



Gender mainstreaming and impact of women SHGs in fish fertilizer production: A pragmatic study in Kerala

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Abstract

A pragmatic assessment on the impact of women SHGs in gender mainstreaming was embarked on the fish fertilizer production units operating at Engandiyoor of Thrissur district and Munambam of Ernakulam district in Kerala. The extent of empowerment, performance level, gender characteristics and economic feasibility analysis were assessed out based on socio-economic surveys and personal interviews using structured data gathering protocols. Empowerment Index was quantified based on eight 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, gender need analysis etc. Though most activities are female-dominated, the male counterparts also have a convinced role in decision-making, arrangement of raw materials and fish waste, transportation of the product, etc. The Scales of Performance 'Assessment' and 'Empowerment Index' developed have the upright potential for future use in other key areas on a sustainable basis. Lacunae identified in the Empowerment Index computation give feedback to proceed in the right direction and follow appropriate changes in the maneuver of the microenterprise. The identified interrelationships between the variables can act as catalytic points for group action on a sustainable basis. The indicative economics worked out advocates

that the unit takes just one year to break even, which shows the cost-effectiveness of the enterprise. A success case study documented as a video documentary can be used as a prototypical manual for promoting group action for mobilizing SHGs on a sustainable basis.

Keywords: *Gender mainstreaming, self help group, empowerment index, performance level*

Introduction

The archetype of 'Gender 'Mainstreaming' (GM) fundamentally focuses on gauging 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 stratagem for making women 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. Lombardo (2005) of European

Union (EU) constitution has adopted an “integrating” rather than an “agenda-setting” approach to gender mainstreaming. Five indicators of application of mainstreaming will serve as a reference point for exploring how it has been applied in EU constitutional convention: a broader concept of gender equality, the incorporation of a gender perspective into the mainstream, equal representation of women, the prioritization of gender policy objectives, and a shift in institutional and organizational culture. Jacqui (2010) claimed that GM does not end in simply increasing the number of women within a specific institution and is about changing social consciousness, so the effects of a policy for both women and men are genuinely analyzed before they are implemented. The FAO State of Food and Agriculture 2010-11 reports disclosed that if female farmers had the same access as male farmers to agricultural inputs and services, they could substantially increase the yields on their farms. A World Bank report concluded that reducing gender inequality leads to falling infant and child mortality, improved nutrition, higher economic productivity and faster growth. For the global community, gender equality is also a commitment embedded in international human rights agreements and the United Nations Millennium Development Goals (FAO, 2011).

The ultimate goal to achieve gender equality (ECOSOC, 1997; UNESCO, 2000) has a three-pronged approach to women's empowerment and gender equality consists of, GM perspective in all policy planning, programming, implementation and evaluation activities; promoting the participation of women at all levels and fields of activity, giving particular attention to women's priorities and perspectives in redefining both the goals and means of development; and developing specific programs and activities for the benefit of girls and women, particularly those promoting equality, endogenous capacity-building and full citizenship. 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 -right-based so that women have equal rights, enshrined in international standards and treaties, and should have the 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; William *et al.*, 1995; Charlesworth, 2005; Kelly, 2005). Here in the present study, an attempt was made on the assessment of the impact of SHGs in fish fertilizer production in gender mainstreaming in two districts, namely Thrissur and Ernakulam in Kerala state. Engandiyoor is one of the coastal villages in the Vadanapilly panchayat of Thrissur district. This village shares borders with Orumanayur Panchayath on the north side and Vadanapilly panchayath on the south side. On the west side is the Arabian sea and to the east, Canoli canal. People in this area mainly depend on fishing, fishery-related activities, and agriculture for their livelihood. Women involve only in fish selling, small-scale agriculture etc. Apart from their

traditional job pattern, a group of empowered women thought differently and introduced a new reliable area. Under the guidance and supervision of the Society for Assistance to Fisherwomen (SAF), working under the department of fisheries, Kerala, as a first step, they formed 'Jaivashree' SHG unit consisting of four members. Like in Engandiyoor of Thrissur, SAF has enunciated another ferfish SHG unit named 'Prakrithishree' in the Munambam of Ernakulam district. Munambam is a suburb of Kochi, India, at the north end of Vypeen Island, surrounded by the Arabian Sea on the west, the Periyar river on the east, and a mouth of the sea on the north. The main occupation of the inhabitants is fishing and is well known in Ernakulam and Thrissur districts for the presence of major fishing harbour in this region.

