

GENDER IN FISHERIES

A Future Roadmap



Central Institute of Fisheries Technology

Indian Council of Agricultural Research

CIFT Junction, Matsyapuri P.O.

Cochin – 682 029



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Gender in Fisheries : A Future Roadmap

Workshop Report

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Preface

The need to mainstream gender into policies and programmes across different food production systems is gaining importance considering the gender specific contributions that can be made to ensure food and livelihood security across nations. The Indian Council of Agricultural Research (ICAR), New Delhi also has been giving stress to this aspect with Dr. S. Ayyappan, Hon'ble Secretary, DARE and Director General, ICAR, calling for “incorporating gender component in research programmes with a due monitoring mechanism” during the XII Plan period.

The Central Institute of Fisheries Technology, Cochin has been carrying out research in developing appropriate technologies, building capacities and assessing impacts of interventions for the benefit of the fisheries sector, including for fisherwomen. A one day workshop on 'Gender in Fisheries: A Future Roadmap' was organized on 4 April 2012, at CIFT, Cochin under the initiative and chairmanship of Dr. B. Meenakumari, Deputy Director General (Fisheries), ICAR. The aim of the workshop was to bring into perspective the issues in the area of 'Gender in Fisheries', especially from the point of view of the future work in this direction. There is a general consensus that data on gender in fisheries is woefully lacking and studies have been at best scattered. It was felt necessary to bring together a group of workers to take forward the agenda for gender research in fisheries, with the Fisheries Institutes under the ICAR taking the initiative and the lead.

Forty seven participants from ICAR Institutes, State Agricultural Universities, State Fisheries Departments and NGOs participated in the workshop. The workshop had an introductory session when the five themes of the workshop were briefly presented to the participants. A brainstorming session followed in which the participants put forth their views on the themes. Besides discussions were carried out on what has been done and what needs to be done. A very useful video conferencing session with experts from the Food and Agricultural Organization, Rome was also organized with three experts in Gender and Fisheries joining the workshop group for discussions. The participants also received a perspective of the global level initiatives and work in the area.

It is imperative that a gendered approach to research, extension, technology, policy and development is evolved. Gender mainstreaming must be given greater importance leading to empowerment and constructive contributions to development of the fisheries

sector in the country. The idea of having a gender group in ICAR institutes is a novel concept which may help in gender sensitization. While gender research is important, it is equally important for researchers to develop suitable skill sets to make it scientifically rigorous and robust. The output of research should provide suitable inputs for informed policy making on gender in fisheries.

This document is a report of the workshop held at CIFT and it is expected that the purpose for which the workshop was conducted will be taken forward and more focused work in the area of gender in fisheries will be carried out in the years to come.

Cochin
November 23, 2012



Dr. T. K. Srinivasa Gopal
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Introduction

Globally, women in fishing communities play multidimensional roles that include livelihood, household, reproductive and community ones. Their involvement in fisheries value chains are often considered as invisible inspite of being active in a wide range of harvest and post-harvest activities both in capture and culture fisheries. It is estimated that out of the total population depending on capture fisheries, 47 per cent are women (World Bank, 2012). The female workforce, particularly in the small scale fisheries sector tends to be high. In aquaculture, one of the fastest growing primary production sector, women's contributions are increasing proportionately.

Fisheries in India has been described as a sunrise sector, as its share in the overall economic contribution to the country has been increasing. It provides livelihood security to millions of people. For centuries, people living along the shore of various water bodies of the country, have depended on them for earning their livelihoods. The coast has seen a rich tradition of marine fishing. Fish and shell fish resources have also been harvested from the inland water systems like rivers, lakes and backwaters. Fish rearing has been practised in village ponds and tanks. Besides fish production, post-harvest activities like pre-processing, processing and marketing have a direct bearing on household incomes and fisherwomen are active in these sectors.

Nearly 65 per cent of the fish is marketed as fresh fish, with women dominating in the retail fresh fish trade in all maritime states of India. Nearly 20 per cent of the catch is processed

using traditional methods like salting and drying, which is the main livelihood activity for a significant number of women in coastal areas. Indian seafood export utilises 6 per cent of catch and almost 40,000 women are employed by the organised seafood processing sector in the country. Women's involvement in fisheries also include near shore fish harvesting activities like collection of clams, mussels and bivalves and harvesting of seaweeds. Other than these, some region specific activities like involvement in aquaculture activities, prawn seed collection, working in fish and shrimp farm and hatcheries and salt loading are also observed. Women's participation is also reported in gear making and mending. (Sudhakara *et al.*, 2003; ICSF, 2010).

Women are important from the livelihood, food and nutritional security point of view at the household (micro level) and the resource use, sustainability and value addition point of view at the regional and national levels (meso and macro levels). Besides the actual jobs they are engaged in, the larger environmental, socio-cultural and policy framework within which they are employed also have an impact on their contributions to households and communities. It has been observed that the impacts of societal and other changes tend to be more severe on women. As has been observed in the case of climate change impacts by Ovstegard (2010), women and men are differently affected by shortage in natural resources like water. Sumagaysay (2011) observes that the unpredictability of weather, as a result of climate change, has affected fish drying activities with women's labour increasing and incomes declining. These are but a few examples of how environmental changes have affected women's roles.

In the fisheries sector, as in many traditional occupations, there is a high degree of specialization or division of labour. In addition to gender division of labour, there are other related factors like differential access to resources, technology, family roles, participation in decision making, political participation etc. All these factors result in differential vulnerability, requiring specific coping and adaptation strategies for men and women, in view of the dynamic changes that are taking place in the sector. The slow, but definite, exclusion of women from many spheres is becoming part of the process, for example the reducing participation in traditional post-harvest activities at landing sites. There is need for greater understanding of the roles as well as the processes of change for arriving at participatory solutions and building capacities.

