Gender in Aquaculture and Fisheries: The Long Journey to Equality Asian Fisheries Science Special Issue **29S** (2016): 01-17 ©Asian Fisheries Society ISSN 0116-6514



Guest Editorial: The Long Journey to Equality

NIKITA GOPAL^{1*}, MERYL J WILLIAMS², MARILYN PORTER³ and KYOKO KUSAKABE⁴

¹ICAR-Central Institute of Fisheries Technology, CIFT Junction, Matsyapuri P.O., Cochin – 682 029, Kerala, India

This Special Issue of Asian Fisheries Science journal includes 12 papers and a report based on the presentations and posters of the 5th Global Symposium on Gender in Aquaculture and Fisheries (GAF5) held during the 10th Indian Fisheries and Aquaculture Forum, November 2014, Lucknow, India. GAF5 was the seventh women/gender Symposium organised by the Asian Fisheries Society (AFS), and the first to be held in conjunction with a national AFS branch forum. For each event, the proceedings or selected papers have been published (Williams et al. 2001; Williams et al. 2002; Choo et al. 2006; Choo et al. 2008, Williams et al. 2012a; Gopal et al. 2014). This is the longest continuous series documenting women and gender issues by a professional fisheries society.

In this Guest Editorial, we reflect on the "long journey" to addressing gender equality in aquaculture and fisheries, the emerging trends that we saw in GAF5, and the trends more generally in gender in the fisheries and aquaculture sectors. We also provide an overview of the papers in this Special Issue.

²17 Agnew Street, Aspley, Queensland, 4034. Australia

³Department of Sociology, Memorial University, St. John's, Canada NL A1C 2Z1

⁴Gender and Development Studies, School of Environment, Resources and Development, Asian Institute of Technology, P.O. Box 4, Klong Luang, Pathumthani 12120, Thailand

^{*} Corresponding author. E-mail address: nikiajith@gmail.com

The long journey

The long journey of the AFS gender group is partly due to the nature of its work, and partly due to the lack of progress on gender equality in the fisheries and aquaculture sectors themselves.

The Asian Fisheries Society (AFS), through its Indian Branch, held its first women in fisheries event in 1990 (Gadagkar 1992). AFS gradually built on this start with other national, regional and global events as Meryl J Williams (2014a) described in her essay on Dr M.C Nandeesha, the initiator of most of the early events.

The AFS gender activities have been shaped by the nature of AFS as a professional society promoting interactions and cooperation among scientists and others concerned with sustainable utilisation, cultivation, conservation and development of aquatic resources. AFS works by addressing fisheries issues, linking fisheries scientists, developing young scientists, promoting global cooperation, encouraging network formation and disseminating information through publications.

Unlike most other professional fisheries and aquaculture societies, AFS has given priority to women and gender equality as fisheries issues. To address gender equality, AFS has held regular symposia and published their results through peer reviewed literature. Members of the AFS gender group have also worked with professional societies such as the International Institute of Fisheries Economics and Trade (IIFET), the World Aquaculture Society and others to support gender sessions at their events.

The regular AFS Gender in Aquaculture and Fisheries (GAF) symposia have evolved to become more focused on key themes and priorities, and have varied the formats of the sessions to suit needs, such as workshops, e.g., on gender in aquaculture research planning, and feminist research methodology (GAF4), panel discussions and video presentations. Following extensive discussions, and in response to requests, a training workshop in basic gender research methodology - GAF 101 - will be held at GAF6.

Since the early 2000s, AFS has augmented its gender symposia work with electronic lists for sharing new research, events, employment and

consultancy opportunities, and discussing relevant topics, such as suitable tertiary course materials on gender in fisheries. The gender group also hosts a substantial website, http://genderaquafish.org/, which contains materials from all past symposia, news and links. A new section of the website is being developed, called Discover GAF, that will contain authoritative but easy to understand materials on topics on women/gender in fisheries and aquaculture. Two early model presentations are now available, on gleaning and women divers (https://genderaquafish.org/discover-gaf/). The gender group also reaches out to different, but overlapping audiences through its social media, namely a Facebook page (https://www.facebook.com/AFS-Gender-in-Aquaculture-and-Fisheries-181176555231544/) and Twitter feed (@Genderaquafish). Key members of the AFS group also contribute regularly to gender in fisheries newsletters of other like-minded partners, especially the Women in Fisheries Information Bulletin of the Secretariat of the Pacific Community, and *Yemaya*, the gender newsletter of the International Collective in Support of Fishworkers.

