IN RESOURCE MANAGEMENT AND ACCESS TO THE RESOURCES

Organizing women clam collectors in Tunisia

Artisanal clam collectors in Tunisia are mainly women. Despite the economic importance of this activity, these women used to earn little as they had weak bargaining power within a larger system characterized by intermediaries, unfair transport fees, lack of official interest and no access to training or extension services. An FAO project provided technical support on how to organize themselves better (FAO project documents, in Dey de Pryck [2012]). Study tours and the sharing of experiences with other groups inspired better mobilization, claiming a fair price and lowering transportation costs. An independent association of only women clam collectors was set up to support the women in bargaining for better prices. In addition, the FAO project provided support for farming smaller clams that were regularly caught accidentally but discarded because they were too small to be marketed. FAO also developed a code of practice for growing out these undersized clams to help the women improve their profits. As a result of the project, these women clam collectors saw their income increase by about 22 percent a year.

By organizing themselves in fishery associations, women are able to gain more recognition, bargaining power, and lower costs, and obtain support to improve their participation in resource management as well as improve their livelihoods and financial situation.

Professionalization of women shellfish collectors in the north of Spain

Women shellfish collectors in Galicia (northwest Spain) received government support to become organized and improve their working situation, by professionalizing their activity (Pintos, 2010; J.A. De Santiago, University of Santiago de Compostela, personal communication). Before the support came, their shellfish collection activity was considered as marginalized from the fisheries sector and they were not represented in fisheries organizations. They only fished when they needed additional income to meet expenses of their otherwise low-income households, and the women themselves considered this activity of very low value. With the government's support, the number of women's organizations grew from only 7 in 1995, with only a few women holding executive positions, to 21, with 351 women in executive positions. The work of extension workers was a key factor in their success, as the women were provided with training programmes and continued support to improve the organizational capacity. Through this process, the organizations acquired professional, financial, technical and management capabilities. As a result, the women are able to pay social security contributions so that they are now guaranteed health insurance and other social benefits. They are also largely involved in decision-making

The perception that women have of their own activity is key for their empowerment. The road to women's professionalization in the fisheries sector can be started through strengthening the sense of self-worth and collective self-worth. Support for training, access to finances, and integration in social welfare and health care systems can reinforce the professionalization of women's and men's activities in the fisheries sector.

related to managing the shellfish resources that they directly depend on. They make the rules, sanctions and set the catch limits. Today, the marisqueiras, as these women are known in Spain, receive visits from schools, and conduct tours for tourists to practise and learn their particular type of fishing, explaining to them the importance of the sustainable use of natural resources. They are proud to be marisqueiras.

Aquaculture as an opportunity for empowerment

The introduction of new aquaculture technologies also provides opportunities for women's empowerment. In an example from India (Ramachandran, 2012), women who initially depended on collecting shellfish from the wild became involved in mussel and seaweed farming. They now have their own income, they are members of decision-making bodies, and they constitute a pressure group in their communities for aspects that

Because aquaculture is often an activity that can be done close to the household, increasing the participation of women can be a strategy for empowerment, but it must be accompanied by secure rights to the resources such as farm space.

are important for them, such as education for their children and dealing with alcoholism. They have also gained self-esteem and bargaining power within their households. It is important to note that the next step will be to secure these gains and their access and rights because this business has now become profitable and, as has been seen in the past, such successes have been usurped by men with the subsequent displacement of the women from their hard-earned livelihoods.

Haenyo, the female divers of Jeju Island

Gwon (2005) describes the work of the women divers (haenyo) in Jeju, the Republic of Korea. These women are able to free dive for more than a minute, and their activity dates back more than a thousand years. The haenyo were able to obtain high earnings by harvesting brown algae and abalone, which have a high commercial value in the Republic of Korea. Despite their important earnings, their work was marginalized as "women's work" and had low social status, probably as a result of the country's rapid modernization. Culturally, these divers were earning enough to buy land, but it had to be in their husbands' names. Despite their higher incomes, these women were excluded from village politics by the fact of being women in a patriarchal society. Today, this labour activity is protected through trade unions and specific laws and policies of the government. This career has sparked a lot of cultural interest in recent

Gender aspects in the fisheries sector cannot be considered as stand-alone, as they depend on the culture and time of a particular community.

A better understanding of the local and national context is necessary in order to tackle gender inequalities in the fisheries sector and in society at large.

In addition, empowerment cannot be seen only from a perspective of increased income. Success may also be dependent on the ability to challenge local traditional and patriarchal systems

years, creating a positive, and more romantic, image of their work. However, new generations of educated women are unwilling to take up this career, mainly owing to the difficult nature of this work. The activity of these female divers may probably disappear, as not enough new divers are being recruited to continue with this tradition.

Sun-Ae (2012) described how the women divers in Jeju Island and other parts of the Republic of Korea lack professional recognition as fishers. Despite their high income, women still feel ashamed of their activity, because diving is considered to be low status owing to the physical labour. In addition, even being part of, and contributing financially to, the fishers association (described as a fishermen's union), women's voices are weak owing to their being more male than female members in the union, and associated patriarchal cultural norms.

Gender issues and the Tara-Bandu in Timor-Leste

The FAO Regional Fisheries Livelihoods Programme (RFLP) for South and Southeast Asia achieved a significant milestone by obtaining, for the first time ever, women as signatories of the first documented (written and mapped) Tara Bandu (RFLP project documents [2012]; E. Alonso, personal communication).

Symbolic steps, no matter how small, can serve to change perceptions on the traditional roles of men and women and pave the way towards gender equality.

The Tara Bandu is a traditional natural resources management practice used in Timor-Leste that does not have formal recognition from the government or the legal system. During the formalization process, local authorities and communities were made aware of the importance and need to involve women in resource management, and they agreed to the RFLP's request to include women as signatories of the Tara Bandu document, which was written with the RFLP's support. As a result, women were given a role during the formalization of the traditional and community-based resource management system. As signatories, they now have to participate in all meetings. However, considering women as signatories does not automatically mean that they will have decisional power over the restrictions posed by the Tara Bandu. Nonetheless, this is an important first step. The aim is to give women a role in the formalization of the regulation, and through the process women's access to the public sphere should be enhanced. Without the status as signatories, women would certainly not have the same access to the public sphere.

