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STUDY ON VARIOUS SOCIO-PERSONAL CHARACTERISTICS OF SELF HELP GROUP (SHG) AND NON-SHG MEMBERS PRACTICING DAIRY FARMING IN WEST BENGAL, INDIA

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ABSTRACT

The study was conducted in Dakshin Dinajpur district of West Bengal. Data were collected through personal interview with the help of pre-tested structured schedule from randomly selected 80 SHG member of 8 blocks of the district. Two villages from each block and five respondent from each village were selected, total of 80 SHG beneficiaries rearing animals were used to make a control group the SHG dairy farmers were younger in age with less than secondary level education. Majority of them depended on agriculture and animal Husbandry based production system with nuclear family and low income group having land holding up-to one hectare. Though, the socio-economic condition of the SHG was poor but their information network, socio-psychological orientation and adoption behavior were better than Non-SHG members. The study indicated that younger farmers with lower level of education and economic status were readily available to join developemental programme which was actually designed for the socio-economic up-liftment of the rural SHG members.

Key words: Dairy farming, Non-SHG, Self Help Group (SHG), Socio-personal.

INTRODUCTION

Dairy farming is a economically important for millions of Indian rural household linked with many complex household requirements. This sector contributes about 26% of its GDP from agriculture and plays a crucial role in rural economy. It has been considered as one with highly potential for alleviating poverty and unemployment in rural areas. Realizing the scenario, Government has implemented several rural developmental schemes since independence. To help the rural poor who have aptitude for self employment programme, Govt. has launched an integrated developmental programme as Swarna Jayanti Gram Swarojgar Yojana (SGSY) in April, 1999. This programme is aimed at assisting the rural poor realizing their latent entrepreneurial potential to build sustainable self-employment through several micro-enterprises in which dairy farming is essentially a need based agrarian intervention (Purushotham-2005). The success of a project depends on the local resources, aptitude, skill and marketing which can be evaluated efficiently through imparting Extension Education. This plays a pivotal role in successful implementation of the SGSY project. So, concurrent evaluation and impact studies of the project may suggest that whether the development administration provided quality support and came out with innovative strategies of support or not with encouraging results. Keeping this idea in mind an attempt has been made to Study various Socio-personal characteristics of SHG & Non-SHG members practicing dairy farming in West Bengal'

MATERIALS AND METHODS

The study was conducted in purposively selected Dakshin Dinajpur district of Northearn region of West Bengal. Data was collected through personal interview with the help of pretested structured schedule administered on randomly selected 80 SHG members practising dairy farming from selected blocks covered under SGSY programme in the district. From 8 blocks of the district, 2 villages were selected from each block, considering the entrepreneurial potentiality of SHG members five respondents were selected randomly,

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so (10) respondents from each block (5X2= 10) were selected for data collection. Similar number of respondents (10X8= 80) from same blocks as Non SHG beneficiaries in the same way rearing dairy cattle was selected to make as control group. Dependent variables such as- Knowledge in improved A.H. Practices (IAHP) and adoption index in improved Dairy farming practices were measured by using the available scales. Adequate numbers of independent variables were selected for the study under the socio-economic, socio psychological, communication and administrative category. The data thus generated were computed and analysed by various statistical methods including percentage, Mean+ SE, Skewness, Kurtosis, Range analysis for better interpretation of the results.

RESULTS AND DISCUSSION

Socio-Personal characteristics of Sample SHG Dairy farmers of Dakshin Dinajpur district of W.B. are shown in Table-1.

Large numbers of sample SHG Dairy farmers belong to the marginal category (58.75%) and within the age group of 18-40 year. Almost all the sample SHG dairy farmers (97.50%) were female and amongst them maximum respondents were Hindus by religion. Majority (85.00%) of the sample stakeholders were married and amongst them maximum number of dairy farmers depended on agriculture and animal husbandry to maintain their livelihood. More than half of the sample farmers (56.25%) belong to low income group (i.e. Rs. below 2000/-) and cultivation (42.50%) was the principal occupational support system with livestock holding size of 5 cattle unit (Small farmers). Majority of SHG dairy farmers on overall basis belong to general caste (46.25%) and 1/3rd of sample farmers (35.00%) were having at least high school education. Majority (77.50%) of sample SHG dairy farmers belong to nuclear family having up to 5 members (75.00%) with land holding up to one hectare (Marginal). It is again reported in the table that 3/4th of the dairy owners were having Kutcha house and nearly half (42.50%) of the farmers had 1-2 draught animals as farm power, whereas no respondents have more than 5-6 draught animals/tractor as farm power. Almost all the sample respondents (97.50%) were from rural family culture and amongst them almost half of the (43.75%) dairy farmers possessed at least two improved materials in their family. Greater numbers (57.50%) of respondents belong to member of one organization with at least 1-2 numbers of extension training related to dairy farming. Majority of (40.00%) respondents never read news paper as a primary communication source, which is very much indicative in the study. The findings also reported that nearly equal number of SHG dairy entrepreneurs used to take decisions collectively and jointly by Husband-Wife.

