



Mainstreaming gender through Aquatourism venture: an assessment of impact of women SHGs in Kerala

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General Note

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ABSTRACT

Central Marine Fisheries Research Institute (CMFRI) made a study on gender mainstreaming and impact of Self Help Groups by mobilised women in Aquatourism venture in Narakkal and Malipuram in Vypeen Island in Ernakulam district of Kerala state. 'Matsyafed' of Kerala State Fisheries Department and Tsunami Emergency Assistance Program (TEAP) have organized these women SHGs for uplifting the life of Fisherfolk by enhancing Fish production Marketing, Technical support and Ecotourism. SHGs names as Souparnika in Narakkal and Vandanam in Malippuram are running the cafeteria which provides delicious homely meals and cooked fish items. The impact of SHGs on gender mainstreaming by assessing the equity and equality of men and women in these SHGs was assessed through gender analysis, performance level of SHG, Empowerment Index and economic feasibility analysis with socio economic surveys undertaken in the locality with a pre-tested and structured data gathering protocols consisting of standardized scales and indices. Empowerment Index was quantified based on 8 relevant dimensions constituting it. The male and female counterparts of the families were separately interviewed to assess the gender mainstreaming aspects in terms of equity and equality to access to resources, participation profile, decision making aspects, gender need analysis etc. Proper 'training on technical matters' and 'marketing aspects' were found to be inevitable for more desirable results. Female counterparts also do have a definite role in site selection, purchase of accessories, cooking, serving, cleaning, marketing etc. The Scales of 'Performance Assessment' and 'Empowerment Index' developed for this study have good potential for future use in other key areas on a sustainable basis. Lacunae identified in Empowerment Index computation give adequate feedback to authorities to proceed in the right direction. The gender dimension analysis on mainstreaming aspect gives sensitization on crucial issues like women fisher folk's rights and marketing channels for policies and other interventions on gender. Inter relationships between the variables act as catalytic points for group action and group empowerment on a sustainable basis. The success case study elucidated can be used as a case model and practical manual for promoting group action for mobilising SHGs on a sustainable basis.

Keywords: Empowerment Index, Gender mainstreaming, Performance level, Self Help Group. Gender perspective, Equity, Equality, Mariculture, Marine Fisheries

Abbreviations; SHG: Self Help Group, TEAP: Tsunami Emergency Assistance Programme, WID: Women in Development, GAD: Gender and Development, EI: Empowerment Index

1. INTRODUCTION

Vypeen in Ernakulam is serene and beautiful place surrounded by greenery and water. Matsyafed of Kerala state under the Department of Fisheries has developed an exquisite venture promoting Aqua Tourism in Narakkal and Malipuram which is situated in the heart of Vypeen Island. Narakkal Aqua Tourism project by Matsyafed is a huge 125 hectare brackish water fish farm. It is located at 15 kilometres from Kochi in a village called Njarakkal or Narakkal. It has four culture ponds along with three nurseries. The fish farm almost lies inside the lake of Vembanad. The major type of fishes found in the farm includes Prawns, Karimeen (Pearlspot), Mulletts, Tilapia, Crab, Green Shell Mussels. It is a popular Eco tourism project by the Matsyafed.

Narakkal Aqua farm offers numerous facilities for spending a complete day there. You can relax on hammocks, swings or benches on the bunds under the shady coconut trees, or do some fishing or even boating. This tourist centre is a big aqua farm where you can enjoy beauty as well as learn something new about farming and fishes. You can learn a little about shrimp farming when you enjoy with your family alongside this big fish farm. Spread across an a massive area of 18 kilometers, this mesmerizing aqua farm and its brackish waters along with its alluring beauty is perhaps one of the most must visit places of Kerala. Fishing is the most important sporting activity in Narakkal Aqua fish farm. Privacy of this place is worth mentioning. It assures privacy to visitors and the panoramic beauty rejuvenates the soul.

It's the project of Kerala Fisheries Department and Tsunami Emergency Assistance Program (TEAP) for uplifting the life of Fishermen community by enhancing Fish production Marketing, Technical support and Ecotourism. Mobilised women SHGs named as Souparnika in Narakkal and Vandanam in Malippuram are running the cafeteria which provides delicious homely meals and cooked fish items such as Fish Curries, Fish Fries, Fish Pickles along with Vegetable curries.



Plate 1 Entrance Sign board signifying the Aquatourism Centre, Narakkal

Tourists are allowed to visit throughout the year. Fishes like Prawn, Pearl spot, Milk Fish, Mulletts, Tilapia, Cat Fish, squid, Ribbon Fish, Crab, Green Shell Mussels are the important species in Farm. Currently they are exporting Fish products to the Countries like China, Korea, Japan and Middle-East.