Improving women's participation in the colonia de pescadores, Brazil

Women do not need to be in a women's only association. A group made up of men and women can strengthen the representation and advocacy of small-scale fishers. Collective action and grouping can guarantee rights, responsibilities and benefits, which would be difficult to access as an individual or single-sex group.

On her own initiative, the secretary of the colonia de pescadores (fisheries association) of Ponte de Pedras, Goiana (northeast Brazil), mobilized women who were engaged in fishing, mending nets, or processing fish to become members of the colonia, which gave them the right to officially have the status as "fish workers", and thereby were able to pay regular contributions to the Brazilian social security with all the attendant rights and benefits (Sharma, 2007). Initially, the colonia were male-dominated and there were some issues of low esteem among women. Now, as active members of

the colonia, they participate in the weekly meetings, formulate their own agendas, and participate in processes. Some of them who were illiterate have learned how to write and read. Women are now considered professional fish workers. They have created a number of subgroups on fish processing and are working on improving the utilization of fish and reducing wastage.

Integrated lake management in Uganda's fisheries

A case study (Nunan, 2006) on the management of fisheries in the lakes in Uganda provides a clear example of how, through indirect approaches (instead of trying to directly change the institutions per se), institutions can be created and challenged, and how stakeholders can improve their access to natural resources and their participation in decision-making structures. The fisheries sector in Uganda used to be dominated by men, who were mainly involved in fishing activities and management structures. It was considered taboo for women to go out fishing. Women were involved in fish processing, and some women owned boats and

External support to guarantee women's participation in resource management and boat ownership is important.

Positive discriminatory measures can foster and ensure women's representation against a backdrop of gender inequality and be a driver for change.

hired men as crew. One of the objectives of the integrated lake management project was to empower marginalized women. Legislation was developed that required that women had 30 percent of the places on beach management unit committees. The impact was that women were indeed empowered, had greater influence on decision-making, were able to speak out on issues affecting women, and had greater access to boat licences and, consequently, increased incomes.

The importance of social capital in Ghana's fisheries

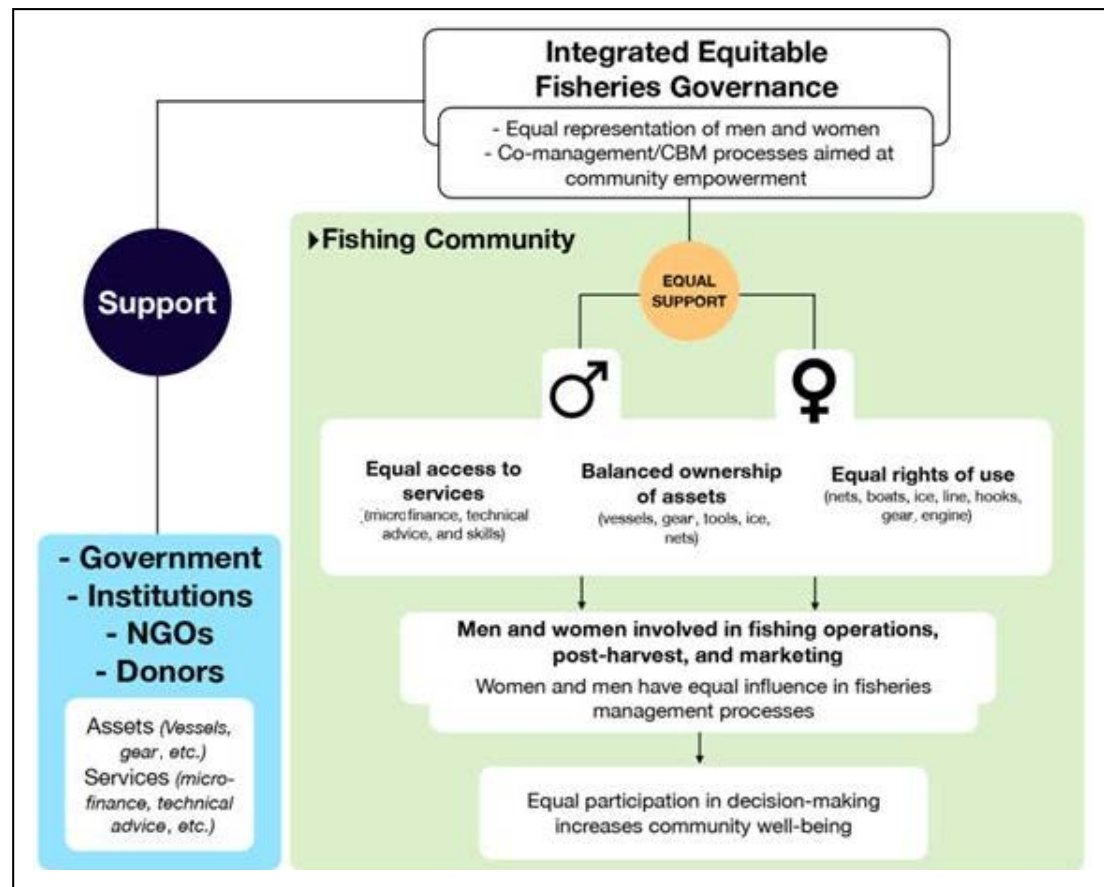
The case of Ghana fisheries (Overå, 1993) indicates that introducing new technologies does not always have negative effects on women. In some cases, the increase in production provided new opportunities to women, thanks to the existing social-economic relationships. Women involved in the canoe fisheries in Ghana combined their productive (economically independent) and reproductive roles (e.g. being a mother) with being a fish processor and a trader. These women are known as fish-wives (not necessarily married to a fisher, they can be their mothers or daughters). When these women become successful enough in their careers, owning and financing canoes and employing other women to do the fish smoking and trading for them, then they are known as fish mammies. These female entrepreneurs emerged and remained in relatively powerful positions. Women's roles and their access to fish were very dependent on socio-economic networks, especially those related to kinship and marriage. As a result, women were able to own canoes and engines and recruit men as crews, a clear sign of their wealth in those communities. These fish mammies occupied influential positions in fish trade, on a system built on credit and trust. The access to fish is dependent on these women's ability to obtain credit through social contacts. The case study claimed that poor people (men and women) are those who lack an economically viable family network and a contact network in the fisheries. In this case, "the modernization of artisanal fisheries in Ghana did not lead to a greater dependency of women on men, but of small scale fishermen and fish wives on 'patrons' and 'matrons'."

