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## **Transforming Activity Groups to Business Units - Emerging Fisherwomen Managers in Kerala, India**

**Shyam S. Salim<sup>1\*</sup> and A. M. Shinu<sup>1</sup>**

<sup>1</sup>ICAR-Central Marine Fisheries Research Institute, Kochi, India.

### **Authors' contributions**

*This work was carried out in collaboration between both authors. Author SSS designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Authors SSS and AMS managed the analyses of the study. Authors SSS and AMS managed the literature searches. Both authors read and approved the final manuscript.*

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### **ABSTRACT**

The fisheries sector in Kerala, on account of its management initiatives on fisheries sustainability and fisher welfare, possesses a unique example for the other coastal states. The state has pioneered many novel management measures and fisher welfare programmes which led to commendable socio-economic standards comparable even with the Western world. Post Tsunami during 2004 in Kerala wreaked havoc in terms of inventory and human losses which led to the initiation of Society for Assistance to fisherwomen (SAF) under the umbrella of Department of Fisheries, Government of Kerala. Over the years SAF planned and implemented many flagship programmes among which Theeramythri was instrumental in empowering women. Currently, there are more than 1200 units providing meaningful employment to more than 5000 women. The fisher empowerment improved considerably post joining SAF from 0.41 to 0.64. The empowerment determinants included economical (30.7%), legal (22.81%), political (20.18%), social (14.91%) and psychological (11.4%). SAF envisioned transforming these groups from a mere activity group into viable business units with more financial outlays, repayments, commitment at self-sufficiency, getting more collateral financial support. In the mission toward converting activity groups into business, SAF provided additional fund on a short term basis which included revolving fund, technology fund and

\*Corresponding author: E-mail: [shyam.icar@gmail.com](mailto:shyam.icar@gmail.com);

shift to business. The study assessed the impact of these funds in augmenting the performance of over 600 activity groups in Kerala. The results showed that both sale turnover and income increased consequent to receipt of additional fund. The repayment rates were also high at 80 percent showing promising future.

**Keywords:** *Theeramythri; empowerment; fisherwomen; impact.*

## 1. INTRODUCTION

The fisheries sector in Kerala, on account of its management initiatives on fisheries sustainability and fisher welfare, possess a unique example for the other coastal states. The women plays a commendable role in the value addition of the fish and fisher related enterprises [1] Many women across different streams and walks of life were able to showcase their potentialities and hence the promotion of those enterprises / initiatives becomes important towards women empowerment [2]. The state of Kerala has pioneered many novel management measures and fisher welfare programmes which led to commendable socio-economic standards comparable even with the Western world. For women empowerment, state government has initiated many programs with the support of other local bodies including government and non-government organizations like Kudumbashree program, Gender park etc. [3]. It has created ample and viable livelihood opportunities for women to come forward to main stream of the society and engaging in many public activities [4,5]. Post Tsunami during 2004 in Kerala wreathed havoc in terms of inventory and human losses which led to the initiation of Society for Assistance to fisherwomen (SAF) under the umbrella of Department of Fisheries, Government of Kerala during 2005 as a charitable society. The Department of fisheries initiated and established microenterprises for fisherwomen under 'Theeramythri' to make use of the local resources through women empowerment [6,7,8]. Over the years SAF planned and implemented many flagship programmes among which Theeramythri was instrumental in empowering women. Theeramythri is a unique livelihood support program for fisherwomen aimed to improve the income and quality of life by providing the alternative livelihood to fisherwomen. It also provides the marketing support to the units working under Theeramythri. The main focus is on the overall empowerment of fisherwomen and currently, there are more than 1200 units providing meaningful employment to more than 5000 women. The different categories of activity groups

include Tailoring and garments, Fish, Food, Provisional store, Supermarket and coir and "Others" catering to location specific areas and demand driven. The major effort to popularise micro-finance in Kerala has the twin aims of poverty alleviation and women's empowerment, this seems justified [9]. Then try to place the 'micro-finance revolution' in Kerala within the larger historical trajectory of successive 'regimes of empowerment' in order to understand the different political stakes in each, and their implications for gender politics [10,11].