Though women serve as an important link in fisheries value chains, their roles and contributions are often not sufficiently understood. In the light of improving women's participation in the sector as well as ensuring household, food and nutritional security and as a first step towards ensuring gender equity in the fisheries sector, it is essential to bring into perspective the contribution of fisherwomen to the sector by identifying the critical issues that need to be addressed from the different levels like livelihoods, technology, skill and policy.

It is also important to understand that fisherwomen are not a homogeneous group and are placed at different levels within the ecological, value chain and socio-cultural systems in fisheries. Studies have to be based in a dynamic conceptual framework, to assess the interactions between gender and the various sub-systems within the sector. Different policy regimes formulated for sustainable fisheries often came up with gender neutral policies, which are not able to absorb the vulnerability attributes of fisherwomen. An in-depth gender analysis which takes into consideration gender roles and relations, assets and capabilities and empowerment is needed prior to any policy formulation for sustainable development. Systematic and organized gender analysis is required for the outcomes to be useful in the process of gender mainstreaming and planned policy interventions (WFC, 2010). An appropriate research agenda to address these issues would be a milestone in fisheries and aquaculture.

Across the world gender issues in general, and a gendered approach to development in particular, are taking centre stage, and some of the recent events and publications that have flagged these issues are listed below:

- ❖ Creation of a new UN organization, **UN Women** in July 2010, by the UN General Assembly
- ❖ The FAO Publication **State of Food and Agriculture (SOFA) 2010-11 – Women in Agriculture: Closing the gender gap for development**
- ❖ Women in Fisheries Workshop – **Recasting the Net: Defining a Gender Agenda for Sustaining Life and Livelihoods in Fishing Communities**, convened by the International Collective in Support of Fish workers (July 2010, India)
- ❖ The Global Conference on Aquaculture 2010 (October 2010, Phuket, Thailand)
- ❖ The Gender in Aquaculture and Fisheries (GAF) series at the Asian Fisheries Forum (the latest of which was the 3rd Global Symposium on Gender in Aquaculture and Fisheries held at Shanghai, 2011 which was supported by FAO and the FAO-Spain Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP). GAF3 was the fifth triennial women/gender Symposium organized by the Asian Fisheries Society)
- ❖ FAO Special Workshop on **Future Directions for Gender in Aquaculture and Fisheries: Action, Research and Development**, 23-24 April 2011, Shanghai
- ❖ The International Livestock Research Institute (ILRI), **Strategy and plan of action to mainstream gender in ILRI**, March 2012

The SOFA report (FAO, 2011) pinpoints the gender differential in production and productivity. The report observes that by closing the gender gap, there could be a 2.5 to 4

per cent gain in agricultural productivity at the national level. There could be a 12 to 17 per cent reduction in hunger and 100 to 150 million people could be lifted out of hunger. These gains would reflect in overall welfare gains of the society at large. The need for ensuring equality, while recognising the gender differences that exist, was stressed.

Aquatic Agricultural Systems have been identified as a major poverty reducing tool by the CGAIR (CGAIR, 2012) and 'getting gender integration right' is highlighted. This is consequent to the recognition of the importance of gender and need for clear gender strategies for holistic development.

A comprehensive initiative is required in India to address the various gender issues in fisheries and aquaculture in a holistic manner. The approach should be inclusive, with regards to the various sectors like capture and culture, and with better linkages between different organisations like academic and research organisations, development departments and NGO's.





Some gender concepts

- ❖ Gender has been defined as 'a concept that refers to the social differences, as opposed to the biological ones, between women and men that have been learned, are changeable over time and have wide variations both within and between cultures.
- ❖ Gender equity refers to the process of fair and justice treatment of women and men to reach gender equality.
- ❖ Gender equality refers to the equal enjoyment by women and men or boys and girls of rights, opportunities, services and resources
- ❖ Gender analysis is the systematic attempt to identify key issues contributing to gender inequalities so that they can be properly addressed. Gender analysis provides the basis for gender mainstreaming and is described as 'the study of differences in the conditions, needs, participation rates, access to resources and development, control of assets, decision-making powers, etc., between women and men in their assigned gender roles'.

Women's empowerment and their full participation on the basis of equality in all sphere of society, including participation in the decision-making process and access to power, are fundamental for the achievement of equality, development and peace
Beijing Declaration

[Source: <http://www.rflp.org/> (Regional Fisheries Livelihoods Programme for South and Southeast Asia)]



Brief review of gender studies carried out in ICAR Fisheries Institutes

Recognising women's roles in the fishing community, there have been gender focussed studies and programmes in fisheries Institutes under the Indian Council of Agricultural Research and the work has been briefly discussed below. Eight institutes under ICAR undertake research on various aspects of fisheries, CMFRI, Cochin; CIFRI, Barrackpore; CIFT, Cochin; CIFE, Mumbai; CIFA, Bhubaneswar; CIBA, Chennai; NBFGR, Lucknow; and DCFR, Bhimtal.

The broad areas of work undertaken have been assessment of gender roles and constraints; studying impacts of changes in technology, resources and environment; and planning and implementing location specific interventions. Studies have been location specific and generally micro level in scope. Observations have shown that women have been involved in both harvest and post-harvest activities. Their roles in harvesting have been limited to collection and hand picking and fishing from smaller water bodies. Clams, crabs, fish fry, seaweed, chank etc. have been fished by women in states like Kerala, Tamil Nadu, West Bengal, Andhra Pradesh, Orissa and the North East. Other occupational roles in post harvest included prawn peeling, fish curing, drying, fresh and dry fish marketing, net making and mending etc. In the seafood processing industry women continue to be relegated to floor level unskilled work, with very few top level functionaries. Employment opportunities are generally seasonal in nature and wages

poor. However, the contribution of women for household food and income security has been highlighted.

