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Impact of Self-Help Groups in gender mainstreaming: A case study on clam processing units in Pookaitha village, Kottayam, Kerala

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Original Article

Abstract

A study for assessing the impact of SHGs in gender mainstreaming was undertaken on the clam processing units operating at Pookaitha located at Kottayam District of Kerala. The analysis included specific aspects such as performance assessment of the SHGs, gender analysis, empowerment analysis and economic feasibility analysis which were carried out based on socio-economic surveys and personal interviews using pre-tested and structured data gathering protocols with standardized scales and indices involving the members of the SHGs. 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. Though majority of activities are female dominated, the male counterparts of the households also have definite role in decision making, purchase of accessories, sales, marketing etc. The indicative economics worked out for the economic feasibility analysis of the SHGs suggests that, the unit takes two years to break even. A success case study was elucidated and documented as a documentary which can be used as a case model for promoting group action for mobilizing SHGs on a sustainable basis.

Keywords: *Self Help Group, empowerment index, gender mainstreaming, performance level*

Introduction

Gender mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's and men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres, so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality and equity which aims to transform the mainstream at all levels to end gender discrimination. Equity is the means and equality is the result. Equality is rights based in such a way that women and men have equal rights, enshrined in international standards and treaties and should have same entitlements and opportunities. Equity means justice so that resources are fairly distributed, taking into account the different needs of women and men (FAO, 2017). Here in the present study, an attempt was made on the assessment of impact of SHGs in Clam Processing units in gender mainstreaming in Pookaitha location of Chempu grampanchayat in Kottayam district of Kerala state.

Pookaitha is an island within Kottayam district of Kerala situating

along the border of Alappuzha district with a population of 42 households. The geographical isolation from the mainland as well as poor socio-economic status rendered the inhabitants of the village away from the mainstream development activities for quite a long time. The major means of livelihood of the village were agriculture and fishing. To augment livelihood status of the inhabitants of Pookaitha, the Kerala State Department of Fisheries under the Society for Assistance to Fisherwomen (SAF) came forward to mobilize the women fisherfolk in the village as Self Help Groups in Clam Processing and two SHGs named as Samudra and Pavizham with four members each were mobilized under the *Theeramythri* project of SAF with technical training on Clam Processing. The income generated out of this entrepreneurial venture has become one of the major means of livelihood reflected in the families of the members of these SHGs. An assessment on the participation profile in various activities like clam collection, purchase of accessories, meat shucking by boiling in water, separation of meat and shell, cleaning, weighing, marketing, arrangement of institutional and non-institutional credit, account and record keeping etc. has shown extreme commitment on the part of the members of the SHGs in taking forward the developmental initiative.

Material and methods

With the assistance of SAF, the research team of Central Marine Fisheries Research Institute (CMFRI) visited the Pookaitha location once in a month for six times and conducted interaction programme for the fisherfolk on Clam culture and Clam processing. With the co-operation of Chempu

