

**STUDIES ON EMPOWERMENT STATUS OF WOMEN
SELF HELP GROUP MEMBERS IN FISHERIES**

*Thesis submitted in part fulfilment of the requirements for the degree of
Master of Fisheries Science in Fisheries Extension to the
*Tamilnadu Veterinary and Animal Sciences University, Chennai.**

R. KARUMALAI KANNAN, B.F.Sc.

[ID. NO. MFT 03016 (FEX)]

**DEPARTMENT OF FISHERIES EXTENSION
FISHERIES COLLEGE AND RESEARCH INSTITUTE
TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY
THOOTHUKUDI – 628 008**

2005

CERTIFICATE

This is to certify that the thesis entitled “**STUDIES ON EMPOWERMENT STATUS OF WOMEN SELF HELP GROUP MEMBERS IN FISHERIES**” submitted in part fulfilment of the requirements for the award of the degree of **MASTER OF FISHERIES SCIENCE IN FISHERIES EXTENSION** to the Tamilnadu Veterinary and Animal Sciences University, Chennai is a record of bonafide research work carried out by **Mr. R. KARUMALAI KANNAN** under my supervision and guidance and that no part of this thesis has been submitted for the award of any other degree, diploma, fellowship or similar titles. However, as per our University's regulations, a portion of the thesis has been sent for publication in a peer reviewed journal and a copy of the manuscript is enclosed.

Place: Thoothukudi.

Date: 23.07.2005

(R. SANTHAKUMAR)
Chairman

Approved by

Chairman : **Dr. R. SANTHAKUMAR**

Members : **1. Dr. G. SANJEEVIRAJ**

2. Dr. M. RAJAKUMAR

EXTERNAL EXAMINER

Date:

ACKNOWLEDGEMENTS

I would like to express my deep sense of gratitude to my Chairman **Dr. R. Santhakumar**, Assistant Professor (Senior Scale), Department of Fisheries Extension for his great inspiration, unflinching, support, encouragements and surpassing guidance throughout my research work.

I express my sincere thanks to **Dr. G. Sanjeeviraj**, Professor and Head, Department of Aquaculture and member of the Advisory Committee for his meticulous guidance, advice and immense help during the study period.

I record my hearty thanks **Dr. M. Rajakumar**, Assistant Professor (Senior Scale), Department of Fisheries Resources and Economics and member of the Advisory Committee for his professional suggestions and timely help throughout the study.

It is indeed my great pleasure to express my wholehearted thanks to **Dr. R. Santhanam**, Dean, Fisheries College and Research Institute, Thoothukudi for his enthusiasm and continued encouragements for the successful completion of my research work.

I extend my sincere gratitude to **Dr. N.V. Sujathkumar**, Associate Professor and Head, **Dr. K. Veerabhadran**, Assistant Professor (Senior Scale), Department of Fisheries Extension for their whole hearted support and encouragements during the entire period of study.

My special thanks are also due to **Dr. Punna Rao**, ANGRAU, Hyderabad and **Dr. Kumaran**, **Dr. Deboral Vimala**, Central Institute of Brackishwater Aquaculture, Chennai for their invaluable help in sending reference materials related to this study.

I thank **Mr. M. Jeyaraj**, Fishery Assistant and **Mr. P. Moorthy** for their support during the course of the study.

I specially thank the **Library Staff** of this institute for their help in providing references.

R. KARUMALAI KANNAN

**DEDICATED TO
MY LOVABLE PARENTS
AND CUTE VISHNU, VICKY
AND PARKAVI**

CONTENTS

Chapter No.	Title	Page No.
1.	INTRODUCTION	1
2.	REVIEW OF LITERATURE	5
	2.1. Socio-personal characteristics of women members of SHGs.	5
	2.2. Empowerment status of members of SHGs.	17
	2.3. Problems of members of SHGs and measures suggested by them	18
3.	RESEARCH METHODOLOGY	20
	3.1. Selection of the study area	20
	3.2. Selection of blocks, fishing villages, SHGs, and respondents	22
	3.3. Selection of variables and their empirical measurements	25
	3.4. Design of interview schedule, pilot study and collection of data	36
	3.5. Statistical tools used	37
4.	RESULTS AND DISCUSSION	38
	4.1. Socio-personal characteristics of women members of SHGs.	38
	4.2. Empowerment status of members of SHGs.	53
	4.3. Problems of members of SHGs and measures suggested by them	56

Chapter No.	Title	Page No.
5.	SUMMARY AND CONCLUSION	59
	5.1. Socio-personal characteristics of women members of SHGs.	60
	5.2. Decision making power with regard to household activities	62
	5.3. Problems of members of SHGs and their suggestions	62
	5.4. Implications of the study	63
	5.5. Suggestions for future research	64
	REFERENCES	65
	APPENDICES	

LIST OF TABLES

Table No.	Title	Page No.
1.	Details of the sampling area	23
2.	Variables selected and their empirical measurements	26
3.	Age level of women SHG members	39
4.	Educational status of women SHG members	39
5.	Marital status of women SHG members	40
6.	Occupational status of the women SHG members	41
7.	Annual income of women SHG members	41
8.	Experience in SHGs	43
9.	Economic motivation of women SHG members	43
10.	Family type of women SHG members	44
11.	Family size of women SHG members	44
12.	Mass media exposure of women SHG members	45
13.	Participation in SHG activities of women SHG members	45
14.	Time spent in SHG activities of women SHG members	46
15.	Contact with development personnel of the women SHG members	46
16.	Savings of women SHG members	47
17.	Share in family income of women SHG members	47
18.	Change in personal financial position of women SHG members	48

Table No.	Title	Page No.
19.	Self confidence of women SHG members	48
20.	Frequency of travelling of women SHG members	50
21.	Knowledge on health and hygiene of women SHGs members	51
22.	Training attended by women SHG members	51
23.	Decision making power of women SHG members	53
24.	Correlation between the socio-personal characteristics of the women SHG members and their level of decision making power	55
25.	Problems perceived by the women SHG members	56
26.	Suggestions given by the women SHG members	57

LIST OF FIGURES

Figure No.	Title	Page No.
1.	Map showing the study areas in Thoothukudi district	24
2.	Sundrying of masala fish by SHG members	42
3.	Fish pickle unit of SHG	42
4.	Value added fishery products prepared by SHG members	42
5.	Preparation of fish pickle	42
6.	SHG women engaged in composite fish culture	42
7.	Crab fattening by SHG members	42
8.	Change in share in family income	49
9.	Self confidence of women SHG members	49
10.	Lobster fattening in cages by SHG members	52
11.	Meeting conducted by SHG members	52
12.	Demonstration by DRDA officials to SHG members	52
13.	SHG members attending training	52
14.	Knowledge on health and hygiene of women SHG members	54
15.	Decision making power of women SHG members	54
16.	Problems of women SHGs and their suggestions	58

ABSTRACT

Title : **STUDIES ON EMPOWERMENT STATUS
OF WOMEN SELF HELP GROUP MEMBERS
IN FISHERIES**

Name : **R. KARUMALAI KANNAN, B.F.Sc.**

Degree : **M.F.Sc. (FISHERIES EXTENSION)**

Chairman : **Dr. R. SANTHAKUMAR**

Department : **DEPARTMENT OF FISHERIES EXTENSION**

College : **FISHERIES COLLEGE AND RESEARCH INSTITUTE**

Year and University : **2005, TAMILNADU VETERINARY AND ANIMAL
SCIENCES UNIVERSITY, CHENNAI.**

Fisheries is an indispensable part in the life and livelihood of the people of coastal communities. Earlier, women of the fishing communities were confined to home mostly doing the household works. Most of the fisherwomen are poor due to lack of education and financial resources both of which are required to help them work their way out of poverty and for upward economic strengthening and social mobility. A vital factor towards strengthening of economic activities of the fisherwomen is through Self Help Group approach. Now, in general the status of women both within the household and outside has improved considerably through their participation in the SHGs.

The present study on empowerment status of women SHG members in fisheries was carried out in Thoothukudi district of Tamilnadu. The fishing villages

Punnakkayal, Vellapatti, Tharuvaikulam and Pazhayakayal were selected for the study based on the maximum number of fisherwomen population. Twelve SHGs were selected based on their active involvement in fisheries activities from the selected fishing villages. A total of 120 women SHG members were selected randomly for the study comprising of 10 women members from each SHGs. Data were collected through interview schedule and analysed using statistical tools.

Most of the women SHG members were of young age group (40.00 per cent), educated up to primary level (40.00 per cent) and married (87.50 per cent). A total of 33.33 per cent of women SHG members had value addition of fishes as their main occupation. Majority (64.17 per cent) of women had low annual income. Most of the women (50.00 per cent) SHG members had 3-4 years of experience, and equal percentage had more than 4 years of experience in SHG activities. Majority (86.67 per cent) of the women SHG members expressed their economic motivation to save money regularly. Most of the women SHG members (86.67 per cent) had nuclear family and the family size up to 5 members (81.67 per cent).

Most of members (47.50 mean per cent) read newspaper, listen to radio and watch TV regularly. Majority of the women SHG members (83.33 per cent) had medium level of participation in SHG activities and spent 3-9 hours per week in SHG activities (60.00 per cent). A total of 44.17 per cent of women SHG members had once in a week contact with development personnel, and had low savings (78.33 per cent). Most of the women SHG members (81.67 per cent) share in family income was increased and personal financial position also increased (80.83 per cent). Majority of the women SHG members (93.33 mean per cent) had more

confidence level after joining the SHGs and travelled mostly alone (78.61 mean per cent). The women SHG members had adequate knowledge on health and hygiene (86.52 mean per cent) and they had low training exposure (50.00 per cent).

Most of the women SHG members (55.83 per cent) had medium decision making power in household activities. Lack of marketing facilities (85.00 per cent) was the major problem as perceived by the most of the women SHG members and they suggested that the Government and Non-Government Organizations should help for marketing of their products (80.00 per cent).

CHAPTER 1

INTRODUCTION

Indian fisheries sector is not only a source of valuable food and employment generation, but also contributes significantly to the national income. The fisheries sector has recorded faster growth as compared to the agricultural sector in all the decades. More than six million fishermen and fish farmers are totally dependent on fisheries, for their livelihood in India (Anjani Kumar *et al.*, 2003).

India is endowed with 2.02 million sq. km of Exclusive Economic Zone (EEZ) along with a coastline of 8129 km and 0.5 million sq. km continental shelf (Pillai *et al.*, 2003). India is the third largest producer of fish in the world after China and Japan and second in inland fish production after China (Selvaraj, 2005). Tamilnadu is one of the important coastal states of India. The total coastline of Tamilnadu is estimated at 1076 km which shared 13 per cent of country's coastline. The EEZ of Tamilnadu is computed at 1.9 lakh sq. km with a continental shelf area of 41,412 sq. km. There are 591 fishing villages in the coastal zone of Tamilnadu with 3.6 lakh families consisting 18 lakh population in which 9.5 lakh are involved in fishing activities. There are 362 fisherwomen co-operative societies with a membership of 99,683 women in Tamilnadu (Director of Fisheries, 2005). A total number of 1,18,413 Self Help Groups was formed in Tamilnadu with 23,26,973 members and the members saving amount raised to Rs. 332.22 crores (Sheik Mohamad, 2004).

According to a United Nations report, women perform 2/3rd of the world's work (Ashaletha *et al.*, 2002). Women in India constitute around 50 per cent of the total population and comprise one third of the labour force. It is therefore important that when considering the economic development of this segment of the population due attention is given to their socio-economic empowerment. In India, out of a population of 5.4 million active fisherfolk, 3.8 million are fishermen and 1.6 million are fisherwomen. These fisherwomen are engaged in several fisheries avocations. The major activities in which women's contribution could be noticed throughout the country are fish processing industry, marketing, net making, fish culture, shrimp culture, crab fattening, lobster fattening and value added fishery products. However, their participation and contribution are increasing in the areas of aquaculture research, development and education. The involvement of women in these activities generates supplement income to support their families. Even though women are as efficient as man, earnings are not always the same. Different payments to males and females are prevalent (Samantray and Pathak, 1998).

The Self Help Groups are the offshoots of the alternative development. It is a forum for the collective voice of the poor against common oppression and exploitation to understand the individual and common problems and improve their skills and capacities to manage resources. They are based on the concept of development which strongly believes that development is lived by the people where they are, live, learn, work, love, play and die. It is a group or association of individuals with common economic needs who undertake a systematic economic activity, participate directly in decision making and sharing benefits on an equitable basis.