Studies have also shown that value addition provides the highest earnings per hour and fish vending also offered opportunities to earn higher annual income, provided other factors are favourable. There is usually limited access to resources, poor say in decision making, inadequate training and formal education, high disparity in ownership of productive assets and wage structure, exploitation by middlemen and contractors and intensive labour and long working hours. The lack of working capital and the dependence on informal credit sources at higher rates of interest by women vendors was also reported by many workers. Changing socio-economic conditions and marginalisation of women in small scale fisheries with respect to the technology advancement and trade liberalisation has also been looked into. Diffusion of modern technologies in the sector has also affected the community and had affected the role and status of fisherwomen in the fisheries sector.

Case studies on empowerment of fisherwomen have been undertaken and it has been established that communication technology used by knowledge centers was highly effective in empowering women. Access to financial services, especially through the Self Help Group- Microfinance models have improved incomes. Post-harvest activities have been found to be a means of providing gainful employment opportunities for women fisherfolk in India.

The studies have suggested that location-specific and need based training programmes for fisherwomen should be organized to enhance the awareness and technical know-how enabling them to start self-generating gainful employment ventures in aquaculture and post-harvest sector of fisheries (Srinath, 1987; Meenakumari and Panicker, 1988; Cecily, 1986; 1987; 1988; Kandoran *et al.*, 1988; Annamalai, 1992; Srinath and Immanuel, 2000; Gopal and Srinath, 2002; Ashaletha *et al.*, 2002, Ojha and Salim, 2002; Sathiadhas *et al.*, 2003; Immanuel and Sathiadhas, 2004; Gopal, 2005; Khader *et al.*, 2005; Gopal *et al.*, 2007; Mahalakshmi, 2007; Reena and Arpita, 2007; Immanuel *et al.*, 2008; Gopal and Meenakumari, 2011; Sathiadhas *et al.*, 2012).

Gender research has generally been constrained by methodological issues (Williams *et al.*, 2012). The research area is evolving and there is need for robust methods for undertaking studies so as to clearly bring out the gendered contributions and problems.

Studies reviewed here have largely been descriptive and qualitative in nature. Indices (like livelihood index, group dynamics index) have commonly been used to make comparisons. Situation analysis, Participatory Rural Appraisals (PRA) etc. have also been used to identify micro level issues and problems and in trying to arrive at their solutions. Clinical studies on nutrition have been attempted and a study in this regard in

Tamil Nadu and Kerala had shown that 51 per cent of fisherwomen were malnourished (Kahder *et al.*, 2006). The Central Institute of Fisheries Education (CIFE) work on “Fisherwomen and livelihoods: An ergonomics perspective” during 2003-2006, was aimed at micro activities and there were indications that the women fishers might be facing a number of occupational problems, including the ergonomically unsuitability of occupational and household tools, resulting in health issues. Action research had been attempted through a project on 'Coastal Zone Management through specific involvement of women and children' at Central Institute of Fisheries Technology (CIFT), Cochin implemented during 2004-07. In the National Agricultural Innovation Project (NAIP) of ICAR on 'Visioning policy Analysis and Gender' (V-PAGe), gender perspectives are being analysed with respect to fisheries policies.

Planning and implementation of development interventions have also been part of the work done by the Institutes, with an aim of empowerment of fisherwomen through identification and up-scaling of potential livelihood activities related to fisheries and aquaculture. Institutes have been engaged in identifying and implementing potential livelihood options through technologies developed at the institutes. They included edible oyster culture; mussel farming; shrimp farming; crab fattening and culture; sea weed farming; pond fish culture; raising fry and fingerlings in seasonal ponds; backyard hatchery management; integrated aquaculture; management of fish pens and cages; aquarium fish breeding and culture; carp fry production; carp poly culture; integrated farming systems like fish-cum-duck, fish-cum-poultry and fish-cum-horticulture etc. Post harvest activities like value addition through drying and other processing technologies have also been demonstrated. (Srinath, 1994; Devaraj *et al.*, 1997; Sathiadhas, 2005; Immanuel, 2008; Kripa and Surendran, 2008, Shanti and Krishnan, 2004; Shanti *et al.*, 2006; Shanti, 2011). An ICAR network project on 'Capacity Building of Coastal Fisherwomen through Post harvest Technology,' led by Directorate of Women in Agriculture (DRWA), Bhubaneswar along with CIFT, Cochin; Fisheries College and Research Institute, Thoothukudi; CIFE, Mumbai; College of Fisheries, Orissa University of Agriculture & Technology, Odisha; and Krishi Vigyan Kendra, Undi, Acharya N G Ranga Agricultural University, during 2009-12, was instrumental in demonstrating model fish drying centres in five states. Most of the above programmes were based on technology transfer through self - help groups (SHGs).

Conferences and workshops have also been organised at various fora on gender in fisheries and aquaculture. In 1988, an All India Workshop on Gainful Employment for Women in Fisheries Field was organized at CIFT, Cochin. In 2001, CIFE, Mumbai had organised an International Conference on Women in Fisheries through Indian Society of Fisheries Professionals (ISFP) in Mumbai, sponsored by Small Farmer's Agri-Business Consortium, New Delhi; Fisheries Division, Department of Animal Husbandry and Dairying, New Delhi; and MPEDA, Kochi. The sessions and recommendations have been compiled in the form of a book entitled 'Women in Fisheries' published in 2002, by

the ISFP, Mumbai (Kohli, M.P.S and Tewari, Ratna, *Eds.*). A National Consultation on Gender Perspectives in Agriculture was organized at New Delhi in 8-9 August, 2011 to 'understand stakeholders' perspective on importance of gender research for agriculture and economic development', in which fisheries was also discussed. The First Global Conference on Women in Agriculture held in New Delhi, during 13-15 March 2012, brought into focus the issues of women in agriculture, including fisheries, with themes such as assessing women's empowerment, linking women to markets, policies and services with regard to access to assets, resources and knowledge and impact of climate change related risks and uncertainties.