There is an entry ticket for a reasonable amount so that the visitors can take delicious food items and an amazing ride in the boat. The Major Attractions for tourists include the availability of Hook and Bait for a first-hand Fishing experience, provision to take home the fish what they have caught for a nominal cost, Boating through the labyrinth of Canals having a rich greenery ambience, proximity to Narakkal and Malippuram Beaches which are at walkable distance, Very delicious food and option of Special Fish dishes on the particular day by paying a minimal price.

The major peculiarity of Malippuram aqua tourism location is the famous 'Fish Jump' called as *meenchaattam*. The tourists can hire boats and make a ride in the lake. The fishes will be jumping to a height up to 1 metre and may even fall on the boats. They can take the fish if they want at a nominal cost.



Plate 2 A view of Narakkal Aquatourism centre

2. SCOPE OF THE STUDY

The present study dealt with an assessment on the glimpses of gender mainstreaming in Aquatourism venture of women SHGs in fisheries sector, in a descriptive way, focusing attention on the gender equity and equality emphasized in the Indian context. There is ample scope to explore the gender empowerment paradigm along with emphasis on the three pillars such as economic empowerment, well-being and decision making. Among the Asian countries, India ranks third in capture fisheries and second in aquaculture. Looking into the policy and programs for aquaculture development in India, it could be observed that, the production from marine sector has almost attended the plateau where as aquaculture has a great potential. Fish is the cheapest source of animal protein. Fisheries wealth of India is a huge bonanza. It has emerged as a giant industry. Its vast and varied fisheries resource includes 8129 km coastline, 29000 km length rivers which includes 14 major river system, 44 medium rivers and innumerable small rivers and desert streams; 2,013,213 ha of flood plain lakes; 3.1 million ha of reservoirs, 2.254 million ha ponds and tanks and in the coastal area 1.2 million ha has been identified as potential resources for finfish and shellfish. This vast resource provides lifeline to more than 14 million people. About 3,651 coastal villages' economy depends on fisheries activities. The Indian fisheries sector provides employment to over 12 million people engaged fully, partially or in subsidiary activities and play a major role in Indian economy. Women constitute nearly 50% of the total population and one third of labour force Fisheries contributed about 5% of Indian's GDP and about one per cent of the total GDO. The sector supports livelihood options for about 40 million people in India. The marine fishery resources of the country include a coastline of 8129 km with numerous creeks and saline water areas, an Exclusive Economic Zone (EEZ) of 2.02 million km² which are suitable for capture as well as culture fisheries. The annual harvestable marine fishery resources in the Indian EEZ have been estimated at about 3.54 million tones. (CMFRI, 2016) The Indian fish production is contributed by marine and inland sectors.

With regard to the women empowerment paradigm, according to Kieffer (1984), empowerment is an interactive process which occurs between the individual and his environment, in the course of which the sense of the self as worthless changes into an acceptance of the self as an assertive citizen with sociopolitical ability. The outcome of the process is skills, based on insights and abilities, the essential features of which are a critical political consciousness, an ability to participate with others, a capacity to cope with frustrations and to struggle for influence over the environment. There is a point of view that women's empowerment may mean the loss of privileged position that patriarchy allotted to men. But as a prelude to this view, women's empowerment also liberates and empowers men, both in material and psychological terms. Women provide new insights, leaderships and strategies. Struggle of women groups for access to material resources and knowledge directly benefit men and children of the families and communities and a better quality of life. When women become equal partners, men are freed from the roles of gender stereotyping which limit their potential personality development in men as much as in women. In addition to losing traditional privileges they also lose traditional burdens.

Strictly speaking, women empowerment is a 'bottom-up' process of transforming gender power relations, through individuals or groups developing awareness of women's subordination and building their capacity to challenge it. Empowerment basically refers to the process of raising women status by way of promoting economic, social, political and local empowerment. Empowerment is a process of awareness and capacity building leading to greater participation to greater decision making powers and control and to transformative action. The goals of women empowerment are to challenge patriarchal ideology, to transform the structures and institutions that reinforce and perpetrate gender discrimination and social inequality and enable poor women to gain access to and control over both material and information resources. The paradigm of empowerment means increasing the social, political, spiritual or economic strength of individuals and communities. A lot has already been echoed in the mainstream media and research perspective about the significance that gender equality and empowerment of women play in the overall modernization of any society. Empowering women in a society where they have been treated like doormats for centuries is a Herculean task. There is bound to be an internal resistance practically. It would be pertinent to make an attempt for the practical empowerment of women in the context of community development.

International Fund for Agricultural Development (IFAD) considers three pillars to achieve gender equality and women's empowerment, which include :

1) Economic empowerment: Improving women's access to income-earning opportunities and productive assets. Improving rural women's economic status and helping them build an asset base contribute to breaking down gender stereotypes. Eliminating the barriers that prevent women from getting access to fundamental assets is crucial for broad-based economic growth and poverty reduction.

2) Decision-making: Increasing women's say in community affairs and strengthening women producers' organizations. Rural poor people need to be able to influence the public and private decisions that affect their lives, if change is to be sustainable.