In this century, while the profit-oriented agriculture practices using immense chemical fertilizers are converting our agricultural land infertile, these women recognized the need and reliability of bio-fertilizers to live a better human life and making the agriculture land fertile. They made a successful step in the production of biofertilizers from fish. It is seen as a possible solution to disposing of large quantities of fish waste generated by the fishing industries and processing units. The bio-product could be marketed across the country. According to official estimates, almost half of the total fish catch is expelled as waste. Annually an estimated 3 million tonnes of waste is generated as fish and fish parts. But since this waste is rich in organic proteins, it has a tremendous scope as livestock feed and fertilizer. Raw fish has been traditionally used as fertilizer in Kerala. But they are often shunned due to the stench or handling difficulties. But a product like this is both handy, and even in the processing stages, there is no foul smell or any other related difficulties.

The procedure being followed by the selected SHGs in the preparation of fish fertilizer involves a series of consecutive steps. As the first step, the SHG members collect small fishes of low economic value from harbors and sardines and fish wastes from markets. is thoroughly mixed with jaggery in a ratio of 3:1 and keeps the mixture in air-tight containers for an average of 50 days (Varies with the species and size of fishes). The obtained slurry is mixed with coir pith in a ratio of 3:1, and after sun drying and sieving, the fish fertilizer is packed in a polythene bag possessing the brand name and other details of the product. This fish fertilizer is used as a preeminent biofertilizer for vegetables, ornamental plants etc., and apart from fertilizer, it also serves as an effective pesticide. From the locally available cheap raw materials, these women make a profitable outcome, and this can be considered a perfectly viable model for other SHGs in similar allied sector micro-enterprises.

Material and methods

The methodology adopted for the present study was a

pragmatic and sensible combination of extension research and practical extension. With the assistance of SAF, the research team of Central Marine Fisheries Research Institute (CMFRI) visited the Engandiyoor and Munambam locations once in a month for five times and conducted regular meetings and interaction programmes for the fisherfolk on fish fertilizer production units. With the co-operation of SAF officials and the involvement of scientists of CMFRI, technical assistance of KVK, a series of farmer interaction meetings were organized for these SHGs. The participation profile, decision making, gender need analysis, economic feasibility analysis etc., were undertaken by interviewing the men and women counterparts of the families of the SHG members. A map showing the locale of study is presented as Fig. 1.

For assessing the Performance level of SHGs and Empowerment Index, appropriate scales and indices developed for the project with modifications were used. The Level of Performance (NABARD, 2007; Shalumol, 2015) was assessed by the checklist containing the same 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,