In the changing global and national scenario, with gender mainstreaming becoming important, there exists a clear necessity for expanding the work on Gender in the fisheries institutes in the ICAR with a wide choice of potential technologies that can be refined and transferred for the benefit of fisherwomen aiding in alternative livelihood options within the fisheries sector. The workshop on 'Gender in Fisheries: A Future Roadmap' organized at CIFT, Cochin on 4 April 2012, was expected to lead to a focussed look at Gender Research for ICAR Fisheries Research Institutes. With the workshop, it was expected to have a more holistic approach on gender research, including methodological focus and coordination among the ICAR Fisheries Institutes.

(The authors acknowledge the contributions of Dr. N. Aswathy and Dr. P.S. Swathilakshmi, CMFRI, Cochin; Dr. Paramita Banerjee Sawant, CIFE, Mumbai; Dr. B.Shanthi, CIBA, Chennai; Dr. P.K. Sahoo, DCFR, Bhimtal; Dr. U.L. Mohanty, CIFA, Bhubaneswar for providing additional information about the gender research in their respective Institutes. The review given above is a brief prepared based on these inputs and does not encompass a complete listing of work done at the Institutes or in ICAR)





Women in Fisheries Programme of the I C S F A Notable NGO initiative

Issues relating to women in fisheries have been a matter of concern to the International Collective in Support of Fishworkers (ICSF) ever since it was formed. Highlighting issues of women in fisheries, supporting the role of women in fisheries and enhancing their participation in decision-making processes have always been high on the agenda of ICSF. The WIF programme of ICSF has evolved a feminist perspective on fisheries that connects with the larger feminist critique of development. It critiques development models that benefit the few at the expense of the majority (particularly poor women); increase the vulnerability of local communities and destroy their means of livelihood; and undervalue and overexploit natural resources. Gender issues focus not only on women, but on the relationship between men and women, their roles, rights and responsibilities, while acknowledging that these vary within and between cultures as well as class, race, ethnicity, age and marital status. The Women in Fisheries (WIF) programme has been highlighting and valorizing -- through workshops, publications, studies and through various activities in the ICSF website -- the vital role that women play in fisheries and fishing communities. The major programmes undertaken by ICSF on women in fisheries are as listed below.

Workshops

The workshop Enhancing Women's Roles in Fisheries in India was held from 1-3 February 2010 in Navi Mumbai, India. The workshop discussed and analyzed the role of women in fisheries, and reflected on issues facing women in fishing communities and organizations in India.

An important international workshop on women in fisheries issues titled Recasting the Net: Defining a Gender Agenda for Sustaining Life and Livelihoods in Fishing Communities was organized from 7-10 July 2010. The workshop brought together activists, researchers, policy makers and ICSF members, and agreed on the “Shared Agenda” that needs to be taken forward.

Publications and Studies

Yemaya: The ICSF Newsletter on Gender and Fisheries: Yemaya, is the only newsletter of its kind at the global level, focusing on women-in-fisheries issues, tracking grassroot processes in different parts of the world, and inviting write-ups, mainly from women fishworkers and their supporters. The publication has helped in providing greater support and visibility to the organizational efforts and struggles of women of fishing communities, the issues facing them, and the need for protecting their interests in the face of changes in the larger economic, technological and social context. Yemaya has been brought out in English, French, and Portuguese. All issues of Yemaya, in all languages, are available online at the ICSF website, as PDF files.

Yemaya Dossier: The Yemaya Dossier titled, ‘Gender Focus’ is a compilation of articles from the issues of Yemaya, providing a broad overview of the key issues facing women in the fisheries sector, as well as the local, national and regional initiatives being taken by women's groups to organize around their concerns. ICSF also brought out two special issues of Yemaya (issue 29 & 34) in preparation for various workshops and processes.

ICSF Dossiers – The Women in Fisheries Series: ICSF brought out a series of Women in Fisheries Dossiers in an effort to study women's roles in fisheries, and to record accounts of their struggles against social marginalization. These dossiers were also aimed to strengthen the participation of women in fishworkers' organizations and in decision-making processes at various levels. They are:

- ❖ Public Hearing on the Struggles of Women Workers in the Fish Processing Industry in India, 23 and 24 June 1995, Cochin, Kerala, India. This dossier puts together documents relating to a unique Public Hearing, held at Cochin, India in June 1995, on the problems faced by women workers in India's fish processing industry. This Dossier includes transcripts of oral testimonies of some of the women workers.

- ❖ Women First: Report of the Women in Fisheries Programme of the ICSF in India. Volume 1. This dossier contains details of women's involvement in fisheries in each of the nine maritime States of India.
- ❖ Women for Sustainable Fisheries: Report of the First Phase of the Women in Fisheries Programme of ICSF. This dossier draws on reports from seven countries to arrive at an understanding of the issue of gender in fisheries. In the process, it questions traditional norms in male-dominated fishworker organizations, both in the North and in the South.

Documentation

- ❖ 'Women Fish Vendors in India: An Information Booklet' contains information on government policies and other initiatives that have been undertaken, or are being undertaken, with a bearing on the livelihoods and conditions of work of women fishworkers. It compiles, for example, some of the fisheries-specific schemes and initiatives to support women in fisheries undertaken by Central and State departments, as well as by Central Research Institutions and Intergovernmental organizations.
- ❖ 'Turning the Tide: Women's Lives in the Fisheries and the Assault of Capital' (Biswas, 2011) is based on a review of literature. This paper explores various key issues and trends: that the framework of political economy seems to have been largely replaced by a framework of political ecology; that the idea of women's empowerment has gained ascendancy over the idea of women's exploitation and oppression; that a rights-based approach is being embraced, within which fishery rights are being articulated, on the one hand, as privatized rights, and, on the other, as human rights; that there is a growing articulation of the idea of community as well as of models of community-based management of natural resources in the fisheries; and that, both for fishery activities as well as for research and mobilization in the fishing sector, there is a growing dependence on multi-donor aid, bringing with it the ideology of liberalization and free market as a single prescription for all.
- ❖ Film on seaweed harvesters: A documentary film 'Shifting Undercurrents: Women seaweed harvesters in the Gulf of Mannar', on women seaweed collectors in the Gulf of Mannar National Park, in Tamil Nadu, explores the challenges facing the livelihoods of women seaweed collectors in an area declared as a national park, where extractive activities have been prohibited. The film also explores alternatives being proposed by the women, in order to ensure the sustainability of both the resources and their livelihoods.