Social capital needs to be better understood, as it can play an important role in developing or hindering women's empowerment, by either limiting or facilitating access to productive resources and management bodies.

IDENTIFYING FACTORS AND PROCESSES TO IMPROVE WOMEN'S PARTICIPATION IN FISHERIES RESOURCE MANAGEMENT AND DECISION-MAKING

The case studies summarized above are examples of how it is possible to improve women's participation in resource management through an increased recognition and valuing of their activities, and by guaranteeing their access to the resources. However, these case studies show individual pieces of the puzzle, but very little has been documented of an entire value chain. Figure 2 illustrates a fishing community in a context of integrated and equitable fisheries governance. In this model, all the pieces of the puzzle have been put together. Men and women in fishing communities receive equal access to services. They have balanced ownership of assets and equal rights of use, based on the premise that an equal recognition of rights can provide the basis for equal participation in decision-making, enhancing the attempts to increase well-being in small fishing communities.

FIGURE 2
Integrated equitable fisheries governance framework



However, the full integration of gender equality considerations into the small-scale fisheries sector also requires the incorporation of other factors and processes that can enhance women's participation in decision-making. The following are examples where this can be undertaken:

- **The conventional approaches based on traditional or “typical” gender roles needs to be challenged.** The typical role of women as processors can be an impediment to their full actualization as resource users. An integrated value-chain approach to analysis, power, wealth distribution and equity would better secure women's rightful place in policy and fisheries management decision-making.
- **Awareness raising on gender equality issues** in the fisheries sector for all stakeholders, including fisheries administrations, fishers, processors and fisheries managers is of great importance for women achieving empowerment. Women's own perceptions of their work are a key factor in improving their roles and participation in fisheries management. There is need for them to realize that they are able to demand support and exercise their right to food and in the equitable use of the natural resources that they share. Experience demonstrates that negative perceptions (existing among men and women) of having women as leaders quickly change if women are given the chance and the support to be in charge (Banerjee and Duflo, 2011). This realization could go a long way towards their empowerment, following the five levels categorized by Longwe (2002), from lowest to highest of women's empowerment:
 - **Welfare:** passive recipients of benefits.
 - **Access:** increased access over the resources.

- **Raised consciousness level:** the realization of their lack of status and welfare.
 - **Mobilization:** they organize to address their problems.
 - **Control:** with existing equality over the control/decision-making over the resources.
- **Appropriate support to women’s organizations and the recognition of their professional activities** can directly affect women’s own perceptions about their work and can quickly change to a feeling of pride and belonging, with greater sense of collective self-worth. This would improve their own social and financial well-being, as well as the sustainable management of the resources (Pintos, 2010). The processes that were used in the Uganda case above were focused on empowerment through specialization and economic improvement so marginalized users could claim their rights. This was done though clearly defining occupational target groups and actions towards professionalization of the sector. This was similarly reflected in other case studies of this review, for example with the Spanish marisqueiras and the fish processors in the Patos Lagoon in Brazil. Formally recognizing their activity as being professional and facilitating their membership of fisheries organizations was found to be crucial in obtaining rights. A caveat is that women’s professionalization requires capacity development, awareness raising and sharing information, technical support, performance monitoring and advocacy for the inclusion of women in management bodies and dialogues.
 - **Apply a gender lens and focus on the particular needs of the fisheries sector,** which requires local and regional understanding of the culture and the type of fishery in question. This implies a deep **understanding of the power relationships and influence** between the different actors along the value chain, such as boat owners and boat crews, fisheries officers and fishers, and between them and fish processors and fish-mongers (Nunan, 2006). It also requires an understanding of the different wealth categories as a pre-condition to success in understanding pathways to more participation by women, **realizing that neither women nor men are a uniform group**. Value chain decisions also depend on outside factors of the market and powerful wholesalers from outside the community can completely change the relations (Holvoet, personal communication).
 - Traditional management arrangements for fisheries (such as community-based natural-resource management [CBNRM] and co-management) also have the potential to **improve women’s participation in resource management by recognizing women’s as fish workers and guaranteeing their access to productive resources**, but for this to happen, a value chain approach should be followed that gives due consideration to women fish workers both during harvest and post-harvest.
 - **Adaptive/interactive governance:** Fisheries co-management approaches can be conceptualized through adaptive (and interactive) governance approaches, designing interventions within the principles of efficiency, adaptability, learning-by-doing, dealing with uncertainty and complexity, collaboration, management flexibility and, particularly of interest to the gender perspective, through power sharing (Bavinck *et al.*, 2005; Nunan, 2013). **Fisheries management can be ultimately improved through the strengthening of women’s and men’s livelihoods, by reducing their uncertainty and vulnerability** (Dey de Pryck, 2012) and increasing their resilience to change. In this vein, some authors (Jul-Larsen *et al.* [2003] in Nunan [2006]) have argued that fisheries co-management should be primarily concerned with the empowerment of communities, over conservation concerns. This is coherent as conservation could also be achieved through stakeholder stewardship. However, for

this to happen, **women and men together must realize their own potential and rights and responsibilities for responsible management. Irresponsible exploitation by both women and men can easily unravel all the best intentions for inclusion of stakeholders in co-management.**

