

**EMPLOYMENT AND INCOME GENERATION THROUGH LIVESTOCK
AMONG WOMEN SELF HELP GROUPS – A STUDY IN
THIRUVANNAMALAI DISTRICT., TAMILNADU***

***B. Jaya Varathan, M. Prabu, A. Serma Saravana Pandian and G. Senthilkumar**

Department of Animal Husbandry Economics,
Madras Veterinary College, Chennai-600 007.

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ABSTRACT

A study was undertaken in Thiruvannamalai district of Tamil Nadu to analyze the socio-economic characteristics, income and employment pattern of Self Help Group members and non-members through livestock rearing. Data pertaining to the objectives of the study were collected from 120 sample respondents using pre-tested interview schedule. The results showed that, out of 60 SHG women livestock farmers, the presence of landless category was the highest (76.67 per cent) and out of 60 women livestock farmers from non-members of SHG, the marginal farmer category were the highest (50.00 %). It was observed that 77 per cent of the SHG respondents were from landless category. The overall average land holding size of SHG member and non-member was 0.67 and 1.43 acres respectively which showed that economically weaker sections of the women farmers were participating more in the SHG programme. The average livestock holding size of SHG members were low (1.94) compared to non-members (2.37). SHG members having secondary level of education were at a higher level (58.33 %) than non-members (9 %). The analysis on income and employment pattern of sample respondents clearly indicated that the livestock farming engaged more man-days (121) and fetched higher annual income (Rs.28874) among SHG members compared to non-members (51 man-days and Rs.24687). The study distinctly indicated the favorable impact of the SHG programme on the socio-economic characteristics, income and employment dimensions among SHG women members.

Key words: Socio-economic status, income, employment, SHG members, non-members, Livestock rearing

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*Corresponding author : Email : vet_varathan@yahoo.co.in

INTRODUCTION

With the advent of globalization and industrialization, agriculture and its allied activities have become more commercial and is bracing for a crucial place in the economic development of country. Under the agricultural domain, animal husbandry has occupied a prominent place by generating income and employment to the resource poor rural women. The estimate of employment in animal husbandry sector was about 11.44 million in principal status and 11.01 million in subsidiary status, which is 5.50 per cent of the total working population of the country. Also, out of 22.45 million population engaged in animal husbandry sector, 16.84 million were women. Thus, the total employment in animal husbandry and fisheries sector is around 9.05 per cent of total work force in the country (NSSO, 2005).

As per the reports on Status of Microfinance in India by NABARD during 2009-10, 96 per cent of the SHGs constituted women's group with 90 per cent of the members owned less than two acres of land. The Non-availability of land and the willingness to start the individual business were the two major reasons for the women farmer to initiate any livestock related activities. Apart from this, less input cost involved in the purchase and maintenance of animals, easy access to markets for their outputs especially milk at their doorsteps and regular flow of money in their hands on daily basis for their outputs push them to go for livestock related activities in present day rural economic activities. Also, access to knowledge through training programmes at Veterinary Extension Centres and Non-Governmental Organizations makes them to do livestock related activities on a sustainable and

profitable basis. In this context, the present study was undertaken to analyze the socio-economic status of SHG members and non-members who rear livestock and to assess their income and employment pattern.

METHODOLOGY

The study was conducted in the district of Thiruvannamalai, Tamil Nadu. Out of the total number of SHGs (2, 48,139 during 2008-09) present in the district, more than 86 % was in rural areas (Annual report, Tamil Nadu Corporation for Development of Women, 2009). Hence, the factors like higher number of rural women SHG and high number of livestock population present in the Thiruvannamalai district provided the environment to assess the empowerment and income generation through livestock.

For collection of data, a multi-stage random sampling design (I Stage – Selection of Blocks and II Stage – Selection of Villages) was used. From 18 blocks of Thiruvannamalai district, two blocks (Polur and Kalasapakkam) were selected by simple random sampling. From each selected block, five villages were selected by simple random sampling technique. From each of the selected villages, six respondents each from SHG members and non-members who rear livestock were selected. Thus, a sample of 60 respondents from SHGs members and 60 respondents from non-SHG members who reared livestock were selected. The data collected were tabulated and analyzed with average and percentage analysis to achieve the desired objectives of the study. For the present study, the pattern of employment was estimated in terms of man-days. Regarding man equivalent days, one-man day is equal to 8 hrs

of work done by an adult male worker and one female day is equal to 2/3rd of man day (Elumalai and Pandey, 2004). Total number of animals owned by each respondent was converted into livestock units (five mature sheep or goats was equal to one livestock unit) as described by Ensminger (1997).

