

WOMEN IN FISHERIES: POINTERS FOR DEVELOPMENT

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All over the world, women contribute in multiple ways to the production, processing, marketing and management of fish and other living aquatic resources. The first ever Global Symposium on Women in Fisheries, held in Kaohsiung, Taiwan on 29 November 2001 generated the present collection of papers on women in fisheries. These published Proceedings go beyond the actual Symposium in two ways. First, the papers that were initially presented have been revised and, therefore, more detailed and richer in information content than the short, spoken versions. These written versions have also benefited from the discussions during and around the Symposium. Second, two additional papers, from Africa, are presented in this volume, thus increasing the richness of African material on women in fisheries.

The reader of this volume will find in it a wealth of information, albeit in a very heterogeneous form, that the authors have had to draw from many different sources. Some are primary research studies whereas most are historical reviews from first hand experience of the authors or derived from other written materials, often contained in reports of fisheries development projects, newspapers and source materials well outside the fish sectors. Such is the nature of our knowledge in the field of women's, and also gender, roles in fisheries that few of the primary sources were actually designed to address the field in a rigorous and analytical way. They rather addressed other aspects of fish and fisheries and incidentally revealed much of value, at least by description, on women's roles.

To help the reader better access the wealth of material in these Proceedings, we have assisted in three ways. First, by arranging the papers into different sections, mainly by geographic region. Second, by providing an index to the contents so that topics, e.g., post-harvest processing, countries, localities and projects/initiatives, can be located in the different papers. Third, by providing this overview and drawing out the key pointers for development from all the papers, we provide a short guide to what each paper contains, the approach it takes and, across all papers, the main messages for human development. In the conclusion of this overview, we summarize these messages into 10 key pointers for development.

Setting the Scene

The Proceedings begin with messages from the co-conveners of the Symposium, the then-President (Dr I.C. Liao) and the then-past President (Prof. M. Shariff) of the Asian Fisheries Society, setting in context the Society's involvement in the issue of women in fisheries. The Asian region, the largest producer of fish in the world, has now strongly recognized the fact that women make very important contributions to fisheries. This is reflected in the Society's sponsorship of the Symposium and to real changes in gender balance of the Society's office bearers. Indeed, I would reflect that the society has sent a dramatic signal with its new woman president and with 5 of 16 women councilors. In a region not noted for leading the world in women's issues, contrast this with, for example, the still nearly all male composition of the Boards of companies in the OECD countries, despite years of efforts to redress this.

We then present a short personal summary of the Proceedings by Sunderarajan, who participated in the Symposium and reflected on the major threads from the perspective of a professional working in a non-government organization (NGO) movement in southern India.

Nandeeshha and Tech explore in some depth the sorts of impact women are making in the Asian Fisheries Society (AFS), a scientific society founded in 1984 for fisheries professionals to communicate, share information and cooperate. Noting the genesis of the women in fisheries professional meetings and symposia which the Society has become associated since 1994, the authors conclude that significant advances have been made in raising awareness of the issues. This has been achieved through the publishing of the proceedings, the photography competition at the AFS forums every three years (sponsored by PADEK in Cambodia) and the maturing understanding of the issues, signaled by the shift to a gender and not just a women's focus. Small but powerful signals, such as ensuring that women are included as keynote speakers at conferences and encouraging more women on the Council, have also helped. Several networks at the national level, e.g. in Indo-China countries and in Philippines, have been generated by the AFS action and it is perhaps here that the greatest hope for real impact in the lives of women will occur. This paper also tracks the recommendations of the AFS symposia.

Williams, Williams and Choo make a case for the fisheries sectors to follow the lead of other international actors, especially in the development assistance community, and to shift focus from 'women in fisheries' to 'gender and fisheries'. The authors argue that, although gender imbalances remain formidable against women, this cannot be resolved only by focusing on women nor can it be tackled by thinking of women only within the current realities of the sectors but through bringing about change in these realities. Research and research organizations are urged to become more rigorous and aware in their research and data gathering on gender and fisheries. Research is particularly critical at this point in history because real knowledge is hampered by a dearth of basic information and data on gender roles. The authors note that most of those enlisted by the Society in the women in fisheries events are not professional social scientists or gender specialists but have been drawn in variously through personal commitment. The authors are particularly indebted to Dr M.C. Nandeeshha (a man and, by training, a biologist) who has been the unselfish catalyst and champion of the issue since the early 1990s when he worked in Cambodia.