SHGs have emerged mainly to marginalise the money lenders and to enhance the income earning capacity of the poor. But they have emerged stronger than expected and contributed a lot in asserting human rights and human development. Their major contributions are, they have taught skills they have turned individual problems into collective one, they offer new possibilities for solution and they are essential vehicle for social, political and psychological empowerment. Social empowerment provides access to information, knowledge and skills, and paves way for participation in social organizations. Political empowerment enables the individual to take part in the decision making process that affects his / her future.

SHGs have come to stay among the poor. They have become part and parcel of the rural community. They have been scaled up with the active facilitation by Government and Non-Government Organizations (Narayanasamy *et al.*, 2003). Women empowerment concept was introduced at the International Women's Conference in 1985 at Nairobi (Ramesh and Priya Lakshmi, 2004). Empowerment is a process of awareness and capacity building leading to greater participation, to greater decision making power and control and to transformative action (Sudharani *et al.*, 2000). The participation of women in SHG makes a significant part of their empowerment both in social and economic aspects. Most of the women are able to increase their income level, financial decision making power and also contribute to the development of their family (Ponnarasu, 2004).

At present the SHGs certainly play an important role in providing opportunities for women to gain knowledge, confidence, awareness and skill to find better employment and economic support. These SHGs could generate income and

employment in building their empowerment. Present study was formulated with the following objectives.

1. To study the socio-personal characteristics of women members of Self Help Groups.
2. To analyse the various components of empowerment status of members of Self Help Groups.
3. To identify the problems of members of Self Help Groups and measures suggested by them.

Scope of the study

The study would reflect the characteristics of women and their level of empowerment status in household or society through fisheries related Self Help Groups. The findings would help to understand the extent of participation of women in various fisheries development activities and the relationship of their characteristics with their participation. Thus, this investigation would help getting an idea about the constraints and prospects of women Self Help Group members in fisheries. The relationship of the socio-personal characteristics of women with their decision making would also be explored.

Limitations of the study

The constraints in respect of resources and time which resulted in limiting the scope of the study. The study was carried out in four fishing villages among 12 Self Help Groups of Thoothukudi district viz. Punnakkayal, Vellapatti, Tharuvaikulam and Pazhayakayal with one hundred and twenty women respondents and hence the findings could be generalized to a limited extent only.

CHAPTER 2

REVIEW OF LITERATURE

This study attempts to find the empowerment status of women Self Help Group members in fisheries. The objectives of the present study are to find out various socio-personal characteristics, to analyse empowerment status of women and to identify the problems faced by the members of women Self Help Groups and measures suggested by them. The studies on empowerment status of women Self Help Groups in fisheries are very much limited. However, the review of related studies of women Self Help Group members in the field of agriculture are also included. The literatures collected are presented in the following subheadings.

- 2.1 Socio-personal characteristics of women members of SHGs.
- 2.2 Empowerment status of members of SHGs.
- 2.3 Problems of members of SHGs and measures suggested by them.

2.1. Socio-personal characteristics of women members of SHGs

2.1.1. Age

Sujathkumar (2000) indicated that the majority of fisherwomen belonged to young age groups (53.31 per cent) followed by middle (28.13 per cent) and old (21.56 per cent) age.

MYRADA (2002) revealed that most of the Self Help Group members were found in young age group between 26 and 35 years. Narayana Kumar *et al.* (2003) reported that 17.11 per cent of fisherwomen represented the age groups of 19–35 years.

Ranjitha (2003) revealed that the majority of the women belonged to middle aged groups (35 – 50 years old). Saroj Wadiwala (2004) reported that 70 per cent of the fisherwomen belonged to the age group of 20 – 45 years in the study.

Surat Singh (2004) indicated that about 63 per cent of the women were found in the young age group of 21 – 30 years. Twenty three per cent of the women represented middle age groups of 31 – 40 years and 14 per cent represented the age of 51 years and above.

2.1.2. Educational status

Sujathkumar (2000) revealed that majority of fisherwomen were found illiterate (30.69 per cent) and functionally literate (30.31 per cent). The percentage of the fisherwomen who had primary level of education was only 15.93 per cent.

Veeraputhiran (2000) reported that the fisherwomen (56.66 per cent) had education up to primary school level followed by middle school (43.66 per cent) education.

Sarah Kamala (2004) stated that the majority (92.78 per cent) of the women were totally illiterate in which 22.78 per cent of these have only functional literacy. While 7.22 per cent of women who were literate.

Saroj Wadiwala (2004) reported that 47 per cent of women have studied upto primary level, 26 per cent of fisherwomen up to secondary level and 27 per cent were found as illiterate. Surat Singh (2004) revealed that 21 per cent of fisherwomen had primary level of education and 17 per cent had education up to high school level.

2.1.3. Marital status

Veeraputhiran (2000) reported that 60.55 per cent of the fisherwomen respondents were married followed by 35 per cent of unmarried women and only 8 per cent were found as widow.

Kumaran (2002) found that 98.9 per cent of women respondents were married and only 1.1 per cent of women were widow in the study. Arpita Sharma (2003) observed that most of women were married in the study.

Sarah Kamala (2004) indicated that 97.78 per cent of the women were found as married and in which 24.44 per cent of women were found as widow in the study. Saroj Wadiwala (2004) stated that 84 per cent of women were found as married and 16 per cent of women were unmarried in the study on empowerment of rural women.

2.1.4. Occupational status

Sadangi *et al.* (1999) indicated that 60 per cent of fisherwomen were primarily involved in fishing and fish trading and 40 per cent of fisherwomen were involved in aquaculture in the study.

Veeraputhiran (2000) indicated that 76.67 per cent women respondents had fisheries alone as their main occupation, 15 per cent women had occupation in fisheries and as labour and 8.33 per cent women respondents had occupation in fisheries and business.

Anwara Begum and Marcel D' Costa (2002) indicated that majority of women involved in fish seed collection, marketing, fish processing, net mending and repairing and fish feed preparation in the study.

Ashaletha *et al.* (2002) reported that more than 90 per cent of the fisherwomen involved in prawn peeling and 70 per cent in the processing of other fishery products. Jaleela (2002) revealed that 45.94 per cent of the fisherwomen were found working in the peeling sector, 23.58 per cent were engaged in small scale fish trading, 16.36 per cent were found as fish processing workers (salting and drying), 7.58 per cent were working in processing factories and the remaining 6.54 per cent were working in the beach. Deboral Vimala *et al.* (2004) revealed that a majority of women involved in pond preparation and feed preparation in fish culture.

2.1.5. Annual income

Bhople and Alka Patki (1998) reported that 68.66 per cent of the women respondents had annual income below Rs. 10,000 in the study. Gayatridevi Patil and Uma Gaurmath (2002) revealed that 40 per cent of the women beneficiaries were in the low income groups followed by high (35 per cent) and medium income group (25 per cent) in the study.

Narayana Kumar *et al.* (2003) indicated that 39.76 per cent of the women respondents were earning an income of less than Rs. 24,000/- per annum followed by 26.44 per cent of the women respondents earned an annual income between Rs. 24,000 and Rs. 36,000 in the study. Sarah Kamala (2004) revealed that 50.6 per cent of women members were earning more than Rs. 10,000 per annum, while 9 per cent of the women have an annual income of more than Rs. 20,000 per annum in the study.

2.1.6. Experience in SHGs

Sujathkumar (2000) revealed that 57.50 per cent of fisherwomen had 10–15 years of experience in small scale fisheries. Veeraputhiran (2000) reported that 55 per cent of the fisherwomen had low level of experience, 25 per cent of the fisherwomen had medium level of experience while 20 per cent of fisherwomen had rich experience in fisheries

Kumaran *et al.* (2003) reported that most of the farmers had more than five years of farming experience. Deboral Vimala *et al.* (2004) reported that most of the women had direct or indirect experience in brackish water aquaculture from 1 - 16 years in the study.

2.1.7. Economic motivation

Sujathkumar (2000) revealed that 59.06 per cent of the women had medium level of economic motivation followed by high (27.19 per cent) and low (13.75 per cent) levels of economic motivation.

Veeraputhiran (2000) indicated that 43.33 per cent of the fisherwomen had medium level of economic motivation while 28.89 and 27.78 per cent of fisherwomen had low and high levels of motivation respectively. Arul Oli (2004) stated that 70 per cent of the respondents had medium level of economic motivation followed by high (20 per cent) and low (10 per cent) level.

Kala (2004) reported that the Self Help Groups were not only engaged in savings and also internal lending activities in their groups. Sarah Kamala (2004) revealed that 46.11 per cent of the women had high economic orientation and interestingly equal percentage had low economic orientation, while 7.78 per cent of the women had medium economic orientation.

2.1.8. Family type

Bhople and Alka Patki (1998) noted that higher proportions of women labourers were belonging to nuclear type of families. Gayatridevi Patil and Uma Gaurmath (2002) revealed that 70 per cent of the women had nuclear family and only 30 per cent had joint family.

Mamatha and Hiremath (2002) indicated that more than 65 per cent of families were belonging to nuclear family system. Arpita Sharma (2003) revealed that most of the women had nuclear families in the study.

Ranjitha (2003) reported that most of the women had nuclear families in the study. Sarah Kamala (2004) reported that the majority of the women beneficiaries (62.22 per cent) lived as nuclear families where as 37.78 per cent lived in joint family system. Surat Singh (2004) revealed that 72 per cent of women were from nuclear families.

2.1.9. Family size

Bhople and Alka Patki (1998) indicated that 67.33 per cent of the women had 4 - 6 members in their family. Gayatrivedi Patil and Uma Gaurmath (2002) showed that 54.17 per cent of the women beneficiaries had less than five members in their family.

Mamatha and Hiremath (2002) revealed that 75 per cent of families were having less than 5 members and only 25 per cent families were having more than 5 members.

Suman Kalyani and Radha Krishna (2002) reported that 50 per cent of the average size of family was small (3 - 5 members) in the study. Arpita Sharma (2003) reported that most of the women had six family members.

Narayana Kumar *et al.* (2003) stated that 54.42 per cent of the sample households were found with a family size of 2 - 4. The medium family size of 5 - 6 members accounted for 31.06 per cent of the households.

2.1.10. Mass media exposure

Manga Sri (1999) observed that 67 per cent of women had greater media exposure. Veeraputhiran (2000) reported that more than 60 per cent of fisherwomen had medium level of mass media exposure followed by high (28.33 per cent) and low (11.67 per cent) levels of exposure.

Balasubramani (2001) indicated that more than 76 per cent of the women respondents watched TV either frequently or sometimes and only 25 per cent of the women respondents watched TV rarely or never.

Iyyampillai and Kulandai Theresa (2001) revealed that the majority of the women did not read news paper regularly. Gayatridevi Patil and Uma Gaurmath (2002) revealed that majority of the women beneficiaries (43 per cent) had low level of mass media exposure followed by medium and high level of mass media exposure in 34 per cent and 23 per cent respectively.

2.1.11. Participation in SHG activities

Veeraputhiran (2000) reported that more than half of the respondents (51.11 per cent) had high level of social participation followed by medium (31.67 per cent) and low (17.22 per cent) levels of participation for the study. Balasubramani (2001) revealed that more than 63 per cent of women participated in village panchayat activities either frequently or sometimes.

Gupta and Shrivastava (2001) reported that the SHGs hold meetings weekly or fortnightly and most of the members attended the SHG meetings regularly.

Kumaran (2002) reported that monthly meetings were regularly convened by the NGO, Bank and DRDA for SHG and participation rate of members in these meetings was very high.

Punithavathy Pandian and Eswaran (2002) revealed that most of the women members of the SHG's were persuaded to attend the Self Help Group meetings regularly. Sarah Kamala (2004) reported that 47.22 per cent of the women had high social participation and 31.67 per cent had medium social participation, while only 21.11 per cent of the women had low political participation in the study.

2.1.12. Time spent in SHG activities

Madheswaran and Amita Dharmadhikary (2001) observed that the SHG meetings were held once in month on a fixed date where women participation rate was very high. MYRADA (2002) revealed that most women members (78 per cent) both in new and old SHG groups spent 4-9 hours in SHG meetings in a month.

