Agricultural Economics Research Review
Vol. 21 (Conference Number) 2008 pp 355-362

Determinants of Group Performance of Women-led Agro-processing Self-help Groups in Kerala♣

Lina Joy, A. Prema* and S. Krishnan
Department of Agricultural Economics, College of Horticulture, Kerala Agricultural University, Thrissur - 680 656, Kerala

Abstract

Factors determining the group performance of women-led self-help groups (SHGs) engaged in agro-processing organized under Swarnajayanti Gram Swarozgar Yojna (SGSY) in Kerala have been studied following the multi-stage purposive and random sampling technique in the Thrissur district. It has been observed that socio-economic variables like age, education, market perception, economic motivation, attitude towards self-employment, management-orientation, risk-orientation, innovativeness and information-seeking behaviour influence the group performance of SHGs. The BPL women in SGSY-SHGs of the performing groups are around 30 years of age, with middle school level education. Education and age of respondents have negative correlation on group leadership. The group stability has been determined by factors like group cohesion, group leadership, team spirit, group decision-making and regularity in maintenance of records. Correlation analysis between group performance and socio-economic characters has revealed that management-orientation has a positive and significant influence on all the determinants of group performance, followed by information-seeking behaviour, knowledge about processing, market perception and economic motivation. The parameters like age of respondent, education of spouse, attitude towards self-employment and innovativeness have been found least influential on group performance. The study has indicated the need of providing training on management and technical aspects as well as provision of market infrastructure to the SHGs so that they could become competitive in the market.

Introduction

A self-help group (SHG) is a small economically homogenous group of people having common goal of socio-economic development, for discussing their problems and resolving through appropriate participatory decision-making. In India, the concept of self-help groups can be traced back to the Gandhian Grama Swaraj movement, and the success of Bangladesh Grameen Bank, started by Prof. Mohammed Yunus in 1976, triggered momentum to the concept. Initially, SHGs were organized for savings mobilization and thrift operation among the poor and later, they started taking up income-generating activities like farming, agro-processing and other micro-enterprises. The growth in Indian food industry and agro-processing was a stimulant even in the rural areas. According to Kachru (2006), the Indian food industry has registered a growth of around 20 per cent over the past five years. Growing urbanization, increasing per-capita income, rising woman labour force, changing lifestyles and food habits/ preferences of the population and the increasing level of literacy are resulting in the rising demand for processed food products. The processed food products have made successful penetration even into rural households and food processing constitutes a predominant segment of agriculture. Agro-

* Author for correspondence,
E mail: premaakau@rediffmail.com

♣ This is a part of the MSc(Ag) work of the first author submitted to Kerala Agricultural University in 2007

processing has been taken up as an important micro-enterprise by several self-help groups. Among the various poverty alleviation programmes of the Government of India, *Swarnajayanti Gram Swarozgar Yojna* (SGSY) aims to establish micro-enterprises on a large scale in the rural areas so as to utilize the full potential of the rural poor for their socio-economic development. Even though SHGs have emerged as an alternative developmental strategy to promote common interest of the weaker and vulnerable section of the society and have contributed to the empowerment of the poor women, an array of problems confront the SHGs, including improper selection of group activities, lack of co-operation and zeal among the members of the group, non-availability of adequate amount of raw materials, lack of demand of the products and lack of marketing facilities (Rao, 1999; Tatti, 1999; Reji, 2002 and Anand, 2004).

With this background, the present study was undertaken to identify the factors determining the group performance of women-led SHGs and their influence on the group stability among SHGs involved in agro-processing in Kerala, under SGSY of the government. The specific objectives of the study were to: (i) analyze the socio-economic profile of SGSY group members, (ii) study group characteristics and factors influencing group stability, and (iii) find the relationship between socio-economic variables and group performance.

Methodology and Data Collection

A multi-stage purposive random sampling was followed for the selection of blocks, SHGs and respondents for the present study. The SGSY-SHGs in the Thrissur district undertaking agro-processing and having completed three years of formation, were selected for the study. Five blocks having maximum number of agro-processing SHGs were selected, viz. Mullassery, Thalikkulam, Cherpu, Chavakkad and Wadakkanchery. Four highly performing SHGs having done second grading were selected from every block in each category of activity for a detailed study. One non-performing SHG was also selected for a comparison. From each SHG, five members were selected such that two of them were office bearers and three were ordinary members. The total number of sample respondents was 85.

