

Original Research Article

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## Influence of Socio-economic Factors on Empowerment of Farm Women: An in Depth Analysis

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### ABSTRACT

Gender Empowerment has been a highly focused area over three decades to empower women so that they can be made free from the mettle of exploitation, deprivation, and social impoverishment. The study was conducted in Haringhata Block under Nadia district of West Bengal. Both purposive as well as simple random sampling was adopted for selection of 100 respondents in five mouzas of the selected block. The present study envisages two components viz. livelihood and income generation as to have conceptual and operational contribution in empowering women adequately and workably. There are 19 independent variables (X1-X19) and 1 independent variable (Empowerment). For the analysis and interpretation statistical tools Correlation of coefficient, Path Analysis, Regression analysis and Canonical Correlation analysis have been used. The results reveal that out of 19 independent variables 14 variable found to have strong significant positive co-relationship at 1% level of significance (Education 0.529\*\*, Land 0.290\*\*, House Type 0.435\*\*, Material Possession 0.695\*\*, Family Income 0.406\*\*, Social Participation 0.507\*\*, Mass Media Exposure 0.578\*\*, Training 0.432\*\*, Monetary Benefits 0.346\*\*, Non monetary Benefits 0.495\*\*, Profit utilization Pattern 0.468\*\*, Decision making in household activities 0.492\*\*, Decision making in agricultural activities 0.375\*\* and Socio economic activities change after Income Generating Activities 0.744\*\*) with the predicted variable Empowerment. The variable Socio-Economic status Change shows highest direct effect on Empowerment where as the Family Income shows the highest indirect effect in path analysis. The residual effect is 26%, it could be contributed that the combination of 19 variables had been able to explain 74% of the variation in the consequent variable i.e. Empowerment. Stepwise Multiple Regression analysis explained 72 % and all predictors in this equation have resulted significant regression coefficient to explain Empowerment.

#### Keywords

Women empowerment, Livelihood and Income

#### Article Info

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### Introduction

The issue of empowerment is very complex as the issues related to women are varied and

multidimensional. In its simplest form, women empowerment means the manifestation of redistribution of power that challenges patriarchal ideology and the male

dominance. Empowerment is a multi-dimensional social process that helps people gain control over their own lives communities, and into heir society, by acting on issues that they define as important. Empowerment occurs within sociological, p[psychological, economic spheres and at various levels, such as individual, group, and community and challenges our assumptions about the status quo, asymmetrical power relationships and social dynamics. Cultural tradition and economic necessity have always meant a significant role for women in agriculture. In India it is not uncommon that women do not control over the land. Even, where women constitute a larger share of agricultural producers but, there are cultural constrains to easy communication between men and women, because almost all extension workers are men. It is very difficult to define empowerment with a universally accepted definition. It has been defined by academics and development agencies like World Bank and NGOs, does not bear the same meaning as used by feminist development theorists and practitioners. However much of the literature views empowerment as a process of change in existing power structure. It is clearly concerned with power, and particularly with the power relations – and the distribution of power-between individuals and groups (Kahlon 2004, Batiwala 1994) defined empowerment as the process of challenging 4existing power relations and of gaining greater control, over the sources of power'. Acharya and Ghirme (2005) identified empowerment as a dynamic and ongoing process that takes place which enhances women's and any other marginalized and alienated groups' abilities to change the structures and ideologies that keep them subordinate. There is no straightforward definition of women empowerment, because the concept of power cannot be streamlined internationally as it differs from societal context (Snijders, 2009). Defining women

empowerment process covers many influencing factors, meaning that any definition almost always captures part of the complete process. When defining women empowerment, one of the similarities in the literature is the concept of women's decision making power as an indicator of women empowerment (Snijders, 2009, Malhotra, et al. 2002) stated that defining women empowerment has been done in most studies by using the terms options, choice, control and power. The objectives are: to find out the relationship between the selected consequent and antecedent variable the (Empowerment of Farm Women), to identify the degree to which the Empowerment may be predicted from these characteristics and to understand the different problems faced by the women hindering the empowerment process and measures suggested by them as remedies.