2.1.13. Contact with development personnel

Veeraputhiran (2000) indicated that 66.97 per cent of the women respondents were found to have low level of contact with extension agency followed by medium (23.59 per cent) and high (9.44 per cent) levels of contact. Gayatridevi Patil and Uma Gaurmath (2002) revealed that 52.51 per cent of the women beneficiaries had medium level of extension contact followed by high (43.33 per cent) and low (4.16 per cent) extension contacts.

Velusamy and Netaji Seetharaman (2002) reported that 82.22 per cent of women had medium level of development personnel contact followed by high (16.67 per cent) and low (1.11 per cent) development personnel contact. Kumaran *et al.* (2003) indicated that more than half of the farmers had regular contact with extension personnel of the State Department of Fisheries and other institutional agencies.

Sarah Kamala (2004) reported that majority (72.22 per cent) of the women respondents had medium extension contact and 18.89 per cent of the women had low extension contact while 8.89 per cent had high extension contact.

2.1.14. Savings

Mammo (1987) reported that 49.18 per cent of the women respondents saved at home and 39.34 per cent of the women respondents saved at banks. Binodini Sethi and Atibudhi (2001) revealed that 70 per cent of the women were found to have saving bank account in different banks. The per capita savings were found to be very low as Rs. 177 in the study on microfinance.

Debnarayan Sarker (2001) indicated that 30 per cent of the households who reported savings range of Rs. 501 to Rs. 2000 and more than 70 per cent of households received credit more than their saving to the extent of Rs. 3000 to Rs. 5000 in the study.

Iyyampillai and Kulandia Theresa (2001) recorded that majority of women beneficiaries had saving account in bank.

Rekha R.Gaonkar (2001) reported that saving habit of most of the Self Help Group members was increased after joining in Self Help Group. Saundarjya Borbora and Ratul Mahanta (2001) reported that only 15 per cent of the women members had account in the post office or bank before joining in SHG. Most of women members (57.8 per cent) saved Rs.200 to Rs.500 and 42.2 per cent saved Rs. 501 to Rs.1000 per month.

Kumaran (2002) revealed that 96.7 per cent of the women had high saving habit after joining the Self Help Group. Monthly saving among the fisherwomen members varied from Rs. 20 to 50. Velusamy and Netaji Seetharaman (2002) reported that 1.11 per cent of women beneficiaries saved Rs 15000 per annum after participation in poverty alleviation programmes.

2.1.15. Change in share in family income

Rekha R. Gaonkar (2001) indicated that SHG member's family income was increased after joining Self Help Group. MYRADA (2002) recorded that 66.3 per cent of women members share in the family income was increased.

Punithavathy Pandian and Eswaran (2002) reported that most of the women respondents opined that the micro credit resulted in significant increase in the women's own income. Senthil Vadivoo

and Sekar (2004) revealed that the most of the SHG members gained additional income and employment through Self Help Groups.

2.1.16. Change in personal financial position

Manimekalai and Rajeswari (2001) reported that the income of the SHG women almost doubled after joining the SHG. Sharma (2001) noted that income of the SHG women members was increased after joining the SHG. MYRADA (2002) indicated that 89 per cent of women financial status has been changed in the old Self Help Groups at against only 71 per cent in the younger Self Help Groups.

2.1.17. Self confidence

Rekha R. Gaonkar (2001) reported that SHG member gained more self confidence after joining the SHG. Suguna (2001) revealed that most of the women members reported that they increased their self confidence level after joining the SHG.

Dwarakanath (2002) reported that savings enhanced self confidence of the individual as a sign of group encouragements. MYRADA (2002) reported that women members in the older groups had positive influence on confidence level in dealing with peoples and institutions. It also indicated that most of the women members of older groups were expressed a higher level of confidence and sense of ease.

Ranjitha (2003) indicated that the self confidence level of Self Help Group members was high in the study. Ganesan (2005) indicated that Self Help Groups showed so much self confidence in their ability to start and run micro enterprises.

2.1.18. Frequency of travelling

MYRADA (2002) indicated that more women members of the old SHG travelled mostly alone. Velusamy and Nataji Seetharaman (2002) studied the distance travelled by the women in connection with their job. It was found to be short distance travelled by 100 per cent of women both before and after their participation in poverty alleviation programmes.

2.1.19. Knowledge on health and hygiene

Neena Gulabani (1987) revealed that 94 per cent of the women respondents had high knowledge of home management practices. Manga Sri (1999) reported that majority of the women indicated medium improvement (61.66 per cent) in health and nutritional status.

Iyyampillai and Kulandai Theresa (2001) indicated that majority of the women (60 per cent) had high knowledge on health and hygiene conditions, remaining 40 per cent of the women were not having any idea about their height and weight. Suguna (2001) revealed that majority of women increased their knowledge and awareness level on health nutrition after joining the SHG. MYRADA (2002) reported that older SHG and new SHG women respondents

represented substantially larger percentage in their increased awareness on health.

2.1.20. Training attended

Ahilan (1999) observed that 271 women expressed their need for training in fish processing, 103 women in net mending and 32 women in coastal aquaculture. Manga Sri (1999) reported that majority of the women (51.67 per cent) received low training programmes.

Balasubramani (2001) revealed that participation of women was increased in activities in which they were trained. Kumaran *et al.* (2003) reported that one-fifth (16.7 per cent) of the farmers attended in training on shrimp farming conducted by State Institute of Fisheries Technology and MPEDA. Sarah Kamala (2004) revealed that 75 per cent of the women had medium to high training exposure and 25 per cent of the women had low training exposure.

2.2. Empowerment status of members of SHGs

Manga Sri (1999) analysed the empowerment of rural women of development of women and children in rural areas programme (DWCRA) in Andhra Pradesh. She reported that majority of rural women were found with medium process psychological empowerment (48.33 per cent) product empowerment (46.66 per cent) and also overall empowerment (50 per cent).

Bant Singh and Lavleen Kaur (2000) revealed that most of the women were taken decisions relating to lending of household savings, purchase of household goods, schooling of children and healthcare. Sujathkumar (2000) revealed that 37.81 per cent of the women respondents made individual decisions.

Veeraputhiran (2000) revealed that 26.67 per cent of fisherwomen who made self decision for fisheries related activities while 73.33 per cent of fisherwomen took joint decisions in the case of investment, marketing, health care etc. Cherian and Aditivats (2001) revealed that more than 90 per cent took joint decision in most of the home and family related activities.

Vijayapriya (2001) revealed that the adolescents preferred joint participation in the immovable properties like purchase of house and land, more number of males preferred independent decisions by themselves with regard to the movable properties especially, the purchase of consumer durables.

Indradeep Chakraborty and Devonita Pal (2004) reported that the decisions related to household tasks made by male and female members together. The highest percentage of responses (100 per cent) were taken joint decision in the case of health, recreation, cleanliness, birth ceremonies and religious ceremonies followed by marriages (94.74 per cent) and education of children (89.47 per cent) in the study.

2.3. Problems of members of SHGs and measures suggested by them

Sadangi *et al.* (1999) reported many constraints faced by fisherwomen in fisheries such as inadequate availability of institutional finance, non-availability of sufficient fish for marketing, inadequate assistance through the societies and inadequate governmental support. They also suggested that their positive mind set for institutional credit coupled with hard physical work in the enterprise and the best way of utilisation of credit.

Sujathkumar (2000) reported many constraints faced by the fisherwomen in small scale fisheries. The main constraints were problems of middle man (82.50 per cent) procurement of fish and lack of transportation facilities (80-94 per cent), lack of good marketing facilities (72.81 per cent) inadequate credit facilities and saving (62.81 per cent) and high cost of raw materials (48.15 per cent).

Awasthi *et al.* (2001) stated that SHG members suffered from lack of motivation, backward and forward linkages, inadequacy of infrastructure, insufficient loan, and inadequate provision for marketing and availability of inputs, lack of systematic monitoring and follow up of the activities etc. Thus there is need to evaluate the SHGs annually to assess the progress of different income and employment generating schemes under SHGs.

Manimekalai and Rajeswari (2001) reported that major problems faced by the SHGs women were lack of finance as a serious

problem in addition to non-availability of raw material, lack of infrastructure facilities including marketing, lack of support from family members in running the enterprise etc. It has developed a sense of leadership organisational skill, management of various activities of a business, right from acquiring finance, identifying raw material, market and suitable diversification and modernisation.

Mishra *et al.* (2001) reported that the major problems faced by the members of SHGs were lack of training, credit and market facilities, entrepreneurship, social evils, and high rate of interest. They suggested that the banks, regional rural banks, primary agricultural co-operative credit societies and other financing institutions as well as the state government should come forward to help the rural poor through the SHGs and provide liberalised credit facilities at chapter rate of interest.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter has been enriched with the detailed description of the methods and procedures employed in conducting the research in an organised manner. The various components of this chapter are grouped under the following sub headings.

3.1 Selection of the study area.

3.2 Selection of block, fishing villages, SHGs and respondents.

3.3 Selection of variables and their empirical measurements.

3.4 Design of interview schedule, pilot study and collection of data.

3.5 Statistical tools used.

3.1. Selection of the study area

3.1.1. Selection of the district

Among the four southern coastal districts of Tamilnadu, only Thoothukudi coastal district was selected for this study due to the following reasons.

1. The District Rural Development Agency (DRDA) Thoothukudi, created many infrastructure facilities with a objective to provide a constant source of income to the SHG women through crab fattening, solar fish drier, integrated fish farming and lobster fattening.

2. Women SHGs are also successfully managing the Meenavar Angadi and lobster fattening.
3. Majority of the women SHGs established with the support of District Rural Development Agency (DRDA) getting a reasonable income through fresh water prawn culture, fattening of crabs, solar drying of fish, integrated fish culture and value addition of fish.

3.1.2. Description of the study area

The majority of women SHG members are involved in various fisheries activities in the study area. So the empowerment status of women SHG members with reference to decision making power could be studied. The brief description of the study area is furnished below.

Thoothukudi is the costal district of Tamilnadu has coastal length of 163 km accounting 15 per cent of the total coastal length. Thoothukudi is the 20th district in Tamilnadu and it covers an area of 4,635 sq.km accounting for 4 per cent of the total geographical area of the state. This district is surrounded by Virudhunagar and Ramanathapuram district on the north, Kanyakumari district on the south, Gulf of Mannar on the east and Tirunelveli district on the west.

This district has a total of 21 fishing villages. The total fishermen population of this district was 69, 558 and among them, the male population was 35,828 and the female population was

33,730. The numbers of the literates of this district were 50,122 out of the total literates (3,99,067) of the costal districts in Tamilnadu (Department of Fisheries, 2002). There are two major and a twenty minor fish landing centres in this district.

In this district a total of 6669 women Self Help Groups was formed during the past seven years. These women SHGs consisting of 1,16,630 members involved in various activities. The training programmes for SHG women on fisheries technologies such as preparation of value added fishery products, integrated fish farming, ornamental fish culture, crab fattening and lobster fattening were jointly organised by Fisheries College and Research Institute, Thoothukudi and Tamilnadu Women Development Corporation. A total of 1100 women were trained in the above fish trades. There are about 30 women SHGs with 450 members were actively involved in fisheries activities with the economic assistance of District Rural Development Agency (DRDA), Thoothukudi.

The success stories of women SHG on integrated fish farming, lobster fattening, solar fish drier, value addition of marine foods and crab fattening were collected and published by DRDA, Thoothukudi. Based on the above background the studies on empowerment status of women Self Help Group members in fisheries were taken.

3.2. Selection of blocks, fishing villages, Self Help Groups and respondents

Among 12 blocks of this district, three blocks were randomly selected for the study. From the selected blocks, fishing villages were chosen based on the maximum number of fisherwomen population. Three women Self Help Groups were selected, from each of the selected fishing villages based on their active involvement in fisheries activities. Thus a total of 12 women SHGs were selected for this study. A total of 10 women members were randomly selected from each of the selected SHGs. Thus a total of 120 SHG women members were interviewed for this study. All the selected SHGs were promoted by Non-Governmental Organisations (NGOs). The details of sampling area are furnished in Table 1 and Figure 1.