3) Well-being: Improving access of rural people, in particular women, to basic services and infrastructure. Rural women give high priority to basic needs such as health services, water, education and infrastructure when consulted during planning of development initiatives. IFAD recognizes that lack of, or limited access to, essential services and infrastructure is a major obstacle to women's advancement because it prevents them from participating in the mainstream of economic development and community life.

With these perspectives, a study on gender mainstreaming and impact of Self Help Groups of mobilised women in Aquatourism venture in Narakkal and Malipuram in Vypeen Island in Ernakulam district of Kerala state was undertaken as a part of the in-house project on Gender mainstreaming in Central Marine Fisheries Research Institute (CMFRI) for (Vipinkumar *et al*, 2015, 2016) Women SHGs mobilised by 'Matsyafed' of Kerala State Fisheries Department and Tsunami Emergency Assistance Program (TEAP) for uplifting the life of Fishermen community by enhancing Fish production, Marketing, Technical support and Ecotourism. Being an important stakeholder of fisheries sector, women shoulders various roles. Traditionally fisher women (women belonging to particular caste, sub-caste, etc.) are important stakeholders in fish processing and marketing. With increase in awareness level among women on economic activities and dissemination of aquaculture techniques, rural women from other caste have joined the fishery sector. Now we find women besides their reproductive roles, assumed new roles in scientific fish culture, processing and marketing. Women constitute 50% of the total population and comprise one-third of the labour force. So the development of our country cannot be assured leaving behind this large population. Though it is largely accepted that, the role of women in fisheries sector is limited to processing and marketing, then role in other activity like aquaculture and allied micro enterprises cannot be totally ignored. On other hand, their participation in this sector is needed to be strengthened for better production. The fisheries activities are broadly categorized into capture and culture and the processing is coming up as a separate industry. The resources under capture and culture include – marine, brackish and fresh water. Whereas capture fisheries dominate the marine sector, culture activity dominates inland waters. During last five decades, the fisheries sector witnessed a continuous rise with a paradigm shift in the production scenario from that of marine to inland fisheries and aquaculture is gaining priority over capture fisheries. Production of fish from capture sector (with marine and fresh water) has been stagnant for nearly a decade. Hence, the demand shifted automatically to the aquaculture. Aquaculture has shown a continued expansion since 1980s and established a better position among food production sector. Its growth rate registered more than 6 per cent, which is higher to the production of food grains, milk, eggs and many other food items.



Plate 3 Homely meals preparation by Sauparnika SHG members



Plate 4 SHG members in aquatourism centre engaged in preparation of food



Plate 5 SHG leader member serving the food to the visitors in aquatourism centre

Like any other sector of agriculture, women participation in aquaculture and allied enterprises like aquatourism cafeteria etc. remains largely unnoticed. When the question of adoption of new technology comes the women are rarely considered a target group. But since women constitute 50% of total population, negligence to bring them to the front line action is always a negative approach to the total development process. It is estimated that women carry out almost 70% of agricultural workload, but in aquaculture, their role has not been properly identified. May be it is due to the ignorance of women about the technology, cultural and social barriers, women's perception and so on. Women's role in fisheries is very significant and there is gender bias in respect of their works. This discrimination may be noted out from the country's scenario through the economic upliftment of fisherwomen through appropriate policies, programmes and projects. The inequalities between men & women in rural India are observed in the social, cultural and economic lives and are being maintained in the society through various forms of bias. But they are the important stakeholders of our development process. Extension system hardly targets the women folk for technological empowerment. Women participation in fishery sector is age old. But they are still engaged in traditional method of processing and marketing. Their

participation in culture sector is not yet properly defined. Aquaculture is a developing sector and women participation in this sector and allied enterprises like aquatourism, running cafeteria, hotel etc. needs a meticulous planning for technological empowerment encompassing the social and economic barriers. On-farm trials conducted by DRWA, CIFA, CIBA and CMFRI have brought out the strong motivation and capability among women for taking up aquaculture (Freshwater, brackish-water and marine). Empowering women in different aquaculture practices (Freshwater and brackish-water) can provide suitable option for sustained economic and nutritional security of the family and thereby an in depth observation on these dimensions made through the present study has ample scope to explore the paradigm of gender balance and women empowerment based on views of Women in Development (WID) and Gender and Development (GAD). A cross section of Aqua-tourism SHGs essentially involved in preparation and serving the food in the cafeteria of tourism centres is herewith exposed with gender paradigms.

3. MATERIALS AND METHODS

The methodology followed for the study included the following parts systematically executed.

- The Extension part consists of Awareness Programmes.
- ECB Training programmes undertaken with technical experts.
- Extension research part focusing on socio economic surveys with a pre-tested and structured data gathering protocols with standardized scales and indices.
- Stage by stage Video documentation in the various phases of activities of SHG.