## **Materials and Methods**

The study was conducted in Haringhata Block under Nadia district of West Bengal. Both purposive as well as simple random sampling was adopted for selection of 100 respondents in five mouzas of the selected block. After pretesting of data collecting device information/data was collected following the personal as well as group interview method. The study was conducted with the Independent variables like Age, Education, Marital Status, Caste, Family Type, Family Type, Family Size, Land Holding, House Type, Material Possession, Family Income, Social Participation, Mass Media Participation, No. of Training undergone, Monetary Benefits, Non Monetary Benefits, Decision Making in House hold Activities, Decision Making in Agricultural Activities, Socio-Economic Status change after joining Income Generating Activities and Dependent variable Empowerment. Analysis of the data has been done using the statistical tools

Correlation of coefficient, Path Analysis, Regression analysis and Canonical Correlation analysis.

Dependent Variable Empowerment consisted of nine variables Education, Land Ownership, Ownership of other assets (other than land), Control over income contributed by her in the family, Control over the income of the

family, Savings, Access to credit, Social participation and Cash income earned from income generating activities.

Based on the score obtained from these nine variables extent of empowerment was calculated by computing the empowerment index (expressed in percentage) as follows:

$$\text{Empowerment index} = \frac{\text{Score obtained}}{\text{Maximum score obtainable}} \times 100$$

Gain in empowerment was calculated by taking difference between empowerment index value before and after taking income generating activity.

## **Results and Discussion**

The correlation co-efficient between the independent variables and the empowerment (Y) has been displayed in Table 1.

Out of 19 independent variable age (X<sub>1</sub>), marital status (X<sub>3</sub>), caste (X<sub>4</sub>), family type (X<sub>5</sub>), family size (X<sub>6</sub>) are not found to be significantly related with the Empowerment (Y).

The variables Education (X<sub>2</sub>) (Bharathamma G. U.2005), Land (X<sub>7</sub>) (Bharathamma G. U.2005), House type (X<sub>8</sub>), material possession (X<sub>9</sub>), Family income (X<sub>10</sub>) (Bharathamma G. U.2005), Social participation (X<sub>11</sub>) (Bharathamma G. U.2005), Mass media Exposure (X<sub>12</sub>) Bharathamma G. U.(2005), Number of trainings (X<sub>13</sub>) (Agarwal 2000), Monetary benefits (X<sub>14</sub>), non-monetary benefits (X<sub>15</sub>), Profit utilization pattern (X<sub>16</sub>), Decision making in household (X<sub>17</sub>), Decision making in agriculture (X<sub>18</sub>), Socio economic status change (X<sub>19</sub>) are found to be highly correlated

with the empowerment (Y).

Table 2, presents the path analysis to explain the direct, indirect and residual effect of antecedent variables on consequent variable i.e. Empowerment.

The result reveals that the variables socio economic status change (X<sub>19</sub>) exerts highest positive direct effects on Gain in Empowerment over the other 18 antecedent variables, which is followed by Mass Media Exposure(X<sub>12</sub>), Material Possession(X<sub>9</sub>), Social Participation(X<sub>11</sub>) and Family Type(X<sub>5</sub>).

It has been found that the variable Age (X<sub>1</sub>) and Family Income(X<sub>10</sub>) exerts highest negative direct effect on Gain in Empowerment over the other 18 antecedent variables, which is followed by Caste(X<sub>4</sub>), Decision making in agriculture activities(X<sub>18</sub>) and Training No. (X<sub>13</sub>).

The result also reveals that the variable family income (X<sub>10</sub>) exerts highest positive indirect effects on Empowerment over the other 18 antecedent variables followed by Material Possession(X<sub>9</sub>), Education(X<sub>2</sub>), and Training No. (X<sub>13</sub>), Decision making in Household activities(X<sub>17</sub>) respectively.

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.

In table 3 it concluded that 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 Empowerment (Y) and Age ( $X_1$ ) variable with its negative impact towards reducing the magnitude of Y. Total variance explained by such equation is 72 % and all predictors in this equation have resulted significant regression coefficient to explain Empowerment.

Following Canonical Correlation Analysis 5 Canonical associations or dimensions were found significant.

Table 4 represents Standardized Canonical Coefficients for Dependent Variables in 5 Canonical dimensions which were found significant.

Table 5 represents the Standardized Canonical Coefficients for Covariates in 5 Canonical dimensions.

In these 2 tables we considered only those Standardized Canonical Coefficient values which were greater than 0.3.

1<sup>st</sup> Canonical Variate (Table 4) revealed that Material Possession( $X_9$ ), Family Income( $X_{10}$ ) and Mass media Exposure( $X_{12}$ ) have positive significant association with Non Monetary Benefits( $X_{15}$ ) and Empowerment (Y).