- In order to improve institutional support for the fisheries sector, particularly to improve women's participation, it might be best to **indirectly challenge and change institutional arrangements** instead of trying to directly change existing institutions (Nunan, 2006; Leach, Mearns and Scoones, 1999). Natural-resource management depends not only on formal, but also informal institutions, which are not usually recognized as having a role in resource management. The process of formal recognition of these traditional structures can also provide an opportunity to involve women as full participants in resource management as seen above in the Tara Bandu experience. Kinship and marriage relationships, also play an important part facilitating or constraining the access to and control of the resources (Nunan, 2006). For example, as seen in the case of the fish mummies in Ghana (Overå, 1993), the increase in production due to modernization provided new opportunities for women (in contrast to the other case studies mentioned above), and this was thanks to their kinship and marriage relationships. In this case, it was **women's access to social capital and networks that secured their control over technology and resources.**
- Facilitating women's access to productive tools and services requires guaranteeing their rights of access and control and enhancing their full participation in decision-making. By being a primary producer, i.e. vessel and gear owner, the rights to access and control of the resource management decisions are better guaranteed. This could be achieved by an **enabling policy and legislative environment, through determining fishing areas, gear, methods, licensing processes and management processes with a gender perspective.**
- **Participatory monitoring and evaluation:** Particular initiatives based on behaviour change, a way for monitoring the effect of the interventions, could be done through **outcome mapping**, which is better suited to dealing with complexity and higher levels of uncertainty (Hummelbrunner and Jones, 2013). These can help identify the changes in behaviour along the value chain that have positive outcomes for both men and women.
- **Improvement/recognition schemes:** The Good Fish Code (GFC)¹⁰ developed by the RFLP (Leadbitter, 2011), is aimed at improving management while balancing the needs for socio-economic resilience of fishing communities. In the GFC, one of the criteria taken into account by this system is women's and men's full participation and contributions to the development and management of capture fisheries.
- **Improving the gathering of gender-disaggregated data in the fisheries sector:** Lack of data continues to be one of the main barriers to developing a global gender programme in fisheries. Countries need to develop surveys with gender-related and socio-economic information, including the type of access and use of aquatic resources. Special attention should be given to subsistence and small-scale fishers, as the sector lacks reliable data on which to base policy formulation.

¹⁰ The Good Fish Code is an **improvement programme** designed to establish a series of agreed thresholds that define progress towards improved management (well-managed fisheries benefit fishing communities and encouraging resilient fishing communities. At each step, there are defined incentives, and these become more valuable the more a fishery progresses (and this may have financial considerations). The GFC also recognizes the elimination of all forms of child labour, among others.

- **Voluntary Guidelines on the Responsible Governance of Land, Fisheries and Forests in the Context of National Food Security (FAO, 2012b):** The FAO technical guidelines to support the achievement of responsible gender-equitable governance of land tenure (FAO, 2013a) are also a very valuable resource to take into consideration for equitable governance in fisheries in policy-making, legal frameworks, institutions, and technical issues. The rights-based approach, where stakeholders have right of tenure and responsibility for the well-being of the resource, although complex, can support fisheries resources conservation.
- **The Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) and the Global Assistance Programme** to support their implementation provide the perfect opportunity to carry out interventions at global scale that look into these issues more carefully. The SSF Guidelines encourage women's leadership and the need to tackle any form of discrimination against women, as stated by the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). The SSF Guidelines urge that any small-scale fisheries development strategies need to engage in gender mainstreaming, securing women's equal participation in decision-making processes affecting the sector, and they should be encouraged to participate in fisheries organizations.

5. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

As fisheries is still considered a male-dominated sector with little reflection on the variety of roles that women play and only focusing on their post-harvest roles, it is no surprise that most of activities targeted at women in small-scale fisheries focus only on improving post-harvest and providing other types of supplementary livelihood support. These activities are certainly important, especially for those women who do not fish but are involved in fish processing, or are secluded in the household domain away from any type of income-generating activities. However, these “gender” interventions have not been effective in increasing women’s voices within the fisheries sector and particularly in the management of the fish resources on which their livelihoods depend.

From the case studies reviewed, it appears evident that, although some women have primary and **direct access** to the resources, most fisher women have only secondary or tertiary access to fish, which (as seen above) can be also quite limited or dependent on previous links in the value chain. Their access and control over fisheries resources as primary users is limited owing to many and diverse notions, tradition and challenges, including the lack of ownership of productive tools and access to services, access to fishing grounds, women’s own perception of themselves and those of others, taboos, lack of recognition as professionals or the lack of representation in fisheries organizations, just to name a few. Women that are secondary or tertiary users also suffer from additional challenges such as invisibility, marginalization and exploitation.

It is clear that there is not just one way of attaining women’s empowerment and achieving gender equality in the fisheries sector. The academic literature describing women’s active participation in resource/fisheries management is scarce, making it difficult to draw robust conclusions based on the evidence, especially when confronted with the lack of gender-disaggregated information. The recent support to women’s post-harvest activities, microfinance and access to markets should continue and improve, but this should be complemented by actions directed to empower women in the sector and enhance their full and equitable participation in decision-making, and this can only be achieved by looking beyond improvements in their post-harvest roles.

Fisheries practitioners should mainstream gender, drawing on the lessons learned from real case scenarios, applying a value chain approach, and understanding the challenges and opportunities arising from a more integrated approach. For this, it is also necessary to obtain and document more specific examples describing the processes by which women have been empowered in the fisheries sector and have increased their voice in resource management. The sector is in great need of better understanding of power structures, including gender, socio-economic and migration considerations in the discourse.

The Global Assistance Programme in support of the implementation of the SSF Guidelines provides an excellent opportunity to explore in more depth these issues, revising and adapting policies, legislations, fisheries management plans and even technologies to incorporate gender equality considerations in all aspects along the value chain in small-scale fisheries.

RECOMMENDATIONS (BY STAKEHOLDER GROUP)

Some recommended actions to be taken into account when developing action strategies for the Global Assistance Programme include:

FAO Normative Programme

- Mainstream gender in all normative programmes, policies and strategies.

- Support and strengthen the roles of the FAO Fisheries and Aquaculture Department's gender focal points (GFP) to fulfil their mandates.
- The GFPs should advocate for and regularly participate in the Interdepartmental Working Group on Gender and increase interdepartmental collaboration.
- Commission at least three studies on gender and fisheries annually.
- Develop and advocate for the development of guidelines and tools that promote and build capacity in gender mainstreaming and analysis, formulation of gender-sensitive policies and strategies that will lead to equity, empowerment and vulnerability reduction of women and men fisherfolk.
- Include gender as an agenda item for discussion by the FAO Committee on Fisheries (COFI).

FAO Programme Work, UN Agencies, project formulators, executing agencies and NGOs

- Mainstream gender in all projects, programmes, policies and strategies.
- Ensure that fisheries development and emergency projects go beyond “stereotypical” gender roles and incorporate value chain approaches, and studies aimed at understanding power and wealth distribution and the role of women in decision-making.
- Support the formation and strengthening women's organizations and the professionalization of their activities in both harvest and post-harvest activities.
- Integrate capacity development, awareness raising and the provision of technical support into all projects and programmes.
- Develop gender-related criteria to feed into fisheries management improvement/recognition schemes that assess the sustainability of the fishery.
- Ensure that women are involved in decision-making processes in all aspects of the value chain, in fisheries resources management and the formulation of policies.