SAF has a strong budget position for the implementation of the Theeramythri groups with the support from Government of Kerala. Theeramythri is a program that encourages, facilitates and handholds fisherwomen to engage in gainful alternate self-employment for their economic and social emancipation [12,13]. The Theeramythri groups comprises of fisherwomen who form a microenterprise with the support of the Society for Assistance to Fisherwomen and engaged in different enterprises aimed at generating alternative livelihoods and income generation [14]. There are different kinds of funds which are made available to the activity groups. In the business cycle it could be revolving fund, technology fund or shift to business devoid of interest. A Revolving fund (RF) is provided as working capital support for existing enterprises. The working capital support for the revolving fund is given to the activity groups without charging interest. The loans extended from the existing revolving fund have already emerged as an important source of working capital funds for the groups. Groups, that had gone down in performance due to problems in working capital management have benefited from this opportunity. SAF provides technology improvement support that focuses on technical improvement, replacement and repairs, technical support, and application of new and appropriate technologies. The activity groups implemented by SAF need to be developed by extensive application of new and appropriate technologies in various micro enterprises. These increase the demand for interventions in technology improvement and skill training. Shift to business fund has been provided only at the time where

there is no other option left out for reviving the activity group. They can be linked to avail loan from banks as that will create the institution for hard work to revive the group. Over the last decade the activity groups have been provided with these funds to improve the sales volume and market development. Women empowerment and economic development are closely related: in one direction, development alone can play a major role in driving down inequality between men and women; in the other direction, empowering women may benefit development [15,16]. The main objective of the present study is assessing the impact of financial support in augmenting performance of Theeramythri activity groups through the major financial support / initiatives which includes revolving fund, technology fund and shift to appropriate business. The impact assessment of these additional funds were done to estimate the extent of increased sales, employment generations and the benefits realized consequent to the additional fund receipts. The outcome of the study is expected to generate policy directives and guidelines on fund disbursal for the future.

## 2. DATA AND METHODOLOGY

The study is based on the primary data collected from the different Theeramythri activity groups of SAF across nine districts of Kerala viz., Thiruvananthapuram, Kollam, Kottayam, Alappuzha, Ernakulam, Trissur, Malappuram, Kozhikode, and Kannur using stratified random sampling method. A total of 610 groups were surveyed using a structured questionnaire. The sample distribution encompassed groups which had availed revolving fund (N-345), technology fund (N-195), and shift to business (N-70) using a pretested structured survey schedule.

The revolving fund schedule elicited information on socio economic and demographic characteristics of the respondents, details of the group members (current and drop outs), capital formation, revolving fund, assets holding before and after receiving the revolving fund. The motivation to get revolving fund or its utilization was analysed based on the order of preference of the given parameters by the respondents. A comparative study of revolving fund and other financial sources of the respondents were evaluated to analyse the credit accessibility of the revolving fund. Moreover the benefits gained after receiving fund and the short comings in revolving fund as well as business were also clearly explained in the schedule. The schedule on technology fund elicited information such as

capital formation since inception, instalment received and payables by different activity groups. This gives information regarding the necessity and optimal utilization of the fund by evaluating their asset purchase and growth. The schedule also points out the relevance of technology fund, the necessity of providing technology fund, optimal utilization pattern of the activity, motivation to get and provide the technology fund, benefits after receiving the technology fund, shortcoming in the technology fund, and in the business. The schedule on shift to business depicts the information regarding the reasons for shift in business and its benefits after shifting the business. It also derives the economic wellbeing of the activity group, with special focus on the changes in the empowerment level of the activity groups and the influence of funds such as revolving fund and technology fund. The problems faced by the group members after shifting the business as well as status of the assets and liabilities of the group prior to shift in business and vice versa were also clearly discussed in the schedule.

In order to analyse the data, the primary statistical tool of percentage analysis was employed to assess various financial parameters of the study. The Garrett ranking Technique was employed to rank the constraints [17,18].

## 3. RESULTS AND DISCUSSIONS

The data was collected, analysed and the results are discussed under the following heads:

- Revolving Fund
- Technology fund
- Shift to Appropriate Business

### 3.1 Revolving Fund

A Revolving fund (RF) is provided as working capital support for existing enterprises. The working capital support for the revolving fund is given to the activity groups without charging interest. The loans extended from the existing revolving fund have already emerged as an important source of working capital funds for the groups. Groups, that had gone down in performance due to problems in working capital management have benefited from this opportunity.

Most of the activity groups started during 2009-12 (42 per cent) and 30 percent prior to 2009 and 28 percent after 2012. The average hours of employment by a group member across the



sectors is 7.5 hours ranging between supermarket sector (10 hours) and 7 hours in Tailoring and garments sector. The supermarkets catered more time due to long working hours (Fig. 1).

When considering the revolving fund received by the sectors, an average of Rs. 33160 received by all the sectors ranging with the highest Rs.49743 received by Supermarket sector and lowest amount of Rs. 25390 received by the provisional store sector (Fig. 2).

The revolving fund received needs to be repaid, accordingly the quantum of repayment indicates the viability of the enterprise and the credit worthiness of the enterprise. The repayment ratios computes the ratio of amount repaid to amount received is calculated. Fig. 3 shows that highest ratio in provisional store sector followed by the fish sector and lowest ratio in supermarket sector. This is due to the variation in revolving fund received. Supermarket sector received more amount and provisional store sector received less amount among the sectors.