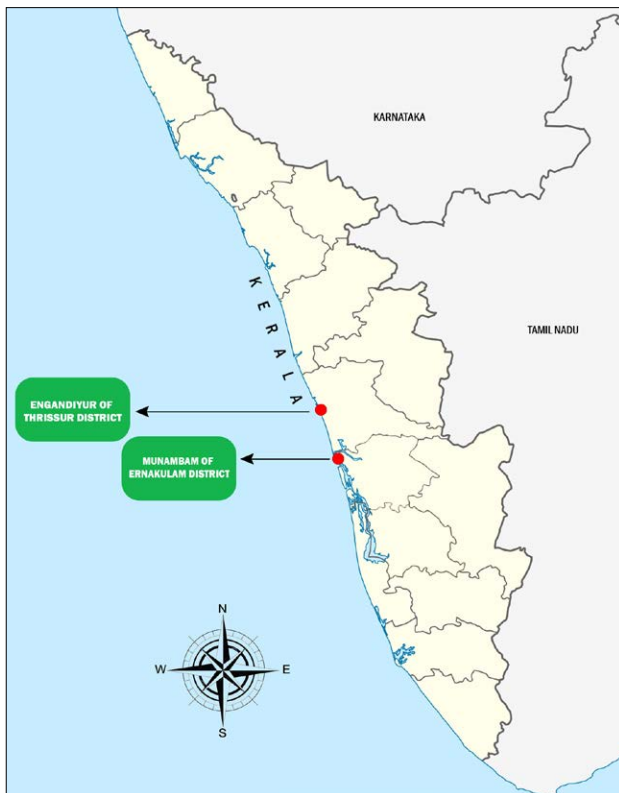


Fig. 1. Map showing the locale of the study

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 eight dimensions (Meena *et al.*, 2012; Srinath, 1990) 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 dimension were first made uniform, and that was multiplied by the weightages assigned by the judges while relevancy rating for ascertaining the content validity through scale product method. Each of the dimensions of the Empowerment Index was computed by the scores of the sub-dimensions coming under the categories of these eight dimensions. The Empowerment Index and Level of Performance of SHGs were quantified with the standardized interview schedules.

The practical extension part for the present study consists of Awareness & Entrepreneurial Capacity Building (ECB) Training programmes systematically executed. The extension research part focused on socio-economic surveys with a pre-tested and structured data gathering protocol with standardized scales and indices. Stage by stage video documentation in the various segments of activities of SHG in fish fertilizer production was done. In the extent of involvement in various stages of entrepreneurial activity of running the fish fertilizer units by the members like site selection, arranging extension service, purchase/collection of fish or fish wastes, mixing with jaggery and coir pith, drying, sieving, packing, and labeling, marketing, transportation, arrangement of institutional & non-institutional credit, account and record-keeping etc. were quantified with structured interview schedule. For the gender mainstreaming (Daly, 2005) to assess the equity and equality the men and women counterparts of the family were separately interviewed to evaluate the access to resources, participation profile, decision making aspect and gender needs analysis. The number of beneficiaries of two selected SHGs include 8 nos. along with the counterparts and other members comprising the total sample size of 30.

Results and discussion

Empowerment Index, Level of Performance of SHGs and Extent of Involvement in Entrepreneurial Activity

The Empowerment Index and Level of Performance of two SHGs, namely *Jaivashree* and *Prakrithisree* units, were quantified and presented in Table 1. Paired t-test was conducted separately for

different SHGs to determine the statistical difference between the mean empowerment index scores: before and after joining SHG. The results of the paired t-test given in Table 2 were highly significant ($p < 0.01$) in all the eight empowerment variables considered for the present study, indicating a significant increase in the empowerment scores 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 purchase/collection of fish or fish waste, mixing with jaggery, sieving and marketing stages.

Assessment of gender perspectives

An assessment of gender perspectives in terms of gender need and gender role in running the fish fertilizer units was also done as a part of the study. All households were selected and male and female counterparts in each family were separately interviewed. The gender participation in different activities, gender needs, decision making and access and control over the resources in respect to fertifish production was 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,

Table 1. Empowerment Index components and Level of Performance of SHGs

Parameters	Jaivashree fertifish SHG, Engandiyoor, Thrissur.	Prakrithishree fertifish, SHG, Munambam, Ernakulam
Confidence building	0.779	0.677
Self esteem	0.791	0.697
Decision making Pattern	0.710	0.692
Capacity building	0.753	0.683
Psychological empowerment	0.790	0.692
Social empowerment	0.776	0.738
Economic empowerment	0.812	0.793
Political empowerment	0.749	0.724
Overall Empowerment Index	0.770	0.712
Level of Performance	68 percent	61 percent