All of these activities have depended on the strong support of successive AFS Councils, many generous symposia donors, from time to time the support of mainstream institutions such as WorldFish Center, NACA and the Indian Council for Agricultural Research, the volunteer work of key gender group members, and the many presentations from those engaged in relevant research and development activities. The gender group, however, is not in a position to develop and conduct its own projects, other than run the symposia, publications and social media, nor engage in advocacy, e.g., for gender equality. To a large extent, therefore, the size and quality of the symposia and their products is a mirror of what is being invested in GAF generally. Despite the long journey to date and the gradual strengthening of the AFS gender group's capacity, our assessment is that the investments are far too modest and totally inadequate to the needs.

The AFS gender group is now becoming a formal GAF Section of AFS, a step that may give its work greater profile and outreach. Given the slow and long journey so far, however, the AFS Section and its partners urgently need to leverage their modest achievements in terms of knowledge to increase greatly the global quantum of GAF research, development and application. We need a much higher level of investment so that the theory, methods and tools for addressing gender inequality in aquaculture and fisheries become well

developed and disseminated. To make this leap will mean making the case for gender equality and social justice and the impacts for society, using as a base the present knowledge and theory.

Trends in addressing gender equality in aquaculture and fisheries

Less than two years has passed since we last reviewed trends in how the aquaculture and fisheries sectors were addressing gender equality (Gopal et al. 2014). In the interim, few dramatic changes have occurred. One important development is the incremental but important advance of gender equality on the fisheries policy and action agenda, e.g., the gender equality provisions of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (VG SSF) (FAO 2014). Inevitably, the new directions and opportunities bring teething problems. Typically, gender actions are introduced through audits, followed by small projects, conducted by new actors or contracted actors working within existing cultural norms inside mainstream fisheries/aquaculture institutions, households and communities. This pathway soon tends to lead to loss of enthusiasm and lack of momentum, or even resistance by the status quo. These teething problems are exacerbated by the fact that the conceptual basis for introducing gender equality is weak. For example, development projects to empower women may simply introduce more work for them without changing their powers of self-determination (Choo and Williams 2014), and tools to support the interventions often are lacking. We explored the issues of conceptual shortcomings in our previous Guest Editorial (Gopal et al. 2014) and so we will not revisit the issues here, although they persist and, given the greater interest in gender, are even more urgent.

As more agencies begin to pay greater attention to gender equality in their work, the lack of experience within institutes and the dearth of experienced experts become challenges. GAF5 contained many presentations from research and development workers who were new to gender studies, although often highly experienced in technical fields of aquaculture and fisheries. Many of the studies presented were new works in progress, often in preliminary stages, and so relatively few were ready for publication. The present volume thus contains fewer papers relative to the number of oral and poster presentations than for other GAF events.

A networks meeting at GAF5 noted that several new gender in fisheries/aquaculture networks had been created, e.g., the Women's Network of Aquaculture without Frontiers, and the Gender in Aquaculture Group established by the Network of Aquaculture Centres in Asia-Pacific. It also noted that longer running groups such as Aktea in Europe, WinFish in Philippines and the Mekong Network for Gender Promotion in Fisheries Development continued to operate.

To further its own work, the informal group present at GAF5 established a working group to advise the Asian Fisheries Society (AFS) on formalising the AFS Gender in Aquaculture and Fisheries (GAF) group. In April 2016, the AFS Council approved the creation of an AFS GAF Section (GAFS). This is only the second such specialist section in the AFS, the other being the Fish Health Section. It is also a world first for an aquaculture/fisheries society.

The draft objectives of the GAFS are to promote cooperation, increase awareness of the importance of gender and more particularly women, in fisheries and aquaculture, advocate for the advancement of women within the sectors, and promote the establishment of local gender networks.

To illustrate the type of work underway, we now focus on examples from the United Nations Food and Agriculture Organisation (FAO), which though a unique global body, serves as a useful barometer of interest in gender in aquaculture and fisheries. We also briefly mention recent reviews of gender work in the western Pacific region, an area thought to have one of the highest rates of women in fisheries (Harper et al. 2013).