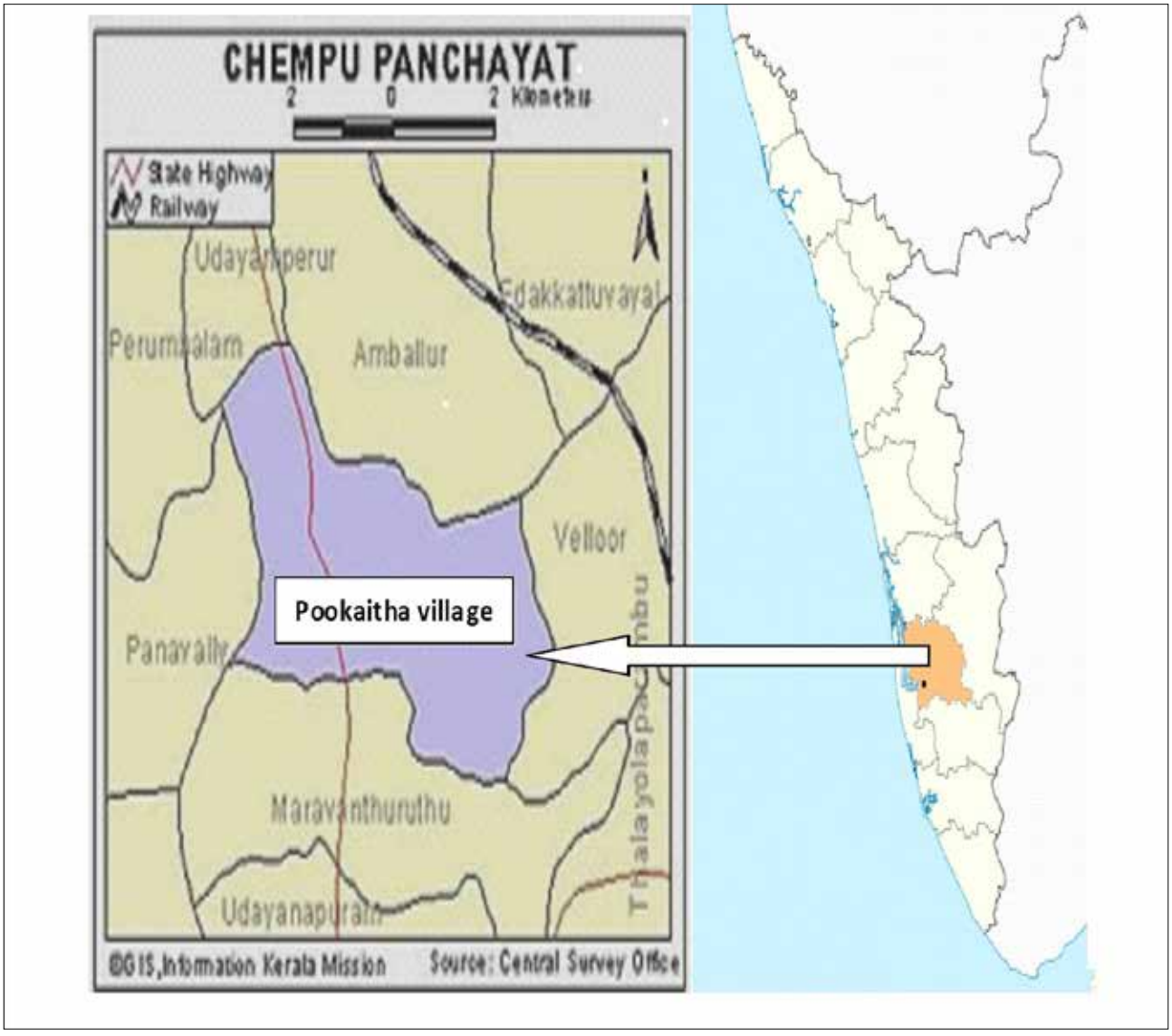

Fig. 1. Map showing the Pookaitha locale of the study in Chempu grampanchayath of Kottayam district in Kerala state

grampanchayath and with the involvement of fisheries scientists of CMFRI, a series of awareness programme and farmer interaction meetings were organized for these SHGs. The participation profile, decision making, gender need analysis, Economic Feasibility Analysis etc. also were undertaken by interviewing the men and women counterparts of the families of the SHG members. A map showing the locale of the study *ie.* Pookaitha of Chempu grampanchayath in Kerala is presented as Fig. 1.

The obstacles and hurdles being encountered by these SHGs, their income status, difficulties in transport, etc. were assessed along with the economics of clam cultivation potential in the water bodies of Pookaitha. The major aim and methodology employed essentially consists of practical extension coupled with extension research. The study was undertaken with the major objectives to organize awareness and training programmes of Entrepreneurial Capacity Building (ECB) in Clam processing technology covering the practical extension part. The objectives covering the research part included the assessment of impact of SHGs in gender mainstreaming which was undertaken through assessment of the Performance level of SHGs and Empowerment Index through appropriate scales and indices and Gender analysis of the members of SHGs of clam processing in Pookaitha. An attempt was also made to document a success case study of clam processing SHGs in Pookaitha as a documentary through video which can be used as a practical manual for mobilizing similar SHGs in any key areas on a sustainable basis.