Asia

These above general background papers precede the regional sections, the first of which is on Asia. Not surprisingly, this is the largest section, with eight papers. This section begins with a major overview paper that was coordinated by Professor Ida Siason, the Chancellor of the University of the Philippines in the Visayas and a member of the AFS council. Thirteen other authors from Bangladesh, India, Indonesia, Japan, Malaysia, Nepal, Philippines, Sri Lanka and Mekong River Commission Secretariat contributed to this paper. Due to the scope of the material from the authors, the following 15 countries were covered: Bangladesh, Cambodia, Kuwait, India, Indonesia, Iran, Japan, the Lao PDR, Malaysia, Nepal, Philippines, Saudi Arabia, Sri Lanka, Thailand and Vietnam. Although not complete, China being a notable exception among the large fish producing countries, it does present a very valuable picture of the women (and gender) dimensions of fisheries and aquaculture in developed north Asia, Southeast Asia, south Asia and west Asia.

In their overview paper, Siason et al. provide background geographic and demographic material for the 15 countries, grouped as Mekong, Islamic and south Asian countries, Philippines and Japan. The country groupings follow approximate cultural rather than geographic lines, as befits the gender lens. The paper includes a valuable review on the legal status of women in the 15 countries. The paper then describes the situation of women in fisheries in each country or country group, and the relative importance of fish in the economies and lives of the people, from the oil rich or generally affluent nations such as Kuwait and Japan, to the populous archipelagic nations such as Indonesia and Philippines.

From their wealth of personal knowledge, the authors draw on many sources of information, most of which was not collected to allow detailed studies of women in fisheries. Good examples of these are the information on types of women fish traders in eastern India taken from the DFID Post Harvest Fisheries

Project - namely 'head loaders', petty fish traders and dry fish traders - and the household information on women's participation in the fresh fish trade in Bangladesh conducted through the Bay of Bengal Programme. Many of the differences between countries in women's roles are also due to different patterns and scales of production, even within a sector such as aquaculture. For example, in the Philippines, the paper reports studies which show that 18.5% of oyster growers are women compared to only 2.4% of mussel growers. Oysters are grown in the more shallow parts of rivers and mussels are farmed in deep bays.

The paper also analyses the membership of the AFS according to country and gender, and reveals large differences in the national percentages of women members, from the lowest two countries—none in Korea and 4.6% in Japan—to the highest two countries, 35.7% in Brunei Darussalam and 40.5% in the Philippines.

The paper concludes with identifying issues for each country/country group to address in the field of women in fisheries.

Huang's paper on the emerging issue of HIV/AIDS among fishers and the vulnerability of their partners refers mainly to the Asian situation but also draws widely from information on Africa and other parts of the world. Huang, who is from the Department of Community Health of Universiti Putra, Malaysia, was drawn to the conference by her research that had highlighted the greater risk of contracting HIV posed by fishers' lifestyles. To many of us, this was a particularly new and serious issue that had not been on the horizon in fisheries sector. Fishers are more vulnerable due to the frequent periods far from home, working hard and long hours and tending to be more likely than workers in other occupations to use commercial sex workers and take intravenous drugs. The risk to partners is often compounded by religious and cultural taboos, women's lack of assertiveness and the marginalization of fishing communities that are not in close contact with mainstream health services and education programs.

In the time since the Symposium, I have learned, through anecdotal evidence only, of several other fisheries projects beginning to note high HIV/AIDS rates among the participants. The gravity and impact of this pandemic on people in their most productive years warrant urgent studies and programs be developed to better understand the nature and cause of the apparent high rates among fishers and fishing communities and enroll these people in the multi-sectoral approaches that are needed to address this problem.