FAO's gender activities

The FAO work on gender in fisheries and aquaculture often has global reach and can provide models for others to adapt. It also faces similar opportunities and challenges in what priority and resources to apply to gender, tending to neither lead nor lag behind regional, national and local bodies. We have also reported at some length on FAO's previous work and since our last brief survey (Gopal et al. 2014), this work has continued to expand its normative, project and information activities.

Normative activities that address gender equality are the abovementioned VG SSF, and the proposed Global Work Programme for Advancing Knowledge on Rights-Based Approaches for Fisheries.

The SSFG promote a human rights based approach and include a specific chapter on gender equality and equity among the guiding principles. Throughout the text, gender is referred to, stressing that the improvement of livelihoods and the reduction of vulnerability in small-scale fisheries requires addressing gender issues. FAO intends to develop widely applicable guidance to raise awareness, and support advocacy and capacity development activities on the application of the relevant principles of the SSF Guidelines.

Typical of its recent greater recognition of the role of women in fisheries in its mainstream documents, FAO published a report on the technical and socio-economic characteristics of small-scale coastal fishing communities, acknowledging the role of women and of gender equality (FAO 2016a).

FAO has also been working for several years to develop the knowledge base for rights based approaches to fisheries, and now is at the stage of proposing a Global Work Program on this (FAO 2016b). The proposed Programme mentions the knowledge strategies for addressing gender inequality and promoting women's involvement in fish supply chains.

At the regional level, two significant FAO-led projects, the Bay of Bengal Large Marine Ecosystem (BOBLME) project, and the EAF (Ecosystem Approach to Fisheries)-Nansen project are starting to address gender issues. The BOBLME project has taken its gender assessment (Brugere 2014) and put gender considerations into the BOBLME Strategic Action Programme (SAP) that will be implemented in the second phase of the project. The SAP includes a gender target, and regional and national gender actions. The SAP has high-level endorsement by the countries, and therefore, future commitment to gender sensitive actions. In addition, the BOBLME Project, as the pioneer on gender, produced a generic brochure on mainstreaming gender in LME projects to inform current and future LME projects (BOBLME 2016).

The FAO EAF-Nansen project, operating in Sub-Saharan Africa, undertook its first ever gender audit and drew up recommendations for

addressing gender equality in project management, project activities and dissemination (FAO EAF-Nansen 2015).

FAO work on climate change and disaster management is slowly beginning to incorporate gender activities. Global Environment Facility climate change adaptation projects in fisheries and aquaculture, e.g., in Myanmar, Benguela Current LME and Bangladesh, will undertake gender-specific vulnerability assessments and promote gender differentiated adaptation plans to support adaptation in the value chains. A special session on gender and climate change will be held in the forthcoming FishAdapt: Global Conference on Climate Change Adaptation in Fisheries and Aquaculture (August 2016).

FAO considers gender mainstreaming as one of the overarching principles in responding to disasters. The Fisheries and Aquaculture Emergency Response Guidance (Cattermoul et al. 2014) provides indicators and guidance notes for the mainstreaming of gender in relief interventions. A practical example of gender-specific interventions include the work FAO is doing in Somalia where women were trained in boat building (http://www.fao.org/blogs/blue-growth-blog/promoting-gender-in-fisheries-activities-in-somalia/en/_accessed 18 June 2016).

More and more FAO projects are including gender elements. By region, just a few are mentioned here.

In West Africa, the five-year FAO-GEF CFI (Global Environment Facility, Coastal Fisheries Initiative) project on achieving sustainable environmental, social and economic benefits has a focus on women fish processors and their organisations. It will cover Cape Verde, Cote d'Ivoire and Senegal and is expected to start in October 2016.

Completed in October 2015, the programme "Fishing along the Lagos-Abidjan corridor: Building partnerships to empower women and youth in matters of reproductive health," will go into a second phase focusing on youth reproductive health and youth employment. Important interventions will be on gender issues in female youth employment and enterprise development. This work is linked to the FAO regional programme "Strategic response to HIV/AIDS for fishing communities in Africa," started in 2012, that builds a

regional response to issues arising from migration and mobility in the fish sector. One of the programme areas is the Lagos-Abidjan corridor, where fishing communities, landing sites and fish markets are targeted and youth and women in the fishing communities are key actors in prevention approaches combining value chain upgrading or livelihoods diversification interventions with HIV counselling, sexually transmitted disease screening and family planning.