Plate 6 Narakkal aquatourism centre

In the extent of involvement in various stages of entrepreneurial activity of running the cafeteria and hotel by the members like purchasing materials, food preparation, serving, cleaning, accounts and record keeping etc. Were quantified with structured interview schedule. The gender mainstreaming (Daly, 2005) to assess the equity and equality of men and women counterparts of the family were separately interviewed to assess the access to resources, participation profile, decision making aspect and gender need analysis.

For assessing the 'Performance level of SHGs' and 'Empowerment Index', appropriate scales and indices were developed. The Level of Performance (NABARD,2007 & Shalumol, 2015) was assessed by the checklist containing 16 dimensions developed by NABARD such as Group size, Type of members, Number of meetings, Timings of meetings, Attendance of members, Participation of members, Savings collection within the group, Amount to be saved, Interest on internal loan, Utilization of savings amount by SHG, Loan recoveries, Maintenance of books, Accumulated savings, Knowledge of the rules of SHG, Education level, Knowledge of Govt. programs etc arranged in 3 point continuum. Similarly the Empowerment Index was quantified based on 8 dimensions (Meena *et al*, 2012) such as Confidence building, Self-esteem, Decision making pattern, Capacity building, Psychological Empowerment, Social Empowerment, Economic Empowerment and Political Empowerment. The extent of empowerment was quantified as the difference

between the scores obtained as per the perception of the SHG members before and after joining the SHG. For computing the Empowerment Index, the scores obtained for each dimensions were first made uniform and that was multiplied by the weightages assigned by the judges while relevancy rating for ascertaining the content validity of the scale through scale product method. Each of the dimensions of Empowerment Index was computed by the scores of the sub-dimensions coming under the categories of these 8 dimensions.



Plate 7 A view of the tourist spot of Narakkal Aqua tourism centre



Plate 8 Project leader interviewing the SHG members

4. RESULTS

The Empowerment Index and Level of Performance of SHGs namely Souparnika in Narakkal and Vandanam in Malippuram were quantified with the standardized interview schedules. (Table 1) The extent of involvement in various phases of the Entrepreneurial

Activity was also quantified and expressed in Table 2 and Figure 1. Maximum participation of the members and families was observed during Site selection and marketing stages.

Table 1

No.	SHGs	Level of Performance	Empowerment Index
1	Souparnika, Narakkal	79.92	0.89
2	Vandanam, Malippuram	77.64	0.87

Table 2

Extent of Involvement in Entrepreneurial Activity	
Activity	%
Site selection	75
Extension Service	30
Purchase of raw material	30
Preparation of raw materials	80
Cooking	50
Serving food	70
cleaning	80
Accounting	20
Institutional Credit	45
Non-Institutional Credit	45
Account and record keeping	50
Other inputs	50

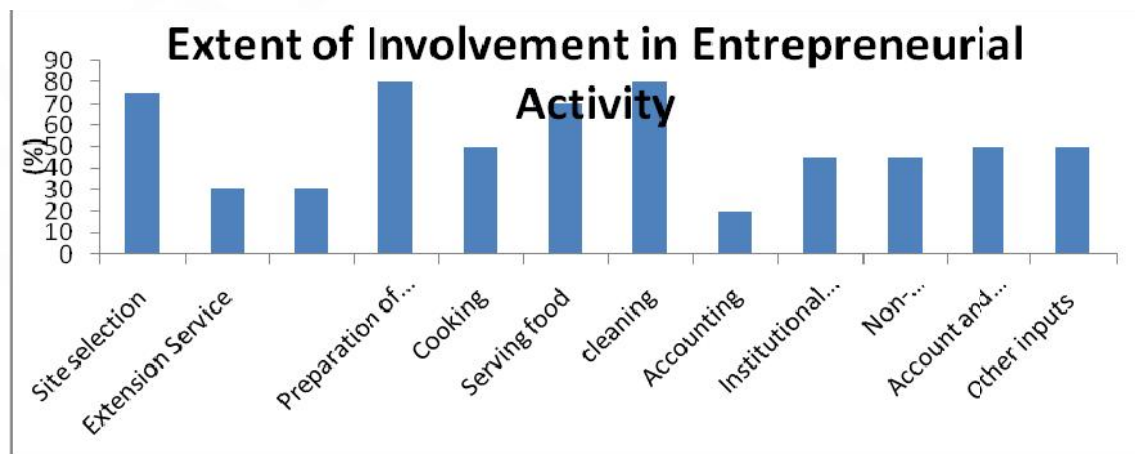


Figure 1



Plate 9 A view of *Meenchattam* in Malippuram Aquatourism centre

Table 3

Access to resources for Aqua tourism												
Resource Access	Female Alone		M<F		M=F		M>F		Male Alone		No Access	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Site selection	71.43	57.14	0.00	0.00	28.57	42.86	0.00	0.00	0.00	0.00	0.00	0.00
Extension Service	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase of raw material	57.14	42.86	0.00	0.00	42.86	57.14	0.00	0.00	0.00	0.00	0.00	0.00
Preparation of raw materials	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cooking	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Serving food	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
cleaning	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accounting	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Institutional Credit	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Institutional Credit	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Account and record keeping	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other inputs	28.57	42.86	0.00	0.00	71.43	57.14	0.00	0.00	0.00	0.00	0.00	0.00