Socio-Personal characteristics of Non-SHG Dairy farmers of Dakshin Dinajpur district of W.B. are shown in Table-1.

Majority of Non-SHG Dairy farmers belong to marginal group (57.50%) and within the age group of 18-40 year (77.50%). More than half (56.25%) of the sample dairy farmers were female and maximum (71.25%) belong to Hindu by religion. Almost 3/4th of Non-SHG stakeholders were married (76.25%) and amongst them greater number (70.00%) of respondents depended on agriculture and animal husbandry as means of their livelihood. Majority (67.50%) of the dairy farmers used to earn Rs. below 2000/- (Low income group) per month and cultivation was the principal occupation of half of the respondents (50.00%). Approximately all (93.75%) were small farmers (Livestock holding Below 5 Cattle unit) in which greater numbers (53.75%) of the dairy farmers belong to general caste and approximately 1/3rd dairy owners were having high school education (38.75%). More than 70.00% respondents belong to nuclear family with up to 5 members in their family and more than half (52.50%) of the stakeholders were having land up to one hectare. The types of house, the sample dairy farmer's lives in reflect their poor socio-economic status. Majority (75.00%) of dairy owners used to reside in Kutcha House. The distribution of the farm power and Material possession indicated the economic backwardness of the sample Non-SHG dairy farmers. Half of the (52.50%) dairy farmers were having 1-2 draught animals as farm power, whereas nearly 50% had at least 2 numbers of improved materials in their House. Approximately, all respondents were from rural family culture and half of them had no social participation with 1-2 no's of extension training orientation related to dairy farming. It is also evident that on overall basis nearly 1/3rd of the sample dairy farmers used to read news paper several days in a week and majority (63.75%)

TABLE 1. Distribution of Some Demographic and Socio-Personal characteristics of Self Help Group (SHG) & Non Self Help Group (NSHG) respondents.

Items	Category	Self Help Group(SHG)		Non Self Help Group(NSHG)	
		Frequency (N= 80)	Percentage (%)	Frequency (N= 80)	Percentage (%)
Category	Landless	22	27.50	20	25.00
	Marginal	47	58.75	46	57.50
	Small	11	13.75	14	17.50
	Medium- Large	00	0.00	00	0.00
Age	< 18 years	10	12.50	05	6.25
	18-40 years	56	70.00	62	77.50
	41-60 years	13	16.25	13	16.25
	> 61 years	01	1.25	00	0.00
Sex	a. Male	02	2.50	35	43.75
	b. Female	78	97.50	45	56.25
Religion	a. Hinduism	56	70.00	57	71.25
	b. Muslim	23	28.75	22	27.50
	c. Christian	01	1.25	01	1.25
	d. Others	00	0.00	00	0.00
Marital Status	Married	68	85.00	61	76.25
	Unmarried	09	11.25	19	23.75
	Widow	03	3.75	00	0.00
	Divorced	00	0.00	00	0.00
Source of Income	a. Agril. + Animal Hus.	52	65.00	56	70.00
	b. Agril+ A.H.+ Business	09	11.25	06	7.50
	c. Agril.+ A.H. + Service	04	5.00	04	5.00
	d. A.H. + Business	08	10.00	03	3.75
	e. Agril,+ A.H. + Others	07	8.75	08	10.00
	f. others	00	00	03	3.75
Gross Income	a. Below 2000/-	45	56.25	54	67.50
	b. 2001-5000/-	32	40.00	24	30.00
	c. 5001& above	03	3.75	02	2.50
Herd Size	a. Small farmer(1-5)	72	90.00	75	93.75
	b. Medium farmer(5-10)	08	10.00	05	6.25
	c. Large farmer(< 10)	00	0.00	00	0.00
Occupation	Labour	14	17.50	08	10.00
	Caste occupation	00	0.00	00	0.00
	Business	07	8.75	04	5.00
	Independent	02	2.50	03	3.75
	Cultivation	34	42.50	40	50.00
	Service	02	2.50	02	2.50
	Labour & Cultivation	12	15.00	12	15.00
	Cultivation & Business	09	11.25	11	13.75
Caste	Scheduled caste	25	31.25	25	31.25
	scheduled tribe	18	22.50	11	13.75
	General	37	46.25	43	53.75
	Other Backward cast	00	0.00	01	1.25
Education of respondent	Illiterate	04	5.00	00	0.00
	Can read only	04	5.00	04	5.00
	Can read & write	17	21.25	11	13.75
	Primary	19	23.75	17	21.25
	Middle	07	8.75	12	15.00
	High School	28	35.00	31	38.75
	Graduate	01	1.25	05	6.25