In late 2014, the project "Support to artisanal inland fisheries: Dissemination of post-harvest techniques in North-Western Angola" helped reduce post-harvest losses in five small-scale riparian fishing communities, with women at the center of the intervention.

In South America and the Caribbean, FAO projects involving gender have included those on the mollusc gatherers of Costa Rica, women in aquaculture in Chile, Colombia, Paraguay and Peru, and scoping studies for the Caribbean.

On the Pacific coast of Costa Rica, mollusc gatherers from about 1,000 families are mainly women and in many case the partners of fishermen, or single mothers. However, their work is not legally recognised, affecting the sustainable use of the mangroves and driving the collectors into illegality. In Chomes, Puntarenas, a group representing these women has organised "Coopemoluscos R.L", a collective to develop their work in sustainable and decent conditions. With the support of FAO and Coope Soli Dar R.L. (a professional cooperative with the aim to promote sustainability), a partnership was developed to obtain official recognition of their work and to legally use the product and fight for their rights as mollusc gatherers. Today, the women have a government compromise to recognise an official sustainable use permit for six months, as a first step to cover about 50 women shellfish harvesters over labour rights and access to health, retirement pensions and social security. This is the beginning of a process to make mollusc gathering visible and empower the women harvesters in the framework of SSFG.

FAO has studied and will shortly publish studies on the contribution of women in the fisheries and aquaculture sectors in Chile, Colombia, Paraguay and Peru, based on national reports and their synthesis. A Policy Note will also be produced

Under a Letter of Agreement with FAO, the Centre for Resource Management and Environmental Studies (CERMES) of the University of West Indies in Barbados, is preparing a scoping study on gender in fisheries from a fisherfolk perspective.

FAO's Asian activities are in the analytic phase and focus on women and men's division of labour and time use in rice shrimp farming in Soc Trang province, Vietnam, and comparative case studies of women's empowerment in aquaculture in Bangladesh and Indonesia.

FAO has a long history of work on small scale fish processing technology for women but with a predominantly technical focus. It has continued to expand its approaches and focus more on the needs of the women through such work as the FAO-Thiarove Fish Processing Technique (FTT) (Ndiaye et al. 2014). The FTT capitalised on the assets of the last generation of improved fish-drying kilns, e.g., Banda, Altona, and Chorkor, and corrected limitations that undermined the working conditions and livelihoods of women fish operators. An ember furnace, a fat-collection tray, and an indirect smoke generator system were added. The new structure is multifunctional and considered gender sensitive for fish smoking, cooking and drying. Also, it yields safe and premium quality end-products, implying better opportunities for increasing women fish operators' incomes, including through potential access to international markets. By controlling heat and smoke emitted during smoking, the drudgery of women, and health, occupational and safety hazards are reduced. In African countries where it has been trialled, namely Angola, Côte d'Ivoire, Gambia, Ghana, Guinea-Bissau, Tanzania, Togo and Senegal, the FTT-Thiaroye has achieved significant post-harvest benefits to women fish processors. The use of this technique has also expanded to Asia, where it is being piloted in Sri Lanka.

In terms of information activities, in addition to promoting the results of the above work, FAO has made a major step towards engendering its fisheries statistics. The "Guideline to Enhance Small Scale Fisheries and Aquaculture Statistics", presents a methodology for data collection that includes the contributions of women (FAO 2015). For the first time, the biennial FAO State of Fisheries and Aquaculture Report provides gender disaggregated data for six countries from 2010 to 2014 (Australia, Chile, Japan, Mauritius, St Lucia and Sri Lanka) (FAO 2016c).

Little recent interest on gender in western Pacific fisheries

Three recent overviews of the attention to women's contributions to Pacific island countries' fisheries found little progress had been made since the completion of the 2008 major coastal fisheries study led by the Secretariat of the Pacific Community (SPC) (Williams 2014b; 2015; and Gillett 2106). Indeed, in the last 25 years, attention to women in fisheries seems to have waxed and waned in the work of the SPC (Williams 2014b).