An assessment of gender perspectives in terms of gender need and gender role in the running of hotel and cafeteria was also done as a part of the study. All households were selected and male and female counterparts in each household were separately interviewed. The gender participation in different activities, gender needs, decision making and access and control over the resources in respect to hotel running were analyzed. Opinion of men and women in above aspect was found to be similar without any significant difference. However, differential gender response was observed among SHG. Significantly, the accounting/money

transaction is under the control of women and the most important requirement perceived by both men and women is cooking. In case of participation and need, both men and women share almost the same opinion. (Sahoo *et al*, 2009, Raghavan, 2009) Socio-economic, technological and export support requirement was analyzed for gender mainstreaming. Male and female respondents in a household were separately interviewed for getting the response of gender needs in terms of access to resources in hotel management, participation in various activities of running a hotel, gender needs and decision making in various stages (Table 3). The typology access to resources in running a sea food kitchen in gender response such as female alone, male <female, male = female, male >female and male is alone indicated separately for male and female respondents.

A perusal of the table 3 clearly shows the response of male and female separately in access to resources concerned with running a hotel. Among the responses of female and male for the items of access to resources, most of the items are dominated by 'female alone'.



Plate 10 Tourist with fish caught in 'meen chattam' at Malippuram Aquatourism centre

Similarly the participation profile in various activities concerned with sea food kitchen is presented in a Table 4. The gender response in participation in various activities in this such as female alone, male <female, male = female, male >female and male alone indicated separately by male and female are presented in Table below.

Table 4

Participation profile in gender perspective for Aqua tourism						
Activity	Man (Independently)		Men and women together		Women (Independently)	
	Female	Male	Female	Male	Female	Male
Site selection	0.00	0.00	28.57	42.86	71.43	57.14
Extension Service	0.00	0.00	0.00	0.00	100.00	100.00
Purchase of raw material	0.00	0.00	14.29	42.86	85.71	57.14
Preparation of raw materials	0.00	0.00	0.00	0.00	100.00	100.00
Cooking	0.00	0.00	0.00	0.00	100.00	100.00

Serving food	0.00	0.00	0.00	0.00	100.00	100.00
cleaning	0.00	0.00	0.00	0.00	100.00	100.00
Accounting	0.00	0.00	0.00	0.00	100.00	100.00
Institutional Credit	0.00	0.00	0.00	0.00	100.00	100.00
Non-Institutional Credit	0.00	0.00	0.00	0.00	100.00	100.00
Account and record keeping	0.00	0.00	0.00	0.00	100.00	100.00
Other inputs	0.00	0.00	57.14	42.86	42.86	57.14