Items	Category	Self Help Group(SHG)		Non Self Help Group(NSHG)	
		Frequency (N= 80)	Percentage (%)	Frequency (N= 80)	Percentage (%)
Family type	a. Nuclear family	62	77.50	61	76.25
	b. Joint family	18	22.50	19	23.75
Family size	Up to 5 member	60	75.00	62	77.50
	Above 5 member	20	25.00	18	22.50
Land	No Land	15	18.75	22	27.50
Holding	Up-to One hectare	54	67.50	42	52.50
	Up-to Two hectare	11	13.75	15	18.75
	Above Two hectare	00	0.00	01	1.25
House type	No house	00	0.00	00	0.00
	Hut	07	8.75	11	13.75
	Kutcha house	62	77.50	60	75.00
	Mixed house	08	10.00	08	10.00
	Pucca house	03	3.75	01	1.25
	Mansion	00	0.00	00	0.00
Farm Power	No Draught animal	27	33.75	29	36.25
	1-2 Draught animals	34	42.50	42	52.50
	3-4Drought animals/1or more prestige animals	19	23.75	09	11.25
	3-4Drought animals/1or more prestige animals	00	0.00	00	0.00
Material	No Material	01	1.25	00	0.00
Possession	Single Materials	15	18.75	20	25.00
	Double Materials	35	43.75	35	43.75
	Triple Materials	27	33.75	18	22.50
	Four Materials	02	2.50	07	8.75
Family	Rural	78	97.50	76	95.00
culture	Peri-Urban	02	2.50	04	5.00
	Urban	00	0.00	00	0.00
Social	No participation	29	36.25	39	48.75
Participation	Member of one organization	46	57.50	30	37.50
	Member of more than 1 organization	05	6.25	11	13.75
	Office bearer of any organization	00	0.00	00	0.00
Extension	None	36	45.00	33	41.25
Training	One to two	41	51.25	46	57.50
	Three to four	03	3.75	01	1.25
	Five & above	00	0.00	00	0.00
News paper	Never	32	40.00	15	18.75
reading	Less than once a week	13	16.25	20	25.00
	Once in week	13	16.25	15	18.75
	Several day in week	13	16.25	26	32.50
	Everyday in week	09	11.25	04	5.00
Decision	No response	00	0.00	00	0.0
making	Husband only	03	3.75	01	1.25
pattern	Collective decision	37	46.25	51	63.75
	Joint decision	34	42.50	28	35.00
	Wife only	06	7.50	00	0.00

TABLE 2. Summary of Extension Education impact related factors of Sample SHG & Non- SHG Respondents of Dakshin Dinajpur District of West Bengal.