### 3.2 Impact on Revolving Fund

After receiving the revolving fund, the sales as well as income of different activity groups increased. The sales ratio and income ratios are shown in Fig. 4. It indicates that both the sale and income increased in provisional store sector. By dissecting "Other" sector it was found that among the different enterprises beauty parlour, flour mill, soap and detergent units, hiring service, DTP centres, day care, paper and farm it was found that it was found that the flour mill (43 per cent) followed by the beauty parlour (10 per cent) showed considerable increase in the sales and income (Fig. 5).

### 3.3 Motivation to get a Revolving Fund / Utilization of the Revolving Fund

Many attributes were identified in developing a motivation towards availing revolving fund as well as its utilisation. The major attribute identified for the motivation to avail revolving fund included enhancing the sales volume, increasing the personal income followed by purchasing the raw materials, ease of availability and creation of job opportunity.

### 3.4 Benefits after receiving the Revolving Fund

The revolving fund created an impetus in the functioning of the enterprises with increased

sales and income. The major benefit accrued after receiving the revolving fund is the increase in savings and income followed by increase in sales volume. Motivation / leadership and more accountability / responsibility are the other major benefits after receiving the revolving fund.

### 3.5 Shortcomings in the Revolving Fund

A considerable activity groups identified certain shortcomings in availing/ utilising the revolving fund which included inadequacy of fund, lack of awareness as the major is in the first position followed by lack of awareness. Other constraints are lack of skill in managing money and long procedures as indicated by the Garrette scores (Table 3).

### 3.6 Shortcomings in the Business

The Theeramythri group faced many shortcomings while undertaking business as indicated by the Garrette scores and ranks. The major shortcomings included competition in the market followed by lack of institutional linkages and lack of branding. The competition for the different SAF products with the local/ national brands often resulted in lack of market penetration and lower sales. In addition lack of proactive institutional linkages across the different forward and backward value chain acted as a deterrent towards enhancing sale volume and revenue (Table 4).

### 3.7 Technology Fund

SAF provides technology improvement support that focuses on technical improvement, replacement and repairs, technical support, and application of new and appropriate technologies. The activity groups implemented by SAF need to be developed by extensive application of new and appropriate technologies in various micro enterprises. These increase the demand for interventions in technology improvement and skill training.

Most of the activity groups started before 2009 (42.4 per cent). 41.2 percentages of the activity groups started in between 2009 and 2012 and 16.4 percent started after 2012. Average hours spend per a day by a person in all the sectors is 7.3 hours. When comparing the different sectors, the maximum hours spend per day in supermarket sector (9.5 hours). This is due to the working time of the supermarkets is high when compared to other sectors. The average working hours per day is minimum in Coir sector (6.3 hours). It is shown in the figure.

**Table 1. Utilization of the revolving fund**

Attributes	Score	Rank
Enhance the sales volume	68.00	I
Increase the personal income	59.00	II
Purchasing the raw materials	54.00	III
Ease of availability	53.00	IV
Creation of job opportunity	52.00	V
Low cost and high business performance	48.00	VI
Meeting the day to day expenses	47.00	VII
Less burden and procedures	46.50	VIII
Marketing the products	46.00	IX

**Table 2. Benefits after receiving the revolving fund**

Attributes	Score	Rank
Increase in savings and income	71.00	I
Increase in Sales volume	64.00	II
Motivation / Leadership	52.00	III
Improved in basic facilities and amenities	50.00	IV
More Accountability/ responsibility	47.00	V
Risk takers	44.00	VI
More employment opportunities	43.00	VII
Marketing skills improved	42.00	VIII

**Table 3. Shortcomings in the revolving fund**

Constraints	Score	Rank
Inadequate funds	64.00	I
Lack of awareness	53.00	II
Lack of skill in managing money	52.00	III
Long procedures in availing funds	47.00	IV
Delay in disbursal of fund	45.00	V
Technical support from SAF	38.00	VI

**Table 4. Shortcomings in the business**

Constraints	Score	Rank
Competition in market	63.4	I
Lack of Institutional linkages	61.0	II
Lack of branding	57.7	III
Unexpected expenses	56.60	IV
Inadequate funds	55.00	V
Lack of skill in business planning	53.40	VI
Seasonality of business	53.30	VII
Inadequate operational space	50.70	VIII
Raw material shortage	50.00	IX
Lack of skill up gradation	48.90	X
Quality issues	45.70	XI
Absenteeism among members	44.60	XII
Conflicts among members	44.00	XIII
Technical support from SAF	41.00	XIV
Delay in disbursal	39.30	XV
Fund spent on other uses	36.30	XVI

### 3.8 Technology Fund Received

An average of Rs.29,446 is received as the technology fund and an average of Rs 23400 is repaid by different sectors. The highest amount was received by the "Other" sector as technology fund (17.6 percentages) followed by supermarket sector (16.6 percentages). The least amount received by coir sector (11.8 percentages). Fig. 7 indicates the share of technology fund received by the different sectors.