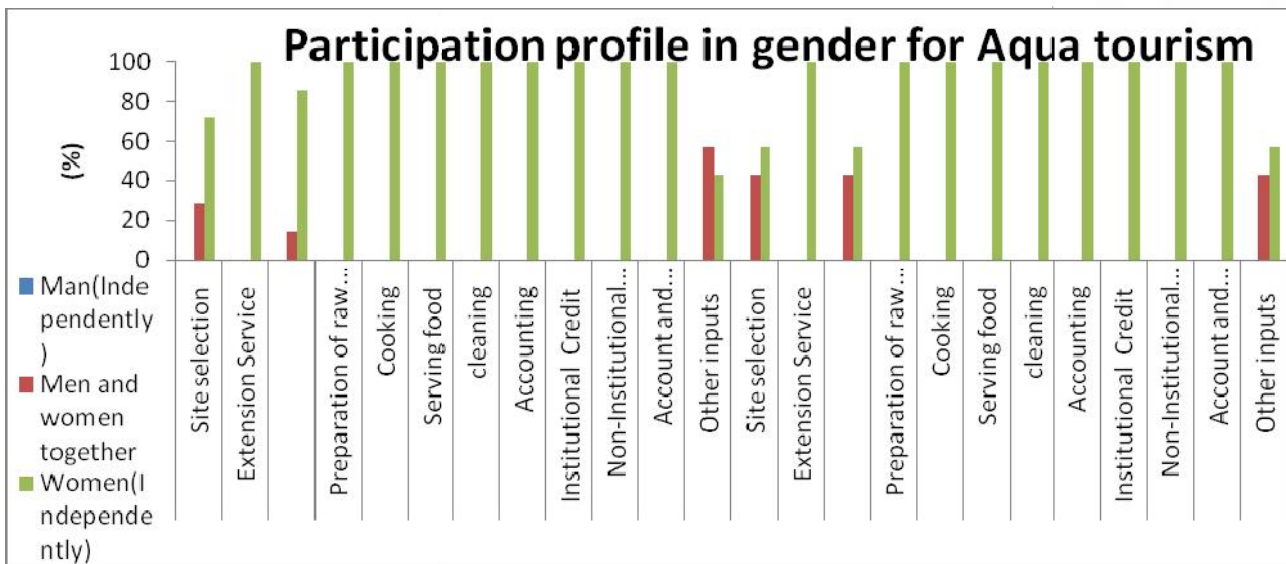


Figure 2

A perusal of the table clearly indicates the participation profile in gender perspective for male and female separately. It can be glanced clearly from the perusal of the table 5 that, most of the activities are female dominating operations in running the hotel, as per the responses of both male and female. But the Site selection and marketing activities are being performed by both men and women.



Plate 11 Meenchattam in Malippurm Aquatourism centre

In the same way, response to the gender needs in various activities concerned with running a hotel, male and female separately is presented in below Table 5. The gender response in need areas in managing a hotel as per the importance assigned by male and female counterparts are presented in the table 5.

Table 5

Gender needs in activities for Aqua tourism						
Need Area	Important		More Important		Most Important	
	Female	Male	Female	Male	Female	Male
Site selection	100.00	100.00	0.00	0.00	0.00	0.00
Extension Service	100.00	100.00	0.00	0.00	0.00	0.00
Purchase of raw material	0.00	0.00	100.00	100.00	0.00	0.00
Preparation of raw materials	28.57	42.86	57.14	14.29	14.29	42.86
Cooking	0.00	0.00	0.00	0.00	100.00	100.00
Serving food	57.14	100.00	42.86	0.00	0.00	0.00
cleaning	0.00	0.00	42.86	71.43	57.14	28.57
Accounting	100.00	100.00	0.00	0.00	0.00	0.00
Institutional Credit	100.00	100.00	0.00	0.00	0.00	0.00
Non-Institutional Credit	100.00	100.00	0.00	0.00	0.00	0.00
Account and record keeping	100.00	100.00	0.00	0.00	0.00	0.00
Other inputs	100.00	100.00	0.00	0.00	0.00	0.00

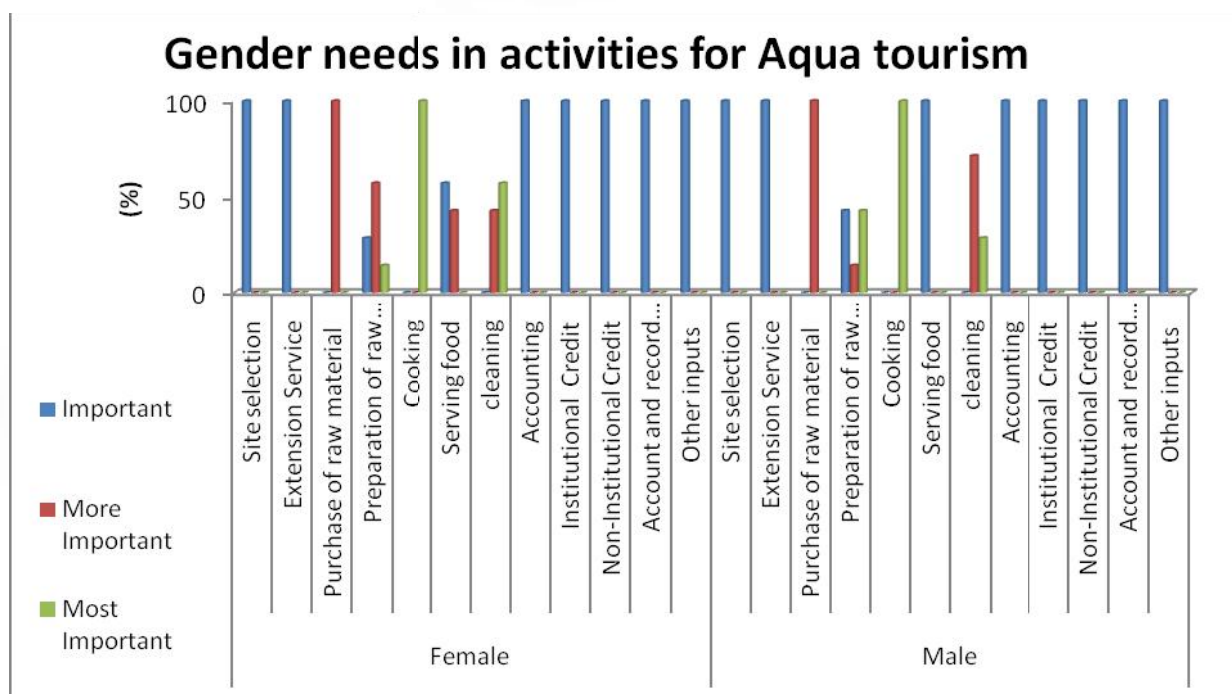


Figure 3

With regard to the gender needs, the most important need area expressed by both male and female counterparts includes cooking and cleaning. Cooking of the food items is the key for the success of the dynamics of the SHG. Proper 'training on technical matters' and 'marketing aspects' is inevitable for desirable results.