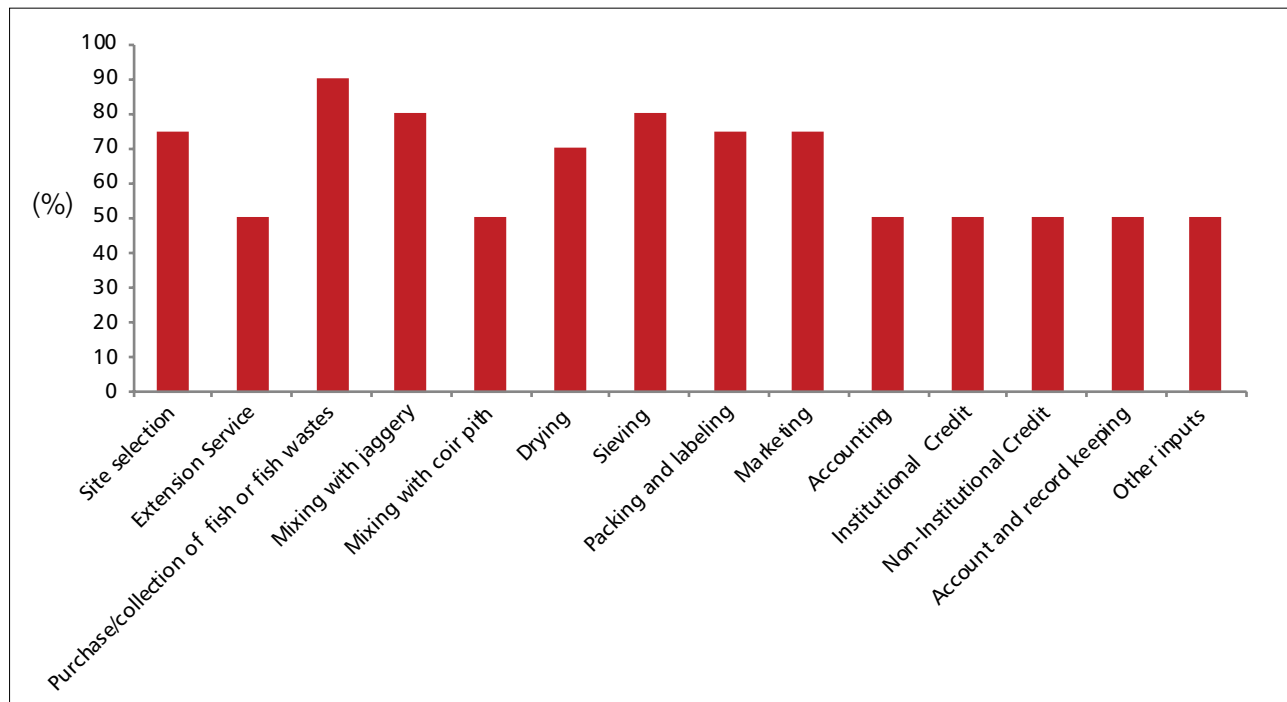


Fig. 2. The extent of involvement in phases of the entrepreneurial activity

the accounting/money transaction is under the control of women, and the most important requirements perceived by both men and women is collection of fish waste, drying, and marketing. In case of participation and need, both men and women share almost the same opinion. (Sahoo *et al.*, 2009; Raghavan, 2009; Vipinkumar *et al.*, 2017 a & b, 2018 a & b) 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, participation in various activities of running the fish fertilizer production unit, gender needs, and decision making in various stages.

In fertifish unit, the important activities like mixing fish with jaggery, mixing with coir pith, drying, sieving, marketing etc., are being accessed by female counterparts and some activities which are difficult to women, like fish waste collection, transportation etc. are being done along with men participation. It is an exquisite observation that this enterprise's major activities are being undertaken through women counterparts of the families (Vipinkumar and Asokan, 2008). The Table 3 shows the response of men and women counterparts of the families separately on resource access for each activity.

Similarly, an attempt was made to assess the participation profile of the respondents by interviewing male and female

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

Empowerment dimensions	SHG 1: <i>Jaivashree</i> fertifish unit, Engandiyoor, Thrissur			SHG 2: <i>Prakrithishree</i> fertifish unit, Munambam, Ernakulam		
	Average Index		t value	Average Empowerment Index		t value
	Before	After		Before	After	
Confidence building	0.329	0.779	42.36	0.351	0.677	42.92
Self esteem	0.357	0.791	53.28	0.349	0.697	37.02
Decision making Pattern	0.379	0.710	43.86	0.378	0.692	42.80
Capacity building	0.334	0.753	33.50	0.329	0.683	32.96
Psychological empowerment	0.283	0.790	20.76	0.330	0.692	17.14
Social empowerment	0.346	0.776	54.98	0.342	0.738	41.20
Economic empowerment	0.354	0.812	42.88	0.298	0.793	28.82
Political empowerment	0.320	0.749	14.51	0.267	0.724	14.28