Consequent to the receipt if the technology fund the same was spend. The utilisation (spending to receipt) indicated that, provisional store sector utilised the maximum (89.61 per cent) followed by the coir sector (87.24 per cent).

### 3.9 Impact on Technology Fund

Like the revolving fund the receipt of the technology fund and its utilisation resulted in enhanced sales and income. The sales and income ratio of the technology fund utilised sectors are given in Fig. 9. It was found that the sales and income increased most in provisional store sector. On an average across the different sectors the sales and income increased by 3.2 and 4.1 per cent respectively.

By dissecting "Others" across the different sectors like beauty parlour, flour mill, soap and

detergent units, hiring service, DTP centres, day care, paper and farm it was found that the sales/income ratios registered maximum growth in the case of farm, hire service and DTP/ Internet centre (Fig. 10).

### 3.10 Reason for availing Technology Fund

The main attribute selected by the groups as the reason for availing technology fund is to enhance the productivity and sales volume followed by increase the income. In addition meet the demand and ease of availability are other reason for availing technology fund (Table 5).

### 3.11 Benefits after receiving the Technology Fund

The main benefit after receiving the technology fund is the increase in sales volume and increase in savings and income. Improvement in the basic facilities and amenities and meeting the demand are the other benefits (Table 6).

The main constraint opined by the groups with regard to the technology fund is the non availability of adequate fund and long procedures towards availing funds. In addition the main constraints in shortcomings in the business are competition in market, inadequate funds and lack of skill up gradation amongst the group members

**Table 5. Reason for availing technology fund**

Attributes	Score	Rank
Enhance the productivity and sales volume	64.00	I
Increase the income	60.30	II
To meet the demand	57.40	III
Ease of availability	53.60	IV
Creation of job opportunity	48.10	V
Providing best service by saving time	47.70	VI
Low cost and high business performance	47.10	VII
To stay competitive	43.10	VIII
Less burden and procedures	41.30	IX

**Table 6. Benefits after receiving the technology fund**

Attributes	Score	Rank
Increase in Sales volume	66.60	I
Increase in savings and income	64.90	II
Improvement in the basic facilities and amenities	53.10	III
Meeting the demand	50.40	IV
Motivation / Leadership	48.70	V
Providing the best service by saving time	48.00	VI
More employment opportunities	47.40	VII
More Accountability/ responsibility	47.10	VIII

### 3.12 Shift to Appropriate Business (SAB)

Shift to appropriate business is made available when there aren't any viable options left with the group towards business improvement and in reviving the activity group. There are several reasons for shifting the business. The main reason is better chance of developing new revenue followed by current business activities, products and services don't generate the revenue, necessary to sustain profit. Economic reality, crisis and pressure and change in customer preference are the other reason for shift to appropriate business (Table 7). Under these circumstances the activity groups are linked to avail loan from banks in reviving the group activities and business development. Most of the activity groups started before 2009 (44.6 per cent). 33.8 percentages of the activity groups started in between 2009 and 2012 and 21.5 percent started after 2012.

### 3.13 Reasons for Shift in Business

When comparing the sales, income and expenditure; the sales is high in fish sector but

the income is low relating to low profit margins. Among the different SAB groups the income was the maximum with the food sector.

### 3.14 Benefits after Shifting the Business

The major benefit after shifting to appropriate business includes is increase in the personal income, enhanced the sales volume and ability to meet day to day expenses. In addition creation of job opportunity, low cost and high business performance and marketing ease were found to be the other major benefits of shift to appropriate business.

Even after shifting to appropriate business the business suffered setbacks, the reasons for the set back is indicated in Table 9. It was found that inadequate funds, lack of skill in managing money, Lack of proper planning and lack of awareness are the other problems .In addition inability to get the expected demand, non adherence of the quality and continuing conflicts amongst members added to the problems of the business groups.