Variables	Self Help Group (N= 80)				Non- Self- Help Group (N= 80)			
Independent Variables	Mean ± SE	Kurtosis	Skewness	Range	Mean ±SE	Kurtosis	Skewness	Range
Socio- Economic:								
(x_1) Age	2.06±0.07	1.14	0.39	3.00	2.10±0.05	1.28	0.34	2.00
(x_2) Occupation	3.24±0.20	-1.66	-0.19	5.00	3.89±0.17	-0.37	-0.99	5.00
(x_3) Caste	2.15±0.10	-1.60	-0.29	2.00	2.23±0.10	-1.58	-0.48	2.00
(x_4) Education	3.36±0.17	-0.82	-0.37	6.00	3.88±0.15	-0.88	-0.44	5.00
(x_5) Family Edu status	3.62±0.08	-0.82	0.06	3.42	3.64±0.07	0.28	0.18	3.33
(x_6) Family type	1.23±0.05	-0.27	1.32	1.00	1.24±0.04	-0.48	1.23	1.00
(x_7) Family size	1.25±0.05	-0.67	1.15	1.00	1.23±0.04	-0.27	1.31	1.0
(x_8) Land Holding	0.95±0.06	0.08	-0.01	2.00	0.90±0.08	-0.38	0.29	3.00
(x_9) House Type	2.09±0.06	3.37	1.19	3.00	1.98±0.06	2.34	0.48	3.00
(x_{10}) Farm Power	1.80±0.17	-1.22	0.16	4.00	1.36±0.14	-0.39	0.62	4.00
(x_{11}) Mat. Possession	2.23±0.10	0.78	0.44	5.00	2.16±0.10	0.01	0.61	4.00
(x_{12}) Gross Income	1.48±0.06	-0.51	0.71	2.00	1.35±0.05	0.23	1.13	2.00
Communication:								
(x_{13}) Inform. Source	8.16±0.25	0.56	0.86	11.00	7.85±0.20	-0.05	0.51	9.00
(x_{14})Urban Contact	4.16±0.18	-0.39	0.28	8.00	3.83±0.17	0.44	0.71	8.00
(x_{15}) Social Particip.	0.70±0.06	-0.59	0.15	2.00	0.66±0.08	-0.84	0.58	2.00
(x_{16}) Extn. Contact	1.18±0.13	-0.84	0.28	4.00	1.20±0.11	-1.34	-0.13	4.00
Administrative:								
(x_{17}) Market Orient.	13.54±0.23	1.44	-0.56	11.00	14.10±0.28	-0.16	-0.66	11.00
(x_{18}) Risk Orient.	14.28±0.22	0.66	-0.65	9.00	13.74±0.28	-0.16	-0.49	10.00
Socio-Psychological:								
(x_{19}) Eco. Motiv	3.17±0.14	-1.17	0.21	4.50	2.95±0.12	-0.38	0.55	4.34
(X_{20}) Innov. Pronnes	3.47±0.14	-0.60	0.56	5.17	4.05±0.11	-0.49	-0.23	5.67
(X_{21}) Dec. Making	2.54±0.08	-0.28	0.21	3.00	2.34±0.05	-1.12	0.38	2.00
(X_{22})Atitude in Dairy	18.73±031	-0.87	0.16	11.0	19.40±0.30	-0.36	-0.23	11.00
(x_{23}) Atti. in Employ	17.21±0.17	0.33	-0.14	9.00	17.52±0.25	0.28	0.46	11.00
(X_{24}) Att. in Income	25.03±0.27	-0.78	0.04	10.00	24.75±0.24	-0.39	-0.18	9.00
Dependent Variables:								
(Y_1) Know in IAHP	40.10±0.9	-0.44	0.58	86.00	42.63±0.66	-0.37	0.07	26.00
(Y_2) Adoption Index	5.29±0.17	1.20	0.81	8.50	4.88±0.14	1.60	1.01	7.00

TABLE 3. Significance of difference in the Mean values of different Independent & Dependent variables (Adoption Index & Know. In IAHP) of Sample between SHG & Non- SHG Respondents.

