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Empowering Farm Women Through Income and Livelihood Generation

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Abstract

Women empowerment covers many influencing factors wherein decision making power as an important indicator generally comes from the economic contribution; economic contribution of women through the access of livelihood generation puts forward the importance of women in the family and society at large. The present study is an endeavor to identify the different independent variables of on-farm and off-farm activities from where their power of empowerment emerges. The study was conducted in area under Haringhata Panchayat Samity, West Bengal with a total sample size of 100 in 5 selected Mouzas randomly. The statistical tools applied were correlation, multiple regression, path analysis, chi-square test, paired t-test and canonical correlation. It is observed that the variables like age, material possession, mass media exposure, family income and socio-economic status have got the important bearing on the gain in empowerment of women.

1. Introduction

Women empowerment ideally as a continuous process where the powerless people become conscious of their situation and organize themselves to improve it and access opportunities, as an outcome of which women take control over their lives, set their own agenda, gain skills, solve problems and develop self-reliance. Gaining more access to a steady income and economic power or security applies the term economic empowerment as one of the defining dimensions of women empowerment (Malhotra et al., 2002; Mayoux, 2000). Female economic empowerment is usually about increased access of women to financial resources, income-generating assets or activities, savings, increased financial decision-making power and more economic independence.

Taking the notion into account the objectives of the study was to identify the profile of farm women involved in income generating activities and their relationship with the empowerment, and prediction of variables responsible for gain in empowerment.

2. Materials and Methods

The study was conducted in the 5 mouzas of haringhata I Gram Panchayat, Haringhata Panchayat Samity of Nadia District. The district, panchayat samity and the gram panchayat have been selected purposively but the number of mouzas and samples were selected randomly. The total sample size was 100. The schedule was prepared after pre-testing conducting the pilot study. The data was collected with the help of personal, group and participatory method. The collected data was analyzed and interpreted applying statistical tools like spearman and pearson correlation coefficient, stepwise multiple regression and path analysis method.

3. Results and Discussion

The descriptive distribution of casual and consequent variables, which considered for the present study have been analyzed in the form of mean, standard deviation and coefficient of variation (%) of the respondents according to their age, education, marital status, caste, family type, family size, land, house type, material possession, family income, social participation, mass media participation, number of training, monetary benefit, non-monetary benefit, profit utilization pattern, decision making in household, decision making in agriculture, socio-economic status change etc. and presented in Table 1.

The distribution of the attribute age (X_1) refers to the chronological age of the respondents in completed years at the time of investigation. In case of farm women the distribution

of attribute age consist of the mean value 35.51, standard deviation 10.46 and the co-efficient of variation 29.46 which reflect moderate consistency of the distribution. The values mean (3.19), standard deviation (1.46) and coefficient of variation (45.77) of respondent's academic attainment (X_2) through formal schooling reflect moderate consistency of the distribution. It reflects highly consistency of the distribution marital status (X_3) which refers to the whether the respondent is married, unmarried, widow and separated.

The distribution of the attribute caste (X_4) refers to the caste in rural system. The estimates of mean (2.66), standard deviation (1.12) and the co-efficient of variation 42.11 reflect moderate consistency of the distribution. The estimates of distribution of family type (X_5) which refers to the whether there were single or joint family and family size (X_6) refers to the family consist husband, wife and their unmarried children or family consist other blood relations show moderate consistency of the distribution.

The distribution of attribute land holding (X_7) refers to the amount of land owned by a person is important economic parameter to assess the economic status of that person in society. Its mean value (1.35), standard deviation (0.99) and coefficient of variation (73.33) suggest that the distribution is moderately consistency. The distribution of attribute house type (X_8) refers to the possession of a house, type and nature of the house are important indicators of socio-economic status and according to value of the estimates, it also reflects moderate consistency of the distribution.

Table 1: Distribution of mean, standard deviation (S.D.), co-efficient of variation (C.V.) of independent variables

Serial No.	Attribute	Mean	S.D.	C.D.
1.	Age (X_1)	35.51	10.46	29.46
2.	Education (X_2)	3.19	1.46	45.77
3.	Marital status (X_3)	2.66	0.40	18.69
4.	Caste (X_4)	2.14	1.12	42.11
5.	Family type (X_5)	1.36	0.48	35.29
6.	Family size (X_6)	1.17	0.38	32.48
7.	Land (X_7)	1.35	0.99	73.33
8.	House type (X_8)	2.77	0.75	27.08
9.	Material possession (X_9)	9.86	3.02	30.63
10.	Family income (X_{10})	3.17	0.74	23.34
11.	Social participation (X_{11})	1.80	1.35	75.00
12.	Mass media exposure (X_{12})	2.77	1.15	41.52
13.	Training No. (X_{13})	0.87	0.79	90.80
14.	Monetary benefits (X_{14})	1.22	0.42	34.43
15.	Non-monetary benefits (X_{15})	3.96	1.11	28.03
16.	Profit utilization pattern (X_{16})	2.55	1.01	39.61
17.	Decision making in Household activities (X_{17})	5.86	3.07	52.39
18.	Decision making in agri-culture activities (X_{18})	2.34	2.59	110.68
19.	Socio-economic status change (X_{19})	5.16	1.74	33.72