An assessment of sea food kitchen successfully being undertaken by Self Help Groups of women fisherfolk brought out a couple of valid conclusions as, it was understood that the female counterparts also do have a definite role in site selection, purchase of accessories, cooking, serving, cleaning, marketing etc. The Scales of 'Performance Assessment' and 'Empowerment Index' developed for this study have good potential for future use in other key areas on a sustainable basis. Lacunae identified in Empowerment Index computation give adequate feedback to authorities to proceed in the right direction. The gender dimension analysis on mainstreaming aspect gives sensitization on crucial issues like women fisher folk's rights and marketing channels for policies and other interventions on gender. An exhaustive research with larger sample and wider area would be of ample scope. Inter relationships between the variables an act as catalytic points for group action and group empowerment on a sustainable basis. Success case study elucidated was brought out as a documentary released by Hon. Governor of Kerala state Sri. Sadasivam on the inaugural function of the 'Platinum Jubilee' celebrations of CMFRI.



Figure 4

Table 6

Decision making in various phases for Aqua tourism										
Activity	Female Alone		M < F		M = F		M > F		Male Alone	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Site selection	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extension Service	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase of raw material	57.14	42.86	0.00	0.00	42.86	57.14	0.00	0.00	0.00	0.00
Preparation of raw materials	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
cooking	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Serving food	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
cleaning	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accounting	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Institutional Credit	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Institutional Credit	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Account and record keeping	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other inputs	28.57	28.57	0.00	0.00	71.43	71.43	0.00	0.00	0.00	0.00

Based on the aspects of decision making in various activities it is observed that the only activity in this enterprise in which men counterpart involved is purchasing of raw materials. Apart from this all the major activities like cooking, serving, cleaning, accounting, etc are performed by female counter parts are presented in the table 6.

5. PRACTICAL OUTPUT OF THE STUDY

As the entire activities concerned with the project work were video documented stage by stage, the 'Success case study' elucidated was brought out as a documentary entitled '*Tasting success through Aquatourism: The chronicle of women SHGs in Vypeen*' (English and Malayalam versions) which can be considered a case model/practical manual for mobilizing SHGs in other allied sectors on a sustainable basis. The documentary movie DVD was released by Hon.Governor of Kerala State Shri.P.Sadasivam on the inaugural function of the Platinum Jubilee Celebration on 18th February, 2017.



Plate 12 Sauparnika SHG in Narakkal Aquatourism centre



Plate 13 Vandanam SHG in aquatourism in Malippuram

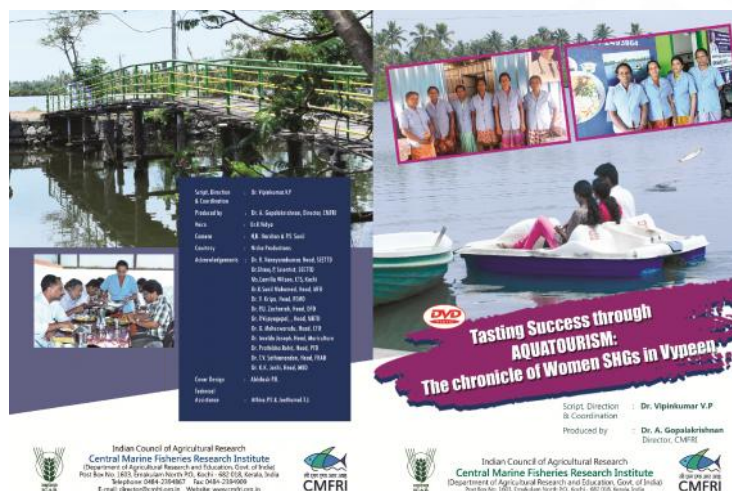


Plate 14 Cover page of the movie CD on Aquatourism SHGs



Plate 15 Cover of the movie CD on Aquatourism SHGs



Plate 16 Hon Governer Kerala state Sri.P.Sathasivam and other Chief Guests releasing the CD on the Inaugural Function of the Platinum Jubilee Celebration of CMFRI



Plate 17 Project leader presenting movie CD on Aquatourism to Sauparnika SHG in Narakkal



Plate 18 Project team presenting movie CD on Aquatourism to Vandanam SHG of Malippuram