National Governments

- Support women's participation in resource management by promulgating policies and actions for their inclusion in decision-making bodies, community-based organizations and fisheries co-management mechanisms.
- Raise awareness on gender equality issues for all stakeholders in the fisheries sector, including fisheries administrations, fishers, processors, and paying particular attention to women fisherfolk, and working towards increasing and improving the perception they have of their own work.
- Mainstream gender-sensitive policies into the fisheries administrations and into national institutions as a way of doing business normally.

- Professionalize fisherfolk work at all levels, particularly the small-scale fishing sector, with a special focus on recognizing the importance of women's contribution and participation in fisheries harvest and post-harvest activities.
- Create an enabling policy and legislative environment that influences fishing policies with a gender perspective.
- Ensure that women have equal access to productive tools such as boats and gear so that they may have a greater stake and right to policy formulation, fisheries management and formulating development strategies.
- Advocate and design policies and strategies that provide equal access to credit and economic and financial instruments towards a more just and equal society.
- Implement the *FAO Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication*, specially the chapters devoted to gender equality.

Research institutions

- Carry out gender and other socio-economic studies and analyses to understand the type of access that women have to fisheries resources (e.g. if they are primary, secondary or tertiary users), in addition to understanding and analysing decision-making processes related to the control over the fishery resources and social capital.
- Analysis of policies from a gender perspective and develop recommendations by sector or type of access (e.g. primary, secondary and tertiary users, inshore, offshore, small-scale, location, seasons, gear) with a view to addressing gender inequalities.
- Monitor the implementation of fisheries development policies and projects, through studies that assess behaviour change and empowerment processes.
- Develop methodologies that improve the gathering of gender and socio-economic-disaggregated data in the fisheries sector, with particular attention given to the small-scale and subsistence fisheries sector.

Fisheries organizations/associations

- Advocate for more training on gender equality to better understand the participation and contributions of women fisherfolk.
- Promote the participation of women fisherfolk as full members of mixed (men and women) fishery organizations/associations, and, if necessary, create post-harvest, aquaculture and other women's support subgroups.
- Mainstream gender in the associations, objectives, activities and plans, with a strong focus on improving women's own perception of their work and defining their own empowerment.
- Organize and build strength to better advocate for an equitable and just fisheries sector, with a greater role for women in fisheries resource management, including boat ownership. Change could be initiated through symbolic steps.

International donors and philanthropic organizations

- Advocate for greater participation of women in the organization, development and management of the fisheries sector.
- Introduce gender-sensitive criteria into the selecting and financing of development and emergency projects.
- Ensure projects financed by the donor have components that target gender equity, with specific outcomes linked to SMART¹¹ indicators and that these are monitored and reported on by project-executing agencies.
- Ensure that there is a beneficiary accountability mechanism in place and that it includes participatory monitoring and accountability processes, especially for women and girls.
- Assess and support the financial requirements for the implementation of the SSF Guidelines, in particular, the chapters devoted to gender equality.

¹¹ SMART Indicators are Specific, Measurable, Achievable, Relevant, Time bound

BIBLIOGRAPHY

- Arenas, M.C. & Lentisco, A.** 2011. *Mainstreaming gender into project cycle management in the fisheries sector*. RAP Publication 2011/15. Bangkok, FAO. 92 pp. (also available at www.fao.org/docrep/014/ba0004e/ba0004e00.pdf).
- Banerjee, A.V. & Duflo, E.** 2011. *Poor economics: a radical rethinking of the way to fight global poverty*. Public Affairs U.S. Paperback. 303 pp.
- Bavinck, M., Chuenpagdee, R., Diallo, M., van der Heijden, P., Kooiman, J., Mahon, R. & Williams, S.** 2005. *Interactive fisheries governance*. Delft, Netherlands, Eburon Publishers. 72 pp.
- G. M. Branch, M. Hauck, N. Siqwana-Ndulo & A. H. Dye.** 2002. *Defining fishers in the South African context: subsistence, artisanal and small-scale commercial sectors* 475-487 pp. (also available at Taylor and Francis group at <http://www.tandfonline.com/doi/abs/10.2989/025776102784528493>)
- Branch, G.M., May, J., Roberts, B., Russel, E. & Clark, B.M.** 2002, Case studies on the socio-economic characteristics and lifestyles of subsistence and informal fishers in South Africa. *South Africa Journal of Marine Science*, 24: 439–462.
- Béné, C. & Merten, S.** 2008. *Women and fish-for-sex: transactional sex, HIV/AIDS and gender in African fisheries*. *World Development*, 36(5): 875–899.
- Bennett, E.** 2005. Gender, fisheries and development. *Marine Policy*, 29: 451–459.
- Brugere, C.** 2013. *Gender audit and recommended actions for mainstreaming a gender perspective in the BOBLME project and its Strategic Action Programme (SAP)*. FAO Draft report. 71 pp. (also available at http://www.google.co.th/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CBwQFjAAahUKEwjw3LvioO7GAhVIVSwKHeOwC_E&url=http%3A%2F%2Fwww.boblme.org%2FdocumentRepository%2FBOBLME-2012-Socioec-02.pdf&ei=qkuvVfDfEMiqsQHj4a6IDw&usg=AFQjCNH03wFWH-Dqo6NTDIQGIJQG-H-0cw&sig2=jy68qqDvbCs8ml4qbVLveg&bvm=bv.98197061,d.bGg)
- Choo, P.S. & Williams, M.J.** 2014. *Avoiding pitfalls in development projects that aspire to empower women: a review of the Asian Fisheries Society Gender and Fisheries Symposium Papers*. *Gender in Aquaculture and Fisheries: Navigating Change*. Asian Fisheries Science, Special Issue 27S: 15-31.
- Choo, P.S., Hall, S.J. & Williams, M.J.** 2006. *Global Symposium on Gender and Fisheries: Seventh Asian Fisheries Forum, 1-2 December 2004, Penang, Malaysia*. Penang, Malaysia, WorldFish Centre. 174 pp.
- Da Cal Seixas Barbosa, S.R. & Begossi, A.** 2004. *Fisheries, gender and local changes at Itaipu Beach, Rio de Janeiro, Brazil: an individual approach*. Published by Multi Ciencia. 14 pp. (also available online at https://www.multiciencia.unicamp.br/artigos_02/rede_3.pdf)
- Dey de Pryck, J.** 2012. *Good practice policies to eliminate gender inequalities in fish value chains.*, FAO. Rome, Italy. 97 pp. (also available online at www.fao.org/docrep/019/i3553e/i3553e.pdf)
- Djoi, D., Cakpo, G. & Gnimadi, C.** 2004. *Programme pour des Moyens d'Existence Durables dans la Pêche (PMEDP) (GCP/INT/735/UK)*. Published by Sustainable Fisheries Livelihoods Programme (SFLP). 70 pp.