ICSF Website on Women in Fisheries

ICSF has been maintaining a 'Women in Fisheries' website which disseminates information on the subject. An annotated, online bibliography on women in fisheries is also available on the website. The bibliography has been developed for use by those interested in, or working on, women's issues in fisheries. Documents have been classified under eight themes: (1) role of women in fisheries; (2) role of women in aquaculture; (3) status of women; (4) recognition and policy; (5) development initiatives; (6) globalization; (7) struggles and movements; and (8) women and resources management.

(Thanks to Ms. Chandrika Sharma, Executive Director and Ms. Neena Koshy of the ICSF, Chennai, for the above input. Detailed information can be accessed through <http://wif.icsf.net/>)





The workshop 'Gender in Fisheries: A Future Roadmap'

Considering the changes taking place the world over in gender related work and the importance it has in the fisheries sector, the need to revisit gender in fisheries in India was apparent. The various drawbacks that exist in the present availability of information needed to be addressed. Dearth of authentic data, lack of rigorous research approaches and inconsistency in evaluation were issues that are inherent in current research attempts (Williams et al., 2012).

It was felt essential to generate credible evidence on gender disaggregated contribution to the fisheries sector, to be followed up with strong advocacy on the roles women play in the sector to evolve suitable policies to support them further. Gender needs to be integrated into the development and policy making debate in the fisheries sector.

A one day Brainstorming Workshop was organised at the Central Institute of Fisheries Technology, Cochin on 4th April 2012, to discuss the above issues. The workshop was aimed at identifying the gaps existing in the level of information and knowledge about women in fisheries, which require analysis and documentation. This could include the contributions made in all spheres of activities, challenges faced and the strategies required for empowerment. It was expected that the themes could be developed into concrete objectives, which need to be addressed comprehensively. The expected outcomes needed to be spelt out so that a clear focus could be given to the future work in each of the areas.

The workshop was Chaired by Dr. B. Meenakumari, Deputy Director General, Division of Fisheries, Indian Council of Agricultural Research, New Delhi and Co-Chaired by Dr. T. K. Srinivasa Gopal, Director, Central Institute of Fisheries Technology, Cochin. Dr. Nikita Gopal, Senior Scientist was the Convener. Forty seven participants from different ICAR Institutes, State Agricultural Universities, State Fisheries Departments, and Non-Government Organizations attended the workshop (Appendix 2).

The major themes identified were as follows:

- I. Assessment of gender roles and analysis of gender issues
- II. Opportunities and constraints in performing gender roles
- III. Power and decision making
- IV. Capabilities and vulnerabilities with respect to shocks
- V. Future strategies for mainstreaming gender equity and empowerment

The workshop started with a brief presentation by the Chair, Dr. Meenakumari, where she outlined the overall aim of the workshop. She presented some of the gender issues and opportunities in fisheries and aquaculture that could be discussed further by the group. Some of the points put forth were as follows.

- ❖ Gender has been largely ignored in fisheries and there is a need to put gender on the fishery policy agendas and include it in all instruments.
- ❖ Fisheries agencies should collect relevant and focussed gender disaggregated information across the range of activities in the sector/value chain (production to marketing).
- ❖ There is need to create greater gender equity and promote the potential in fisheries to empower rather than exploit people. This can be done by addressing gender equity and equality in fisheries work places, raising the technical and management levels of women's contribution in fisheries and by promoting success stories.
- ❖ Stereotyping women in fisheries has to be avoided.
- ❖ More women must be encouraged to pursue higher education in fisheries disciplines.
- ❖ Diversification of livelihoods within fisheries and to other sectors is required and aquaculture / allied opportunities in fisheries can be encouraged.

Co-Chair, Dr. T. K. Srinivasa Gopal, Director, CIFT spoke on the work done by the Institute in technology development and capacity building for the sector in general and fisherwomen in particular. He outlined the importance of technology in empowerment of fisher women.

Dr. Nikita Gopal, Senior Scientist, CIFT presented the outline of the themes. Participants, in four Working Groups, brain stormed the themes further. Theme five 'Future Strategies for Mainstreaming Gender Equity and Empowerment' was debated by all the groups. The Working Groups were heterogeneous and included representatives from ICAR institutes, State Agricultural/Fisheries Universities, representatives from the seafood industry, State Fisheries Department officials and NGOs. The discussions were followed by presentations by each group.

Theme I: Assessment of gender roles and Analysis of gender issues

Working Group I: Dr. S. Balasubramaniam, Dr. Leela Edwin, Mr. Edwin Joseph, Dr. J. Bindu, Dr. Geethakutty Prasad, Dr. S. Shassi, Ms. Ailamma Kuriachan, Ms. Beena Tilak

Presenter: Dr. J. Bindu

The term gender itself refers to socially constructed roles and status of women and men. Gender roles and relations vary spatially, temporally and sectorally. Roles include both productive and reproductive ones and the productive roles are the livelihood option for women and often for the entire household. In case of coastal communities one can observe clearly defined gender roles in relation to the exploitation of coastal and marine resources. Women are rarely involved directly in resource exploitation (for example fishing) in India. But in coral reef areas, women can be involved in the collection of seaweed and other products and in shrimp production (particularly post larvae collection).



But contrary to the participation in fishing activities, in post-harvest activities, women are far more involved and often dominating fish processing and trading activities which are important livelihood activities in most of the coastal communities. Changing technology and trade regimes many times resulted in changing gender roles in the value chain and sometimes even resulted in marginalization of women. Hence it is very important to identify the existing gender roles and its dynamics, in the focus sectors in fisheries and aquaculture. Gender disaggregated data collected in these aspects can be utilized for an inclusive and equitable value chain development in fisheries and aquaculture.