Table 1. Details of the sampling area

Sl. No	Name of the District	Name of the Block	Name of the Fishing Village	No. of SHG	Name of the SHG	Year of start of SHG	Total members of SHG	Total No. of Respondents
1.	Thoothukudi	Alwarthirunagari	Punnakkayal	3	Annammal	1997	16	10
					Jebamalaimatha	2002	13	10
					Panimayamatha	1997	13	10
		Ottapidaram	Vellapatti	3	Annaitheresa	2001	10	10
					Atisayam	2001	20	10
					Sarojini	1999	20	10
			Tharuvaikulam	3	Mullai	1998	20	10
					Vairam	2001	12	10
					Malligai	2001	20	10
		Srivaikundam	Pazhayakayal	3	Nehru Kamothaya	2002	19	10
					Indhira Gandhi	2002	19	10
					Annai Theresa	1997	20	10

Map 1

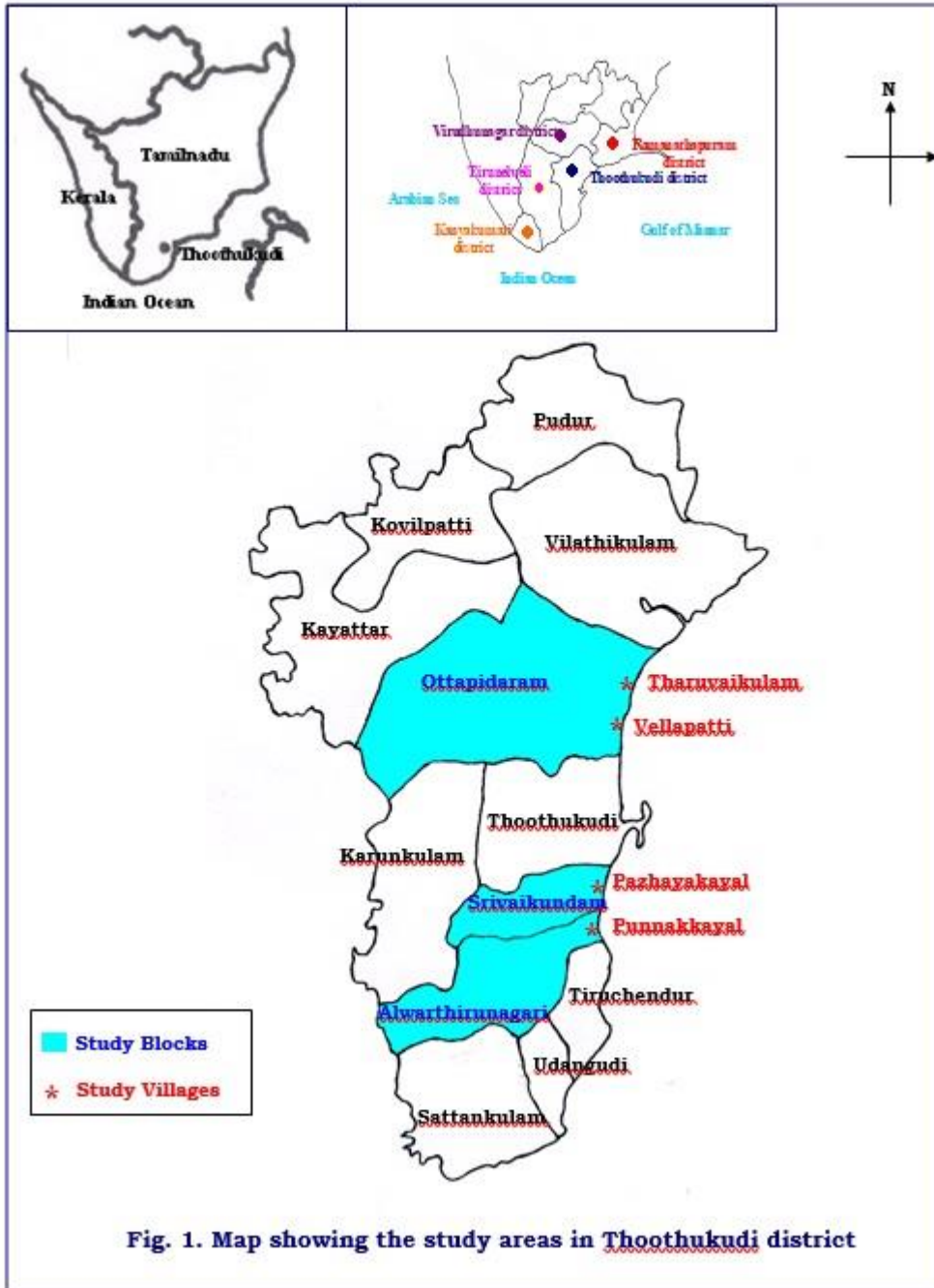


Fig. 1. Map showing the study areas

3.3. Selection of variables and their empirical measurements

Several independent variables were identified based on the literature and in consultation with the fisheries extension experts, fisheries staff of Fisheries College and Research Institute, Thoothukudi and social scientists of other institutions. To select the suitable independent variables for the study, the prepared lists of independent variables were sent to 60 judges comprising of scientists, researchers and academicians working in various fisheries organisations / institutions with the request to select suitable independent variables for the study in a five point continuum viz. most relevant, more relevant, relevant, less relevant and least relevant with the score of 5,4,3,2 and 1 respectively (Appendix - I, Annexure -1 and 2). Out of 60 judges addressed, 32 judges responded and sent their scorings. The score obtained for each item on the five point continuum was added to get the total score of each item. The mean and standard deviation were worked out for all the items. The selected 20 variables were more than the mean plus one standard deviation and included in the interview schedule. Keeping the objective in view, decisions making at household level was considered as basic component of empowerment for this study. Each independent variable was individually measured to know its influence on the decision making with regard to household activities. The details of the variables selected for the study are given in the Table 2.

Table 2. Variables selected and their empirical measurements

Sl . No	Variables	Variables No.	Empirical Measurement
I	Dependent Variable		
1.	Decision Making	Y1	Scale developed by Manga Sri (1999) and Indradeep Chakraborty and Devonita Pal (2004)
II	Independent Variables		
1.	Age	X1	Scale developed by Sujathkumar (2000)
2.	Educational status	X2	Scale developed by Sarah Kamala (2004)
3.	Marital status	X3	Scale developed by Veeraputhiran (2000)
4.	Occupational status	X4	Scale developed for the study
5.	Annual income	X5	Scale developed by Veeraputhiran (2000)
6.	Experience in SHGs	X6	Scale developed for the study
7.	Economic motivation	X7	Scale developed for the study
8.	Family type	X8	Scale developed by Sarah Kamala (2004)
9.	Family size	X9	Scale developed by Gayatridevi Patil and Uma Gaurmath (2002)
10.	Mass media exposure	X10	Scale developed by Veeraputhiran (2000)
11.	Participation in SHG activities	X11	Scale developed by MYRADA (2002)
12.	Time spent in SHG activities	X12	Scale developed by MYRADA (2002)
13.	Contact with development personnel	X13	Scale developed by Sujathkumar (2002)
14.	Savings	X 14	Scale developed by Manga Sri (1999)
15.	Change in share in family income	X15	Scale developed by MYRADA (2002)

Sl . No	Variables	Variables No.	Empirical Measurement
16.	Change in personal financial position	X16	Scale developed by MY RADA (2002)
17.	Self confidence	X17	Scale developed by MYRADA (2002)
18.	Frequency of Travelling	X18	Scale developed by MYRADA (2002)
19.	Knowledge on health and hygiene	X19	Scale developed by MYRADA (2002)
20.	Training attended	X20	Scale developed by Sarah Kamala (2004)

3.3.1. Measurement of dependent variable

The operational definition of dependent variable selected for the study and their measurement procedure followed are given below.

3.3.1.1. Decision making

I. Decision making with regard to household activities

Decision making power of women was operationally defined as their power to take decisions / choices affecting their lives, which influences their well being or position in the family / society. Decision making power was viewed as the nature of the role they play while taking decisions in terms of passive, active, or joint / dominant role.

Passive

The women do not play any role while taking the decisions and accepts whatever decision husband or father or head of the household takes.

Active

The women get involved or participate and express her ideas or views but is not capable of convincing others the advantages or disadvantages of the decision taken.

Dominant

Women reject the unfavourable decision taken by others and can convince her husband / other head of the household to a decision which is of interest or advantages to her.

Selection of decision areas

There are 12 decision areas which were studied by Indradeep Chakraborty and Devonita Pal (2004) and Manga Sri (1999) were considered as most relevant and critical for empowerment of women were selected for this study.

Administration of the instrument and scoring procedure

Women were asked to specify the type of role they play while taking decisions regarding the selected 12 decision areas. Based on the nature of participation or the nature of role women play while taking the decisions, they were scored on a three point continuum of “Passive”, “Active”, “Dominant” role with the weightages of 1, 2 and 3 respectively. So the maximum and minimum possible score for each individual ranged from 12-36 for the 12 selected items.

Categorization of women SHG members according to their decision making power

Based on mean and standard deviation, the women SHG members were classified into the following three categories (Manga Sri, 1998).

	<i>Category</i>
Low	- Below (Mean – SD)
Medium	- Between (Mean ± SD)
High	- Above (Mean + SD)

3.3.2. Measurement of independent variables

3.3.2.1. Age

The age of the fisherwomen was operationalised as the number of completed years of age at the time of enquiry and the chronological age was taken as measures. The scale developed by Sujathkumar (2000) was used to measure the age of the respondents with suitable modification for this present study. The respondents were classified into categories as given below.

Category	Years
Young	Up to 35
Middle	36 to 45
Old	Above 45

3.3.2.2. Educational status

It refers to formal schooling of respondents measured in years of schooling completed by respondents for the present study. The variable score given by Sarah Kamala (2004) has been used with suitable modification. The categories of educational status with assigned scores were shown as below.

Category	Score
Illiterate	1
Functionally literate	2
Primary school	3

Middle school	4
High school	5
Secondary	6
Collegiate	7

3.3.2.3. Marital status

The marital status of fisherwomen was classified as married, widowed, divorced, destitute and unmarried. The scoring procedure developed by Veeraputhiran (2000) was followed in this study. The scores were given as **below**.

Category	Score
Married	5
Widowed	4
Divorced	3
Destitute	2
Unmarried	1

3.3.2.4. Occupational status

Occupational status was operationalised as the extent to which a respondent considered fishing as their major source of income. One score was given for each occupational activities. The measurement procedure adopted is as follows.

Activities	Score
Fish sorting and grading	1
Fish curing and drying	1
Net making	1
Net mending	1
Value addition of fishes	1
Ornamental fish culture	1
Composite fish culture	1

Net cleaning	1
Crab fattening	1
Lobster fattening	1
Fish retailing	1
Others	1

3.3.2.5. Annual income

Annual income was operationalised as the total earnings by the respondent in a year through fisheries and other sources. The scoring procedure followed by Veeraputhiran (2000) was used in this study.

Category	Score
Rs. 5000 and below	1
Rs. 5001 to 15000	2
Rs. 15001 and above	3

3.3.2.6. Experience in SHGs

It was operationalised as the number of years occupied in the SHGs by the respondent as the main source of her livelihood. The actual number of year of their experience in the field was considered and scores were assigned as below.

Category (in Yrs.)	Score
Upto 2	1
3 – 4	2
Above 4	3

3.3.2.7. Economic motivation

It refers to the occupational success in terms of profit maximization and relative value of an individual place on economic ends. One score was given for each reason as furnished below.

Reason	Score
To save money regularly	1
To do internal lending	1
To support family income	1
To meet members regularly	1

3.3.2.8. Family type

Based on information obtained from the respondents on the type of family, the respondents were grouped into joint family and nuclear family and score of 1 and 2 were given respectively. The scale developed by Sarah Kamala (2004) was used in this study.

3.3.2.9. Family size

This refers to the number of members of a family a respondent possessed. It was measured using the scale developed by Gayatridevi Patil and Uma Gaurmath (2002). The scoring procedure followed is furnished below.

Category (Nos.)	Score
Up to 5 (small size)	2
Above 5 (Large size)	1

3.3.2.10. Mass media exposure

If refers to the regularity of the respondents going through / listening to / watching to different media. The extent of mass media exposure was measured using the scale developed by Veeraputhiran (2000) with slight modification in frequency and score to suit this study.

Frequency	Score
Regularly	3
Occasionally	2
Never	1

3.3.2.11. Participation in SHG activities

Participation is the degree of involvement of the respondents in various social organisations. The categories on frequency of attending different social organisations as followed by MYRADA (2002) with suitable modification in score was used in this study.