Matics, Poeu and Siason report on women and gender in fisheries networks that had commenced in the 1990s in the four lower Mekong Basin countries (Cambodia, Lao PDR, Thailand and Vietnam) and the Philippines. These are important fishing countries where women's roles are significant. In the Mekong countries, the networks are not only linking with each other but also integrating their work with that of mainstream gender and women's departments and services, e.g. health and women's affairs, thus bringing greater mainstream capacity to bear on the problems and opportunities for women in the sector.

From Taiwan, Chao, Chang and Chang built on the work of Chao and Liao (2001) in the Asian Women in Fisheries Symposium. The earlier work studied the views of women researchers and teachers in fisheries professions in Taiwan. For the present study, the researchers conducted a survey, using a semi-structured questionnaire, to gain an understanding of the views of more than 50 professional women in fisheries education, administration, research and private industry. The study examines women's knowledge of and likely responses to the apparently inevitable globalization in the fisheries sectors. The study finds that women, and most probably men as well, are in a good position to reap many advantages because of their awareness of trends, ready access to information and adaptability. However, the authors conclude that due to heavy workloads, the structure and small size of family business units means that industry, associations and the Government need to do more to help the sector cope.

The next two papers deal with women's conditions in Bangladesh, the first by Shelly and D' Acosta is on the aquaculture sector and the other by Sultana, Thompson and Ahmed, is on women's roles in community-based capture fisheries management.

Shelly and D'Acosta describe, as background, the current fisheries situation in Bangladesh and then, in some detail, the evolution and experience of the Caritas initiatives in involving women in aquaculture. Both authors are staff of Caritas, a multi-sectoral NGO with a mission to enhance the welfare of people in Bangladesh and to contribute to national development. The Caritas activities in aquaculture began in 1981 and experienced positive growth throughout the 1980s as the technology developed and people were motivated to take it up when they saw the good results. However, most of the beneficiaries were men and Caritas wanted women to benefit as well. In other sectors served by Caritas, 65% of all groups formed were women's groups. From the early 1990s, therefore, women were much more of a focus in Caritas' activities. Entering the current decade, Caritas is taking an even more comprehensive approach to the management of aquatic resources and the full range of support services to help groups meet their needs, promoting such gender sensitive policies as access to credit for women as well as men, and assisting women to more readily access seed and feed so that they can continue their home-tied nurturing roles as well. This paper is yet another illustration of the co-evolution of fish sectors and the organizations that serve them. As a related paper showed in the earlier symposium Proceedings (Debashish et al. 2001), institutions have to undergo internal transformations to serve their beneficiaries when the profile of those beneficiaries changes, e.g. from predominantly men to women and men.

Sultana et al. describe the development of a women-led beel (seasonal water body) management committee in Goakhola-Hatiara, Bangladesh, from its inception as a women-only group formed by a women's NGO, Banchte Shekha, in 1997 to a more inclusive and women-led management committee in 1999. The study documents the complexities of the changing aquatic resource situation. For example, technology and market developments led to increasing demands for snails for feeding to ducks and prawns, greater women's employment in snail collecting and breaking and the consequent overexploitation of snails. Seasonal fish production includes the women's own fishing from the beel and its interconnected canals and rivers. Despite the progress and the good support and cooperation from the Department of Fisheries, and a supportive community setting, outstanding institutional issues remain, such as the inability of the beel management committee to obtain the necessary formal control over the canal supplying the beel. Such rights could enable the committee to greatly improve the overwintering capacity of the aquatic resource system and thus enhance production.

Moving from one country where many people's lives are centered around water and fish to another, the next two papers, from the Philippines, examine a somewhat different situation. Both papers are based on empirical studies. In the first, Asong of the University of the Philippines in the Visayas and five co-authors document the gender differences among livelihoods of the low-income coastal people of Barangay Rizal, in the municipality of Buenavista, island province of Guimaras, Western Visayas Region. The paper describes the gender differences in occupations of the population which does not have a high dependence on fishing. Since Spanish times the area has been known for its model boat making and the districts (puroks) that carry such names as galley, frigate, yacht. The men work in transportation on land and sea (taxi drivers, tricycle drivers, pump boat operators, boat crew), model boat making, carpentry and farming and the women in vending, storekeeping, laundry, housekeeping and as beauticians. Fishing is a sideline activity for many, at sea and in the local fishponds. The children also gather clams, crablets and other shoreline invertebrates at times. The paper describes cash and non-cash means of support, and the impacts of the changing market for products such as model boats, which has become more difficult since the closure of the United States naval bases in the Philippines in the early 1990s. Incomes have dropped since the closure. Barter of goods such as the model boats is an important means of household support.