The practical extension part focused on awareness & ECB Training programmes with systematically executed farmer interaction meetings in Pookaitha with the involvement of scientists from CMFRI and SAF officials of State Department of Fisheries. Professional training on clam meat shucking by boiling in water, hygienic handling methods and operation methods of clam sorting device for separation of meat and shell, cleaning aspects etc. were also undertaken systematically with the involvement of fisherfolk members of SHGs. Stage by stage Video documentation in the various phases of activities of SHGs in Clam processing were also undertaken.

The extension research part focused on socio economic surveys with a pre-tested and structured data gathering protocol consisting of standardized scales and indices to assess the impact of group approach in enhancing their standard of living. The involvement of people in clam collection, purchase of accessories, meat shucking by boiling in water, separation of meat and shell, cleaning, weighing, marketing, arrangement of institutional and non-institutional credit, account and record keeping etc. were quantified using appropriate procedures. The gender mainstreaming (Daly, 2005) to assess the equity and equality of the men and women counterparts of the family were separately interviewed to evaluate their access to resources, participation profile, decision making aspect and gender need analysis.

The Performance level of SHGs and Empowerment Index, appropriate scales and indices were used. The Level of Performance (NABARD, 2007; Shalumol, 2015) of SHG was assessed by the NABARD checklist containing 16 dimensions including 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. programmes etc. arranged in a 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. (Vipinkumar and Asokan, 2008) Each dimension of Empowerment Index was computed by the scores of sub-dimensions coming under the categories of these 8 dimensions.

Results and discussion

Empowerment Index and Level of Performance of SHGs

The Empowerment Index and Level of Performance of two SHGs namely Samudra and Pavizham were quantified and presented in Table 1. Paired sample t test was conducted separately for different SHGs to find out the statistical difference between the mean empowerment index scores: before and after joining SHG. The results of the paired sample t test given in the Table 2 were highly significant ($p < 0.01$) in all the eight empowerment variables considered for the present study, indicating that there was a significant increase in the empowerment scores -before and after the formation of SHG. The extent of involvement in various phases of the entrepreneurial activity was also quantified and expressed in Fig. 2. Maximum participation of the members and families was observed during site selection and marketing stages.

Table. 1. Empowerment Index components and level of performance of SHGs

Parameters	Samudra SHG	Pavizham SHG
Confidence building	0.804	0.746
Self esteem	0.772	0.664
Decision making Pattern	0.786	0.815
Capacity building	0.681	0.669
Psychological empowerment	0.671	0.652
Social empowerment	0.720	0.710
Economic empowerment	0.807	0.675
Political empowerment	0.646	0.613
Overall Empowerment Index	0.736	0.693
Level of Performance	64 per cent	61 per cent

Table 2. Impact of SHGs on women empowerment using Paired t test

Empowerment dimensions	SHG 1: Samudra			SHG 2: Pavizham		
	Average Empowerment Index		t value	Average Empowerment Index		t value
	Before	After		Before	After	
Confidence building	0.349	0.804	43.28	0.340	0.746	42.27
Self esteem	0.358	0.772	53.99	0.348	0.664	37.03
Decision making Pattern	0.391	0.786	43.98	0.367	0.815	42.65
Capacity building	0.325	0.681	33.20	0.318	0.669	32.03
Psychological empowerment	0.281	0.671	17.48	0.323	0.652	17.13
Social empowerment	0.356	0.720	56.59	0.333	0.710	41.21
Economic empowerment	0.352	0.807	42.16	0.296	0.675	28.82
Political empowerment	0.304	0.646	13.56	0.258	0.613	15.24