**Table 7. Reasons for shift in business**

Constraints	Score	Rank
Better chance of developing new revenue	68.60	I
Current business activities, products and services don't generate the revenue, necessary to sustain profit	65.20	II
Economic Reality	63.40	III
Crisis and pressure	55.80	IV
Change in customer preference	49.80	V
Custom demand	49.60	VI
Increase in consumer demand	48.00	VII
customers	47.40	VIII
Not able to keep a quality image	47.20	IX
Seasonality of business	46.60	X
Social Demand	45.60	XI
Social pressure	39.00	XII
Governmental regulations	33.20	XIII

**Table 8. Benefits after shifting the business**

Attribute	Score	Rank
Increase in the personal income	60.00	I
Enhanced sales volume	56.20	II
Ability to meet day to day expenses	49.00	III
Creation of job opportunity	47.60	IV
Low cost and high business performance	43.40	V
Marketing ease	39.00	VI

**Table 9. Problems faced after shifting the business**

Constraints	Score	Rank
Inadequate funds	62.40	I
Lack of skill in managing money	57.20	II
Lack of proper planning	50.20	III
Lack of awareness	49.60	IV
Couldn't get the expected demand	48.40	V
Couldn't able to maintain quality of the product	43.00	VI
Conflicts among members	38.80	VII

#### 4. CONCLUSION

The SAF aimed at improving the income and quality of life by providing alternative livelihood to fisherwomen. The financial ratios assessed across the different categories of enterprises indicated better sales turn over and income ratios [19]. The major benefit included an increase in sales volume, motivation/leadership, improved in basic facilities and amenities more accountability/responsibility risk-takers more employment opportunities marketing skills improved. It has evidenced without any doubt that women direction is that the best strategy for economic development [20]. The result shows that the average hours spend per a day by a person in all the sectors is 7.5 hours. When comparing the different sectors, the maximum hours spend per day in supermarket sector (10 hours). This is due to the working time of the supermarket is high when compared to other sectors. The average working hours per day is minimum in Tailoring and garments sector (7 hours). When considering the revolving fund received by the sectors, an average of Rs. 33160 received by all the sectors. Highest amount received by Supermarket sector (Rs.49743) and lowest amount received by the provisional store sector (Rs. 25390). The ratio of amount received and amount repaid is calculated and the highest ratio in provisional store sector followed by the fish sector and lowest ratio in supermarket sector. This is due to the variation in revolving fund received. Supermarket sector received more amount and provisional store sector received less amount among the sectors. An average of Rs.29446 is received as the technology fund and an average of Rs 23400 is spent by different sectors. The highest amount received by the other sector as technology fund (17.6 percentages) followed by supermarket sector (16.6 percentages). The least amount received by coir sector (11.8 percentages). When calculating the ratio of fund received and spends, provisional store sector shows the highest ratio (89.61) followed by the coir sector (87.24).The

results also indicated the need for identifying non-traditional business "Other" enterprises for the future to target younger fisherwomen group members. The SAF and its different Theeramythri groups continue to empower the fisherwomen thereby contributing to the welfare of the fisher community [21,22]. However in the wake of cut throat competition among business it is important to engage the groups with more facets of skills development, technology drive and marketing intervention to sustain the business [23].

#### CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the authors.

#### COMPETING INTERESTS

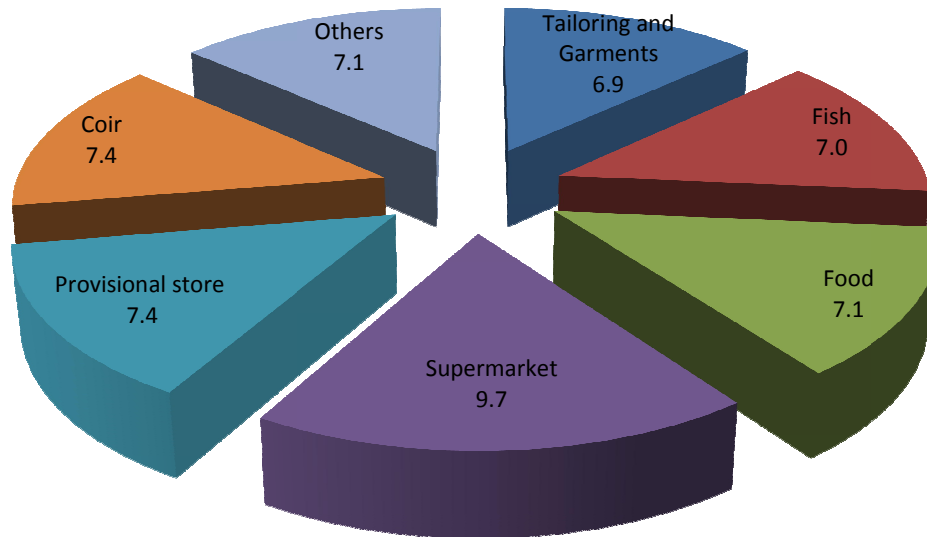
Authors have declared that no competing interests exist.