The paper also documents gender dimensions of the local credit and loan systems and the general support system including education and training, environmental awareness and cleanup campaigns. Both government and non-government agencies are active. Overall, the paper provides a sense of the social resilience of a community that is poor but not destitute and the complexity of the interlocking livelihoods - interlocking within the community, between genders and between the community and the outside markets.

The second paper on the Philippines, by Bañez-Sumagaysay, specifically addresses the question of why women in three fishing communities around Carigara Bay, Eastern Visayas choose to work in paid fisheries sector employment. The author used a time-allocation model from labor force studies to explore demographic, economic and psychological-social factors for married women. The results were complex, indicating the need for more research to further explore the relationships. For example, the presence of a mother substitute in the household did not affect the hours worked, probably because women are able to bring their small children into the workplace such as in vending. Household size positively influenced the number of hours worked and presence of children under six negatively affected working hours.

Oceania

From Asia, the Proceedings moves to Asia's nearest geographic neighbor, Oceania, with a single overview paper coordinated by Lambeth, who was then of the Secretariat for the Pacific Community (SPC) but who has since returned to commercial fishing in northern Australia. She is joined by five other authors from the Pacific and one from Australia. Their paper covers the Pacific islands, Australia and New Zealand.

Fish are a mainstay of the diet and livelihood of Pacific islanders, 80% being used for subsistence and only 20% going to commercial markets. It is estimated that women catch about a quarter of the total seafood in the Pacific. Lambeth et al. describe the roles of women in Pacific fisheries as mainly segregated from those of the men, both inshore and offshore. Of course, many ethnic and sub-regional differences occur and the authors describe some of these for Polynesia, Micronesia and Melanesia and in the industrial tuna fisheries sub-sector where women perform the majority of the shore jobs. Lambeth et al. document the issues for women in Pacific fisheries, starting with the common problem of lack of access to useful information. Development projects (especially outside the fisheries sector) increasingly demand a gender analysis and some projects and training programs for women in fisheries are beginning to emerge.

In Australia and New Zealand, also covered in this paper, employment is generally low due to the highly mechanized nature of the fisheries. Women do not have a large participation in the catching sector but are often very active in the shore-based activities. Fishing by indigenous Australians has often involved women, using traditional methods and also as divers in the early pearl fishery. Women and girls make up about one third of the recreational fishers of Australia, a large group given that about 20-30% of Australians participate in this activity.

Similar patterns apply in New Zealand. Maori have strong traditional ties to fishing and these rights are recognized in law. In the commercial fisheries, including onshore jobs, one third of the total workforce is made up of women. More women are having a voice in the politics of fisheries management.

The authors finally explore the recent evolution of approaches to assistance for women in fisheries. They find that gender specific programs have not succeeded. The reasons include problems over which department should lead projects, e.g. the fisheries department or the social or women's departments, and a related complacency that women in fisheries issues had to be addressed because a special section or project exists. Putting fisheries projects in the social and women's departments also does not appear to work well as they lack technical support and appreciation. The more recent approaches are therefore more integrated through community programs in fisheries. In the future, however, the authors feel that more attention must be given in development projects to women fisheries development activities. This will not be done by continuing with business as usual but rather through approaches such as 'family and development' and promoting equal opportunities for women and men through the fisheries sector.

Africa

Women in fisheries in the African continent are addressed in three papers, the first of which is a conceptual overview by Professor Stella Williams. Williams explores the masculine origins of life on the rivers and seas of the world, now by extension embodied in the heroic male image of fishing even though many fishers are poorer than other rural people and many inland fishers are women. Fisheries crises around the world have tested the resilience of rural political economies that depend on natural resources such as fisheries and the burdens fall heavily on women as well as men. Williams' overview highlights that many women in fishing families also have family backgrounds in the sector. She points out that in Africa, as elsewhere, the inland, i.e. not offshore, fishing pursuits of women are particularly under recognized.