Information/data was collected by interviewing the respondent SHG members by using a pre-tested, well-structured schedule. Secondary data was obtained from the offices of the District Rural Development Agency (DRDA), Thrissur and Block Development offices. The data pertained to the year 2006.

Both, average and percentage analyses were carried out to draw meaningful interpretations. The relationship between group performance indicators and socio-economic variables of group members was studied by simple correlation method.

Results and Discussion

Agro-processing SHGs in Thrissur District

Agro-processing was the major income-generating activity of the SGSY-SHGs. Block-wise distribution of agro-processing SHGs in the Thrissur district has been presented in Table 1. The highest percentage of agro-processing SHGs was found in Mullassery (72.2%), followed by Thalikkulam (50.0%), Cherpu (42.8%), Chavakkad (32.6%) and Wadakkanchery (32.5%). The main activities undertaken by these SHGs included processing of rice powder, copra and fish and making of ready-to-eat items, pappadam and curry powder. All these activities were categorized under four major groups according to the product-mix as follows:

Category -1: Fish processing (FP)

Category-2: Copra processing (CP)

Category-3: Powder making (PM)

Category-4: Ready-to-eat items making (RM)

Category-5: Non-performing (NP)

Socio-economic Profile of SHG Members

Based on literature survey, discussions with experts and pilot study, 40 group characteristics were identified along with their operational definitions and were communicated for relevancy ranking to judges drawn from the officials of SGSY, *Kudumbashree*, lead banks, Department of Agriculture/ Rural Development and agricultural extension/ economics experts.

Table 1. Block-wise distribution of agro-processing SHGs in Thrissur district

Sl No.	Name of Block	Number of agro-processing SHGs under SGSY	Total number of SHGs	Percentage of agro-processing SHGs in total number of SHGs in the block
1	Mullasery	13	18	72.2
2	Thalikkulam	9	18	50.0
3	Cherpu	6	14	42.9
4	Chavakkad	15	46	32.6
5	Wadakkanchery	13	40	32.5
6	Ollukkara	10	36	27.7
7	Irinjalakkuda	8	26	23.1
8	Chalakkudy	4	35	22.8
9	Chowannur	2	40	22.5
10	Anthikkad	4	19	21.1
11	Mala	3	18	11.1
12	Kodakara	2	40	10.0
13	Pazhayannur	2	49	6.1
14	Kodungallur	9	30	6.6
15	Vellangallur	2	36	5.5
16	Puzhakkal	6	36	5.5
17	Mathilakam	-	38	-
	Total	108	530	20.4

Source: District Rural Development Agency, Thrissur (2006)

The major socio-economic factors having influence on the group performance are discussed below and presented in Table 2.

Age: The average age of respondents of all the categories was in the range of 37-39 years in the performing group and about 30 years in the non-performing group. Women in the age group of 20-30 years were pre-occupied with caring of their children and other household chores and had little time to spare for their groups. This might be one of the reasons for their non-performance.

Education of Respondents and Their Spouses: The average score of respondents and their spouses for level of education was nearly 4, which meant that all were educated up to middle school level. In the non-performing group, the respondents were educated up to high school but the group showed a significant score difference (of 2) between education level of respondents and their spouses. It indicated less support of spouses for group activities. Most of the spouses were labourers and had to go for work. The respondent-women in the non-performing group being in their thirtees, had to look after household chores and their education was limited to 'read and write' only. This could be the reason for their unwillingness to send their spouses (respondents) for group activity.

Income: All households assisted by SGSY were under 'Below Poverty Line' (BPL) category and their income was less than Rs 40,000 per year.

Market Perception: It referred to the degree of perception of SHG-members about up-to-date market knowledge. The powder making and ready-to-eat items making units recorded the highest market perception (score of 5), followed by fish processing and copra processing. The non-performing group had the lowest market perception (score of 1).