5. CONCLUSION

The study on Impact of SHGs of women fisherfolk in Aqua tourism venture in mainstreaming the gender dimension undertaken brought out a couple of valid conclusions, as it was understood that, the female counterparts also do have a definite role in Site selection, Purchase of raw materials, Preparation of raw materials, Cooking, Serving food, Cleaning, Accounting etc. The Scales of 'Performance Assessment' and 'Empowerment Index' developed for this study have good potential for future use in other key areas on a sustainable basis. Lacunae identified in Empowerment Index computation give adequate feedback to authorities to proceed in the right direction. The gender dimension analysis on mainstreaming aspect gives sensitization on crucial issues like women fisherfolk's rights and marketing channels for policies and other interventions on gender. An exhaustive research with larger sample and wider area would be of ample scope. The interrelationships between the variables can act as catalytic points for group action and group empowerment on a sustainable basis. Success case study elucidated and brought out as a movie entitled '*Tasting success through Aquatourism :The chronicle of women SHGs in Vypeen*' can act as a case model / practical manual for mobilizing SHGs in other allied sectors on a sustainable basis. Out of the 40 lakh fisherfolk i.e 9 lakhs families, almost 8 lakhs belongs to traditional sector. Out of 3.5 million tonnes of fish production, 98 per cent is contributed by mechanized and motorized sectors and hardly 2 per cent is contributed by traditional sector which is represented by 92 per cent of fisherfolk. (CMFRI, 2010) So it is high time to the traditional fisherfolk to diversify in to appropriated micro-enterprises in fisheries and allied sectors for livelihood and this 'aqua-tourism' venture of SHGs of women fisherfolk is a typical example for diversification.

SUMMARY OF RESEARCH

A study on gender mainstreaming and impact of Self Help Groups by mobilised women in Aquatourism venture in Narakkal and Malipuram in Vypeen Island in Ernakulam district of Kerala state was undertaken in Central Marine Fisheries Research Institute (CMFRI) for the institute project on Gender mainstreaming. women SHGs mobilised by '*Matsyafed*' of Kerala State Fisheries Department and Tsunami Emergency Assistance Program (TEAP) for uplifting the life of Fishermen community by enhancing Fish production, Marketing, Technical support and Ecotourism. Impact on gender mainstreaming of these SHGs running the cafeteria which provides delicious homely meals and fish items was assessed based on the equity and equality of men and women in these SHGs through gender analysis, performance level of SHG, Empowerment Index and economic feasibility analysis with socio economic surveys undertaken in the locality with a pre-tested and structured data gathering protocols consisting of standardized scales and indices. Empowerment Index was quantified based on eight dimensions constituting it. The male and female counterparts of the families were separately interviewed to assess the gender mainstreaming aspects in terms of equity and equality to access to resources, participation profile, decision making aspects, gender need analysis etc. Proper 'training on technical matters' and 'marketing aspects' were found to be very important requisites for improvement. Female counterparts also do have a definite role in site selection, purchase of accessories, cooking, serving, cleaning, marketing etc. The Scales of 'Performance Assessment' and 'Empowerment Index' developed for this study have good potential for future use in other key areas on a sustainable basis. Lacunae identified in Empowerment Index computation give adequate feedback to proceed in the right direction. The gender dimension analysis on mainstreaming aspect gives sensitization on crucial issues like women fisher folk's rights and marketing channels for policies and other interventions on gender. The inter-relationships between the variables an act as catalytic points for group action and group empowerment on a sustainable basis. The documented success case study and the documentary movie produced as a part of the project can be used as a case model and practical manual for promoting group action for mobilising SHGs on a sustainable basis. The paper also highlights the glimpses of gender issues and challenges in aquatourism ventures and women fisherfolk's rights and hardships in running the cafeteria to the fullest satisfaction of clients. For ensuring a rapid economic development, removal of gender imbalances should be established as a priority and this would mobilize the remaining fifty percent of the country's human resources and would result in the smooth movement of the economic wheel. Integrating gender perspective in aquatourism ventures is inevitable because the gender mainstreaming approach advances gender equality and equity in the society. The case studies explored the extent of empowerment brought out in different dimensions including social, political, spiritual and economic strength through Self Help Group mobilization for the betterment of livelihood parameters.

FUTURE ISSUES

It is imperative that the future researchers should think about bringing social action for sensitization on crucial issues like women fisherfolk's rights and marketing channels including policies and other interventions to ensure equality through gender mainstreaming in aquatourism ventures in fisheries sector. To get a distinct outlook of the scenario of gender mainstreaming and Self Help Group Dynamics of women, and exhaustive research with larger sample and wider area involving the farmers of other crop

enterprises like cash crops, perennials and homestead farming systems would be of ample scope. Similarly it is quite necessary for integrating gender perspective in aquaculture extension also because women are the important stakeholders of our aquaculture development process and our extension system hardly targets the women folk for technological empowerment. The aquaculture venture has great potential in association with aquaculture farms as potential tourists spots and the SHG ventures of women in aquaculture cites for running hotels and cafeteria supplying delicious fish food items and homely meals have to be initiated and promoted like TEAP from the part of central and state level administrators for development of women fisherfolk which ultimately will reflect on gender mainstreaming process ensuring equity and equality.

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