The second paper on Africa is by four Tanzanian authors, Medard, Sobu, Ngatunga and Chirwa who focus on gender issues in the famous Lake Victoria fisheries. This paper effectively 'dispels the notion that women are only minimally involved in the fishing industry'. The review draws on Lake Victoria studies, which show that the fishery sector (fishing, processing, transport and marketing) is characterized by a higher than average population rate of single, divorced and widowed women. Again, as Williams noted, the present fishing occupations of the women are often linked to their family/clan backgrounds in fishing. Many have few other alternatives even as fisheries related incomes decline.

In Lake Victoria, women play a major role in post harvest processing of fish and men dominate the producing sector. Post harvest, sun-drying, smoking, preserving, frying, etc of the small *dagaa*¹ are critical to preserving the catch and therefore its value and in permitting transport to distant markets. When fish are transported to the buyers, women tend to be restricted to fresh fish, which have lower value because of their poor keeping quality, because they lack the capital to purchase bicycles and other transport. When training and credit are available, men dominate as recipients. An interesting insight into access to greater benefits comes from the statistics on the Nile perch (*Lates niloticus*) swim bladder trade, in which women's participation is low. The swim bladders are expensive and not often affordable for the women. The review also touches on the roles of women in beach seining for which women provide much of the labor; men may aspire to marry several wives to provide for this, and women as fishing gear owners (in some matriarchal societies) where they are most likely to be cheated by those who hire their gear because they are absentee vessel and gear owners.

The third paper on Africa, by Browne, who is from a humanitarian organization in war-torn Sierra Leone, documents the impacts of war on the artisanal fisheries, ironically against a background of comprehensive and recent national fisheries legislation. The war affected 80% of the coastal area, driving away, killing and maiming men or removing their fishing gear. What fish was caught was often channeled to the fighters. Against this bleak picture, Browne's paper describes the stories of five women who have succeeded in establishing businesses in fishing, fish processing and marketing. They are all involved in industrial scale fishing that employs others, earns foreign exchange and makes them better off financially.

The Americas

Pereira, from the Latin American intergovernmental agency, INFOPECA, portrays the situation in her region with the benefit of information gathered through the Focal Points of the Network of Latin American Women of the Fishery Sector. The picture produced is of women fish factory workers, self-employed fish workers, mainly in processing, various roles in the artisanal fisheries, small scale aquaculture, inland and river fishing, and professional positions in quality assurance, fish product inspection, research and development and in private sector management and administration. In Latin America, as indeed

¹ *Dagaa*: www.fishbase.org lists *dagaa* as the common name in Tanzania and nearby southern African countries for a number of sardine, herring and cyprinid species. They are eaten dried by poor and middle-income people in eastern and southern Africa

in most other regions, mainstream gender programs do not reach women in fisheries. The paper makes recommendations from the Network for more knowledge to better understand women's roles and to better target assistance programs, training to build skills and capacity and credit and loans to really help the poor in fisheries.

For North America, Howell, of Spinney Creek Shellfish, Inc., based her paper on interviews with more than 25 women in the fish sectors as well as literature reviews. She describes the traditional but tough and multi-talented support-partner role of the fisher's wife as well as the less traditional roles of women as active fishers, women taking responsibility in emergencies, women in the seafood business and women in research and lobbying. She recounts the impression that women researchers in government service have few problems since they are protected by the 'mantle of government credibility' whereas those representing private interests have to personally gain respect for their roles. Through her research and interviews, Howell addresses the issue of why there are so few 'women on the water', concluding that it could be aversion to the at-sea working conditions, onshore family commitments and reduced opportunities due to fisheries cutbacks. In aquaculture, women may be working harder than men to gain respect.

Europe

Rana and Choo write on the situation in the European Union countries. Women's roles in fisheries are predominantly in the fish processing and marketing sectors and little has changed in this regard over the last two centuries. European Union statistics show that more than half the workers (59%) in fish processing are women, although this varies across countries. Women have a relatively high participation rate in marine aquaculture (28%). Women's roles in the family and support industry sides of fisheries are usually unpaid and these roles become especially crucial in times of crisis when women are key to keeping communities and families together. Women rarely venture into management and other industry organizations as this conflicts with the perceived correct family division of labor along gender lines. Overall, even in this region where women's rights are protected under the law, they play mainly traditional roles in the fish sectors.