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

Table 3. Access to resources for Fish fertilizer 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/collection of fish or fish wastes	75.00	50.00	0.00	0.00	25.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00
Mixing with jaggery	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mixing with coir pith	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drying	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sieving	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Packing and labeling	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	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transportation	75.00	75.00	0.00	0.00	25.00	25.00	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	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 4. Participation profile in gender perspective in Fish Fertilizer Unit

Activity	Man (Independently)		Men and women together		Women (Independently)	
	Female	Male	Female	Male	Female	Male
Site selection	0.00	0.00	0.00	0.00	100.00	100.00
Extension Service	0.00	0.00	0.00	0.00	100.00	100.00
Purchase/collection of fish or fish wastes	0.00	0.00	25.00	25.00	75.00	75.00
Mixing with jaggery	0.00	0.00	0.00	0.00	100.00	100.00
Mixing with coir pith	0.00	0.00	0.00	0.00	100.00	100.00
Drying	0.00	0.00	0.00	0.00	100.00	100.00
Sieving	0.00	0.00	0.00	0.00	100.00	100.00
Packing and labeling	0.00	0.00	0.00	0.00	100.00	100.00
Marketing	0.00	0.00	0.00	0.00	100.00	100.00
Transportation	0.00	0.00	50.00	50.00	50.00	50.00
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	0.00	0.00	100.00	100.00

Table 5. Gender needs in activities of Fish Fertilizer Unit

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/collection of fish or fish wastes	0.00	0.00	0.00	0.00	100.00	100.00
Mixing with jaggery	50.00	50.00	50.00	50.00	0.00	0.00
Mixing with coir pith	0.00	0.00	50.00	50.00	50.00	50.00
Drying	0.00	0.00	0.00	0.00	100.00	100.00
Sieving	50.00	50.00	50.00	50.00	0.00	0.00
Packing and labeling	0.00	0.00	50.00	75.00	50.00	25.00
Marketing	0.00	0.00	0.00	0.00	100.00	100.00
Transportation	100.00	50.00	0.00	50.00	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

counterparts of the families separately, and results are presented in Table 4.

From the study, it was obvious that the participation of women was conspicuous in the activities like mixing fish with jaggery, coir pith, drying, sieving, packing and labeling, marketing etc. The dependence on the male counterpart was essentially for the activities like purchase of raw materials and transportation of fertifish. Table 4 shows the response of men and women counterparts of the families separately on participation in each activity.

In the same way, response to the gender needs in various activities concerned with running the fish fertilizer production units of the male and female respondents separately is presented in below Table 5. The gender response in need areas in managing the fertifish unit as per the importance assigned by male and female counterparts are presented in the Table.

The gender needs profile examination from Table 5 reveals, the most important need area of the unanimous opinion of men and women together were Purchase/collection of fish

Table 6. Decision making in various phases of Fish Fertilizer Unit

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/collection of fish or fish wastes	75.00	50.00	0.00	0.00	25.00	50.00	0.00	0.00	0.00	0.00
Mixing with jaggery	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mixing with coir pith	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drying	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sieving	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Packing and labeling	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marketing	50.00	50.00	0.00	0.00	50.00	50.00	0.00	0.00	0.00	0.00
Transportation	50.00	50.00	0.00	0.00	50.00	50.00	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	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

or fish wastes, drying, marketing etc. Proper 'training on technical matters' and 'marketing aspects' is inevitable for desirable results. Table shows the response of men and women counterparts of the families separately on the importance of gender needs in different areas.

Similarly, the decision making profile in various phases of Fish Fertilizer Unit when observed, it could be inferred from the results presented in the Table 6 that, most of the decisions on major activities are female dominated except for laborious activities like marketing and transportation, for which men counterparts also play a role equal to female. From decision-making profile, it is evident that important activities including site selection, extension, sieving, drying, mixing with jaggery, mixing with coir pith, packing and labeling, arranging institutional and non-institutional credit, account and record-keeping etc. were decided by female counterparts. In activities like Purchase/collection of fish or fish wastes, Marketing, and transportation, men and women are unanimously involved in decision making.

