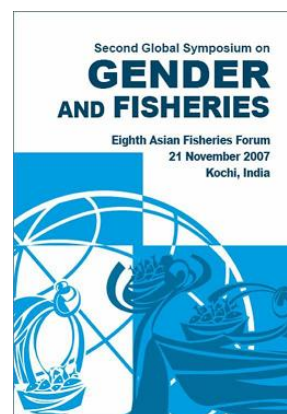


**SUMMARY REPORT**  
**2<sup>nd</sup> GLOBAL SYMPOSIUM ON GENDER  
AND FISHERIES**

**21 November 2007**

**8<sup>th</sup> Asian Fisheries Forum  
20 -23 November 2007  
Kochi, India**



**SOLUTIONS THROUGH GENDER RESEARCH**

**By Meryl J Williams**

Fisheries and aquaculture have long been weak on a gender perspective. Fortunately the tide of attention to gender in fisheries and aquaculture is turning, in good measure due to the series of special women and gender symposia held at the triennial Asian Fisheries Forum of the Asian Fisheries Society.

In Kochi, India, the 21 November 2007 2<sup>nd</sup> Global Symposium on Gender and Fisheries showed that the gender lens produces a better picture of fisheries issues. As with any good lens, the fisheries and aquaculture picture through the gender lens is more complete, better focused and provides the basis for understanding the issues and taking more appropriate action. The gender lens also reinforces the importance of an integrated and complete supply chain approach to fisheries. Without the gender lens, studies and action tend to value fish production and fish stocks and only the knowledge directly linked to these.

**Approaches to Gender Research in Fisheries and Aquaculture**

Despite increased interest in the gender dimensions of fisheries, the field of gender and fisheries research is only beginning to emerge. A theoretical framework is still lacking and, appropriately, the Symposium heard and discussed papers exploring research approaches, frameworks and methods.

Holly Hapke addressed the problem of what approaches to use to theoretically understand gender and globalization, its nuances and the local factors that shape a person's or groups ability to adapt to changing economic settings. Her multi-scale analysis of Kerala fisheries used feminist commodity chain analysis, livelihoods analysis, feminist household analysis and attention to divisions of labor. Her methods revealed how the local ecological crisis of fisheries was causing households to diversify out of fisheries, using pathways depending on each household's assets, its members' education levels and the wider economy. Fishing households, however, still relied on fisheries and increasingly on women's as well as men's work, which were interdependent. The analysis of the Kerala case also suggested that a long term historical perspective, as well as the wide geographical perspective, would provide even greater depth of understanding.

Another approach that reveals much about society and ecology was used by Ramchandran Nair for two fish-dependent Indian communities – the tuna fishing community of the offshore community at Miniocy of the Lakshadweep islands and the onshore Kerala bivalve farmers. He analysed gendered space – working and living space - at individual, family and social scales. Ramchandran's comparative study found that, although generalizations were not possible, analysing gendered space revealed a number of key gender challenges. For example, the prosperity of the tuna boom brought HIV/AIDS with it and the silent bivalve farming revolution unleashed by women also tended to disempower their husbands.

Several presenters pointed out the social contradictions in Kerala, India, often called 'the land of women' because of its positive women's development indicators. Despite the state statistics, women's literacy rates in the fisheries sector lag the state average and the sex ratios in fishing communities are strongly biased towards men. To better understand what forms of social assistance could reduce the gaps between the fishing communities and the general population in Kerala, three studies of coastal villages evaluated the outcomes of interventions at different scales. In the first, Ashaletha used social, psychological, technological and economic empowerment measures for four typical intervention models – those led by the Indian central government, State government, non-government organizations and a research institute (CMFRI). Her findings show that each model has different strengths and weaknesses. For example, the research institute was strong on psychological and technological empowerment but weaker on social and economic empowerment. From the analysis, an indicative empowerment strategy was developed combining the strengths and best partnerships models of each approach.