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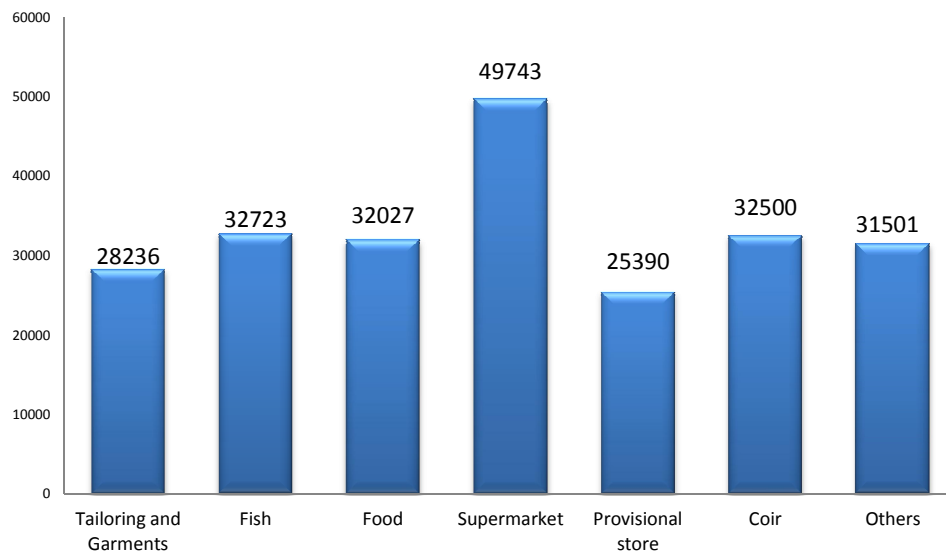
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## APPENDIX