- Duflo, E.** 2012. *Women's empowerment and economic development*. *Journal of Economic Literature* 2012, 50(4), 1051-1079. (also available online at <http://economics.mit.edu/files/7417>)
- FAO.** 1995. *Code of Conduct for Responsible Fisheries*. FAO, Rome, Italy. (also available at www.fao.org/docrep/005/v9878e/v9878e00.HTM)
- FAO.** 2007. *Terminal report "Pilot project Improved livelihoods in post harvest fisheries in Cameroon, Chad, The Gambia and Senegal"* – Sustainable Fisheries Livelihoods Programme (SFLP) (GCP/INT/735/UK), 20 pp. (also available online at <http://www.fao.org/3/a-ak195e.pdf>)
- FAO.** 2007. *Gender policies for responsible fisheries – policies to support gender equity and livelihoods in small-scale fisheries*. New Directions in Fisheries – A Series of Policy Briefs on Development Issues, No. 06. FAO. Rome, Italy. 8 pp. (also available at www.fao.org/3/a-a0990e.pdf)
- FAO.** 2011. *The State of Food and Agriculture 2010 – 2011*. 160 pp. FAO. Rome, Italy. (also available at online at <http://www.fao.org/docrep/013/i2050e/i2050e00.htm>)
- FAO.** 2012a. *The State of World Fisheries and Aquaculture 2012*. FAO. Rome, Italy. 209 pp. (also available online at www.fao.org/docrep/016/i2727e/i2727e00.htm)
- FAO.** 2012b. *Voluntary Guidelines on the Responsible Governance of Land, Fisheries and Forests in the Context of National Food Security*. FAO. Rome, Italy. 40 pp. (also available online at www.fao.org/docrep/016/i2801e/i2801e.pdf)
- FAO.** 2013a. *Governing land for women and men – a technical guide to support the achievement of responsible gender-equitable governance of land tenure*. Governance of Tenure Technical Guide No. 1. Rome, Italy. 110 pp. (also available online at www.fao.org/docrep/017/i3114e/i3114e.pdf)
- FAO.** 2013b. *Strengthening organizations and collective action in fisheries: a way forward in implementing the international guidelines for securing sustainable small-scale fisheries, FAO Workshop, 18–20 March 2013, Rome, Italy*, edited by D.C. Kalikoski & N. Franz. FAO Fisheries and Aquaculture Proceedings No. 32. Rome. 168 pp. (also available online at <http://www.fao.org/3/a-i3540e.pdf>)
- FAO.** 2015. *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication*. FAO. Rome, Italy. 18 pp. Also (also available online at www.fao.org/3/a-i4356e.pdf)
- Fisheries Administration.** 2007. *Gender mainstreaming policy and strategy in the fisheries sector Phnom Penh, December 2007*. Fisheries Administration, Ministry of Agriculture, Forestry and Fisheries. 27 pp.
- Gallardo Fernández, G.L. & Friman, E.** 2011. New marine commons along the Chilean coast – the management areas (MAs) of Peñuelas and Chigualoco. *International Journal of the Commons*, 5(2). (also available online at <http://www.thecommonsjournal.org/index.php/ijc/article/view/284/222>)
- Gätke, P.** 2008. *Women's participation in community fisheries committees in Cambodia*. Roskilde University. (Master's thesis). 24 pp. (also available online at <http://www.abstract.lib-ebook.com/a1-economy/797520-1-master-thesis-supervisors-pelle-g-tke-group-165-associate-profess.php>)
- Gwon, G.-S.** 2005. Changing labor processes of women's work: the haenyo of Jeju Island. *Korean Studies*, 29(1): 114–136.