The Special Issue

The event, GAF5, comprised contributed presentations addressing a wide range of topics, many of which are reflected in the selected set of papers in this Special Issue of *Asian Fisheries Science*. For simplicity, we have organised the papers into the following sections: aquaculture, small-scale fisheries, post-harvest and fisheries and aquaculture institutions, communities and gender. Not only are the topics covered in the Special Issue varied, but so too are the types of papers, which are classified as: research papers (as defined for regular volumes of Asian Fisheries Science journal), technical papers (containing significant new technical information gathered from original studies), and short communications (on development work, surveys or projects). Although the selected papers represented those from the more mature studies presented at GAF5, they report, in general, on research in its earlier stages. We consider this a potentially healthy sign of the greater interest in gender studies in aquaculture and fisheries, but we are also aware of the need for some urgency in proving up promising directions.

Aquaculture

Three papers addressed gender in aquaculture settings. These were concerned with the results of different gender and learning approaches.

Cathy Farnworth and colleagues compared two approaches to transform gender relations and improve fish production in Bangladesh. They compared the "Shaded pond" project that applied a social learning and gender accommodative approach, and the Gender Transformative Approach in Conventional Training (GTA-CT), that took a transfer of technology and gender transformative approach. The former integrated the gender perspective into their social learning approach, while the latter provided explicit gender training alongside fish production training. The result was that in both cases women participated more in household decision making and improved their confidence level. The authors pointed out that how knowledge was transferred is important rather than whether gender training was provided or not to improve women's active engagement.

Seila Chea and her colleagues similarly noted that engaging women in the process of knowledge and skill development is important to ensure women benefit most from aquaculture projects. They studied the "WISH-pond" project in Stung Treng, Cambodia. This project facilitated transformative learning in peri-urban households for small-scale aquaculture. Promoting women's participation was incorporated in the project design, and the exploratory study suggested that the community science approach, where the drive of the research comes from fish farmers themselves, facilitated women's skill improvement.

Liya Jayalal, in her paper on ornamental fish value chains in two places in Kerala, India, observed that though the culture of ornamentals is a growing business and an attractive livelihood option for women, it is not always taken up with full energy, mainly due to lack of family back up. Women taking credit almost always divert that credit for other household related uses. Where it has been taken up as a family enterprise, the results have been encouraging.

Small-scale fisheries

Five papers addressed small-scale fisheries, covering topics from as broad as the way gender is included in the global Small-Scale Fisheries Guidelines, to as specific as the little-documented fishing methods of women in traditional fisheries and how making a documentary film helped women enhance their narrative skills and human capital.

By applying a gender lens to the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (VG SSF), Cornelie Quist provides an overview of the articles of the VG SSF that are important for gender equality and gives clear views on the strengths and weaknesses. She notes that the VG SSF contain weaknesses with respect to gender equality. They are only voluntary and couched in the context of existing, and therefore unequal, laws and institutions, and are overly reliant on mainstream technical measures rather than transformative social change. Cornelie Quist's paper does, conclude, however, that the VG SSF does open up space for action and programmes and hopefully more resources to support gender equality.

In their innovative approach Enrique Poblacion, David Monforte and Alberto Castro explored the role of film making in recognising and making visible the work and lives of women divers of Timor Leste. As they engaged in the film making process, the women enhanced their narrative capabilities and in so doing enhanced their "human capital."

Surendran Rajaratnam and his colleagues analysed women's involvement in fisheries in the Barotse Floodplain in Zambia. They demonstrated how gender norms and power relations restrict women's access to resources and prohibit them from benefiting from fisheries, making them rely on others. Women non-resident fish traders are able to negotiate and establish different relations with fishers than in the case of resident women. However, still, the non-residents' weak bargaining power can result in sex-for-trade relationship in order to secure fish supply.

Focusing on an area of North Eastern India, Shaikhom Inaotombi and Prabin Mahanta make women's role in the fishery more visible by exploring the ways in which local women's traditional knowledge influences women's participation in fisheries, in particular in the gear and unique methods they have developed. They argue that protection of such methods will strengthen women's position in the fishery even as it changes.

P. Sruthi and her colleagues examined gender roles in the Vembanad estuarine system in Kerala, India. She found that whereas men fished in both marine and inland waters, women only fished in inland waters, using primitive

traditional gear like scoop nets, that have not seen much evolution except in terms of the materials used. The women's fishing was declining, however, and young women shunned fishing.

Post-Harvest

Two papers addressed post-harvest topics, both concerned with women and fish trade.

In her carefully observed study of the processed fish traders of Tonle Sap Lake on the borders of Cambodia and Thailand, Kyoko Kusakabe argues that while collective action clearly benefits the female processors, the competitive nature of the existing value chain and the relationship between different actors with different powers, together with their market vulnerability prevent them from taking full advantage of their situation, and this, in turn, pushes them further to depend on Thai traders.