Frequency of attending	Score
Regularly	4
When I have time	3
Never	2
No meeting held so far	1

3.3.2.12. Time spent in SHG activities

This refers to the hours of the time spent of SHG activities in a week. The scale was developed by MYRADA (2002) was used with slight modification in score to suit this study.

Time spent (hrs)	Score
< 3	1
3 – 9	2
> 9	3

3.3.2.13. Contact with development personnel

It was operationalised as frequency of contact of respondents with extension personnel for fisheries information. The following scoring procedure developed by Sujath Kumar (2000) was used to measure the frequency of contact of the respondents with slight modification in frequency and score to suit this study.

Frequency of contact	Score
Weekly	5
Fortnightly	4
Monthly	3
Occasionally	2
Never	1

3.3.2.14. Savings

It was operationalised as the extent of savings generated after participation in the Self Help Groups. The position of savings of each group member before and after participating in the programme was obtained and net savings obtained was calculated for each group members.

$$\text{Savings} = \text{Savings position before participation} - \text{Savings position after participation.}$$

The score of one was given by Manga Sri (1999) for each hundred rupees of savings generated the score was calculated by taking an average of the individual group members scores and they were classified into 3 categories based on their mean and standard deviation.

Category	
Low	- Below (Mean – SD)
Medium	- Between (Mean ± SD)
High	- Above (Mean + SD)

3.3.2.15. Change in share in family income

It refers to the change in share in family income of the women SHG member. The following scoring procedure developed by MYRADA (2002) was used with suitable modification for the present study

Frequency of change	Score
Increased	2
No change	1

3.3.2.16. Change in personal financial position

This refers to the change in personal financial position of the women SHG members. The categories for this variable were given by MYRADA (2002) with suitable modification in score for this study were used as follows.

Frequency of change	Score
Increased	2
No change	1

3.3.2.17. Self confidence

It is the extent of assurance the respondents possesses about one's abilities in finding solutions to confronting problems. The following procedure developed by MYRADA (2002) to measure the self confidence of respondents in dealing with peoples (stranger / outsider like investigators, medical teams, sales personnel etc) and institutions (Banks, NGOs, government agencies etc) with suitable modification in score was used in this study.

Level of confident	Score
More confident	4
Confident	3
Less confident	2
Can't say	1

3.3.2.18. Frequency of travelling

It was operationalised as the frequency of travelling alone by the women SHG members. The level of frequency as studied by (MYRADA 2002) with suitable modification in score was used in this study.

Frequency level	Score
Mostly alone	3
Mostly a member accompanies	2
Every time a member accompanies	1

3.3.2.19. Knowledge on health and hygiene

Responses of the respondents on the level of the knowledge about health and hygiene. The following points on the level as studied by MYRADA (2002) with slight modification in score were used in this study.

Frequency level	Score
More than before	3
As much as before	2
Can't say	1

3.3.2.20. Training attended

Training exposure was operationalized as the number of times and duration (days) of training received by the respondents on different fisheries activities. The score was developed by Sarah Kamala (2004) as one was assigned for each training attended by the respondent and score of one for each day of training received by her. Both these scores were summed up to get the individual respondent training exposure score. The minimum and maximum obtained scores were subjected to equal interval method and categorization was done as follows.

Category	Score range
No training exposure	0
Low training exposure	below 5
Medium training exposure	5 – 10
High training exposure	above 10

3.4. Design of interview schedule, pilot study and collection of data

After studying the mechanics of interview schedule, construction, the objectives and dimensions of the study were carefully considered and the items selected for inclusion in the schedule was based on the discussion made with experienced people, experts and review of relevant fields. The interview schedule was pre-tested in Therespuram village of Thoothukudi district on 12 women beneficiaries of four SHGs involved in fisheries. Based on the

experience gained in pre-testing, necessary modifications were made in the interview schedule and final interview schedule was prepared (Appendix - II). The data were collected from the selected respondents through personal interview. Pre visit was made to all the selected fishing villages to build up rapport with the women SHG members with the help of local leaders. During the interview, the respondents were informed about the purpose of the study.

3.5. Statistical tools used

The collected data were tabulated and computed using statistical tools. The mean and standard deviation were used to select the different variables. The percentage analysis was done to differentiate the groups. Besides, correlation was used to interpret the influences of the independent variables on the dependent variable. The computer software package Microsoft Excel version 2000 was used for the analysis of data.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter deals on the findings of the socio personal characteristics of the women members of SHGs, empowerment status and their problems and suggestions. The results are drawn in relation to the objectives and presented under the following subheadings.

- 4.1. Socio-personal characteristics of women members of SHGs.
- 4.2. Empowerment status of members of SHGs.
- 4.3. Problems of members of SHGs and measures suggested by them.

4.1. Socio-personal characteristics of women members of SHGs

The socio-personal characteristics of SHG women members would give a clear view on the factors influencing the empowerment status of women SHG members in fisheries. A total of twenty variables was selected and results presented below.

4.1.1. Age

It could be concluded from the Table 3 that about 40 per cent of the women SHG members were under young age group followed by middle age (35 per cent) and old age (25 per cent) categories. This finding is in line with the findings of Sujathkumar (2000) and Veeraputhiran (2000) and Ponnusamy *et al.* (2004) who concluded that most of the women SHG members belonged to young age groups.

Table 3. Age level of women SHG members

(n=120)

Sl. No	Age	Number	Percentage
1	Young (Upto 35 years)	48	40.00
2.	Middle (36-45 years)	42	35.00
3.	Old (About 45 years)	30	25.00
	Total	120	100.00

4.1.2. Educational status

It could be observed from the Table 4 that the majority of the women SHG members (40.00 per cent) had education up to primary school level and middle school (29.17 per cent) level of education. The percentage of the women SHG members who had high school level of education was only 13.33 per cent. While 6.67 per cent and 2.50 per cent of the women SHG members had secondary and collegiate levels of education, respectively. While 5.00 per cent and 3.33 per cent of the women SHG members were illiterate and functionally literate, respectively.

Table 4. Educational status of women SHG members

(n=120)

Sl. No	Educational level	Number	Percentage
1.	Illiterate	6	5.00
2.	Functionally literate	4	3.33
3.	Primary school	48	40.00
4.	Middle school	35	29.17
5.	High school	16	13.33
6.	Secondary	8	6.67
7.	Collegiate	3	2.50
	Total	120	100.00

Most of the women SHG members could study upto primary and middle school levels of education due to their poor economic conditions. The findings of Veeraputhiran (2000) and Surat Singh (2004) also support this result.

4.1.3. Marital status

It could be seen from the Table 5 that 87.50 per cent of the women SHG members were married followed by widowed (11.66 per cent) and destitute (0.84 per cent).

Table 5. Marital status of the women SHG members

(n=120)

Sl. No	Marital status	Number	Percentage
1.	Married	105	87.50
2.	Widowed	14	11.66
3.	Divorced	-	-
4.	Destitute	1	0.84
5.	Unmarried	-	-
	Total	120	100.00

This finding is in accordance with the findings of Kumaran (2002) and Saroj Wadiwala (2004).

4.1.4. Occupational status

It is obvious from the Table 6 that majority (33.33 per cent) of the women SHG members had value addition of fishes such as preparation of fish pickle, prawn pickle, fish cutlet and fish wafare as their main occupation. While 16.67 per cent of the women SHG members had net making as occupation and interestingly equal percentage of members had composite fish culture and crab fattening, as their occupation. While 15.00 per cent of women SHG members had other occupation, viz. nursery school teachers, tailoring, pettishops etc. Only 11.67 per cent of the women SHG members were found involved in fish and dry fish retailing and equal percentage of 8.33 per cent of members had occupation in fish curing and drying and lobster fattening.

Table 6. Occupational status of the women SHG members

(n = 120)

Sl. No	Occupational status	Number	Percentage
1.	Fish sorting and trading	-	-
2.	Fish curing and drying	10	8.33
3.	Net making	20	16.67

4.	Net mending	-	-
5.	Value addition of fishes	40	33.33
6.	Ornamental fish culture	-	-
7.	Composite fish culture	20	16.67
8.	Net cleaning	-	-
9.	Crab fattening	20	16.67
10.	Lobster fattening	10	8.33
11.	Fish retailing	14	11.67
12.	Others	18	15.00

4.1.5. Annual income

It is evident from the Table 7 that the 64.17 per cent of the women SHG members had low level of annual income group followed by medium (30.00 per cent) and high (5.83 per cent) levels of annual income groups. Similar observation was made by Veeraputhiran (2000) and Gayatridevi Patil and Uma Gaurmth (2002).

Table 7. Annual income of women SHG members

(n=120)

Sl. No	Annual income	Number	Percentage
1.	Low (Rs.5000 & below)	77	64.17
2.	Medium (Rs.5001 to Rs.15000)	36	30.00
3.	High (Rs.15001 & above)	7	5.83
	Total	120	100.00



Fig. 3. Fish pickle unit of SHG





Fig. 6. SHG women engaged in composite fish culture



findings.

Table 8. Experience in SHGs

(n=120)

Sl. No	Experience (in yrs)	Number	Percentage
1.	Upto 2	-	-
2.	3-4	60	50.00
3.	above 4	60	50.00
	Total	120	100.00

4.1.7. Economic motivation

It could be seen from the Table 9 that 86.67 per cent of the women SHG members expressed their economic motivation to save money regularly. While 33.33 per cent and 25.00 per cent of women SHG members expressed their economic motivation to support family income and to do internal lending respectively. Only 1.67 per cent of respondents expressed their economic motivation to meet members regularly. This findings is also supported by MYRADA (2002).

Table 9. Economic motivation of women SHG members

(n=120)

Sl. No	Economic motivation	Frequency	Percentage
1.	To save money regularly	104	86.67
2.	To support family income	40	33.33
3.	To do internal lending	30	25.00
4.	To meet members regularly	2	1.67

4.1.8. Family type

Results furnished in the Table 10 indicated that 86.67 per cent of women SHG members had nuclear family and only 13.33 per cent had joint family system. This finding gets support from Christopher (2001), Arpita Sharma (2003) and Sarah Kamala (2004) who reported that majority of the women had nuclear family system.

Table 10. Family type of women SHG members

(n=120)

Sl. No	Family type	Number	Percentage
1.	Joint family	16	13.33
2.	Nuclear family	104	86.67
	Total	120	100.00

4.1.9. Family size

From perusal of the Table 11, it could be observed that majority (81.67 per cent) of the women SHG members had up to 5 members in their family and only 18.33 per cent had more than 5 members in their family. This finding is also supported by the findings of Mamatha and Hiremath (2002).

Table 11. Family size of women SHG members

(n = 120)

Sl. No	Family size	Number	Percentage
1.	Up to 5 (Small size)	98	81.67
2.	Above 5 (Large size)	22	18.33
	Total	120	100.00

4.1.10. Mass media exposure

It was apparent from the Table 12 that 47.50 mean per cent of the women SHG members who read newspaper, listen radio

and watch TV regularly followed by occasionally (36.39 mean per cent) and never (16.11 mean per cent).

Table 12. Mass media exposure of women SHG members

(n = 120)

Sl. No	Mass media	Frequency level (percentage)			Total Percentage
		Regularly	Occasionally	Never	
1.	Reading Newspaper	30.00	51.67	18.33	100.00
2.	Listening Radio	43.33	38.34	18.33	100.00
3.	Watching TV	69.17	19.16	11.66	100.00
	Mean	47.50	36.39	16.11	100.00

The study carried out by Manga Sri (1999), Veeraputhiran (2000) and Balasubramani (2001) also indicated similar findings.

4.1.11. Participation in SHG activities

The results furnished in the Table 13 showed that 83.33 per cent of the women SHG members had medium level of participation in SHG activities and only 16.67 per cent had low level of participation in SHG activities. This finding is also supported by Veeraputhiran (2000) and Thara Jabin and Manoharan (2001). They indicated that the social participation level of fisherwomen was medium.

Table 13. Participation in SHG activities of women SHG members

(n=120)

Sl. No	Participation in SHG activities	Number	Percentage
1.	Low (below 9.9)	20	16.67
2.	Medium (between 9.9-16.1)	100	83.33
3.	High (above 16.1)	-	-
	Total	120	100.00

Mean: 13

Standard deviation: 3.1

4.1.12. Time spent in SHG activities

It could be noted from the Table 14 that the 60.00 per cent of the women SHG members spent 3-9 hours per week in SHG activities followed by 40.00 per cent spent less than 3 hours per week in SHG activities. This is in line with the finding of MYRADA (2002).