- Harper, S., Zeller, D., Hauzerb, M., Pauly, D. & Sumaila, U.R.** 2012. *Women and fisheries: contribution to food security and local economies*. Researchgate. Article in marine Policy 39: 56-63. (also available online at https://www.researchgate.net/publication/242331541_Women_and_fisheries_Contributi_on_to_food_security_and_local_economies)
- Harrison, E.** 1995. *Fish and feminists*, edited by Anne Marie Goetz. IDS Bulletin Volume 26 No. 3 Getting Institutions Right for Women in Development. Institute of Development Studies. 17 pp.
- Hendricks, M.K.** 1983. *Technology and tradition in West African maritime fisheries: Tombo Sierra Leone* [online]. International Center for Marine Resource Development, University of Rhode Island. (also available online at http://pdf.usaid.gov/pdf_docs/PNAAW710.pdf) 43 pp.
- Holmgren, S.** 2008. *Fisherwomen : changing meanings, changing norms, changing policies? Practice and thesis work in environmental communication and management*. Swedish University of Agricultural Sciences. Also available online at http://stud.epsilon.slu.se/405/1/holmgren_s_090730.pdf. 41 pp
- Holvoet, K.** 2008. Mainstreaming gender in fisheries. In L. Westlund, .K. Holvoet & M. Kébé, eds. *Achieving poverty reduction through responsible fisheries: lessons from West and Central Africa*, pp. 139–152. FAO Fisheries and Aquaculture Technical Paper No. 513. Rome, FAO. 168 pp. (also available at www.fao.org/docrep/011/i0448e/i0448e00.htm)
- Holvoet, K. & Chiambeng G.Y.** 2011. *Vulnerability of small-scale marine fishing communities to HIV/AIDS in Cameroon*. University of Greenwich. 36 pp.
- Hummelbrunner, B.R. & Jones, H.** 2013. *A guide for planning and strategy development in the face of complexity*. Background note. March 2013. Overseas Development Institute. 12 pp. (also available online at <http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8287.pdf>)
- Kalikoski, D. & Vasconcellos, M.** 2012. *Case study of the technical, socio-economic and environmental conditions of small-scale fisheries in the estuary of Patos Lagoon, Brazil*. FAO. Rome, Italy. 206 pp. (also available online at <http://www.fao.org/docrep/015/i2589e/i2589e.pdf>)
- Kleiber, D., Harris, L.M. & Vincent, A.C.J.** 2014. *Gender and small-scale fisheries: a case for counting women and beyond*. Fish and Fisheries. Wiley Online library doi: 10.1111/faf.12075. 16 pp. (also available online at <http://onlinelibrary.wiley.com/doi/10.1111/faf.12075/references>)
- Kwena, Z., Camlin, C., Shisanya, C., Mwanzo, I. & Bukusi, E.** 2013. *Short-term mobility and the risk of HIV infection among married couples in the fishing communities along Lake Victoria, Kenya*. *PLoS ONE*, 8(1). 7 pp. (also available online at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3545885/>)
- Lambeth, L., Hanchard, B., Aslin, H., Fay-Sauni, L., Tuara, P., Rochers, K.D. & Vunisea, A.** 2001. An overview of the involvement of women in fisheries activities in Oceania. In N.H. Chao-Liao, K. Matics, M.C. Nandeesha, *et al.*, eds. *Women in Fisheries, Global Symposium*: 21-33
- Leach, M., Mearns, R. & Scoones, I.** 1999. *Environmental entitlements: dynamics and institutions in community-based natural resource management*. World Development, 27(2): 225–247. (also available online at http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/3373/EnvEnts_WD_1999.pdf)

- Leadbitter, D.** 2011. *The Good Fish Code – better fisheries through co-management*. Regional Fisheries Livelihoods Programme for South and Southeast Asia, FAO. RAP, Bangkok, 62 pp. (also available online at <http://www.fao.org/3/a-ar438e.pdf>)
- Lentisco, A.** 2013. *Enhancing Small-Scale Coastal Fisheries Livelihoods in Nusa Tenggara Timur Province through Improved Processing and Marketing* Regional Fisheries Livelihoods Programme (RFLP) for South and Southeast Asia (GCP/RAS/237/SPA). 40 pp. (also available online at <http://www.fao.org/3/a-ar283e.pdf>)
- Lentisco, A. & Alonso, E.** 2012. *On gender mainstreaming strategies and tools in fisheries development projects: RFLP gender strategy and lessons from the Asia-Pacific Region. Gender in aquaculture and fisheries: moving the agenda forward*. Asian Fisheries Science Special Issue, 25S: 105–117. (also available online at https://genderaquafish.files.wordpress.com/2012/06/07-msgaf3-25-manuscript_lentisco_alonso_pdf-105-117.pdf)
- Longwe, S.** 2002. *Addressing rural gender issues: a framework for leadership and mobilisation*. Paper presented at the III World Congress for Rural Women, Madrid, October 2002. 13 pp. (also available online at http://www.sarpn.org/documents/d0000055/P60_Rural_Gender_Issues.pdf)
- Mafimisebi, T.E., Ikuemonisan, E.S. & Mafimisebi, O.E.** 2013. *Comparative profitability of women dominated fish-based livelihood activities in southwest Nigeria*. 29 pp. Presentation at the 4th Gender in Aquaculture and Fisheries Symposium. Asian Fisheries Society. (also available at <http://www.slideshare.net/shylanc3/ppt-1-22801418>)
- Merten, S. & Haller, T.** 2007. *Culture, changing livelihoods, and HIV/AIDS discourse: Reframing the institutionalization of fish-for-sex exchange in the Zambian Kafue Flats*. Culture, Health & Sexuality, 9(1): 69–83.
- Moser, C.** 1989. *Gender planning in the third world: meeting practical and strategic needs*. World Development, 17(11): 1799–1825.
- Murray, U. & Sayasane, K.** 1998. *Gender and aquaculture in Lao PDR*. FAO, Rome, Italy. (2), 1–77.
- Nordlund, L.M.** 2012. *People and the intertidal - human induced changes, biodiversity loss, livelihoods implications and management in the Western Indian Ocean*. Finland, Abo Akademi. (also available at https://www.doria.fi/bitstream/handle/10024/78685/nordlund_lina.pdf)
- Nunan, F.** 2006. *Empowerment and institutions: managing fisheries in Uganda*. World Development, 34(7): 1316–1332.
- Nunan, F.** 2013. *Institutions and co-management in African fisheries: a critical; institutionalist perspective*. Presented at the Capturing critical Institutionalism Workshop at King's College, London from 18-19 April 2013. 4 pages. (also available at <http://www.kcl.ac.uk/sspp/departments/geography/research/epd/projectsfunding/criticalinstitutionalism/abstracts/nunan.pdf>)
- Okali, C. & Holvoet, K.** 2007. *Negotiating gender changes within fisheries development*. Sustainable Fisheries Livelihoods Programme. FAO and DFID. 36 pp.
- Overå, R.** 1993. *Wives and traders: women's careers in Ghanaian canoe fisheries*. MAST, 6(1/2): 110–135.
- Pintos, B.M.** 2010. *Y cogieron ese tren ... profesionalización de las mariscadoras gallegas*. Comision de Igualdade, Consejo da Cultura Galega, 1–5.
- Porter, M., Mwaipopo, R., Faustine, R. & Mzuma, M.** 2008. *Globalization and women in coastal communities in Tanzania*. Society for International Development, 1–6.