The second, a case presented by Ashaletha and her senior author Krishna Srinath, explored the special case of a micro-level action research project in Chellavanam village that is attempting to mainstream women's participation in management of this fragile and highly degraded coastal environment. Gender mainstreaming themes were responsible fisheries, sustainable aquaculture/agriculture, natural resources management, drinking water and waste management and alternative livelihoods. Expert consultations and participatory research assessments, through events such as nature camps and ward level interactive workshops, have identified the problems, natural and man-made, and likely positive intervention points such as suitable integrated aquaculture–agriculture practices and value added processing during the seasonal fishing closures. After this first phase of action, local knowledge and awareness was much improved and will be evaluated further by an impact assessment.

In the third Kerala study, Sangeetha K. Prathap interviewed and examined secondary data to describe the severe gender disparities that bedevil fish marketing and prawn peeling jobs. To understand the impacts of deliberate interventions to reduce such disparities, she then studied indicators of successful microfinancing, namely enterprise output, profitability and innovation orientation, through the experiences of 5 successful Self Help Groups (SHG's). SHGs are an Indian movement to reach the poorest people, especially women, with micro-finance and other interventions that have recently reached fisheries and aquaculture. Sangeetha found that mussel farming and fish drying by SHG members were profitable, gave sound employment and the women's earnings reduced household vulnerability. Despite the evident success of the

SHGs, however, much more could be achieved with more and stronger linkages among groups, with local markets, the media and the national development banks.

V. P. Vipinkumar developed and applied a Group Dynamics Effectiveness Index for 15 women's Self Help Groups in 5 districts of the Malabar coast of Kerala, India. The SHGs were undertaking bivalve farming, fish drying, processing and value addition. The Effectiveness Index correlated well with the cost:benefit ratios of the SHGs' enterprises. The most significant correlates of group effectiveness were participation in the group, group atmosphere and achievement. In all the groups, poor living conditions and the challenges of marketing products were the main constraints. Vipinkumar reported that experience across the groups showed that typical evolutionary phases for a successful SHG consisted of a formation phase of up to 4 months, a stabilization phase running from 4 to 15 months and a self-helping phase from 15 to 36 months.

P. Mahalakshmi presented results of an empirical study of gender empowerment in 5 fisheries-linked 'knowledge centers' established by the M.S. Swaminathan Research Foundation in Tamil Nadu, India. Assessed by a comprehensive framework for measuring empowerment, the high-end information and communication technology used by the knowledge centers was highly effective in empowering women. Efforts are now underway to institutionalise the knowledge centers through local governments.

Most gender and fisheries research projects lack baseline data disaggregated by gender and, on a local scale, are forced to collect most of their own data. Existing fisheries data collections typically refer just to the fishing operations themselves. Fortunately, a massive data source has been created from the only census in Asian fisheries that documents women's work. Somy Kuriakose described a major data mining exercise on the 2005 Indian Marine Fisheries Census led by the Department of Animal Husbandry, Dairying and Fisheries and conducted by the Central Marine Fisheries Research Institute. Of 3.5 million people living in 750 thousand coastal fishing villages, 1.7 million were women and 21% of these were involved in fisheries work. The data mining extracted 'implicit, previously unknown and potentially useful information from the data', such as that women's engagement in fish marketing increased as the family owned more fishing craft. Gender, geographical, cultural and other disparities indicated policy relevant results such as that Orissa and West Bengal states have the greatest women's untapped potentials.

Institutional support is critical to 'making gender and fisheries stick' and this has been well demonstrated in the Lower Mekong Basin countries – Cambodia, Laos, Thailand and Vietnam. Hap Navy and Wolf Hartmann traced the history of women in fisheries and then gender and fisheries networks, from informal national and regional information networks in 1997 to full formal membership by the Network on Gender and Fisheries in the policy-based development network, the Technical Advisory Body for the Lower Mekong Basin countries. Having achieved a seat at the fisheries policy table, the challenge is now for the Network to clarify what promotion of gender and fisheries really means.