RESULTS AND DISCUSSION

Classification of sample farmers

The details of category-wise classification of sample farmers in the study area are presented in Table 1. From the table, it could be inferred that, out of 60 SHG women livestock farmers, the landless category was the highest (76.67 %), followed by marginal category (15.00 %) and small farmer category (8.33 %). Out of 60 women livestock farmers from non-members of SHG, the marginal farmer category was the highest (50.00 %), followed by landless (41.67 %), large farmer (5.00 %) and small farmer categories (3.33 %). On comparing the SHG members and non-members, the presence of landless women farmers was highest in SHG (76.67 %) compared to non-members (41.67 %).

Landholding of sample livestock farmers

Based on the land holding size in acres, the sample respondents were classified into landless, marginal (less than 2.5 acres), small (2.5 acres to 5 acres) and large farmer (above 5 acres) categories. The average land holding size of the sample farmers in the study area are presented in Table 2.

From Table 1, it was observed that 77 per cent of the SHG respondents were from landless category. The remaining 23 per cent

were from the marginal and small farmer category who were holding land up to 5 acres. Their average land holding size was found to be 2.10 and 4.20 acres, respectively. For non-members, the average land holding size was found to be 1.65 acres, 3.25 acres and 10.00 acres in marginal, small and large farmer categories, respectively. The overall average land holding size of SHG member and non-member was 0.67 and 1.43 acres, respectively which showed that economically weaker sections of the women farmers were participating more in the SHG programme.

Average size of family

The Table 3 revealed that, the average family size of members in landless and marginal categories of women farmers from SHG was less (3.97 and 4.00, respectively) when compared to the non-members (4.36 and 4.53 respectively). Also, it could be inferred from the table that the overall average family size of farmers in SHG was found to be 4.01 which is lower than the non-members of SHG by 0.37. Thus, it could be concluded that the average family size of women SHG members is less. Members with small family size have got more disposable time which could also be the reason for the participation in the programme.

Educational status of sample farmers

It could be evinced from Table 4, that among the SHG members, the highest percentage of respondents (58.33 per cent) had secondary level education, followed by 18.33 per cent illiterates, 16.67 per cent primary level educated and 6.67 per cent collegiate education. Among non-members, the highest percentage (61.67) fell under primary level education,

followed by 23.33 per cent in illiterates and 15.00 per cent in secondary level education. On comparing the educational status of SHG members and non-members, two main observations were thrown out. High presence of SHG members in secondary level education and overall higher percentage of educational status of the SHG members compared to the educational status of non-members showed that women members who were at the enhanced level of education were involving more in the SHG programme. A relatively higher level of educational status present in the participants of the programme would have definitely played a role in maintaining records and other documents related to group activities.

Livestock holding of SHG members and non-members

The results of the livestock holding of different categories of sample farmers are presented in Table 5. From the table, it could be inferred that the herd size was 1.73 units in landless category of SHG members which was higher than the average herd size in the non-member category by 0.12 units. However, the cow holding of the marginal category farmer in non-member category was 2.90 which was higher than that of the SHG category by 0.79 units. The members did not possess bullock as majority of the SHG members did not have remarkable agricultural land.

Occupation wise distribution of SHG members and non-members

Occupation wise distribution of SHG members and non-members is presented in Table 6. In SHG, out of 46 farmers in landless category, 91.30 and 8.70 per cent of SHG

women members were doing animal husbandry activities at their secondary and primary occupation levels, respectively. But in non-member category, out of 25 farmers in landless category, 64.00 and 36.00 per cent were doing animal husbandry activities at their secondary and primary occupation levels, respectively. This clearly implied that majority of the women members who are participating in the group activities were doing livestock activities predominantly compared to non-members. All the nine farmers under marginal category in SHGs were doing agriculture as their prime occupation and animal husbandry as their secondary occupation. The same scenario existed for the occupational status of non-members from marginal category. All the non-members were doing agriculture as their prime occupation and animal husbandry as their secondary occupation. The whole five members in small farmer category of SHGs were doing agriculture and animal husbandry as their prime and secondary occupation, respectively. The two farmers in non-member category also replicated the same pattern as that of members in terms of their occupation. All the three non-members from large farmer category were doing agriculture and animal husbandry as their prime and secondary occupation, respectively.