Economic Feasibility Analysis of Fertifish units

The Economic Feasibility Analysis of the Fish fertilizer production units of SHGs was undertaken by gathering data for the last four years on expenditure and returns to project the indicative economics. The average operating cost and average net returns were worked out and the significant components assessed were the Break-Even Point and Pay Back Period of these enterprises. The results are presented in Table 7.

From the Table on economic feasibility analysis, it could be observed that the Average Operating cost for the fertifish enterprise was Rs. 1,74,275/-. The Average Annual Net Return was found to be Rs. 86,280/-. The Break-Even Point (BEP) = Fixed Asset / (Profit per unit—Variable cost per unit) = 61,850 / (135-81) = 1145 kg. The Pay Back Period was found to be just one year indicating the profitability of the enterprise.

To put it fleetingly, an assessment of fish-fertilizer production units efficaciously being undertaken by Self Help Groups of women fisherfolk brought out a couple of valid suppositions as, it was understood that, the female counterparts do have a definite role in site selection, availing extension services, purchase/collection of fish or fish wastes, mixing with jaggery, mixing with coir pith, drying, sieving, packing and labeling, marketing, transportation 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 maintainable basis. Lacunae identified in Empowerment Index computation give ample and adequate feedback to authorities to proceed in the right direction. The gender dimension analysis on mainstreaming aspect provides sensitization on vital and crucial issues like women fisherfolk's rights and marketing channels for policies and other interpolations on gender. Exhaustive research with a larger sample and the wider area would be of abundant scope. Interrelationships between the variables can act as catalytic points for group action and group empowerment on a sustainable basis. Success case study expounded and brought out as video documentary entitled

Table 7. Economic Feasibility Analysis of Fertifish unit

Sl. No.	Fixed Expenditure Items	1 st year		2 nd year		3 rd year		4 th year	
		Units	Value in Rs.	Units	Value in Rs.	Units	Value in Rs.	Units	Value in Rs.
1	FRP Cans (Quantity in numbers and value in Rupees)	10	5200						
2	Plastic Sheet (Quantity in numbers and value in Rupees)	5	1250						
3	Sieve		750						
4	FRP Tank (Quantity in numbers and value in Rupees)	3	45000						
5	Weigh Balance (Quantity in numbers and value in Rupees)	1	6000						
6	Sealing Machine(Quantity in numbers and value in Rupees)	1	3000						
7	Trays (Quantity in numbers and value in Rupees)	3	150						
8	Miscellaneous		500						
	Fixed Cost (Rs.)		61850						
Variable Expenditure									
1	Raw Fish (Quantity in Kg and value in Rupees)	1000	18000	1000	17200	1000	17400	1000	19300
2	Fish Waste (Quantity in Kg and value in Rupees)	1000	2000	1000	2000	1000	2000	1000	2000
3	Coir Pith (Quantity in Kg and value in Rupees)	600	12000	600	10000	600	10000	600	10000
4	Jaggery (Quantity in Kg and value in Rupees)	2000	50000	2000	40000	2000	40000	2000	40000
5	Annual rent		15000		15000		15000		15000
6	Labelling(Quantity in Sheets and value in Rupees)	160	4800	160	4800	150	4500	125	3750
7	Labour Charge		60000		60000		60000		60000
8	Transportation		20000		21000		18900		19000
9	Miscellaneous		2000		1850		2100		2500
	Operating Cost (Rs.)		183800		171850		169900		171550
8	Interest on fixed cost (10%/annum)		6185		6185		6185		6185
9	Deprecation (10% /annum)		6185		6185		6185		6185
	Total Variable Cost		196170		184220		182270		183920
Return Stream									
	Fertifish (250 gm) (Quantity in Kg, Value in Rs.)	2000	180000	1900	171000	1950	175500	2060	185400
	Fertifish (5 kg) (Quantity in Kg, Value in Rs.)	60	108000	52	93600	44	79200	55	99000
	Gross Return		288000		264600		254700		284400
	Net Returns		91830		80380		72430		100480

'Fertifish: A Diversified Livelihood Avenue for Women Entrepreneurs in Engandiyoor' (English and Malayalam versions) can be used as a practical guidance manual for marshaling and mobilizing SHGs in similar allied segments on a sustainable basis.

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