## **Marginalization**

Fishing peoples often live on the margins of society, the women in their communities even more so, even in more developed countries. Weak access to social welfare is one form of marginalization.

Katia Frangoudes reported on surveys of the women in the French province of Brittany, the source of 40% of national production. Though Brittany women play little role in fishing at sea, they perform critical fishing support work in management and administration, product transport and sales and in boat and gear maintenance. Since 1998, wives of French fishers have been permitted new legal status options that open up their access to state retirement pensions. However, less than 40% of wives have taken up the options, due to low empowerment, lack of clarity on the tax implications and little social welfare data on the numbers of women eligible.

Another form of marginalization is when access to a range of desired financial services, including credit and insurance, is poor. Arpita Sharma profiled the social and economic status of 4 types of women fish workers in Dakshinda Kannada district of Karnataka state, India – dry and wet fish retailers and laborers – and their small scale financial services needs. Self Help Groups (SHGs), non-government organizations and national banks were productive, especially in their service focus areas of credit and savings. However, only 40% of women are in SHGs, and more could benefit from forming or joining groups. Most significantly, women expressed strong needs for additional services, especially services designed for micro-enterprise development, insurance, remittances, and microfinance for housing and shelter. While agreeing with the better design of microfinance services to meet women's need, the Symposium participants also pointed out that very little attention is being given to men's microfinance needs.

Marginalization can also occur within households. Umesh Goswami presented a well-documented case of undernutrition among women in fishing households in the lower stretches of the Bramaputra river valley, India. His study was initiated when incidences of night blindness were reported in this area. He measured the levels of pro-vitamin A, such as beta-carotene, in the freshwater fish and vegetables eaten and in men's and women's blood. He also estimated the amount of fish retained from the catch and eaten by different household members. Males and children of both sexes consumed much more of the catch and hence received more of the Vitamin A than the women. His study revealed that 95% of women had some degree of Vitamin A deficiency, whereas men and children showed almost no deficiencies. Furthermore, the administration of measured servings of *Amblypharyngodon mola* (mola, a small freshwater fish high in Vitamin A and pro-vitamin A) overcome the symptoms of night-blindness in men, women and children in 10 to 18 days, pregnant women taking longest.

## **Environmental degradation and disasters**

Environments degraded slowly or rapidly by natural and human induced disasters also play out differently for the genders and for minority peoples.

Barbara Nowak analysed the livelihood activities of the Btsisi' households of Peninsular Malaysia. These indigenous coastal people, whose livelihoods were won by exploitation, usually in family groups, of diverse and temporally changing

resources, have adjusted their gender roles to cope with declining resources and resource access. Daily working partnerships between men and women are breaking down and livelihood options are reduced by oil palm plantations, privatization of land and commercial overfishing.

In her survey of hundreds of women fishworkers in Limasawa, an island-town in the Eastern Visayas of the central Philippines, Marieta Banez-Sumagaysay found feminization of poverty, with women's earning only contributing USD25 to monthly family income. As daily witnesses to the depletion of coastal resources and with insights to some of its causes, women are rarely involved in efforts for a more sustainable resource use. The declining resources also signal that families should have strategies to lessen their dependence on fisheries.

To compound the steady and inexorable depletion of coastal resources, on August 11 2006, Guimaras Island in the western Visayas, central Philippines, was hit by the worst oil spill in Philippine history when the Solar I ran aground. Rose Asong and Alice Ferrer presented results from two gendered studies of coastal people affected, especially men and women who are boat operators, resort owners, fishpen laborers, fishers, salt makers, fish processors and vendors and seaweed growers. Yet, staged interventions from emergency response, to second phase clean up, rehabilitation and recovery efforts have received little gender focus to date. This was despite the fact that women tended to already be empowered and engaged in one or more paying, albeit low paying, activities.