2<sup>nd</sup> Canonical Variate (Table 5) revealed that Material Possession( $X_9$ ) and Family Size( $X_6$ ) have positive significant association with Monetary Benefits( $X_{14}$ ), Decision in Agriculture( $X_{18}$ ) and Empowerment(Y) and it also revealed that Family Income( $X_{10}$ ), House Type( $X_8$ ) and Family Type( $X_5$ ) have positive significant association with Profit Utilization Pattern( $X_{16}$ ) and Decision making in household related activities( $X_{17}$ ).

3<sup>rd</sup> Canonical Variate (Table 6) revealed that Marital Status( $X_3$ ), Family Income( $X_{10}$ ) and No. of trainings( $X_{13}$ ) have positive significant association with Monetary Benefits( $X_{14}$ ), Non Monetary Benefits( $X_{15}$ ) and Profit utilization Pattern( $X_{16}$ ) and it also revealed that Age( $X_1$ ), Education( $X_2$ ), Land( $X_7$ ), House Type( $X_8$ ) and Social Participation( $X_{11}$ ) have positive significant association with Socio-economic Status Change( $X_{19}$ ) and Empowerment(Y).

4<sup>th</sup> Canonical Variate (Table 7) revealed that Age( $X_1$ ), Family Size( $X_6$ ), Material Possession( $X_9$ ) and Family Income ( $X_{10}$ ) have positive significant association with Monetary Benefits( $X_{14}$ ), Non Monetary Benefits( $X_{15}$ ) and Socio-economic Status change( $X_{19}$ ) and it also revealed that Marital Status( $X_3$ ), House Type( $X_8$ ) and Social Participation( $X_{11}$ ) have positive significant association with Profit Utilization Pattern( $X_{16}$ ), Decision making in Household related activities( $X_{17}$ ) and Empowerment(Y).

5<sup>th</sup> Canonical Variate (Table 8) revealed that Age( $X_1$ ), Education( $X_2$ ), House Type( $X_8$ ) and Social Participation( $X_{11}$ ) have positive significant association with Profit Utilization Pattern( $X_{16}$ ), Decision making in Household related activities( $X_{17}$ ) and Socio-economic Status change( $X_{19}$ ) and it also revealed that Family Type( $X_5$ ), Land( $X_7$ ) and Social Participation( $X_{11}$ ) have positive significant association with Non Monetary Benefits( $X_{15}$ ) and Empowerment(Y).

In this investigation 83.084% variance of Dependent set and 46.831% variance of Independent set were explained.26.560% variance of Dependent set was explained by the Independent set.

**Table.1** Correlation coefficient between the Empowerment (Y) and Independent variables (X<sub>1</sub>-X<sub>19</sub>)

Variables	Pearson Correlation coefficient (r)
	Y
Age (X <sub>1</sub> )	-0.187
Education(X <sub>2</sub> )	0.529**
Marital Status(X <sub>3</sub> )	0.159
Caste(X <sub>4</sub> )	0.082
Family Type(X <sub>5</sub> )	0.157
Family Size(X <sub>6</sub> )	0.054
Land(X <sub>7</sub> )	0.290**
House Type(X <sub>8</sub> )	0.435**
Material Possession(X <sub>9</sub> )	0.695**
Family Income(X <sub>10</sub> )	0.406**
Social Participation(X <sub>11</sub> )	0.507**
Mass Media Exposure(X <sub>12</sub> )	0.578**
Training No.(X <sub>13</sub> )	0.432**
Monetary Benefits(X <sub>14</sub> )	0.346**
Non monetary Benefits(X <sub>15</sub> )	0.495**
Profit utilization Pattern(X <sub>16</sub> )	0.468**
Decision making in Household activities(X <sub>17</sub> )	0.492**
Decision making in agriculture activities(X <sub>18</sub> )	0.375**
Socio-economic status	0.744**
Change after IGA (X <sub>19</sub> )	

\*\*Significant at 1% level of significance (0.256)

**Table.2** Path Analysis for deriving Direct, Indirect and Residual effect of antecedent variable on consequent variable Y (Empowerment) Vs the 19 antecedent variables (X<sub>1</sub>-X<sub>19</sub>)