Note: All the p values in the t-test were found to be significant at 1% level

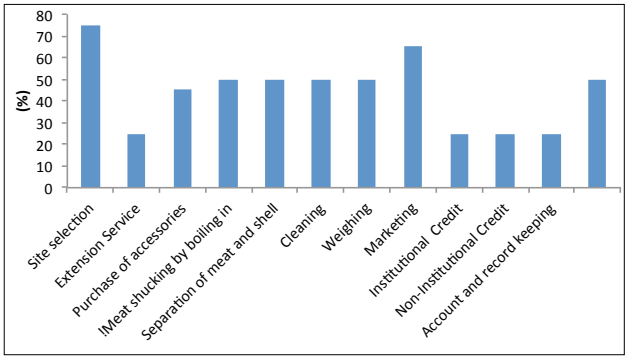

Fig. 2. Extent of involvement in Entrepreneurial activity

Access to resources

In the assessment of gender perspectives in terms of gender need and gender role in clam processing in Pookaitha, 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 clam processing 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 SHGs. Significantly, the accounting/money transaction was under the control of women and the most important requirement perceived by both men and women was the timely availability of clam. In case of participation and need, both men and women share almost the same opinion (Sahoo *et al.*, 2009; Raghavan, 2009). Socio-economic and technological support requirements were 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 clam processing, participation in various activities of farming, gender needs and decision making in various stages. The typology of access to resources in bivalve farming in gender response such as female alone, male <female, male = female, male>female and male are alone indicated separately for male and female respondents (Table 3).

Table 3 clearly shows the response of male and female separately in access to resources concerned with clam processing. Among the responses of female and male for the items of access to resources, most of the items are dominated by 'female alone'.

Participation profile of SHG members

The participation profile in various activities concerned with clam processing and the gender response in participation in various activities in clam processing in such as female alone, male < female, male = female, male >female and male alone indicated separately by male and female are presented in Table 4.

A perusal of Table 4 clearly indicates the participation profile in gender perspective in clam processing for male and female separately. It can be glanced clearly from the perusal of the table that, most of the activities were female dominating operations in clam processing, as per the responses of both male and female. But the site selection and marketing activities were being performed by both men and women.

Gender need analysis

The response to the gender needs in various activities concerning clam processing of male and female separately is presented in Table 5.

With regard to the gender needs, the most important need area expressed by both male and female counterparts includes separation of meat and shell, cleaning and marketing. Marketing of the products is the key for the success of the dynamics of

Table 3: Access to resources for clam processing unit

Access to resources for clam processing unit												
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	100.00	100.00	0.00	0.00	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	0.00	0.00
Purchase of accessories	75.00	50.00	0.00	0.00	25.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase of clam	75.00	100.00	0.00	0.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	0.00
Meat shucking by boiling in water	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Separation of meat and shell	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
Weighing	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marketing	50.00	25.00	0.00	0.00	50.00	75.00	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	75.00	50.00	0.00	0.00	25.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 4. Participation profile in gender perspective in clam processing unit

Participation profile in gender perspective in clam processing unit						
Activity	Man (Independently)		Men and Women together		Women (Independently)	
	Female	Male	Female	Male	Female	Male
Site selection	0.00	0.00	50.00	50.00	50.00	50.00
Extension Service	0.00	0.00	0.00	0.00	100.00	100.00
Purchase of accessories	0.00	0.00	25.00	25.00	75.00	75.00
Purchase of clam	0.00	0.00	0.00	0.00	100.00	100.00
Meat shucking by boiling in water	0.00	0.00	0.00	0.00	100.00	100.00
Separation of meat and shell	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
Weighing	0.00	0.00	0.00	0.00	100.00	100.00
Marketing	0.00	0.00	50.00	25.00	50.00	75.00
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	75.00	25.00	25.00	75.00

Table 5. Gender needs in activities of clam processing unit

Gender needs in activities of clam processing unit						
Need Area	Important		More Important		Most Important	
	Female	Male	Female	Male	Female	Male
Site selection	75.00	50.00	25.00	50.00	0.00	0.00
Extension Service	100.00	100.00	0.00	0.00	0.00	0.00
Purchase of accessories	75.00	100.00	25.00	0.00	0.00	0.00
Purchase of clam	25.00	25.00	50.00	50.00	25.00	25.00
Meat shucking by boiling in water	25.00	0.00	25.00	50.00	50.00	50.00
Separation of meat and shell	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
Weighing	75.00	25.00	25.00	75.00	0.00	0.00
Marketing	0.00	0.00	0.00	0.00	100.00	100.00
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

these SHGs. Proper 'training on technical matters' and 'marketing aspects' is inevitable for desirable results.