In case of farm women, values of mean (9.86), standard deviation (3.02) and co-efficient of variation (30.63) of the distributions of attribute material possession (X_9) collectively reflect moderator consistency of the distribution. In case of farm women, the distributions of attribute family income (X_{10}) which consists of the mean value 3.17, standard deviation 0.74 and the co-efficient of variation 23.34 reflect moderate consistency of the distribution. The distribution of attribute social participation (X_{11}) refers to the degree to which the respondents were involved in formal organization as member and office bearer results of which also reflect moderate consistency of the distribution. In case of farm women, the distributions of attribute mass media exposure (X_{12}) with mean value 2.77, standard deviation 1.15 and coefficient of variation 41.52 which reflect moderate consistency of the distribution.

In case of farm women, the distributions of attribute No. of training (X_{13}) reflect low consistency of the distribution with mean value of 0.87, standard deviation 0.79 and co-efficient of variation 90.80 respectively.

The distributions of attributes monetary benefits (X_{14}) and non monetary benefits (X_{15}) reflect moderate consistency for farm women.

The farm women's distributions of attribute profit utilization pattern (X_{16}) also show moderate consistency of the distribution. The estimated results of the distributions of attribute decision making in household activities (X_{17}) for farm women which is the most important in rural society also reflect moderate consistency of the distribution with mean value of 5.86, standard deviation 3.07 and co-efficient of variation 52.39. Another important attribute decision making in agriculture (X_{18}) for farm women reflect low consistency of the distribution as the estimates remain to 2.34, 2.59 and 110.68 respectively for mean, standard deviation and co-efficient of variation. The distributions of attribute socio-economic status change (X_{19}) of rural women reflect moderate consistency of the distribution. The correlation co-efficient between the empowerment (Y) the independent variables has been displayed in Table 2. Out of 19 independent variables age (X_1), marital status (X_3), caste (X_4), family type (X_5), family size (X_6) are not found to be significantly related with the empowerment (Y).

The independent variables like education (X_2), land (X_7),

house type (X_8), material possession (X_9), family income (X_{10}), social participation (X_{11}), mass media exposure (X_{12}), number of trainings (X_{13}), monetary benefits (X_{14}), non-monetary benefits (X_{15}), profit utilization pattern (X_{16}), decision making in household (X_{17}), decision making in agriculture (X_{18}) and socio economic status change (X_{19}) are found to be highly correlated with the empowerment (Y). The Spearman correlation co-efficient between the empowerment (Y) and the independent variables has been also shown in the same table. Out of 19 independent variables age (X_1), marital status (X_3), caste (X_4), family type (X_5), family size (X_6) are not found to be significantly related with the empowerment (Y).

The independent variables like education (X_2), land (X_7), house type (X_8), material possession (X_9), family income (X_{10}), social participation (X_{11}), mass media exposure (X_{12}), number of trainings (X_{13}), monetary benefits (X_{14}), non-monetary benefits (X_{15}), profit utilization pattern (X_{16}), decision making in household (X_{17}), decision making in agriculture (X_{18}), socio economic status change (X_{19}) are found to be highly correlated with the empowerment (Y). Similar findings were observed by Vidya and Chole (2010), Cheston and Kuhn (2002) and Bharathamma (2005).

The path analysis was done to explain the direct, indirect and residual effect of antecedent variables on consequent variable i.e. Gain in Empowerment (Table 3). The result reveals that the variables socio economic status change (X_{19}) exerts highest positive direct effects on Gain in Empowerment over the other 18 antecedent variables, which is followed by mass media exposure (X_{12}), material possession (X_9), social participation (X_{11}) and family type (X_5).

It has been found that the variable age (X_1) and family income (X_{10}) exerts highest negative direct effect on Gain in Empowerment over the other 18 antecedent variables, which is followed by caste (X_4), decision making in agriculture activities (X_{18}) and training No. (X_{13}).

The estimates result also reveal that the variable family income (X_{10}) exerts highest positive indirect effects on Gain in Empowerment over the other 18 antecedent variables followed by material possession (X_9), education (X_2), and training No. (X_{13}), decision making in household activities (X_{17}).

It has been found that the variable age (X_1) exerts highest negative indirect effect on gain in Empowerment over the other 18 antecedent variables. The residual effect is 26%. It could be contributed that the combination of 19 variables in this investigation in the form of antecedent variable had been able to explain 74% of the variation in the consequent variable i.e. Gain in Empowerment. It is, thus, seen that Gain in Empowerment (Y) is explained by the socio-economic status change (X_{19}), mass media exposure (X_{12}), material possession (X_9) with their positive contribution towards Gain in Empowerment (Y) and age (X_1) variable with its negative impact towards reducing the magnitude of Y (Table 4). Total variance explained by such equation is 72% and all predictors in this equation have resulted significant regression coefficient to explain Gain in Empowerment. The study is corroborated the findings of Puhazhendi (2000).