The main issues and opinions discussed by the group included the Focus sectors- production, processing, marketing and distribution; Education; Research; Extension; Administration; and Policy formulation. After discussion, the following points emerged on gender roles in fisheries and allied sectors:

- ❖ In marine capture fisheries, women played minimal role in actual fishing and they were mostly seen in allied activities like net making and mending. The major issues are that of drudgery, lack of women friendly capture methods and poor documentation of traditional fishing practices carried out by women and of ITKs.
- ❖ In inland fisheries, there was more representation of women mainly in the traditional sector.
- ❖ The culture sector is largely male dominated and women entrepreneurs are rarely visible. The main issue identified was lack of capacity building and training specifically for women and the suggestion was to concentrate on group initiatives for aquaculture.
- ❖ The preprocessing sector is dominated by women and about 75 per cent of the workers engaged in the sector are women. Poor ergonomics during work lead to health problems.
- ❖ In the processing sector 90 per cent women workers are confined to the floor level and though increasingly women are also being positioned at supervisory and technical levels, there is very little representation in top management.
- ❖ Traditional fish curing is still mainly done by women in homesteads.
- ❖ In the marketing sector, for women engaged in fish auction, the odd hours of landing of catch poses problems. For retailers, facilities for transportation of fish vending are inadequate and access to ice and storage facilities are lacking.
- ❖ In major administrative and policy making roles, women are still in a minority.
- ❖ Overall welfare measures targetting fisherwomen are not adequate.

Theme II: Opportunities and Constraints in performing gender roles

Working Group II: Dr.Saleena Mathew, Dr.Rani Palaniswamy, Dr, Femeena Hassan, Dr.P.S.Swathilekshmi, Dr.N.Aswathy, Dr.Divya P.R, Dr.Neetu Shahi, Dr.Satyen Kumar Panda

Presenter: Dr.P.S.Swathilekshmi

Limited access to resources is one of the major constraints faced by women in performing various roles. Access to resources is usually determined by a range of property rights mediated by formal and informal institutions. The ownership of or access to larger, more efficient boats and fishing gear and access to processing, storage and transport facilities etc. constitutes the technological barrier in the marine fisheries sector. Limited access to market in case of fisherwomen force them to sell their products below the market price and therefore intermediary buyers are often benefitted from this barrier.

Opportunities lie where women's access to various productive assets can be facilitated, including human assets, natural assets, social assets, physical assets and financial assets, which are very important in determining the livelihood options and women empowerment in fisheries. For example access to microfinance has opened up opportunities for women in alternative livelihoods empowering them. Evidences of gender differentiated access to resources need to be sought in the fisheries and aquaculture sector for gender responsive policy planning.

The discussion by Group II led to the following points:

- ❖ In case of inland capture fisheries (reservoirs, rivers, wetlands), there are opportunities for women in collection of brood-stock and fingerlings in which women are even now involved. Technical support and training for women is needed in using



boats and other safety equipments in inland capture fisheries. In some areas the fishing license is given only to men.

- ❖ In culture fisheries, women can be engaged as managers of hatcheries and they can be involved in the hatchery rearing of carps. They can also be equipped for harvesting of cultured fishes.
- ❖ Opportunities for womens' participation in mariculture activities through entrepreneurship development, and tapping import and export markets through self help groups need to be explored.
- ❖ Some of the constraints for women engaged in preprocessing and marketing activities are difficulty in availability of potable water, good quality ice etc. and poor ergonomic conditions.
- ❖ Ornamental fish culture and integrated fish farming are some of the diversified livelihood options during off seasons.
- ❖ In cold water fisheries, the terrain conditions often makes capture fisheries inaccessible to women.
- ❖ Taboos on fisherwomen in some communities restrict women's participation in ornamental fish breeding and marketing.
- ❖ Some of the constraints identified for women fisheries professionals are lower networking skills and less participation in administrative and management decision making bodies.
- ❖ For women entrepreneurs there is lack of awareness and access to markets, technologies, government policies and programmes.

Theme III: Power and Decision Making

Working Group III: Mr. T. Ganesh Baba, Dr. Paramita Banerjee Sawant, Ms. Rama R. Menon, Dr. Daisy C. Kappen, Dr. Nirupama Panda, Ms. Neena Koshi, Ms. Devisha Sasidevan

Presenter: Dr. Paramita Banerjee Sawant

Decision making pattern of women at household, community, regional and national level is often taken as an important factor in determining their empowerment. Women's decision making at the household level is an important factor in assuring household food and nutritional security. Participation of women in resource management and policy decisions need to be explored for ensuring sustainable production in capture fisheries and aquaculture.

Group III discussed the importance of identifying gender dependent power and decision making ability of people engaged in fishing and allied activities, and put forward the following points.

- ❖ Improvement in power and decision making capabilities will improve the standard of living, help to achieve social recognition, increase the financial security and it also helps women to recognize their rights.
- ❖ Some of the constraints involved in gaining power are the uncertainty in fishing, perishability of the produce; illiteracy among the fisherfolk, especially women; lack of proper health and sanitation facilities; lack of integration of different research and development departments; and constraints involved in accessing marketing, technology, and credit facilities. Women seafood entrepreneurs faced problems in sending their consignments due to complicated bureaucratic procedures.
- ❖ In order to bring forth and provide solutions to these issues, there is a need for clear cut gender disaggregated data in different sectors in fisheries.
- ❖ Formation and strengthening of women self help groups, technology dissemination to the grassroot level; convergence of activities and programmes of institutions involved in research and development activities; representation of grassroot level stakeholders in all levels of planning; identification of need based schemes and allocation of funds for the schemes; regular monitoring workshops with the involvement of stakeholders and policy makers along with the experts etc. also needs to be taken up.