Table 14. Time spent in SHG activities of women SHG members.

(n=120)

Sl. No	Time spent (hrs/week)	Number	Percentage
1.	<3	48	40.00
2.	3-9	72	60.00
3.	>9	-	-
	Total	120	100.00

4.1.13. Contact with development personnel

It could be concluded from the Table 15 that 44.17 per cent of the women SHG members had weekly once contact with development personnel followed by fortnightly (30.00 per cent) and

monthly (18.33 per cent). Only 7.50 per cent had occasionally contact with development personnel.

Table 15. Contact with development personnel of the women SHG members

(n=120)

Sl. No	Frequency of contact	Number	Percentage
1.	Weekly	53	44.17
2.	Fortnightly	36	30.00
3.	Monthly	22	18.33
4.	Occasionally	9	7.50
5.	Never	-	-
	Total	120	100.00

The above finding is in line with the findings of Kumaran *et al.* (2003).

4.1.14. Savings

It could be observed from the Table 16 that majority (78.33 per cent) of the women SHG members had low saving habit followed by medium (20.00 per cent) and high (1.67 per cent). This is in line with the finding of Manga Sri (1999).

Table 16. Savings of women SHG members

(n=120)

Sl. No	Categories	Number	Percentage
1.	Low (below 127)	94	78.33
2.	Medium (between 127-335)	24	20.00
3.	High (above 335)	2	1.67
	Total	120	100.00

Mean: 104

Standard deviation: 231

4.1.15. Change in share in family income

The Table 17 and Figure 8 indicated that majority (81.67 per cent) of women SHG members share in the family income was increased and only 18.33 per cent opined no change in share in the family income.

Table 17. Share in family income of women SHG members

(n=120)

Sl. No	Share in family income	Number	Percentage
1.	Increased	98	81.67
2.	No change	22	18.33
	Total	120	100.00

The above finding is in line with the findings of Rekha R. Gaonkar (2001) and MYRADA (2002) who found that the majority of women SHG members share in the family income was increased.

4.1.16. Change in personal financial position

The Table 18 revealed that 80.83 per cent the women SHG members personal financial status had been increased followed by no change (19.67 per cent). This finding is in accordance with the findings of Manimekalai and Rajeswari (2001) and Sharma(2001).

Table 18. Change in personal financial position of women SHG members

(n=120)

Sl. No	Personal financial position	Number	Percentage
1.	Increased	97	80.83
2.	No change	23	19.67
	Total	120	100.00

4.1.17. Self confidence

It could be clearly noted from the Table 19 and Figure 9 that mean 93.33 per cent of the women SHG members had more confidence level in dealing with peoples and institutions, while 6.67 mean per cent had confident level. This observation gained support from the findings of Suguna (2001) and Ranjitha (2003) who reported that the self confidence level of SHG women members were high.

Table 19. Self confidence of women SHG members

(n = 120)

Sl. No.	Self confidence in dealing with	Confidence level (percentage)		Total Percentage
		More confident	Confident	
1.	Peoples	93.33	6.67	100.00
2.	Institutions	93.33	6.67	100.00
	Mean	93.33	6.67	100.00

Fig. 8 & 9.

4.1.18. Frequency of travelling

It could be observed from the Table 20 that the majority (78.61 mean per cent) of the women SHG members travelled mostly alone followed by every time a member accompanies (14.45 mean per cent) and mostly a member accompanies (6.94 mean per cent). The study carried out by MYRADA (2002) also reported similar findings.

Table 20. Frequency of travelling of women SHG members

(n = 120)

Sl. No	Place of travelling	Frequency level (percentage)			Total Percentage
		Mostly alone	Mostly a member accompanies	Every time a member accompanies	
1.	Another village	100.00	-	-	100.00
2.	Nearest town	69.17	10.00	20.83	100.00
3.	Nearest city	66.67	10.83	22.50	100.00
	Mean	78.61	6.94	14.45	100.00

4.1.19. Knowledge on health and hygiene

It could be seen from the Table 21 and Figure 14 that 86.52 mean per cent of the women SHG members had knowledge on health and hygiene more than before followed by as much as before (13.47 mean per cent).

Table 21. Knowledge on health and hygiene of women SHG members

(n = 120)

Sl. No	Knowledge on health and hygiene	Knowledge level (percentage)		Total Percentage
		More than before	As much as before	
1.	Family planning methods.	85.83	14.17	100.00
2.	Washing hands before eating /cooking	84.17	15.83	100.00
3.	Child's vaccination	89.17	10.83	100.00
4.	Not allowing water and dirt to stagnate	90.83	9.17	100.00
5.	Using toilets at home	85.00	15.00	100.00

Sl. No	Knowledge on health and hygiene	Knowledge level (percentage)		Total Percentage
		More than before	As much as before	
6.	Adding fruits and vegetables in diet of pregnant women	84.17	15.83	100.00
	Mean	86.52	13.47	100.00

The above finding is in line with the findings of Suguna (2001) and MYRADA (2002).

4.1.20. Training attended

The results furnished in the Table 22 revealed that 50.00 per cent of the women SHG members had low training exposure followed by 31.67 per cent and 15.00 per cent of medium training exposure and no training exposure, respectively. Only 3.33 per cent of the women SHG members had high training exposure. This is in line with the finding of Sarah Kamala (2004).

Table 22. Training attended by women SHG members

(n=120)

Sl. No	Category	Number	Percentage
1.	No training exposure (0)	18	15.00
2.	Low training exposure (below 5)	60	50.00
3.	Medium training exposure (5-10)	38	31.67
4.	High training exposure (above 10)	4	3.33
	Total	120	100.00



Fig. 10. Lobster fattening in cages by SHG members



Fig. 11. Meeting conducted by SHG members

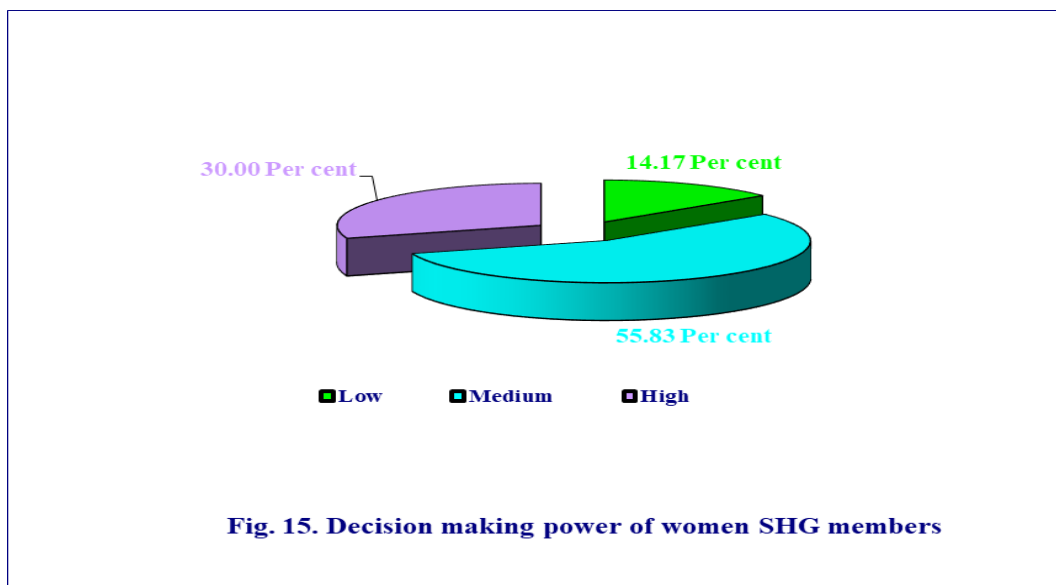
Fig. 12. Demonstration by DRDA officials to SHG members

Fig. 13. SHG members attending training

4.2. Analysis of components of empowerment status

4.2.1. Decision making with regard to household activities

The empowerment status of women SHG's members in the decision making with regard to household activities was measured based on 12 areas which were studied by Manga Sri (1999) and Indradeep Chakraborty and Devonita Pal (2004).



It could be seen from the Table 23 and Figure 15 that 55.83 per cent of the women SHG members had medium level of decision making power followed by high level of decision making power (30.00 per cent) and low level of decision making power (14.17 per cent). The study carried out by Manga Sri (1999) also support this result.

Table 23. Decision making power with regard to household activities of women SHG members

(n=120)

Sl. No	Level of decision making power	Number	Percentage
1.	Low (below 17.74)	17	14.17
2.	Medium (between 17.74-34.86)	67	55.83
3.	High (above 34.86)	36	30.00
	Total	120	100.00

Mean : 26.3

Standard Deviation: 8.56

Fig. 14 & 15

.2.2. Relationship between the socio-personal characteristics of the women SHG members and their level of decision making power

It could be seen from the Table 24 that age, annual income, savings, change in share in family income, change in personal financial position, and self confidence had shown significant and positive relationship with the decision making power of women SHG members in fisheries, whereas, the all other variables have shown non-significant relationship with the decision making power of women SHG members.

Table 24. Correlation between the socio-personal characteristics of the women SHG members and their level of decision making power

Variable No.	Independent variables	r-values
X₁	Age	0.2214*
X₂	Educational status	0.0852 NS
X₃	Marital status	0.0615 NS
X₄	Occupational status	0.0121 NS
X₅	Annual income	0.2443*
X₆	Experience in SHGs	0.0747 NS
X₇	Economic motivation	0.0481 NS
X₈	Family type	0.1310 NS
X₉	Family size	0.0468 NS
X₁₀	Mass media exposure	0.0987 NS
X₁₁	Participation in SHG activities	0.0113 NS
X₁₂	Time spent in SHG activities	0.0862 NS
X₁₃	Contact with development personnel	0.1116 NS
X₁₄	Savings	0.3401 **
X₁₅	Change in share in family income	0.2274 *
X₁₆	Change in personal financial position	0.2666 *
X₁₇	Self confidence	0.3559 **
X₁₈	Frequency of travelling	0.0202 NS
X₁₉	Knowledge on health and hygiene	0.1549 NS
X₂₀	Training attended	0.0085 NS

*** Significant at 0.05 level**

**** Significant at 0.01 level**

NS- Non-Significant

It could be concluded that the empowerment status of women SHG members was very much influenced by age, annual income, savings, change in share in family income, change in personal financial position and self confidence. The participation of women in Self Help Group economic activities is certainly increasing

the psychological empowerment as well as the economic empowerment status of women.

4.3. Problems of members of SHGs and measures suggested by them

Under this section, three important problems perceived by the women SHG members in running their enterprises and the suggestions for the problems mentioned by the women SHG members for effective functioning of their enterprises are presented.

4.3.1. Problems perceived by the women SHG members in running their enterprises

The results indicated in the Table 25 and Figure 16 that the 85.00 per cent of the women SHG members perceived lack of marketing facilities was to be the serious problem followed by non-availability of raw materials (70.83 per cent) and insufficient loan (55.00 per cent).

Table 25. Problems perceived by the women SHG members

(n = 120)

Sl. No.	Problems	Frequency	Percentage
1.	Lack of marketing facilities	102	85.00
2.	Non-availability of raw materials	85	70.83
3.	Insufficient loan	66	55.00

4.3.2. Suggestions given by the women SHG members for the problems mentioned

It could be observed from the results furnished in the Table 26 and Figure 16 that majority (80.00 per cent) of the women SHG members suggested that the Government and Non-Government Organisations should come forward to help the marketing of products of SHGs. While 66.67 per cent of the women SHG members suggested that to provide cold storages to store raw materials and 56.67 per cent suggested that to increase the loan amount from banks, regional rural banks, co-operative banks and other financial institutions at low rate of interest.