Independent Variables	Mean value of SHG (N= 80)	Mean value of NSHG (N= 80)	Mann-Whitney U test	Sig.(2 tailed)
Socio- Economic:				
(x_1) Age	2.06	2.10	3076.50	0.58
(x_2) Occupation	3.24	3.89	2640.50*	0.04
(x_3) Caste	2.15	2.24	3007.50	0.47
(x_4) Education	3.36	3.87	2625.50*	0.04
(x_5) Family Education Status	3.62	3.64	3148.50	0.86
(x_6) Family type	1.23	1.24	3160.00	0.85
(x_7) Family size	1.25	1.23	3120.00	0.71
(x_8) Land Holding	0.95	0.94	3126.50	0.78
(x_9) House Type	2.09	1.99	2981.00	0.32
(x_{10}) Farm Power	1.80	1.34	2653.00*	0.05
(x_{11}) Material Possession	2.23	2.16	3026.50	0.53
(x_{12}) Gross Income	1.47	1.35	2836.00	0.14
Communication:				
(x_{13}) Information Source	8.16	7.85	3016.50	0.53
(x_{14}) Urban Contact	4.16	3.84	2814.00	0.18
(x_{15}) Social Participation	0.70	0.65	2978.00	0.40
(x_{16}) Extension Contact	1.17	1.20	3128.50	0.78
Administrative:				
(x_{17}) Market Orientation	13.54	14.10	2834.00*	0.02
(x_{18}) Risk Orientation	14.28	13.74	2811.00	0.18
Socio-Psychological:				
(x_{19}) Economic Motivation	3.17	2.96	2914.50	0.33
(X_{20}) Innovation Proneness	3.47	4.05	2194.00**	0.00
(X_{21}) Decisions Making	2.54	2.34	2694.00*	0.05
(X_{22})Attitude in Dairy farming	18.72	19.40	2707.50	0.09
(x_{23}) Attitude in Employment	17.21	17.53	3007.50	0.50
(X_{24}) Attitude in Income gen.	25.04	24.75	3011.50	0.52
Dependent Variables:				
(Y_{1A}) Knowledge in AI	5.89	6.41	2513.50*	0.02
(Y_{1B}) Knowledge in Deworming	4.33	4.76	2538.00*	0.02
(Y_{1C}) Knowledge in Vaccine	12.37	12.68	2897.00	0.30
(Y_{1D}) Know. in Green Fodder	5.14	5.54	2658.50	0.06
(Y_{1E}) Know. in Concentrate Feed	12.31	13.35	2626.50*	0.05
(Y_1) Knowledge in IAHP	40.10	42.63	2414.00*	0.01
(Y_2) Adoption Index	5.292	4.881	2632.50*	0.05

NOTE: * Significant at 0.05level; ** Significant at 0.01 level

of Non-SHG dairy entrepreneurs used to take decision collectively regarding their family matter.

Summary of the Extension Education impact related factors of sample SHG and Non-SHG Dairy farmers of the study area are presented in the Table-2.

A perusal of the Table-2 indicates that in both the categories (SHG & Non-SHG) the average age was between 18-40 years with below secondary level of education standard. The average family education status in either side was almost similar (below secondary level) with minor variation. Sarkar and Bandyopadhaya (1996) found that maximum dairy farmers were of younger age with secondary level education in his study. Maximum numbers in both categories of the sample dairy farmers belong to nuclear family with up to 5 members in their family. The average family income differed from below Rs. 2000/-to Rs. 5000/- in both group but little bit higher in SHG group. Lalitha *et. al.* (2000) & Latoria (2002) supported the facts under study. Their average land holding vary from one-two hectare with Kuccha house for their shelter. On an average, information source exposure and social involvement were slightly higher in SHG than Non-SHG dairy farmers. Meshram *et. al.(*2006) expressed positive view same as the present findings. In Non-SHG, average socio-psychological orientation like Market orientation, Innovation proneness, Attitude in Dairy farming and Employment status were quiet better than SHG and reverse in case of Risk Orientation, Economic Motivation, Decision making and Attitude in income generation. Finally, the table explored that on overall basis the average adoption score in dairy farming is better in SHG than Non-SHG, but it was just reverse in case of Knowledge gain in IAHP which was very much indicative for the study. Chowdhury & Singh (2000) and Vashistha *et.al.(*2008) also observed same factual relationship in their study.

Mean values of independent and dependant variables of sample SHG and Non-SHG members compared with the help of Mann-Whitney U test and presented in the Table -3.

A cursory look at Table-3 indicated that the mean score obtained by the sample SHG dairy farmers in respect of variables namely Farm power, Decision making and Adoption index in dairy farming were found to be significantly ($P< 0.05$) higher than that of Non-SHG counter parts. Sarkar *et. al.* (2007) observed same findings in his study. In case of some characteristics like occupation, education of the respondents, market orientation, knowledge in AI, deworming, concentrate feeding, knowledge in IAHP, the mean value of the Non-SHG sample dairy stakeholders were found to be significantly higher ($P< 0.05$) than those of sample SHG livestock owners. At the same time mean score of innovation proneness of Non-SHG category was significantly higher ($P< 0.01$) than that of SHG counterpart. Chinnadurai *et.al* (2004) observed better occupation, education standard and knowledge level among dairy farmers.

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