Bibha Kumari described the situation of fish traders in Patna fish market in Bihar, India. She noted that since the early 1990s, men fish traders have increased and the proportion of women traders decreased. The main reason is that the market places are insecure and lack facilities. The women traders' experience and fear of sexual harassment pushed the women to choose even more casual trading options such as moving from place to place.

Fisheries and Aquaculture Institutions, Communities and Gender

Meryl Williams' more general piece looks at the unequal and uneven progress towards (possible) gender equality in the fisheries and aquaculture sectors. She recognises the long term and persistent efforts of individuals and NGOs, such as the Asian Fisheries Society, but is much more critical about the role of established fisheries and aquaculture institutions, arguing that rather than taking gender equality seriously they tend to "outsource" gender concerns to informal networks, consultants or NGOs.

To illustrate the challenges faced when mainstream aquaculture institutions decide to include gender in their programs, Arlene Nietes Satapornvanit and her colleagues examine the processes involved in conducting a multi-country project in Cambodia, Laos, Thailand and Vietnam. They found

that, despite a certain willingness to introduce gender, the government agencies tend to have insufficient capacity and tools to make much progress. At this stage of introducing gender equality objectives, the officers felt they needed support and collaboration from regional bodies such as the Network of Aquaculture Centres in Asia-Pacific (NACA) and access to knowledgeable experts from other countries.

Conclusions

Despite the richness of the articles in this issue and the research on which they are based, much work remains to be done. The potential of a field of academic research that encompasses both social and natural sciences is significant. Ideas and practices can move to and fro between previously closeted academic disciplines. Practical, field based research can draw on the theoretical work of academic researchers; academic researchers can learn from and incorporate the realities in the field and practical knowledge being generated. Above all, GAF can provide practical and theoretical support to the increasing numbers of young researchers who are eager to incorporate gender concerns into their projects.

We are encouraged to see that an international organisation such as FAO is taking gender concerns into consideration in its program, and that many networks are emerging. The regular GAF events of the AFS also show that more and more researchers are interested in studying gender and fisheries/aquaculture, both from among the social scientists and fisheries biologists. Thus the GAF events create a unique forum for social and natural sciences to meet and discuss, which is often not the case in other disciplines.

There is still much work to be done in both developing and disseminating theory and methods that are relevant to researchers in gender and aquaculture and fisheries. This Special Issue is thus part of a larger endeavour to develop and sustain a growing population of well-informed gender specialists in fisheries and aquaculture. For gender research, tools development and dissemination is required in fisheries and aquaculture. However, we are concerned that a much bigger agenda than presently envisaged by mainstream institutes and funders is required to make progress.

The history of GAF development shows that we now have a sound platform to move ourselves wider and deeper – training new researchers and sustaining and developing more research from more diverse angles to have a more complex and nuanced understanding of GAF. For this, we call for more resources to facilitate the growth of an area of research that has a potential to influence and shape multi-disciplinary approaches in social and natural sciences.

The work has not finished, but it has now begun.

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References

- BOBLME (Bay of Bengal Large Marine Ecosystem). 2016. Mainstreaming gender in large marine ecosystems. http://www.boblme.org/documentRepository/MainstreamGender brochure.pdf. Accessed 17 June 2016.
- Brugere, C. 2014. Mainstreaming gender in transboundary natural resources projects the experience of the Bay of Bengal Large Marine Ecosystem (BOBLME) project. Environmental Development 11: 84–97.
- Cattermoul, B., D. Brown and F. Poulain (eds.). 2014. Fisheries and aquaculture emergency response guidance. FAO, Rome. 167 pp.
- Choo, P.S., S.J. Hall and M.J. Williams (eds.). 2006. Global symposium on gender and fisheries. Seventh Asian Fisheries Forum, 1–2 December 2004. WorldFish Center and Asian Fisheries Society, Penang. 174 pp.
- Choo, P.S., B.S. Nowak, K. Kusakabe and M.J. Williams. 2008. Guest Editorial: Gender and fisheries. Development 51:176-179.
- Choo, P.S. and M.J. Williams. 2014. Avoiding pitfalls in development projects that aspire to empower women: A review of the Asian Fisheries Society gender and fisheries symposium papers. Asian Fisheries Science 27S: 15-31.
- FAO EAF-Nansen Project (Food and Agriculture Organization, Ecosystem Approach to Fisheries). 2015. Gender audit and recommendations for mainstreaming gender in the