Economic Motivation: It referred to the extent to which a respondent was oriented towards profit maximization and the relative value placed on the monetary gains. The economic motivation of powder making units was the highest (24), followed closely

Table 2. Average score of socio-economic characters of SHG-members

Profile characters	Fish processing	Copra processing	Powder making	Ready-to-eat items	Non-performing	Maximum attainable score
Market perception	3	3	5	5	1	6
	(2.5)	(2.5)	(4.5)	(4.5)	(1)	
Economic motivation	20.3	23.9	24	22.25	15	25
	(2)	(4)	(5)	(3)	(1)	
Attitude towards self- employment	5.9	6.05	7.25	5.2	1	9
	(3)	(4)	(5)	(2)	(1)	
Management-orientation	5	9.5	9	9.4	8	10
	(1)	(5)	(3)	(4)	(2)	
Risk-orientation	26	27.4	25	24.9	22	30
	(4)	(5)	(3)	(2)	(1)	
Knowledge about processing	5.9	6.05	7.25	5.2	1	13
	(3)	(4)	(5)	(2)	(1)	
Information-seeking behaviour	2.5	2.5	3.75	3	2	5
	(2.5)	(2.5)	(5)	(4)	(1)	
Innovativeness	2.45	2.45	3	2.75	1	4
	(2.5)	(2.5)	(5)	(4)	(1)	
Rank score total	20.5	29.5	35.5	25.5	9	

Note: Figures within the parentheses indicate ranks

by copra processing, ready-to-eat items making and fish processing. Lack of product differentiation in fish processing was reflected in their low score of economic motivation. The non-performing unit had the lowest score, which indicated that lower profit might be a reason for their failure.

Attitude towards Self-employment: It was the degree of positive or negative perception of SHG-members towards self-employment. In the present context of extreme unemployment, one of the alternatives for income generation was to take up self-employment. Powder making units had the highest score (7.25) for a positive attitude towards self-employment, probably because it did not require much training. Initial investment in it was also very low and it could be taken up even with affordable income. The comparatively low score for ready-to-eat items making unit was because of low returns and higher investments.

Management Orientation: The level of management skills of SHG-members was calculated by their management orientation. Fish processing units had the lowest score (5) because of their poor planning. The average score (8) of the non-performing group indicated that though the members had high management orientation, it was not reflected in their programmes and planning.

Risk-orientation: It was the degree to which the respondent was oriented towards risk- encountering price uncertainty, market condition and technology. Copra processing had the maximum risk orientation (27.4), followed by fish processing (26) and powder making (25). Copra processing required up-to-date information about price and markets of copra and coconut, and it was reflected in their high risk-orientation scores. The average score (22) of the non-performing group showed that the members had high risk-orientation, but due to weak linkages within the group, they were not able to reap the profits.

Knowledge about Processing: Powder making units depicted the highest score (7.25) for knowledge about processing, followed by copra processing and fish processing.The difference in the scores on this count was due to the difference in exposure to

training. Every month a meeting of all the SHGs under each block was being held and training was being provided on different aspects to enhance members' knowledge. The low score of non-performing SHG indicated that they were not aware about new processing practices.

Innovativeness: It depicted the degree to which a respondent was relatively ready to adopt new ideas. The powder making units had the highest score for innovativeness, because they needed to acquire good marketing skill and latest techniques of production. The low score of non-performing group indicated that they were either not adopting new techniques or were not interested in acquiring new ideas.

Information-seeking Behaviour: It depicted the extent to which a SHG member was seeking information from different sources like Krishi Bhavan, Block Office and mass media. The category having highest score on information-seeking behaviour was powder making, which needed awareness about good marketing practices and strong linkages with customers. The non-performing group had a low score on this character too.

Group Performance Indicators of SHGs

The study of group characteristics helped in better understanding of group stability and the factors affecting it. Different group characteristics studied are discussed below and the score of SHGs are reported in Table 3. Copra processing achieved the maximum rank score (21.5), which showed that these groups had maximum group stability, followed by powder making (20.5), fish processing (14), and ready-to-eat items making (14). Non-performing group had the lowest rank score (5), which showed that their group stability was poor.