In the rehabilitation and restoration phase of social welfare efforts following the devastating 26 November 2004 Indian Ocean tsunami, the M.S. Swaminathan Research Foundation established 41 Self Help Groups in Tamil Nadu to help 750 women. The women traditionally depended on traditional fishing activities and were helped successfully into mud crab fattening in floating cages in back waters and shrimp and fish pickle manufacture. Women's fish vending was also revived.

### **Globalization and the fish supply chain**

Driven by the importance of fish as a global trade commodity, a growing trend in fisheries research is to consider the whole value chain or fish supply chain. This trend has special significance for gender studies in fisheries as it exposes the contributions of more women as well as the secondary roles of men.

Charlotte Howard's study of vulnerabilities throughout the supply chain of fish from capture in Lake Selingué through to the city markets in Bamako, Mali, Africa, revealed the utility of a gendered approach. The study identified a key intervention point, namely securing access to credit for ice and transport, to limit post harvest losses which cascaded down to households and communities.

In Kilwa district on the southern coast of Tanzania, Africa, people in the Somanga and Songosongo Island communities remain remote, poor, dependent on marine resources and yet strongly connected to global markets such as for seaweed and octopus. Marilyn Porter's gendered analysis revealed that people in these communities are integrated into the world markets at the lowest level. Their produce is valued so they cannot afford to eat it themselves and yet they ultimately retain no negotiating power over its price.

Post-harvest fish workers in 5 Kerala, India, coastal villages were studied by Femeena Hassan. The prawn peelers, clam collectors cum processors, dryers, curers, fish processing plant workers and vendors suffered from many occupational health and other problems such as shoulder and backache, long hours but seasonal unemployment. Under-nutrition was prevalent. Were attention paid to their plight, however, many technical and entrepreneurial fish sector opportunities could be locally created to better use men's and women's capacity, preferably in the more remunerative men-women partnerships.

The seafood processing sector of India has been export oriented since the 1950s. In Veraval, Gujarat state, India, Nikita Gopal studied women in 5 European Union approved factories as part of a wider effort to understand seafood export sustainability. The study found women overwhelmingly clustered in the casual contract labor category on the factory floor, and almost totally absent from administrative, professional and regular staff categories. Two thirds of the women were migrants, largely from Kerala and Tamil Nadu, working to support their families and dependent on the weak social security provisions of their contractors who escape the Indian laws covering migrant labor. Social audits should be conducted to ensure that labor laws are respected in these factories, in a similar way that the factories are audited for export product quality.

#### **Aquaculture policy and extension**

Aquaculture and fisheries interact but many aspects of aquaculture require special understanding. The common themes of all the aquaculture papers were how to mobilize women's entry to the sector, especially as active members of the family effort, and how to enhance their skills as part of the household farming unit. As aquaculture moves to higher levels of efficiency, skills building becomes even more critical.

In West Tripura, in Tripura state, India, M.C. Nandeesha's policy support research sought to develop a gender and ethnic-inclusive aquaculture extension strategy to reach the West Bengal and tribal people. Women's involvement in aquaculture led to significantly higher production. Tribal women's constraints to entry were chiefly lack of knowledge and time. Only about 2% of women attended training, and eighty percent of women gave 'never invited' as their reason for not attending; two thirds were prepared to attend if invited and their husbands were generally supportive of the wives being trained. The researchers have presented the results and policy recommendations on family-centered, flexible training programs to the state government which is now acting on this advice.

In the Central Terai of Nepal, a participatory research and development project targeted ethnic Tarau women, who traditionally fish the rivers, streams and rice fields, for training in carp or tilapia farming in small farm ponds. Ram Bhujel reported that yields averaged 4.5 t/ha/yr, contributing an average of 15% to family income. The impacts were social – families were happy with their pond achievements, husbands and wives worked together, financial and empowering for the women, and improved family nutrition. Locally, more pond construction followed without project support. More project sites and ethnic groups were added after the first phase and vegetables

added to the farming mix. Farming cooperatives formed of family and community groups are helping the enterprises to become self-supporting.