4. Conclusion

The present study has steered to harvest the conclusive remarks that empowerment is the social, economic and managerial acquisition for influencing both desirable process and function in a given social ecology. Mass media exposure, material possession or home innovation have got a desirable role in ushering a substantive gain in empowerment. Socio-economic status has always been an initial boost to gain empowerment. Women at younger age are more responsive to the process of women empowerment. It is discernible that of all the variables, socio-economic status has exerted substantial impact on

Table 2: Correlation coefficient between the gain in empowerment and independent variables

Variables	Pearson Correlation Coefficient (r)Y	Spearman Correlation Coefficient (p) Y
Age (X_1)	-0.187	-0.148
Education (X_2)	0.529**	0.535**
Marital status (X_3)	0.159	0.087
Caste (X_4)	0.082	0.057
Family type (X_5)	0.157	0.154
Family size (X_6)	0.054	0.047
Land (X_7)	0.290**	0.285**
House type (X_8)	0.435**	0.428**
Material possession (X_9)	0.695**	0.697**
Family income (X_{10})	0.406**	0.466**
Social participation (X_{11})	0.507**	0.524**
Mass media exposure (X_{12})	0.578**	0.587**
Training no. (X_{13})	0.432**	0.425**
Monetary benefits (X_{14})	0.346**	0.335**
Non-monetary benefits (X_{15})	0.495**	0.503**
Profit utilization pattern (X_{16})	0.468**	0.476**
Decision making in household activities (X_{17})	0.492**	0.537**
Decision making in agriculture activities (X_{18})	0.375**	0.442**
Socio-economic status change (X_{19})	0.744**	0.764**

Table 3: Path analysis for deriving direct, indirect and residual effect of antecedent variable on consequent variable Y (Gain in empowerment) vs the 19 antecedent variables

Variables	Total effect	Direct effect	Indirect effect	Substantial indirect effect		
				(i)	(ii)	(iii)
Age (X_1)	-0.187	-0.118	-0.069	-0.046 X_{11}	-0.027 X_{12}	-0.014 X_{15}
Education (X_2)	0.529	0.018	0.511	0.190 X_{19}	0.080 X_{11}	0.079 X_9
Marital status (X_3)	0.159	0.030	0.129	0.051 X_{19}	0.041 X_9	-0.035 X_1
Caste (X_4)	0.082	-0.057	0.139	0.044 X_{19}	0.043 X_{12}	0.026 X_{11}
Family type (X_5)	0.157	0.114	0.043	0.039 X_9	0.036 X_{19}	-0.031 X_{11}
Family size (X_6)	0.054	0.032	0.086	0.050 X_5	-0.039 X_{11}	0.031 X_{12}
Land (X_7)	0.290	0.046	0.244	0.066 X_9	-0.051 X_{12}	-0.051 X_{10}
House type (X_8)	0.435	0.075	0.36	0.088 X_{12}	0.081 X_9	-0.066 X_{10}
Material possession (X_9)	0.695	0.175	0.52	0.077 X_{12}	0.064 X_{11}	-0.053 X_{10}
Family income (X_{10})	0.406	0.118	0.524	0.169 X_{19}	0.100 X_{12}	0.078 X_9
Social participation (X_{11})	0.507	0.156	0.351	0.143 X_{19}	0.080 X_{12}	0.072 X_9
Mass media exposure (X_{12})	0.578	0.230	0.348	0.162 X_{19}	0.059 X_9	0.054 X_{11}
Training no. (X_{13})	0.432	0.035	0.467	0.140 X_{19}	0.081 X_{11}	0.065 X_9
Monetary benefits (X_{14})	0.346	0.093	0.253	0.119 X_{19}	0.063 X_9	0.044 X_{12}
Non monetary benefits (X_{15})	0.495	0.080	0.415	0.146 X_{19}	0.098 X_{12}	0.075 X_9
Profit utilization pattern (X_{16})	0.468	0.065	0.403	0.166 X_{19}	0.087 X_{12}	0.056 X_9
Decision making in household activities (X_{17})	0.492	0.071	0.421	0.162 X_{19}	0.075 X_9	0.065 X_{11}
Decision making in agriculture Activities (X_{18})	0.375	-0.041	0.416	0.139 X_{19}	0.080 X_9	0.056 X_{11}
Socio economic status change (X_{19})	0.744	0.365	0.379	0.116 X_9	0.102 X_{12}	0.061 X_{11}

Table 4: Stepwise Multiple Regression analysis between the Gain in Empowerment and independent variables.

Variable	B	Unstandardized coefficients Std Error	Standardized coefficients Beta	t	Sig.
(Constant)	-1.03	2.27		-0.45	0.65
Socio economic status change	1.87	0.35	0.41	5.29	0.00
Mass media exposure	1.84	0.43	0.27	4.33	0.00
Material possession	0.86	0.19	0.33	4.47	0.00
Age	-0.12	0.04	-0.15	-2.75	0.01
Dependent variable: Gain in empowerment					
R	R.Sq	Adj R. Sq.	SE(est)		
0.85	0.72	0.70	4.32		

women empowerment. The process of empowering women can be triggered off with the pace and momentum having higher initial socio-economic status. Family income here has been elicited as to have high intensity companionship towards empowering women folk.

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