- Ramachandran, C.** 2012. "A sea of one's own!" A perspective on gendered political ecology in Indian mariculture. *Gender in aquaculture and fisheries: moving the agenda forward*. *Asian Fisheries Science*, Special Issue 25S: 17–28.
- Rico M.** 1998. *Género, medio ambiente y sustentabilidad del desarrollo*. In: *Mujer y desarrollo*, pp. 47–52.
- Sharma, C.** 2007. *Count us in too*. Gender Focus. Yemaya Dossier. International Collective in Support of Fishworkers. p. 7.
- Sopanha, C., Chansothea, T., Kimsan, M., Phannady, T., Sokngy, S., Chansoriya, M., Typo, S., et al.** 2008. *Gender implication in CBNRM - the roles, needs and aspirations of women in community fisheries*. Fisheries Administration of Ministry of Agriculture Forestry and Fisheries and the Community Based Natural Resource Management Learning Institute. pp. 1–99.
- Sriputinibondh, N., Khumsri, M. & Hartmann, W.** 2005. *Gender in fisheries management in the Lower Songkhram River Basin, in the northeast of Thailand*. In: Proceedings of the 7th Technical Symposium on Mekong Fisheries, Ubon Ratchathani, Thailand, 15th - 17th November. 330 pp. (also available at <http://www.mrcmekong.org/assets/Publications/conference/Proceedings-7th-Technical-Symposium.pdf>)
- Sultana, P., Thompson, P.M. & Ahmed, M.** 1998. *Women-led fisheries management - a case study from Bangladesh*. In N.H. Chao-Liao, K. Matics, M.C. Nandeesh, M. Shariff, I. Siason, E. Tech, M.J. Williams, eds. *Women in Fisheries - Global Symposium, 2001*. 216 pp. (also available at http://pubs.iclarm.net/resource_centre/WF_328.pdf)
- Sun-AE II.** 2012. *Why do Korean Women Dive? A discussion from the viewpoint of gender*. Paper presented at the gender in Aquaculture and Fisheries: Moving the Agenda Forward. *Asian Fisheries Science Special issue Vol 225 (2012) 47-58*. Available at <http://www.asianfisheriessociety.org/publication/pdf/0298711001355738496.pdf>
- United Nations Department for Policy Coordination and Sustainable Development.** 1995. *Beijing Declaration – Fourth World Conference on Women*. (available at www.un.org/esa/gopher-data/conf/fwcw/off/a--20.en)
- UN Women.** 1979. Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). In: *UN Women* (also available at www.un.org/womenwatch/daw/cedaw/cedaw.htm)
- Walker, B.L.E.** 2001. *Sisterhood and seine-nets: engendering development and conservation in Ghana's marine fishery*. University of California at Santa Barbara. *The Professional Geographer*, 53(2): 160–177.
- Weeratunge, N., Snyder, K. A. and Sze, C. P.** (2009). Gleaner, fisher, trader, processor: Understanding gendered employment in the fisheries and aquaculture sector. Paper presented at: Workshop on gaps, trends and current research in gender dimensions of agricultural and rural employment: differentiated pathways out of poverty. Rome, 31 March - 2 April 2009. Food and Agriculture Organization of the United Nations (FAO), International Fund for Agriculture Development (IFAD), International Labour Organisation (ILO). 32 pp.
- Weeratunge, N., Pemsil, D., Rodriguez, P., Chen, O.L., Badjeck, M.C., Schwarz, A.M., Paul, C., Prange, J. & Kelling, I.** 2011. *Planning the use of fish for food security in Solomon Islands*. Coral Triangle Support Partnership. 51 pp.
- Westermann, O., Ashby, J. & Pretty, J.** 2005. *Gender and social capital: the importance of gender differences for the maturity and effectiveness of natural resource management groups*. *World Development*, 33(11): 1783–1799.

- Williams, M.J., Chao, N.H., Choo, P.S., Matics, K., Nandeesh, M.C., Shariff, M., Siason, E. Tech., Wong, J.M.C.,** 2001. *Global Symposium on women in fisheries. Sixth Asian Fisheries Forum*. 29 November 2001, Kaohsiung, Taiwan. 203 pages.
- Williams, M.J.** 2008. *Why look at fisheries through a gender lens?* *Development*, 51: 180–185.
- Williams, M.J.** 2010. *Gender dimensions in fisheries management*. In R.Q. Grafton, R. Hilborn, D. Squires, M. Tait & M. Williams, eds. *Handbook of marine fisheries conservation and management*. 72–96 pp. Oxford, UK, Oxford University Press.
- Williams, M., Williams, S. & Choo, P.S.** 2002. *From women in fisheries to gender and fisheries*. In: *Global Symposium on women in fisheries*. In M.J. Williams, N.-H. Chao-Liao, P.S. Choo, K. Matics, M.C. Nandeesh, M. Shariff, I. Siason, E. Tech & J.M.C. Wong, eds. *Sixth Asian Fisheries Forum, Kaohsiung, Taiwan*, pp. 13–18. Penang, Malaysia, WorldFish Center.
- Williams, M.J., Porter, M., Choo, P.S., Kusakabe, K., Vuki, V., Gopal, N. & Bondad-Reantaso, M.** 2012. *Gender in aquaculture and fisheries: moving the agenda forward*. *Asian Fisheries Science*, Special Issue, 25S: 276.
- Williams, M.J., Chao, N.H., Choo, P.S., Matics, K., Nandeesh, M.C., Shariff, M., Siason, I., Tech, E. & Wong, J.M.C., eds.** 2002. *Global symposium on women in fisheries. Sixth Asian Fisheries Forum, 29 November 2001, Kaohsiung, Taiwan*. Penang, Malaysia, ICLARM -WorldFish Center. 209 pp.
- World Bank, FAO & WorldFish Center.** 2012. *Hidden harvest - the global contribution of capture fisheries*. Open Knowledge Repository. 92 pp. (also online at <https://openknowledge.worldbank.org/handle/10986/11873>)
- WorldFish Center.** 2010a. *Framework for mainstreaming gender analysis in fisheries and aquaculture research and development*. World Fish Center. Penang, Malaysia. 23 pp.
- WorldFish Center.** 2010b. *Gender and fisheries: Do women support, complement or subsidize men's small-scale fishing activities?* Issues Brief 2108. 8pp. (also available online at <https://d3gxp3iknbs7bs.cloudfront.net/attachments/d345620e-a536-4f8f-b668-ec88dd0d3079.pdf>)
- Zacharias, A.** 2009. *'The lake that gives, the lake that takes' – Access to health care for fisherfolk at Lake Chilwa, Malawi*. Karolinska Institutet, Stockholm. (Master's thesis). 53 pp.