Table 26. Suggestions given by the women SHG members

(n = 120)

Sl. No.	Suggestions	Frequenc y	Percenta ge
1.	Government and Non-Government Organisations should come forward to help the marketing of products of SHG.	96	80.00
2.	To provide cold storages to store raw materials	80	66.67
3.	To increase the loan amount from banks, regional rural banks, co-operative banks and other financial institutions at low rate of interest	68	56.67

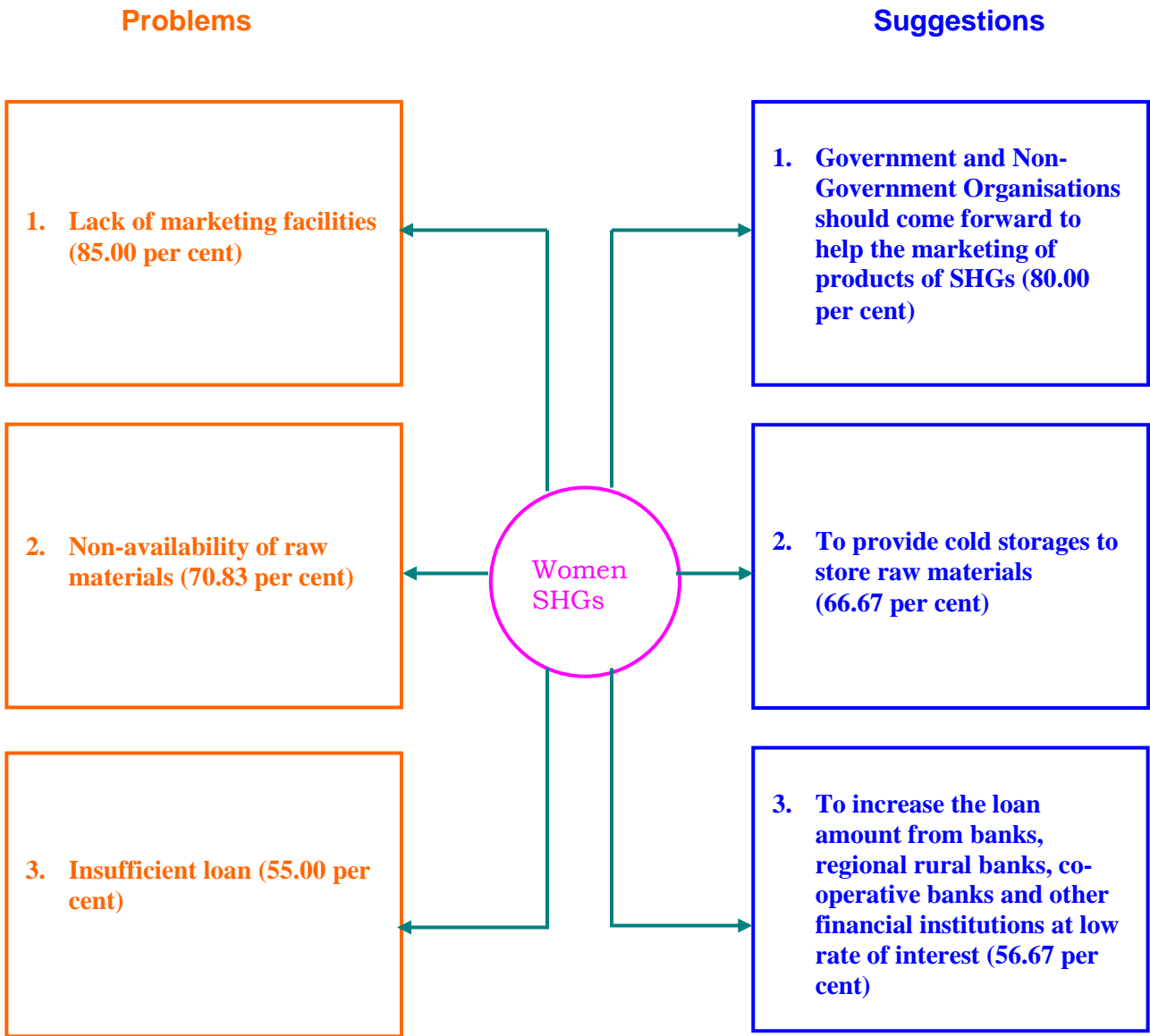


Fig. 16. Problems of women SHGs and their suggestions

CHAPTER 5

SUMMARY AND CONCLUSION

Fisheries is the most important resources for communities inhabiting the coasts as it forms their major livelihood (Krishna Srinath, 2002). Fisherwomen in India constitute around 1.6 million of the total fisherfolk population (Narayana Kumar *et al.*, 2003). Earlier, women of the fishing communities were confined to home mostly doing the household work. While men were the breadwinners, women were the homemakers of the family (Prameela, 2002). Women have collectively struggled against direct and indirect barriers to their self development, their social, political and economic participation. The women's organizations started struggle for women's rights in the early part of the 20th century. At present fisherwomen's movement focusses its attention on equality and empowerment through Self Help Groups (Senthil Vadivoo and Sekar, 2004). Empowerment as a strongly articulated goal of development has become very attractive topic in recent years. The participation of fisherwomen in SHG makes a significant part of their empowerment both in social and economic aspects. In India fisherwomen's participation in economic and political decision making is very low.

Now, gradually with the increase in fisherwomen education, technology, social participation and greater decision making power in the home, community and the society level has been improved. After joining the SHGs, they have started to participate in SHGs particularly in fisheries activities such as net making, fish culture, fish drying, value added fishery products, crab fattening, lobster fattening etc., to earn more from these fisheries activities (Sathiadhas *et al.*, 2003). Keeping the above aspects in view, the study on “Studies on empowerment status of women Self Help Group members in fisheries” was undertaken with the following objectives:

- i) To study the socio-personal characteristics of women members of SHGs.
- ii) To analyse the various components of empowerment status of members of SHGs.
- iii) To identify the problems of members of SHGs and measures suggested by them.

The district of Thoothukudi, Tamilnadu was selected for the study. Out of 21 fishing villages of this district, four fishing villages viz. Punnakkayal, Vellapatti, Tharuvalkulam and Pazhayakayal were selected based on the maximum number of fisherwomen population. Three women SHGs were selected from each of the selected fishing villages based on their active involvement in fisheries activities. Thus, a total of 12 women SHGs were selected for this study. A total of 120 women SHG members were selected randomly for this study comprising of 10 women members from each SHGs. The data were collected through a well-structured

interview schedule from personal enquiry. The collected data were analysed using necessary statistical tools such as correlation, standard deviation, mean, percentage, etc. The salient findings of the study are given below:

5.1. Socio-personal characteristics of women members of SHGs

1. Majority of the women SHG members were young aged (40.00 per cent), educated up to primary school level (40.00 per cent) and were found married (87.50 per cent).
2. Preparation in value addition of fishes was the main occupation for 33.33 per cent of the women SHG members. Majority of the women SHG members (64.17 per cent) had low annual income group of Rs. 5000 and below.
3. The women SHG members had 3-4 years of experience in SHGs (50.00 per cent) and equal percentage had above 4 years of experience in SHGs.
4. Most of the women SHG members (86.67 per cent) expressed their economic motivation to save money regularly followed by to support family income (33.33 per cent), to do internal lending (25.00 per cent) and to meet members regularly (1.67 per cent).
5. Majority of the women SHG members (86.67 per cent) had nuclear family and 81.67 per cent of the women SHG members had up to 5 members in their family.

6. Majority (47.50 mean per cent) of the women SHG members read newspaper, listen to radio and watch TV regularly followed by occasionally (36.39 mean per cent) and never (16.11 mean per cent).
7. Majority (83.33 per cent) of the women SHG members had medium level of participation in SHG activities. Most of the women SHG members (60.00 per cent) spent 3-9 hours per week in SHG activities and 40.00 per cent spent less than three hours per week in SHG activities.
8. As far as contact with development personnel, 44.17 per cent of the women SHG members had weekly once contact with development personnel, followed by fortnightly (30.00 per cent), monthly (18.33 per cent) and occasionally (7.50 per cent).
9. Most of the women SHG members (78.33 per cent) had low level of savings followed by 20.00 per cent had medium level and 1.67 per cent had high level of savings.
10. Majority (81.67 per cent) of the women SHG members share in the family income was increased and also increased in personal financial position (80.83 per cent).
11. As far as self-confidence, 93.33 mean per cent of the women SHG members had more confidence level in dealing with

peoples and institutions. Majority (78.61 mean per cent) of the women SHG members travelled mostly alone.

12. The knowledge of women SHG members on health and hygiene was more than before (86.52 mean per cent). Most of the women SHG members (50.00 per cent) had low training exposure.

5.2. Decision making power with regard to household activities

Majority of the women SHG members (55.83 per cent) had medium decision making power in household activities and 30.00 per cent had high decision making power. Only 14.17 per cent of women SHG members had low decision making power.

5.3. Problems of members of SHGs and their suggestions

1. Lack of marketing facilities (85.00 per cent), non-availability of raw materials (70.83 per cent) and insufficient loan (55.00 per cent) were the major problems faced by the women SHG members in running their enterprises.
2. Government and Non-Government Organisations should help in marketing of products of SHGs (80.00 per cent), to provide cold storages to store raw materials (66.67 per cent) and to increase the loan amount from banks, regional rural banks, co-operative banks and other financial institutions at low rate of interest (56.67 per cent) were the measures suggested by the women SHG members for the problems mentioned.

5.4. Implications of the study

1. The overall empowerment status of fisherwomen was found to be good after joining the Self Help Groups. The economic empowerment of the fisherwomen is mainly based on their participation in decision making process. Self Help Groups enhance the equality status of fisherwomen as participants, decision makers and beneficiaries in the economic, social and cultural spheres of life, and also have inculcated a great self confidence in the minds of fisherwomen to succeed in their day-to-day life. The SHGs encourages savings and promotes income generating activities. It creates better awareness on health and hygiene, education and environment among the fisherwomen. Therefore, Government Organisations dealing with fisheries educational institutes like Fisheries Colleges, Non Governmental Organisations, District Rural Developmental Agencies, etc. should create awareness among fisherwomen about the importance of SHGs through various schemes and projects.
2. The educational status of women SHG members was very low at present. Therefore, there is an urgent need for organising and conducting adult education and training programmes through various mass media.

3. The annual income of women SHG members was very low, due to lack of marketing prospects. Therefore, Government and Non Government Organisations should organise campaign to widen marketing opportunities.
4. In order to improve the participation of fisherwomen members, SHG meetings, meeting with local bank officials, NGOs and village panchayat etc. should be organised regularly.
5. It shows that most of the women SHG members had low level of savings. Hence, development personnel should create awareness among the women SHG members about the savings during the SHG meeting.
6. Most of the women SHG members had low training exposure. Hence, more training programmes need to be organised besides, the women SHG members must be motivated to attend such training programmes.

5.5. Suggestions for future research

1. A similar study has to be conducted in other coastal districts of Tamilnadu also.
2. Case studies on empowerment status of women SHG in fisheries may be carried out.
3. A study on the impact of fisheries training on the empowerment status of fisherwomen may be taken up.

REFERENCES

- Ahilan, B., 1999. Training needs of fisherwomen in Thoothukudi district, University Research Project Final Report, Department of Fisheries Extension, FC & RI, TANUVAS, Thoothukudi, 1-21.
- Anjani Kumar, P.K. Joshi and Pratap, S. Birthal, 2003. Fisheries sector in India: An overview of performance, policies and programmes. In: Anjani Kumar, Pradeep K. Katiha and P.K. Joshi, (Ed.). *Proceeding Series 10, A profile of people, technologies and policies in fisheries sector in India*. 2003. National Centre for Agricultural Economics and Policy Research, New Delhi, India, 1-16.
- Anwara Begum and Marcel D' Costa, 2002. Women in aquaculture: Initiatives of CARITAS Bangladesh. In: Sing Kohil, M.P. and Ratna Tewari, (Ed.). *Women in Fisheries*. 2002. Indian society of fisheries professionals, Mumbai, India, 147-155.
- Arpita Sharma, 2003. Valuing women's work in fisheries. *Fishing Chimes*, **23(7)**: 46-48.
- Arul Oli, G., 2004. Effectiveness of selected extension teaching methods for educating the fishermen on sustainable marine fisheries development. Unpub. M.F.Sc., Thesis, FC & RI, TANUVAS, Chennai.
- Ashaletha, S., C. Ramachandran, Sheela Immanuel, A.D. Diwan and R. Sathiadhas, 2002. Changing roles of fisherwomen of India – Issues and perspectives. In: Singh Kohil, M.P. and Ratna Tewari, (Ed.). *Women in Fisheries*. 2002. Indian society of fisheries professionals, Mumbai, India, 21-43.
- Awasthi, P.K., Deepak Rathi and Vimla Sahu, 2001. Working and impact of Self Help Groups on economic status of women in watershed area of Madhya Pradesh. *Indian Journal of Agricultural Economics*, **56(3)**: 475-476.