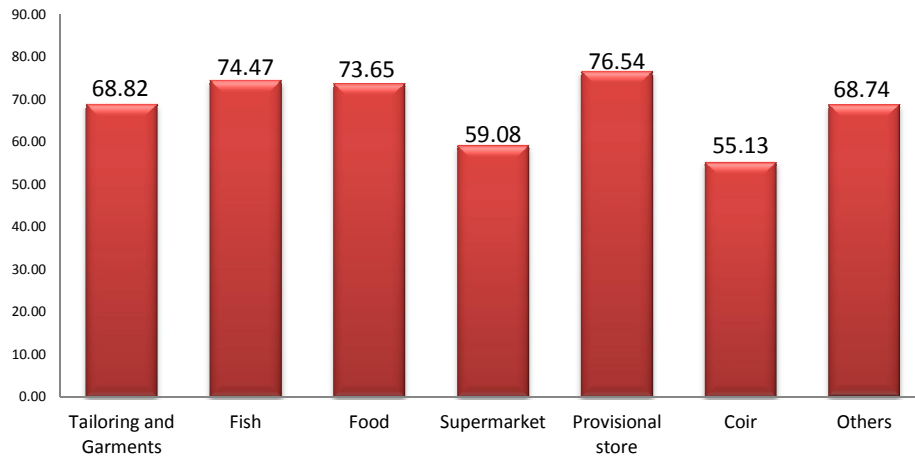


**Fig. 1. Average hours spend per day**

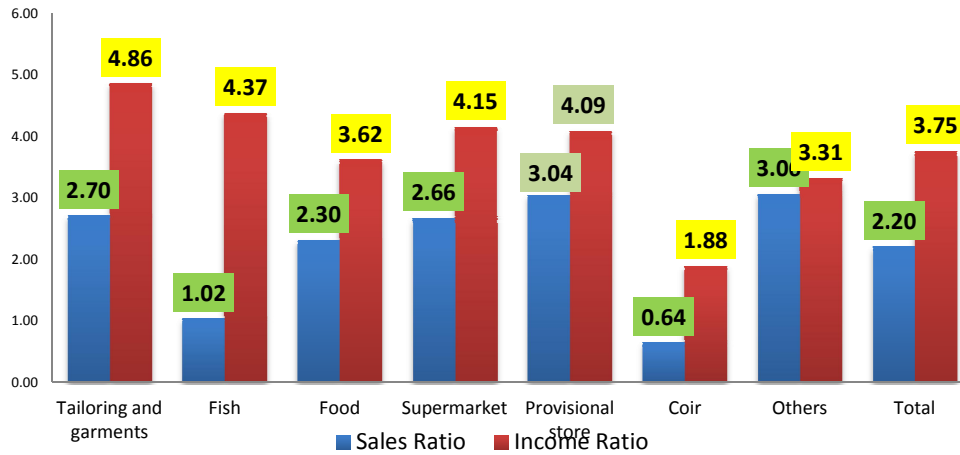


**Fig. 2. Average revolving fund received (Rs)**

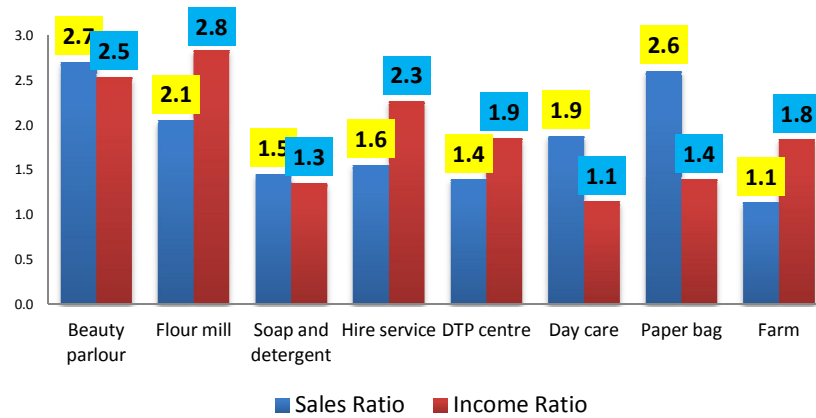
Supermarket sector. This is due to the variation in revolving fund received. Supermarket sector received more amount and provisional store sector received less amount among the sectors.



**Fig. 3. Repayment ratios - amount repaid to amount received**



**Fig. 4. Impact on revolving fund**



**Fig. 5. Dissecting "others"**



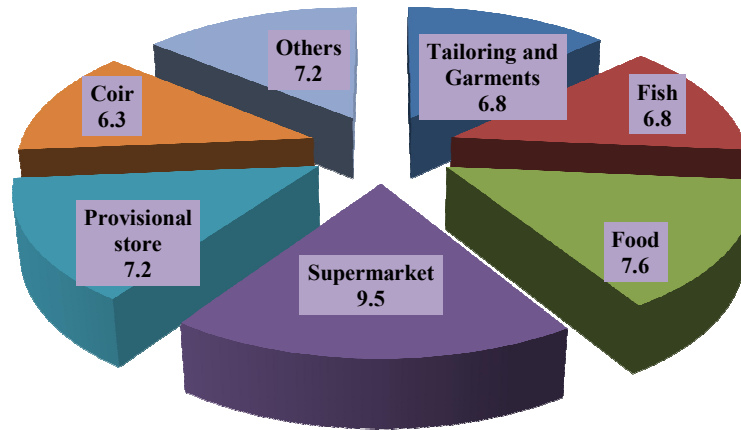


Fig. 6. Average hours spend per day (Technology fund)

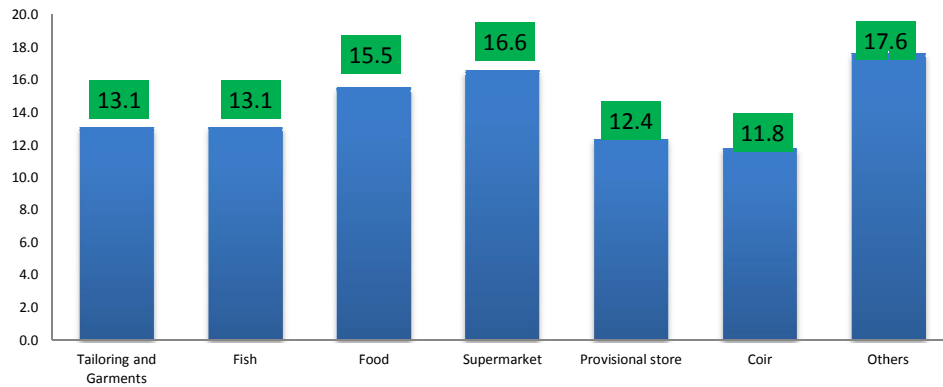


Fig. 7. Technology fund received

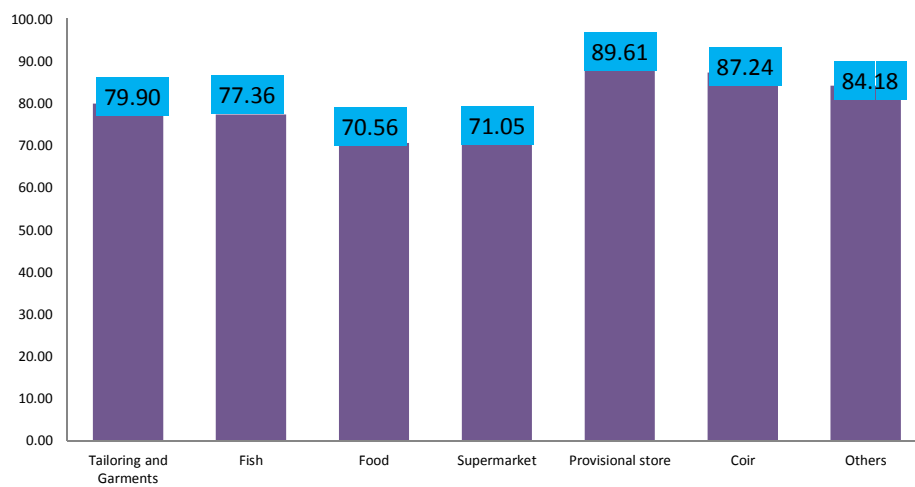


Fig. 8. Ratio of technology fund received and amount spend for repairing the equipment