Group Cohesion: It referred to the degree to which the group members were affiliated to one another and were motivated to remain in the group. The average score on group cohesion for all the performing categories was about 10; the highest being of copra processing units (10.2). The non-performing group had the lowest score (7), indicating weak linkages within the group.

Group Leadership: It was determined on the basis of the tendency of members to get in touch with other members of the group and mix freely with them without any formality or inhibition. Fish processing and copra processing groups had high values on group leadership, may be their work needed more co-ordination than other groups and therefore, a strong leadership was required. Non-performing group had the lowest score (5).

Table 3. Average score of group characters of sample SHGs in Kerala

Category of SHGs/ Group characters	Fish processing	Copra processing	Powder making	Ready-to-eat items	Non-performing	Maximum attainable score
Group cohesion	9.95	10.2	10	9.9	7	13
	(3)	(5)	(4)	(2)	(1)	
Group leadership	13.5	13.05	11.55	11.85	5	15
	(5)	(4)	(2)	(3)	(1)	
Team spirit	17.75	19.5	20	18.25	8	20
	(2)	(4)	(5)	(3)	(1)	
Group decision-making	33.45	35.75	36	35.7	16	36
	(2)	(4)	(5)	(3)	(1)	
Record-keeping	7.75	9	9	6.75	3	9
	(3)	(4.5)	(4.5)	(2)	(1)	
Rank score total	14	21.5	20.5	14	5	93
	(82.4/93)	(87.95/93)	(86.55/93)	(82.4/93)	(39/93)	

Note: Figures within the parentheses indicate the rank for average score in five-point continuum

Team Spirit: It was the willingness of each member of a group to work together with devotion. The powder making groups had the highest score on team spirit (20), followed by copra processing (19.5) and powder making (18.25). Non-performing group had a lower score (8) on team spirit, which showed lack of enthusiasm among the members.

Group Decision-making: The process of arriving at an opinion or decision by a group through either consensus or majority vote was referred as group decision-making. Powder making unit had the highest score on group decision-making (36), followed by copra processing and ready-to-eat items making. The non-performing group had lowest score (16), which indicated lack of team spirit.

Record-keeping: It depicted regularity in maintaining records and theirs verification. These records were helpful for a future reference and depicted transparency in group activities. Proper maintenance of records was also a criterion for grading the SHGs. Monthly checking of records was carried out by the Village Extension Officer. Powder making and copra processing units had the highest average score (9), followed by fish processing (7.75) and ready-to-eat items making (6.75). Non-performing SHGs (NP) had the lowest score (3) on record-keeping.

Relationship between Group Performance Indicators and Socio-economic Characters of Group Members

The coefficients of correlation between group performance indicators and socio-economic variables of group members are presented in Table 4. The significant socio-economic characters that contributed towards group performance were management-orientation, followed by information-seeking behaviour, knowledge about processing,

Table 4. Coefficients of correlation between group performance indicators and socio-economic variables

Variables	Group cohesion	Group leadership	Team spirit	Group decision-making	Record-keeping
Education of respondent	0.191 (0.089)	-0.335 (0.002)	**	**	**
Education of spouse	0.296 (0.009)	**	**		**
Age	**	-0.197 (0.079)	**	**	**
Market perception	**	**	0.301 (0.007)	0.231 (0.039)	0.413 (0.000)
Economic motivation	**	.**	0.285 (0.010)	0.435 (0.00)	0.349 (0.002)
Attitude towards self-employment	**	0.222 (0.048)	**	**	**
Management-orientation	**	0.313 (0.005)	0.575 (0.00)	0.505 (0.00)	0.748 (0.00)
Knowledge about processing	**	0.187 (0.096)	**	0.238 (0.034)	0.346 (0.002)
Risk-orientation	**	**	**	0.433 (0.000)	0.416 (0.117)
Innovativeness	-0.199 (0.077)	**	0.186 (0.099)	0.462 (0.000)	**
Information-seeking behaviour	**	**	0.277 (0.013)	0.293 (0.008)	0.471 (0.00)

Notes: Figures within the parentheses are probability levels of significance.

** indicates values of insignificant correlation.

market perception and economic motivation. The parameters like age, education, attitude towards self-employment and innovativeness were least influential. All the respondents had almost same education and economic levels, but many of the groups were low in innovativeness.