Employment pattern of SHG members and non-members

The employment pattern of the sample respondents were analyzed and presented in Table 7. The livestock farming contributed 121.57 man-days per annum for SHG members whereas it was 51.04 man-days per annum for non-members, which clearly showed the employment potential for SHG members. The results concurred well with Sreeramulu (2001)

who studied the landless dairy production systems, its problems and prospects in Andhra Pradesh. The result also drew a similar line with the findings of Singh (2002) who found that 60 per cent of total employment generated per farm was contributed by the livestock sector and remaining 40 per cent was by the crop husbandry sector and he also pointed out that livestock activities created an annual employment of 576 man-days.

Annual gross household income from different sources for SHG members and non-members

The annual gross household income for SHG members and non-members are presented in Table 8. The average annual gross family income per household for SHG members was Rs. 87,240, in which the income from other occupation category accounted for Rs. 30,400 (34.85 %) followed by livestock activities for Rs. 28,874 (33.1 %), agriculture for Rs. 22,300 (25.55 %) and local business for Rs. 5,667 (6.50 %). This clearly implied that the contribution of livestock to the average total family income was positioned next to the contribution of income from other occupation category of SHG members. The average annual gross family income per household for non-members was Rs. 90,004, in which the highest contribution was from agriculture which was about Rs.48,933 (54.37 %). The next contribution was from livestock activities (27.43 %) followed by other occupation category (18.20 %).

On comparing the average total family income for the farmers in landless category, the SHG members' average total family income placed at a higher value (Rs. 75505) than the non-members (Rs.56708). This high value distribution of income could be due to their

participation in SHG programme. The members could easily reach the credit access from the financial institutions for lower rates of interest in existing market conditions. Comparing the income level of members and non-members in marginal and small category had given mixed results. Overall, the SHG members from landless category evinced higher level of income distribution compared to the non-members that pitched the fact that empowerment in terms of income was high for SHG members.

SUMMARY AND CONCLUSIONS

The overall average land holding of SHG member and non-member was found to be 0.67 and 1.43 acres, respectively. The overall average family size for sample farmers in SHG was 4.01 and for non-members it was 4.38. Among the SHG members, the highest percentage of respondents (58.33 %) possessed secondary level of education. With regard to livestock holding, on an average, the sample farmers from SHG members and non-members hold 1.94 and 2.37 cows, respectively in the study area. Among SHG members from landless category, 91.30 per cent were doing animal husbandry activities as their secondary occupation compared to 64.00 per cent in non-members category. The livestock occupation contributed 121.57 man-days for SHG, whereas it was 51.04 man-days for non-members. The overall average annual gross household income for SHG members was Rs. 87,240 in which the income from other occupation category accounted 34.85 per cent followed by livestock activities (33.10 %), agriculture (25.55 %) and local business for (6.50 %). The overall average annual gross income per household for non-members was Rs. 90,004, in which the highest contribution was from agriculture which was

about 54.37 per cent. On comparing the total family income in landless category, the members' average total family income per household placed at a higher value (Rs. 75,504) than the non-members (Rs.56, 708).

The present study indicated that in SHG programme, majority of the participants fell under landless category and possessed higher level of education than the non-members. Livestock rearing was practiced as their secondary occupation among SHG members compared to non-members. The income analysis evidenced that the percentage of contribution of income from dairying was high among

members. Keeping these good signs in mind, adequate measures could be taken involving all the stakeholders such as veterinary institutions, Veterinary extension centers, NGO's and SHG participants in order to capture the growing momentum and to consolidate the gain achieved so far. This will further stimulate the existing contribution of livestock sector at the national level thereby it designs the way to ensure food security and to maintain equality. Hence, livestock farming ought to be promoted among SHG members for effective and efficient utilization of manpower and to improve the income status of rural SHG women.