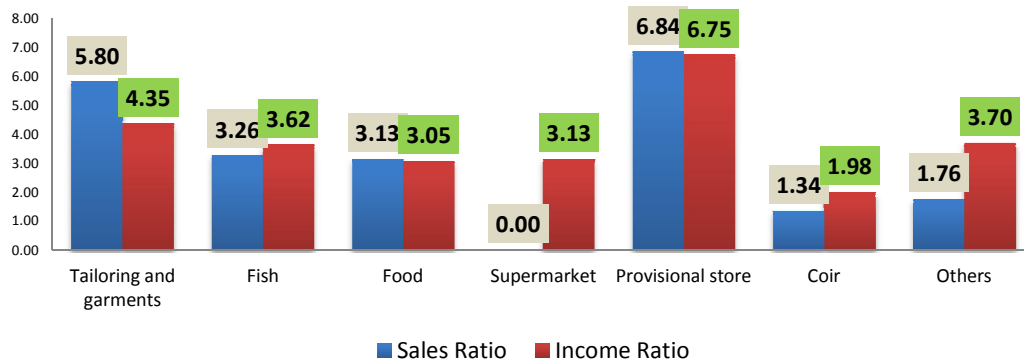


Fig. 9. Impact on technology fund

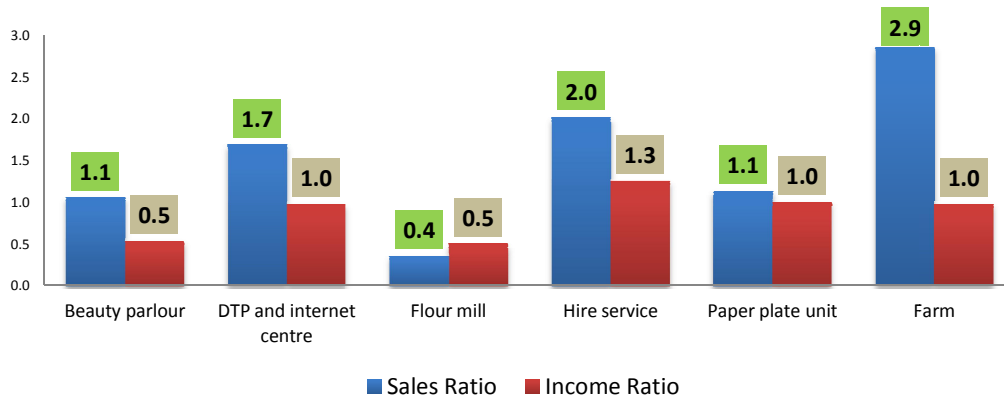


Fig. 10. Impact on technology fund- other sectors

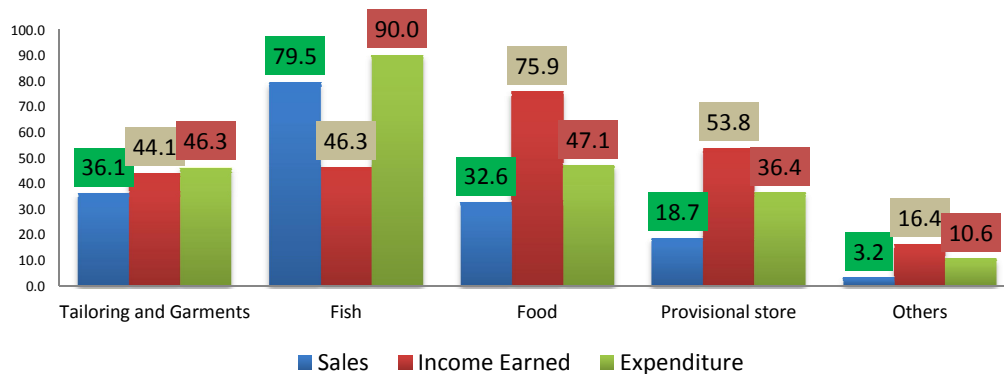


Fig. 11. The sales, income earned and expenditure of SAB groups

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