From the 4 different technology aquaculture components of the Greater Noakhali aquaculture project, Bangladesh, Kyoko Kusakabe reported that an impact assessment survey found no increase in women's intra-household decision making and little change in the division of labor. However, women reported greater self-confidence and mobility from working side by side with their husbands. The lesson is that aquaculture extension is not just about imparting knowledge but also about improving the participants self confidence in ways that are culture and gender-specific.

Deboral Vimala assessed the training needs of women fish farm laborers – those engaged in pond preparation, hand picking, fish processing and fish feeding in coastal aquaculture in 5 districts of Tamil Nadu, India. The women's training needs increased with their education level, farm income, working experience and economic motivation, but were independent of age and family size.

In many fisheries the women play the role of 'collaborating spouse', but, since 1996 in southern India, women have been the main adopters of the new technology of green mussel farming, according to Kripa V., an aquaculturist who helped develop the technology. To study adoption and its impacts on women and families in Kasargod, Kerala, India, she defined locations with 5 levels of adoption across low to high adoption rates. She found that women's Self Help Groups have been the main drivers of production increases. Beyond increased production, other benefits of mussel farming have rippled out, including creating significant labor for other village women in ancillary activities such as seeding and coir rope production. Women have proven capable of managing the farms, especially by turning them into family businesses, while often having to manage sensitive issues with their husbands over managing the finances. An opportunity exists for technology developers and promoters to take the new industry to a new level.

India is starting to react to the global opportunities for cultured ornamental fish. Inspired by this, P.K. Sahoo's work sought ways of bring these opportunities to women fish farmers. Beginning with low capital alternative technology, the women's first attempt to market their fish through retailers in the Bhubaneswar, the distant capital of Orissa state, India, experienced many practical constraints and problems with middlemen. The next model, working through a local entrepreneur also ended in marketing and payment problems. However, a third model has succeeded by popularizing aquarium keeping in local and semi-urban areas, including local youths in marketing and generating a local aquarium construction industry.

Biswanath Sadangi of the Indian National Research Center for Women in Agriculture reported how the Center was turning its attention to understanding the gender needs in village aquaculture. He studied poor women's backyard fish culture and fish seed production, integrated aquaculture-agriculture in community and leased ponds, fish seed production and ornamental fish production with new homestead equipment. The most common motivation of the women was 'to earn more income relatively easily'. Of the types of aquaculture, ornamental fish culture was most likely to elevate family living standards; women involved tended to be young, educated and market oriented. Women's needs in each type of fish farming were assessed with respect to social and

policy, technological, training, extension and information, revealing commonalities and also differences. For example, the community based farming required different rights and transactional support to all other types where rights to farms were already defined, and all types needed access to technology demonstration and training in their areas of need.

### **Gender and fisheries networking: where to now?**

The Symposium papers revealed a new wealth of actions and understanding on gender roles, with a focus on women's roles, in fisheries and aquaculture. As a follow-up, 22 women and men met on 22 November to discuss common networking interests. Several recurring themes were highlighted, as well as areas for future collaboration.

1. *Barriers to women's entry* may need to be broken down to get more women experts educated. For example, in parts of India, women are often not admitted to professional education and training in fisheries and aquaculture research and extension due to lack of basic facilities such as student dormitories. Following an approach to the Vice Chancellor of the Assam Agricultural University, a girls' hostel for entrants to the Bachelor of Fisheries Science course is now nearing completion.

2. *Unpaid women's labor and gender wage disparities* were common. Many participants recounted instances of the unpaid contributions that women make to fish production and of gender disparities in wages, along with efforts to find means to redress these inequalities. Good studies on women's unpaid labor in fisheries and on whether women have the same opportunities for jobs and promotion throughout the sector, including as researchers. The Organizing Committee for the next Gender and Fisheries Symposium should ensure that such studies are undertaken and reported.