Theme IV: Capabilities and Vulnerabilities with respect to shocks (institutional, trade and environment)

Working Group IV: Dr. B. Shanti, Dr. P. Mahalakshmi, Dr. M. R. Boopendranath, Dr. P.K. Sahoo, Dr. Jessy Joseph, Mr. Julian Teeler, Dr. U.L Mohanty, Dr. Joice Abraham

Presenter: Dr. B. Shanti

Shocks in fisheries regimes may result from changes in institutional patterns, trade regimes or environment. Various policies that emerged to mitigate shocks have generally been gender neutral. Evidence shows gender differentiated impacts of globalization leading to their location shifts in the value chain. Spatial and sectoral migration trends have been observed in case of fisheries in relation to technological advancement and introduction of new trade policies. Another emerging shock is that of climate change. Even though women in fisheries are more vulnerable to climate change their specific skills and capabilities can be utilized for planning mitigation and adaptation strategies. Gender disaggregated information of capabilities and vulnerabilities are very necessary to predict the impact of any changes induced in the regime.

Group IV discussed the theme in the context of developing capabilities in the context of institutions, trade and environment induced vulnerabilities. Institutional vulnerabilities include improperly planned policies and programs; socially induced mobility issues; lack of cohesiveness and common goals in group related interventions; and general lack of gender sensitization. Vulnerabilities in trade is seen due to the presence of multiple levels of intermediaries in the value chain. The co-operative movement which could reduce market linked vulnerability in the sector has also largely been ineffective.



Environmental issues include natural disasters like floods (and extreme ones like Tsunamis) and climate change related problems.

- ❖ An effective strategy to meet the challenges would be through the cluster approach and formation of Self Help Groups (SHGs). There was a special mention about the Kudumbasree programme of Kerala, which has shown a successful model in generating SHG based livelihoods. Similar initiatives like TNWDC in Tamilnadu and Mission Sakthi in Orissa are promoting formation of women SHGs. Group savings, microcredit, micro insurance etc. have paved the way for adoption of diversified livelihood activities. NGO initiatives like that of SIFFS, which provides microfinance to fish vending women SHGs, were also highlighted.
- ❖ Another specific case mentioned as an institutional capability building instrument was the pond leasing policy by Orissa Government, where 20 per cent of the Panchayat ponds were reserved for women.
- ❖ Village Knowledge centres by M.S. Swaminathan Research Foundation, ICT centres by Institute of Rural Management, Anand and other NGOs are providing strong institutional support in knowledge dissemination in fisheries.
- ❖ In case of ICAR research institutes, there are projects and training programmes leading towards gender mainstreaming and empowerment.
- ❖ Cooperatives like MATSYAFED in Kerala and TACOFED in Tamilnadu are trying to facilitate marketing facilities for fishers. National Fisheries Development Board also has many schemes for women.
- ❖ Strategies to meet environmental changes (including disasters) can also be catalyzed through group formation and programs implemented through them.

The Theme V: Future Strategies for Mainstreaming Gender Equity and Empowerment

This theme was discussed across all the groups and the summary recommendation was

'Identification of key gender roles and issues, opportunities and constraints and the capabilities and vulnerabilities is ultimately expected to become a roadmap for gender mainstreaming in fisheries and aquaculture. The consolidated gender disaggregated output may be later utilized for promoting gender equity and empowerment through various research, extension, policy and development interventions.'



Video Conferencing with FAO Experts

As a part of the workshop, a video conferencing was organised to foster interaction between the participants and experts from Food and Agricultural Organisation (FAO), Rome. Dr. Nandini Gunewardena (Gender and Rural Development Statistics Officer, FAO), Helga Josupeit (Fishery Industry Officer, FAO) and Daniela Kalikoski (FAO Consultant, Fisheries and Aquaculture Department) participated in the session. The FAO experts were briefed about the aims of the workshop. The experts highlighted various initiatives being taken up globally in agriculture and fisheries in gender mainstreaming like that of the USAID and the Iceland Initiative in Africa. The FAO experts felt that there is absence of data in Gender Mainstreaming to quantify the extent to which women are contributing in the fisheries sector. Generation of preliminary data was required on the extent of participation of women in fisheries sector, to encourage further fund allocation which is a pre-requisite in building a strong repository of studies on the subject. Since vulnerability is a major issue, it is necessary to look into it and there is also the need for

inclusion of social evils (eg: alcoholism) in the vulnerability context. It is very important to identify illustrative examples of women's contribution towards food security and as an example the bargaining power of women fish vendors in many countries was cited.

Methodological aspects in gender analysis in fisheries were highlighted and various tools like *Women Empowerment in Agriculture Index* developed by USAID in collaboration with IFPRI and the Oxford Poverty and Human Development Initiative, which is being piloted in different countries, and its possible adaptation to fisheries sector, were discussed. The development of a capacity building module for gender in fisheries, including the need of a framework for an educational curriculum on gender in fisheries by FAO, was felt by the workshop participants to build competency and necessary skills sets to undertake work in the area. It was also stressed that climate change negatively affects women more than men and there should be policies to safeguard them.

The discussion ended with summarizing future steps and procedures to be undertaken for exploring the possibility of technical support from FAO for studies in Gender in Fisheries in India.





Future Roadmap

A meeting of world leaders in Rio de Janeiro, Brazil (20-22 June 2012) re-emphasized global commitment to sustainability, gender equality and women's empowerment. 'Our Common Vision' which was the outcome of the meeting has several pointers and statements to this effect. It has come to be recognized that without achieving gender equality and women's empowerment the development process, especially if has to be sustainable, is incomplete. With specific reference to agriculture, the statement says-

“We reaffirm the necessity to promote, enhance and support more sustainable agriculture, including crops, livestock, forestry, fisheries and aquaculture, that improves food security, eradicates hunger, and is economically viable, while conserving land, water, plant and animal genetic resources, biodiversity and ecosystems, and enhancing resilience to climate change and natural disasters. We also recognize the need to maintain natural ecological processes that support food production systems.”