Economic feasibility analysis of clam processing SHG units

The Economic Feasibility Analysis projecting the indicative economics of Clam Processing units of SHGs also was undertaken and the highlights are presented in Table 6.

The Average Operating cost for the venture on Clam processing by SHGs was Rs.2,32,422/- and Average Annual Net Return was found to be Rs.70,440/-. The total Fixed Cost was estimated to be Rs 40,020/-. The fixed cost was incurred only in the first year. Among the variable cost components, raw clams contributed the most. Out of the total estimated variable cost, about 25 per cent was contributed by raw clams. SHGs collect raw clams from agents at an average price of Rs 2 per kg and other recurring expenditure was made on firewood, ice, rent, and wages and so on. There were two products from the units. The major one was the shucked meat which commanded an average price of Rs 2.5 lakhs from an average of 2,127 kg per year and the by-product was shell which commanded an average price of Rs 61,300/- from an average of 21,065 kg per year .The Break Even Point (BEP) (Fixed cost/ (Profit per unit—Variable cost per unit) was estimated to be 8,004 kg of processed clam meat. The economic feasibility analysis of the SHGs suggests that, the unit takes two years to break even.

Here in nut shell, an assessment of clam processing 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, meat shucking, 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

Table 6. Economic Feasibility analysis of Clam Processing SHG units in Pookaitha

Sl.No.	Fixed Assets	2013		2014		2015		2016	
	Items	Units	Price in Rs.						
1	Stove	1	5,000	-		-		-	
2	Weighing Balance	1	5,000	-		-		-	
3	Clam sorter sieve	1	6,000	-		-		-	
4	Utensils	8	15,370	-		-		-	
5	Furniture	7	5,650	-		-		-	
6	Miscellaneous		3,000	-		-		-	
	Fixed cost								**40,020**
	Variable Assets	**Units**	**Price in Rs.**	**Units**	**Price in Rs.**	**Units**	**Price in Rs.**	**Units**	**Price in Rs.**
1	Raw Clams(Kg/Rs)	37,062	65,365	29,290	53,765	36,500	65,700	36,905	66,430
2	Firewood(Kg/Rs)	2,400	12,000	2,500	12,500	2,429	12,100	2230	11,650
3	Ice (Kg/Rs)	4,050	8,100	2,880	5,760	3,120	6,240	3240	6,480
4	Rent (1000/Month)		12,000		12,000		12,000		12,000
5	Wages(Rs.600/225Mandays)		1,35,000		1,35,000		1,35,000		1,35,000
6	Transportation		3,000		2,500		1,800		1,500
7	Miscellaneous		2,000		1,500		1,500		1,800
	Variable Cost		**2,37,465**		**2,23,025**		**2,34,340**		**2,34,860**
8	Interest on fixed cost	(10% /annum)	4002		4002		4002		4002
9	Deprecation (10% /annum)		4002		4002		4002		4002
	Total Operational Cost		**2,45,469**		**2,31,029**		**2,42,344**		**2,42,864**
	Return Stream	**Units**	**Price in Rs.**	**Units**	**Price in Rs.**	**Units**	**Price in Rs.**	**Units**	**Price in Rs.**
1	Main Product (Kg/Rs)	2,449	2,44,900	2,046	2,04,680	2,484	2,65,788	2,527	2,83,024
2	By Product (Kg/Rs.)	25,476	66,238	21,780	56,628	23,458	60,990	23,546	61,219
3	Gross Return		3,11,138		2,61,308		3,26,778		3,44,243
4	Net Return		65,669		30,279		84,434		1,01,379

gives sensitization on crucial issues like women fisherfolk's rights and marketing channels for policies and other interventions on gender. Interrelationships between the variables act as catalytic points for group action and group empowerment on a sustainable basis. Success case study elucidated here was brought out as a documentary movie entitled '*A shot in the arm for livelihood: The success story of Clam processing SHGs in Pookaitha*' (English and Malayalam versions) and can act as a case model/practical manual for mobilizing SHGs in other allied sectors on a sustainable basis.

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