3. The work done for the Asian Fisheries Society *gender and fisheries network* by Choo Poh Sze of WorldFish Center was warmly appreciated. The network meeting participants felt that it would be valuable to add all the network meeting and GAF2 presenters to the GAF list server as presently not all were connected. This list was reaching more and more people and was a handy tool for spreading relevant information.

4. Participants stressed that *fisheries and aquaculture education and vocational training should incorporate gender*, especially focusing on women and household roles. University teachers and extensionists among the participants were interested in sharing and having access to gender/women and fisheries curricula and syllabi and case studies. Some were aware of courses that were being piloted now. The courses would have to differ for different regions. The next GAF Symposium of the AFF should address the subject of gender and fisheries in teaching and in the curricula. Participants agreed to work on writing and sharing specific case studies derived from suitable research projects. Ram Bhjuel of the Asian Institute of Technology agreed to create a format for these and work with contributors to get them loaded on the Internet, available and suitably linked to institutional home sites.

5. Several participants highlighted the importance of making accessible some of the existing *women, gender and fisheries source materials*, including some classic studies and the proceedings of the 1994 Cambodia Women in Fisheries and the 1996 Indochina Women in Fisheries workshops which led to the Asian Fisheries Society



symposium. The 3 AFS symposia are readily available on the Internet. ICSF is in the process of getting seminal and older materials up, and welcomed guidance from participants on what the most important materials. The participants agreed to cooperate on the forthcoming ICSF bibliography of gender and fisheries sources.

6. *Opportunities exist for small projects involving women from Aquaculture without Frontiers*, the non-profit organization that was “established for the specific purpose of promoting and supporting responsible and sustainable aquaculture to assist in poverty alleviation through improving rural livelihoods in developing and transition countries. ..\_AwF is unique in devoting all of its resources and attention to aquaculture; however, it does not seek to promote aquaculture in isolation, but as a component of integrated rural and coastal development plans, and of strategies to alleviate poverty.” AwF has small project funds available and is seeking quality proposals. Visit the AwF website for further details ( [www.aquaculturewithoutfrontiers.org](http://www.aquaculturewithoutfrontiers.org) ) .

7. The meeting suggested that we *measure progress towards finding ‘Solutions through research’*. The WIF/GAF symposia appeared to have helped move experts towards doing more research on the topic, rather than simply reviewing available materials. This claim should be explored empirically, however, by analysing the papers from all the WIF/GAF symposia for the extent to which they were research based, and review the research methods used. However, we should also be looking further to how to make a bigger change in the research emphasis in future, through such mechanisms as more methodological development, better use of media such as the GAF2 and other websites for exchanging research ideas.

8. More generally, the *AFS GAF network should document all the impacts and legacies of the symposia* with a view seeing what has led to positive change and how this has come about. For example, as a result of the 2001 Women in Fisheries Symposium at the 6<sup>th</sup> AFF where, we reported of the problems of HIV/AIDS and fisheries. By making the issue more publicly known, Uganda, and the other Lake Victoria countries were alerted and they now have specific strategies and actions for overcoming the problem in their fishing communities.

### **Contacts for further information:**

GAF2 reports, awards. program, abstracts, PowerPoint presentations:

<http://genderaquafish.org/>

Meryl J Williams, Chair, GAF2 Organizing Committee [MerylJWilliams@gmail.com](mailto:MerylJWilliams@gmail.com)

Choo Poh Sze, Vice-chair, GAF2 Organizing Committee, coordinator WorldFish

Center/Asian Fisheries Society Gender and Fisheries Listserver,

[pohsze@gmail.com](mailto:pohsze@gmail.com)

M.C. Nandeeshah, Organizing Committee member, [mcnraju@gmail.com](mailto:mcnraju@gmail.com)

Ram C. Bhujel, Asian Institute of Technology, [Bhujel@ait.ac.th](mailto:Bhujel@ait.ac.th)

Chandrika Sharma, Executive Director, ICSF, [icsf@vsnl.com](mailto:icsf@vsnl.com)

Aquaculture without Frontiers: <http://www.aquaculturewithoutfrontiers.org/>