Only three variables, viz., education of respondent as well as spouse and innovativeness were found to have a significant relationship with group cohesion. It is evident from Table 4 that three variables, viz. management-orientation, knowledge about processing and attitude towards self-employment had a positive and significant relationship with group leadership. The variables education of respondent and age exhibited a negative but significant relationship with group leadership. As educational status increased, orientation towards self-help group activity decreased. Jayalakshmi (2001) has also reported similar observations.

Four variables, viz. economic motivation, information-seeking behaviour, management-orientation, and market perception had significant and positive relationship with team spirit. The members having high economic motivation try to maintain team spirit in the group and work as a team for their future benefit. Also, as team spirit increased, management orientation also increased. Sreedaya (2000) has also reported similar observations. The increase in team spirit enhanced the market perception of the group.

Information-seeking behaviour, knowledge about processing, management-orientation, market perception, risk-orientation and economic motivation were significantly and positively related to group decision-making. These results are in agreement with the findings of Sarada (2001). The group performance indicator, regularity in the maintenance of records was found to be influenced by market perception, economic motivation, management-orientation, knowledge about processing, risk-orientation and information-seeking behaviour.

Conclusions

The study has revealed that different agro-processing SHGs, classified under four groups of fish processing, copra processing, powder making and ready-to-eat items making, behave differently in their socio-economic and group characters. The study has indicated that the performance of SHGs is influenced more by the experience indirectly captured by the age rather than the education level. It is revealed that group stability is influenced by factors like group cohesion, group leadership, team spirit, group decision-making and regularity in maintenance of records. Analysis has revealed that significant socio-economic characters that contribute towards group performance in general, are management-orientation, information-seeking behaviour, knowledge about processing, market perception and economic motivation, while the parameters age, education and income have been found least influential. The study has observed the need for better training in the fields of management-orientation, risk-orientation and information-seeking behaviour. It has been suggested that the SHG-members should be given better training on management and technical aspects and should be provided with market information and infrastructure so that they could scale-up their production and become competitive in the market.

Acknowledgement

Authors thank the referee for his comments which helped in value-addition to the paper.

References

Anand, J.S. (2004) Self- help groups in empowering poor women. Some experience from Kerala, India. In:*Alleviating Poverty: Case Studies of Local Level Linkages and Processing in Developing World*. Eds: V. Menon, P.G. Nair and K.N. Nair. Rainbow Publishers, Noida, pp. 285-309.

Jayalakshmi, G. (2001) *Empowerment of Rural Women through Self-help Groups — An Action Reasearch*. PhD Thesis, Kerala Agricultural University, Thrissur.

Kachru, R.P. (2006) *Agro-processing Industries in India: Growth, Status and Prospectus*. Available: http:// agricoop.nic.in.pdf. 16.December.

NABARD (1998) *Progress of SHG-Bank Linkage in India*. National Bank for Agriculture and Rural Development, Bangalore. 62p.

Rao, M.K. (1999) *Organising and Implementing Income-generating Activities through Self-help Groups in*

Fisheries and Agriculture, National Bank for Agriculture and Rural Development, Bangalore. 350p.

Reji, E.M. (2002) *Impact of Micro Finance through Self-help Groups in Malappuram District*. MSc (Ag) Thesis, Kerala Agricultural University, Thrissur.

Sarada, O. (2001) *Empowerment of Rural Women through SHGs in Prakasam District of Andhra Pradesh — An Analysis*. MSc (Ag) Thesis, University of Agricultural Sciences, Bangalore.

SGSY (2006) *Swarnajayanthi Gram Swarozgar Yojana –Guidelines*. Available:http://www.drd.nic.in/Guide/sgsy.htm

Sreedaya, G.S. (2000) *Perforamnce Analysis of the Self-help Groups in Vegetable Production in Trivandrum District*. MSc (Ag) Thesis, Kerala Agricultural University, Thrissur.

Tatti, I. (1999) *General Monitoring Study of SHGs Promoted by Selected NGOs.* Vijaya Bank Report. Head Office, Bangalore. 80p.