Table 1 Classification of sample farmers on the basis of land holding

(in numbers)

Members / Non Members	Category of farmers				
	Landless	Marginal	Small	Large	Total
SHG	46 (76.67)	9 (15.00)	5 (8.33)	-	60 (100.00)
Non-members	25 (41.67)	30 (50.00)	2 (3.33)	3 (5.00)	60 (100.00)

(Figures in the parentheses indicate percentages to total)

Table 2 Average landholding size of the members and non-members of SHG

(in acres)

Category of farmers	SHG members	Non-members
Landless	-	-
Marginal	2.10	1.65
Small	4.20	3.25
Large	-	10.00
Overall	0.67*	1.43

*including landless

Table 3 Average family size of sample farmers

(in numbers)

Category of farmers	SHG members	Non-members
Landless	3.97	4.36
Marginal	4.00	4.53
Small	4.40	4.00
Large	-	3.33
Overall	4.01	4.38

Table 4 Educational status of livestock farmers (SHG members and non-members)**(in numbers)**

Category of farmers	SHG members					Non-members				
	Illiterate	Primary	Secondary	Collegiate	Total	Illiterate	Primary	Secondary	Collegiate	Total
Landless	9(19.57)	9(19.57)	26(56.52)	2(4.34)	46(100.00)	9(36.00)	14(56.00)	2(8.00)	-	25(100.00)
Marginal	2(22.22)	1(11.11)	6(66.67)	-	9(100.00)	4(13.33)	20(66.67)	6(20.00)	-	30(100.00)
Small	-	-	3(60.00)	2(40.00)	5(100.00)	-	2(100.00)	-	-	2(100.00)
Large	-	-	-	-	-	1(33.33)	1(33.33)	1(33.33)	-	3(100.00)
Overall	11(18.33)	10(16.67)	35(58.33)	4(6.67)	60(100.00)	14(23.33)	37(61.67)	9(15.00)	-	60(100.00)

*(Figures in the parentheses indicate percentages to the total)***Table 5 Average livestock holding size of SHG members and non-members****(in livestock units)**

Type of livestock	SHG members					Non-members				
	Landless	Marginal	Small	Large	Total	Landless	Marginal	Small	Large	Total
Dairy	1.73	2.11	3.40	-	1.94	1.61	2.90	2.66	2.50	2.37
Bullock	-	-	-	-	-	-	4.00		2.00	2.66
Small Ruminant	15.4	-	-	-	15.4	16.5	10.00	-	-	15.2

Table 6 Occupation wise distribution of SHG members and non-members

S. No	Category	SHG members	Non-members
Primary occupation			
1	Agriculture	14	35
2	Livestock	4	9
3	Local business	4	-
4	Others	38	16
5	Total	60	60
Secondary occupation			
1	Agriculture	-	-
2	Livestock	56	51
3	Local business	1	-
4	Others	3	9
5	Total	60	60

(Figures in the parentheses indicate percentages to total)

Table 7 Employment pattern of SHG members and non-members

(in man-days per annum)

Source of income	Self Help Group				Non Self Help Group				
	Landless	Marginal	Small	Overall	Landless	Marginal	Small	Large	Overall
Agriculture	-	200.00	200.00	200.00	-	232.50	186.67	160.00	193.06
Livestock	131.38	116.67	121.57	121.57	140.00	87.50	58.33	58.33	51.04
Local business	219.00	-	-	219.00	-	-	-	-	-
Other occupation	178.91	-	-	178.91	135.22	-	-	-	135.22

Table 8 Annual Gross household income for SHG members and non-members

Source of income	Self Help Group				Non Self Help Group				
	Landless	Marginal	Small	Overall	Landless	Marginal	Small	Large	Overall
Agriculture	-	80333.33 (70.63)	123000.00 (70.24)	22300.00 (25.55)	-	59533.33 (66.24)	100000.00 (77.88)	316666.66 (92.29)	48933.33 (54.37)
Livestock	28461.29 (37.69)	33405.55 (29.37)	52110.00 (33.10)	28873.65 (30.56)	17388.00 (30.56)	30345.50 (33.76)	28410.75 (22.12)	26452.35 (7.71)	24687.34 (27.43)
Local business	7391.30 (9.79)	-	-	5666.67 (6.50)	-	-	-	-	-
Other occupation	39652.17 (52.52)	-	-	30400.00 (34.85)	39320.00 (69.44)	-	-	-	16383.33 (18.20)
Average total family income	75504.76 (100.00)	113738.88 (100.00)	175110.00 (100.00)	87240.32 (100.00)	56708.00 (100.00)	89878.83 (100.00)	128410.00 (100.00)	343119.01 (100.00)	90004.00 (100.00)

(Figures in the parentheses indicate percentages to total)

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