And specifically on fisheries it adds

“We also stress the crucial role of healthy marine ecosystems, sustainable fisheries, and sustainable aquaculture for food security and nutrition, and in providing for the livelihoods of millions of people.”

Viewing this in the backdrop of the overarching goals of gender equality and women's empowerment, it is crucial that the gender be given greater focus, and concerted efforts in research, policy and development action takes place. Research is essential to bring into focus the existing situation of fisherwomen vis-à-vis fishermen with regard to access to resources, contributions to the sector, the opportunities they have and the constraints they face, their roles in the community and levels of involvement in the management of domestic and common property resources and to assess the gendered impact of environmental, social, economic and political changes.

Research has proven that women can contribute to the agricultural sector and their contribution in increasing food production can further be enhanced if their access to resources improves. Similar evidence needs to be generated in the fisheries by focussed studies, cutting across all important core and allied sectors. It has also been recognized that for sustainability of fishery resources, production and utilization, the efforts of both men and women are required.

The need for generating sex disaggregated data for policy support also has long been advocated. Only hard data can support policy formulation and initiatives and instruments can be tailored to tackle specific issues. Development initiatives based on strong information backed policy framework will only be sustainable in the long term. Rigorous methods and different models of research can be applied for developing indicators and benchmarks.

The future road map to gender in fisheries would thus be an approach that is holistic covering all major production and allied sectors, analyzing and putting the issues in proper perspective, generating sufficient and relevant data, clear policy; and targeted development action. Gender studies have to be inter disciplinary (Williams, 2012) with “better conceptual frameworks and strong social science”.

The specific strategies for mainstreaming gender towards equity and empowerment consolidated from the discussions at the workshop are as follows:

- ❖ Generation of gender disaggregated data on different roles of women in fisheries with proper documentation
- ❖ Development, refinement and popularization of appropriate women friendly technologies
- ❖ Gender responsive research and teaching with an orientation towards gender issues

in fisheries

- ❖ Capacity building in ICAR system for gender mainstreaming
- ❖ Curriculum in gender mainstreaming in fisheries education
- ❖ Documentation of ITK in fisheries, tapping the grassroot level wisdom
- ❖ Gender units in ICAR Fisheries Institutes
- ❖ Development of women supportive marketing infrastructure
- ❖ Need for special programmes to facilitate access to credit and finance
- ❖ Formation and strengthening of women self help groups
- ❖ Improved access to education to fishing communities
- ❖ Strengthening co-operatives in fisheries
- ❖ Application of ICTs for women empowerment
- ❖ Need for ensuring women's participation in implementation of policies and programs
- ❖ Sensitization of fisherwomen on best utilization of locally available resources
- ❖ Allocation of funds for need based schemes
- ❖ Convergence of different departments and agencies on gender sensitive policies, programmes and implementation strategies





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APPENDIX 1

WORKSHOP PROGRAMME

10.00 h	Opening Remarks of Chair	Dr. B. Meenakumari Deputy Director General (Fisheries) ICAR, New Delhi
10.10 h	Remarks by Co-Chair	Dr. T.K. Srinivasa Gopal Director, CIFT, Cochin
10.15 h	Presentation of themes	Dr. Nikita Gopal Senior Scientist, CIFT & Convener
10.35 - 11.00 h	Tea Break	
11.00 – 13.00 h	Working Group Discussions on Themes I to IV	Chair Rapporteur
	Theme V will be common to all the working groups	
13.00 – 14.00 h	Lunch	
14.00 – 15.50 h	Presentation by Working Group Chairs	
14.00 – 14.20 h	Theme I: Assessment of gender roles and Analysis of gender issues & Theme V: Future Strategies for mainstreaming gender equity and Empowerment	
14.20 – 14.40 h	Theme II: Opportunities and Constraints in performing gender roles & Theme V: Future Strategies for mainstreaming gender towards equity and empowerment	
14.40 – 15.10 h	Theme III: Power and Decision Making & Theme V: Future Strategies for mainstreaming gender equity and Empowerment	
15.10 – 15.30 h	Theme IV: Capabilities and Vulnerabilities with respect to shocks (institutional, trade and environment) & Theme V: Future Strategies for mainstreaming gender equity and Empowerment	
15.30 – 16.00 h	Video Conferencing with FAO experts	
16.00 – 16.15 h	Tea Break	
16.15 – 17.00 h	Consolidation of findings Action Plan	Chair: Dr. B. Meenakumari Co-Chair: Dr. T.K. Srinivasa Gopal

APPENDIX 2

List of Participants

S.No	Name	Affiliation
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17.	Mrs. Aliamma Kuriachan	State Co-ordinator, NETFISH – MPEDA, Vallarpadam (P.O), Cochin 682 504
18.	Dr. S. Shassi	State Co-ordinator, NETFISH – MPEDA, Vallarpadam (P.O), Cochin 682 504
19.	Mrs. Beena Tilak	Manager (QA), Interfield Laboratories 13/1208, Karuvelipady, Cochin – 682 005
20.	Dr. Geethakutty Prasad	Centre for Gender Studies in Agriculture, Kerala Agricultural University, Vellanikkara-KAU P.O, Thrissur 680 656,
21.	Ms. Neena Koshy	International Collective in Support of Fishworkers (ICSF), 27 College Road, Chennai - 600 006
22.	Shri. Julian Teelar	South Indian Federation of Fishermen Societies (SIFFS), Trivandrum
23.	Shri. T.N. Venugopal	General Manager, Samrat Middle East Co. Pvt. Ltd, Cochin-682 005
24.	Shri. Edwin Joseph	Managing Director, Winser Exports, Cochin
25.	Mr. Baburaj	Dakshina (H), Kalavamkodam (P.O), Cherthala – 688 586 Alappuzha Dt., Kerala
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28.	Dr. Joice Abraham	Aquaculture Expert, Fish Farmers Development Agency (FFDA), Dept. Of Fisheries, Ernakulam
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