- Balasubramani, K.S., 2001. Empowerment of farm women under Tamilnadu in Agriculture (TANWA) Project. In: Baldeo Singh and Poonam Sharma, (Ed.). *Researches in Agricultural Extension*, 2003. Division of Agricultural Extension, IARI, New Delhi, **(2)**: 237-239.
- Bant Singh and Lavleen Kaur, 2000. Quantifying the extend and determinants of women's say in decision making: A study in Amritsar district, Punjab. *Proceedings of the workshop on women in agriculture and rural development*, 9-10, November 2000. Indian Society of Agricultural Economics, New Delhi, 54-60.
- Bhople, R.R. and Alka Patki, 1998. Socio-economic dimensions of farm women labour. *Rural India*, **61(9-10)**: 192-195.
- Binodini Sethi and H.N. Atibudhi, 2001. Micro finance: An innovative tool for banking with the unbankables: A study in Kalahandi district, Orissa. *Indian Journal of Agricultural Economics*, **56(3)**: 477-478.
- Cherian, A. and Aditivats, 2001. Decision making pattern of rural women regarding farm, animal husbandry, home and family related decisions of hill, Bhabur and Tarai Zone of U.P. State. *Rural India*, **64(11-12)**: 228-234.
- Christopher, A.J., 2001. Role satisfaction and role conflicts among married working women. *Social Welfare*, **48(5)**: 15-24.
- Debnarayan Sarker, 2001. A study of SHG – NGO and SHG – Non - NGO models of rural micro financing in West Bengal. *Indian Journal of Agricultural Economics*, **56(3)**: 454-456.
- Deboral Vimala, D., Ch. Sarada, P. Mahalakshmi, M. Krishnan and M. Kumaran, 2004. Women in coastal aquaculture: Performance, potential, and perspectives. *Aquaculture Asia*, **9(3)**: 25-28.
- Department of Fisheries, 2002. Tamilnadu marine fisherfolk census year 2002. Tamilnadu Fisheries Department, Govt. of Tamilnadu, 1-68.
- Dwarakanath, H.D., 2002. Rural credit and women Self Help Groups. A profile of Ranga Reddy district in Andhra Pradesh. *Kurukshetra*, **51(1)**: 9-15.

- Director of Fisheries, 2005. Present status and high lights of fisheries development in Tamilnadu. *Fishing Chimes*, **24(10)**: 147-148.
- Ganesan, G., 2005. Rural transformation through Self Help Group (SHG). *Kisan World*, **32(1)**: 13-14.
- Gayatridevi Patil and Uma Gaurmath, 2002. Rural development programmes: A study of women beneficiaries. *Indian Journal of Training and Development*, **32(4)**: 89-94.
- Gupta, S.K. and A. Shrivastava, 2001. A study of working of Self-Help Groups in Madhya Pradesh. *Indian Journal of Agricultural Economics*, **56(3)**: 470-471.
- Indradeep Chakraborty and Devonita Pal, 2004. Participation of women of fishers families in Nadia District (West Bengal) in the decision making process. *Fishing Chimes*, **24(6)**: 36, 44.
- Iyyampillai, S. and S. Kulandai Theresa, 2001. Women's empowerment: Status inside and outside the home co-related. *Social Welfare*, **48(8)**: 28-33.
- Jaleela, M., 2002. Food and nutritional security of women in traditional fishing households of Thiruvananthapuram district of Kerala. In: Singh Kohil, M.P. and Ratna Tewari, (Ed.). *Women in Fisheries*. 2002. Indian society of fisheries professionals, Mumbai, India, 44-52.
- Kala, G.S., 2004. Economic empowerment of women through Self Help Groups. *Kisan World*, **31(11)**: 25-26.
- Krishna Srinath, 2002. Women in coastal and fisheries resources management. In: Singh Kohil, M.P. and Ratna Tewari, (Ed.). *Women in Fisheries*. 2002. Indian society of fisheries professionals, Mumbai, India, 8-23.
- Kumaran, K.P., 2002. Role of Self Help Groups in promoting micro enterprises through micro credit: An empirical study. *Journal of Rural Development*, NIRD, Hyderabad, **21(2)**: 231-250.
- Kumaran, M., P. Ravichandran, B.P. Gupta and A. Nagavel, 2003. Shrimp farming practices and its socio-economic consequences in east Godavari district, Andhra Pradesh, India. A case study. *Aquaculture Asia*, **13(3)**: 48-52.
- Madheswaran, S. and Amita Dharmadhikary, 2001. Empowering rural women through Self Help Groups. Lessons from Maharashtra rural credit project. *Indian Journal of Agricultural Economics*, **56(3)**: 427-443.

- Mamatha, T.G. and G.K. Hiremath, 2002. Farm women potentiality in income generation in Tumkur district. *Rural India*, **65(2-3)**: 56-60.
- Mammo, T., 1987. Development of small-scale fisheries, study on income, indebtedness and savings among fisherfolk of Orissa, India. BOBP/WP/55, BOBP (Dec), Chennai, 1-26.
- Manga Sri, K., 1999. Employments of women of DWCRA groups (Development of Women and Children in Rural Areas programme) in Ranga Reddy district of Andhra Pradesh. Unpub. Ph.D., Thesis, ANGRAU, Hyderabad.
- Manimekalai, M. and G. Rajeswari, 2001. Nature and performance of informal Self Help Groups – A case from Tamilnadu. *Indian Journal of Agricultural Economics*, **56(3)**: 453-454.
- Mishra, J.P., R.R. Verma and V.K. Singh, 2001. Socio-economic analysis of rural Self Help Groups scheme in Block Amaniganj district Faizabad (Uttar Pradesh). *Indian Journal of Agricultural Economics*, **56(3)**: 473-474.
- Mysore Resettlement and Development Agency, 2002. Impact of Self Help Groups (Groups Processes) on the social empowerment status of women members in southern Indian. *Proceedings of the seminar on SHG-bank linkage programme, 25th and 26th November, 2002*. New Delhi, 1-52.
- Narayana Kumar, R., Vijaya Khader, R. Sathiadhas, H.M. Kasim, N.S. Sudhakara, K. Dhanpal and J. Lakshmi, 2003. Socio-economic status of fisherwomen. *Proceedings of the workshop on empowerment of fisherwomen in coastal ecosystem on Andhra Pradesh, Karnataka, Kerala and Tamilnadu, 13th and 14th October 2003*. NATP, ANGRAU, Hyderabad, India, 23-40.
- Narayanasamy, N., S. Manivel and B. Bhaskar, 2003. Networking SHGs and Cooperatives – An analysis of strengths and weakness. *Journal of Rural Development*. NIRD, Hyderabad, **22(3)**: 333-344.

- Neena Gulabani, 1987. A study of the self esteem of rural women of farm families. In: Baldeo Singh and Poonam Sharma (Ed.). *Researches in Agricultural Extension*, 2003. Division of Agricultural Extension, IARI, New Delhi, (2): 242-243.
- Pillai, N.G.K., Mohan Joseph Modayil and U. Ganga, 2003. Marine fishing practices and coastal aquaculture technologies in India. In: Anjani Kumar, Pradeep K. Kathiha and P.K. Joshi, (Ed.). *Proceeding series 10, A profile of people, technologies and policies in fisheries sector in India*, 2003. National Centre for Agricultural Economics and Policy Research, New Delhi, India, 83-121.
- Ponnarasu, S., 2004. Women empowerment: A success in twenty first century. *Kisan World*, **31(12)**: 22.
- Ponnusamy, K., M. Jeyanthi, M. Kumaran and N. Thenmathi, 2004. Influence of socio economic variables on level of adoption of prawn / fish pickle making technology. *Fishery Technology*, **41(1)**: 63-66.
- Prameela, C.S., 2002. Community management roles of fisherwomen in Kerala. In: Singh Kohil, M.P. and Ratna Tewari, (Ed.). *Women in Fisheries*. 2002. Indian society of fisheries professionals, Mumbai, India, 53-56.
- Punithavathy Pandian and R. Eswaran, 2002. Empowerment of women through micro-credit. *YOJANA*, (46): 47-50.
- Ramesh, G and D. Priya Lakshmi, 2004. Women empowerment vis-a-vis SHGs. *Kisan World*, **31(11)**: 30.
- Ranijitha, M.H., 2003. Empowerment of rural women through Self Help Groups: A critical analysis. In: Baldeo Singh and Poonam Sharma, (Ed.). *Researches in Agricultural Extension*, 2003. Division of Agricultural Extension, IARI, New Delhi, (2): 239-241.
- Rekha R. Gaonkar, 2001. Working and impact of Self Help Groups in Goa. *Indian Journal of Agricultural Economics*, **56(3)**: 471.

- Sadangi, B.N., P.K. Sahoo and H.K. Dash, 1999. Participation of women in fisheries: Case studies around Chilka, Orissa. *Fishing Chimes*, **19(5)**: 31-33.
- Samantray, K. and S.C. Pathak, 1998. An overview of women in the Indian fisheries sector and suggestions for improvement of their socio-economic status. In: Williams, M.J., M.C. Nandeesha, V.P. Corral, E. Tech and P.S. Choo, (Ed.). Asian fisheries society. *International symposium on Women in Asian fisheries*. 13th November 1998. Chiangmai, Thailand, 121-126.
- Sarah Kamala, T., 2004. A critical analysis of pro-poor initiatives for empowerment of rural women through South Asian Poverty Alleviation Programme (SAPAP). Unpub. Ph.D., Thesis, ANGRAU, Hyderabad.
- Saroj Wadiwala, M., 2004. Slum women empowered by saving credit programme. *Social Welfare*, **51(5)**: 31-35.
- Sathiadhas, R., Vijaya Khader, Femeena Hassan, H. Mohamed Kasim, N.S. Sudhakara, R. Narayana Kumar, K.; Dhanapal and J. Lakshmi. 2003. Role of women fisheries. *Proceedings of the workshop on empowerment of fisherwomen in coastal ecosystem of Andhra Pradesh, Karnataka, Kerala and Tamilnadu*, 13th and 14th October 2003. NATP, ANGRAU, Hyderabad, India, 1-9.
- Saundarjya Borbora and Ratul Mahanta, 2001. Micro finance through Self Help Groups and its impact: A case study of Rashtriya Gramin Vikas Nidhi – credit and saving programme in Assam. *Indian Journal of Agricultural Economics*, **56(3)**: 449-450.
- Selvaraj, P., 2005. Role of banking sector with special reference to National Bank for Agriculture and Rural Development (NABARD) in development of aquaculture. *Aqua International*, **12(9)**: 21-27.
- Senthil Vadivoo, K. and V. Sekar, 2004. Self Help Groups – A movement for women empowerment. *Kisan World*, **31(7)**: 13-14.
- Sharma, K.C., 2001. Micro financing through Self-Help Groups. *Indian Journal of Agricultural Economics*, **56(3)**: 460-461.

- Sheik Mohamad, M., 2004. Self Help Group for the success of women entrepreneurs. *Kisan World*, **31(3)**: 30-31.
- Sudharani, K., K. Sreelatha Kishori and G. Surendra, 2000. Empowerment of women in the rural areas. *Rural India*, **63(10)**: 195-198.
- Suguna, B., 2001. Women's empowerment: Concept and framework. *Social Welfare*, **48(9)**: 3-7.
- Sujathkumar, N.V., 2000. Women in small-scale fisheries, their status problems and prospects. Unpub. Ph.D., Thesis, VC & RI, TANUVAS, Namakkal.
- Suman Kalyani, K. and O.R. Radha Krishna, 2002. Correlating academic prowess and socio-economic factors. *Social Welfare*, **48(10)**: 23-26.
- Surat Singh, 2004. Empowerment of women representatives in panchayati raj – A profile from Haryana. *Kurukshetra*, **52(10)**: 17-20.
- Thara Jabin, M. and M. Manoharan, 2001. Socio-personal characteristics of kitchen garden maintaining urban women. *Journal of Extension Education*, **12(1)**: 3033-3036.
- Veeraputhiran, K., 2000. Effectiveness of training methods on fisherwomen in southern coastal districts of Tamilnadu. Unpub. Ph.D., Thesis, VC & RI, TANUVAS, Namakkal.
- Velusamy, R. and R. Netaji Seetharaman, 2002. Socio-economic impact of IRDP programme on dairy farmers. *Madras Agricultural Journal*, **89(7-9)**: 420-426.
- Vijayapriya, S., 2001. Attitudes of youth towards status of women. *Social Welfare*, **48(3)**: 8-15.