Others

For the record, this volume of Proceedings appends the program of the Global Symposium on Women in Fisheries and the press release issued shortly after the Symposium. A news feature on the outcomes of the symposium can also be found at the following web address: http://www.futureharvest.org/people/fish_farming.shtml.

Development Pointers

Within this volume and its predecessor (Williams et al. 2001) are diverse papers that contain a wealth of information that is highly relevant for development assistance agencies, nationally and internationally. We believe that, even in this rather raw form, the volume contains many pointers for development action. Williams et al. (2001) went into a second printing shortly after its release, and is also available on the Internet.

The final section of this introduction to the present Proceedings distills the key pointers for development action.

1. Active networks have an impact on the ground: Networks at national level, with links to mainstream women's and gender programs, can bring a chance of lasting impact. For additional impact, national networks and their focal points could benefit from regional linkages. Fisheries specialists, especially researchers have raised awareness of the importance of women in fisheries and this has led to a few such networks being formed, e.g., in the 4 riparian countries of the lower Mekong Basin, the

Philippines and in Latin America. New technology such as the Internet, and facilitation by international bodies can help. The co-convenors of the Global Women in Fisheries Symposium are soon to launch a gender and fisheries listserv (GAF@cgiar.org).

2. More hard facts are needed to target action: Every country lacks hard facts on women's roles and contributions in fisheries, thus hampering targeted development assistance to improve women's contributions. Much of the knowledge that is being generated is only incidental to other research and development efforts such as household and post harvest processing projects. Research on women and gender in fisheries requires more rigorous methodological and analytical tools, many of which are being developed or already exist in mainstream gender analysis. Part of the reason for the lack of facts on women's roles and contributions is that much of the work is not remunerated or is poorly remunerated and so little valued in financial terms.
3. Evolve your organization's culture to match gender strategies: Development assistance agencies, research organizations, development projects and professional societies must co-evolve with the needs to incorporate gender dimensions into their strategies and work programs. Organizational development will have to look to workforce composition, internal culture, partnership and relationship management policies.
4. Women's roles match resource and industry characters: Women's roles in fisheries and development are matched to the pattern and scale of aquatic resources, their uses and state of exploitation. Even the legal and constitutional status and rights of women and the stage of economic development of the country seems to have little effect on these relationships. One dominant pattern in the fish sectors is the predominance and sometimes even dominance of women in post harvest activities - processing, marketing, trade, quality assurance, inspection and transport of fish. Development assistance to women here has multiple benefits for them, their families and their countries and for maximizing the economic and nutritional value from fish production.
5. Undertake gender programs in the fish sectors: Women and gender programs in fisheries cannot be left to mainstream gender and social welfare agencies as these seldom give priority to fisheries. Fish sectors must develop their own gender approaches and seek the best links to mainstream actors, such as in health to tackle the HIV/AIDS threat, in education, financial assistance, housing and sanitation. In addition, within the fish sectors, family and community-based approaches rather than women's activities are more likely to succeed and last.

10 Pointers for Development



6. Women need extra help to access assistance: Creative schemes are needed to allow women access to the means for their improvement, including access to capital equipment and technology, credit and loans, training and education. Women's access to all of these enabling factors lag far behind those of men in fisheries in every society.
7. Globalization affects women in fisheries: Development agencies should keep abreast of the globalization trends that are impacting the fish sectors and are changing, positively and negatively, the options and roles of women in fisheries, especially in post-harvest, marketing and technology use.
8. Women must have roles in resource management: Women should be targeted to play a role in fisheries resources management, especially as this becomes more participatory and inclusive.
9. Women are vital in times of fisheries crises: Women's roles are critical and become broader in times of crises in fisheries-dependent communities. This is true irrespective of the economic development status of the country.
10. Women need rights to fish resources too: Rights and access to and the means of control of resources, are central to successful fisheries development; and women's entitlements are frequently ignored. This situation must be addressed explicitly in order for women's contributions to be improved.

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