- EAF-Nansen Project. FAO EAF-Nansen Project Report No. 24. FAO, Rome. 2015. 28 pp.
- FAO (Food and Agriculture Organization). 2014. Voluntary Guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication (SSF Guidelines). http://www.fao.org/fishery/ssf/guidelines/en. Accessed 17 June 2016.
- FAO. 2015. Guidelines to enhance fisheries and aquaculture statistics through a census framework. Food and Agriculture Organisation, Rome, Italy. 153 pp.
- FAO 2016a. Technical and socio-economic characteristics of small-scale coastal fishing communities, and opportunities for poverty alleviation and empowerment. FAO Fisheries and Aquaculture Circular No. 1111. Rome, Italy. 123 pp.
- FAO. 2016b. Advancing knowledge on rights-based approaches for fisheries: A global work programme for enhancing food security and nutrition, poverty eradication and achieving the sustainable development goals. FAO Committee on Fisheries, COFI/2016/Inf.15, FAO, Rome. 13 pp.
- FAO. 2016c. The State of World Fisheries and Aquaculture 2016. Contributing to food security and nutrition for all. FAO, Rome, Italy. 200 pp.
- Gadagkar, S.R. (ed.). 1992. Women in fisheries in India. Proceedings of the workshop on women in fisheries in India. Asian Fisheries Society, India, Special publication 8, Mangalore, India. 51 pp.
- Gillett, R. D. 2016. Fisheries in the economies of Pacific Island Countries and Territories. Secretariat for the Pacific Community, Noumea, New Caledonia. 664 pp.
- Gopal, N., M.J. Williams, M. Porter, K. Kusakabe and P.S. Choo. 2014. Gender in aquaculture and fisheries: Navigating change. Asian Fisheries Science (Special Issue) 27S. 268 pp.
- Harper, S., D. Zeller, M. Hauzer, D. Pauly and U.R. Sumaila. 2013. Women and fisheries: Contribution to food security and local economies. Marine Policy 39: 56-63.
- Ndiaye, O., B. Sodoke Komivi and Y. Diei-Ouadi. 2014. Guide for developing and using the FAO Thiaroye processing technique (FTT-Thiaroye). FAO, Rome. 67 pp.
- Williams, M.J., M.C. Nandeesha, V.P. Corral, E. Tech and P.S. Choo (eds.). 2001. International symposium on women in Asian fisheries: Fifth Asian Fisheries Forum. Asian Fisheries Society, 13 November 1998, Chiang Mai, Thailand. WorldFish Centre and Asian Fisheries Society, Penang. 181 pp.
- Williams, M.J, N.H. Chao, P.S. Choo, K. Matics, M.C. Nandeesha, M. Shariff, E. Tech and J.M.C. Wong (eds.). 2002. Global symposium on women in fisheries: Sixth Asian Fisheries Forum. 29 November 2001, Kaohsiung, Taiwan. WorldFish Centre and Asian Fisheries Society, Penang. 201 pp.

- Williams, M.J., M. Porter, P.S. Choo, K. Kusakabe, V. Vuki, N. Gopal and M. Bondad-Reantaso. 2012a. Gender in aquaculture and fisheries: Moving the agenda forward. Asian Fisheries Science 25S. 276 pp.
- Williams, M.J., M. Porter, P.S. Choo, K. Kusakabe, V. Vuki, N. Gopal and M. Bondad-Reantaso. 2012b. Guest editorial-Gender in aquaculture and fisheries: Moving the agenda forward. Asian Fisheries Science 25S: 1-13.
- Williams, M.J. 2014a. Essay: Dr M.C. Nandeesha The man who brought gender awareness to the Asian Fisheries Society. Asian Fisheries Science 27S: 225-232.
- Williams, M.J. 2014b. Twenty-five issues of the Women in Fisheries Information Bulletin: The story within the story of 25 years of women in fisheries at SPC. Secretariat for the Pacific Community Women in Fisheries Information Bulletin 25: 5-10.
- Williams, M.J. 2015. Pacific invertebrate fisheries and gender Key results from PROCFish. Secretariat for the Pacific Community Women in Fisheries Information Bulletin 26: 12-16.