Variables	Total effect	Direct Effect	Indirect Effect	Substantial Indirect Effect		
				i)	ii )	ii i )
Age (X <sub>1</sub> )	-0.187	<b>-0.118</b>	<b>-0.069</b>	-0.046 X11	-0.027 X12	-0.014 X15
Education(X <sub>2</sub> )	0.529	0.018	<b>0.511</b>	<b>0.190 X19</b>	0.080 X11	0.079 X9
Marital Status(X <sub>3</sub> )	0.159	0.030	0.129	<b>0.051 X19</b>	0.041 X9	-0.035 X1
Caste(X <sub>4</sub> )	0.082	<b>-0.057</b>	0.139	0.044 X19	0.043 X12	0.026 X11
Family Type(X <sub>5</sub> )	0.157	<b>0.114</b>	0.043	0.039 X9	<b>0.036 X19</b>	-0.031 X11
Family Size(X <sub>6</sub> )	0.054	-0.032	0.086	0.050 X5	-0.039 X11	0.031 X12
Land(X <sub>7</sub> )	0.290	0.046	0.244	0.066 X9	-0.051 X12	<b>-0.051 X10</b>
House Type(X <sub>8</sub> )	0.435	0.075	0.36	0.088 X12	0.081 X9	<b>-0.066 X10</b>
Material Possession(X <sub>9</sub> )	0.695	<b>0.175</b>	<b>0.52</b>	0.077 X12	0.064 X11	<b>-0.053 X10</b>
Family Income(X <sub>10</sub> )	0.406	<b>-0.118</b>	<b>0.524</b>	<b>0.169 X19</b>	0.100 X12	0.078 X9
Social Participation(X <sub>11</sub> )	0.507	<b>0.156</b>	0.351	<b>0.143 X19</b>	0.080 X12	0.072 X9
Mass Media Exposure(X <sub>12</sub> )	0.578	<b>0.230</b>	0.348	<b>0.162 X19</b>	0.059 X9	0.054 X11

Training No.(X <sub>13</sub> )	0.432	<b>-0.035</b>	<b>0.467</b>	<b>0.140</b> <b>X19</b>	0.081 X11	0.065 X9
Monetary Benefits(X <sub>14</sub> )	0.346	0.093	0.253	<b>0.119</b> <b>X19</b>	0.063 X9	0.044 X12
Non monetary Benefits(X <sub>15</sub> )	0.495	0.080	0.415	<b>0.146</b> <b>X19</b>	0.098 X12	0.075 X9
Profit utilization Pattern(X <sub>16</sub> )	0.468	0.065	0.403	<b>0.166</b> <b>X19</b>	0.087 X12	0.056 X9
Decision making in Household activities(X <sub>17</sub> )	0.492	0.071	<b>0.421</b>	<b>0.162</b> <b>X19</b>	0.075 X9	0.065 X11
Decision making in agriculture activities(X <sub>18</sub> )	0.375	<b>-0.041</b>	0.416	<b>0.139</b> <b>X19</b>	0.080 X9	0.056 X11
Socio- economic status change(X <sub>19</sub> )	0.744	<b>0.365</b>	0.379	0.116 X9	0.102 X12	0.061 X11

Residual Effect = 0.26

**Table.3** Stepwise Multiple Regression analysis between the Empowerment and independent variables (X<sub>1</sub>-X<sub>19</sub>)

Variable	Unstandardized			Standardized		t	Sig.
	Coefficients			Coefficients			
	B	Std. Error		Beta			
(Constant)	-1.03	2.27			-	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	-	0.01	
					2.75		
<b>Dependent Variable: Empowerment</b>							
R	R Sq.	Adj.R Sq.		SE(est.)			
0.85	0.72	0.70		4.32			

**Table.4** Eigen values and canonical correlation analysis

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.	Sq. Cor.
1	3.290	50.845	50.845	.876	.767
2	1.362	21.045	71.890	.759	.577
3	.822	12.710	84.600	.672	.451
4	.437	6.748	91.348	.551	.304
5	.260	4.023	95.371	.454	.207
6	.183	2.831	98.202	.393	.155
7	.116	1.798	100.000	.323	.104



**Table.5** Dimension reduction analysis

Roots	Wilks L.	F Hypoth.	DF	Error DF	Sig of F
1 to 7	.02264	4.66015	91.00	507.18	.000
2 to 7	.09714	3.31800	72.00	446.49	.000
3 to 7	.22942	2.60853	55.00	383.15	.000
4 to 7	.41812	2.04632	40.00	316.58	.000
5 to 7	.60070	1.73690	27.00	245.97	.016
6 to 7	.75707	1.58626	16.00	170.00	.077
7 to 7	.89575	1.42979	7.00	86.00	.204

**Table.6** Standardized canonical coefficients for dependent variables function no

Variable	1	2	3	4	5
Monetary Benefit	-.116	-.315	-.735	-.521	-.039
Non Monetary Benefit	-.366	.228	-.364	-.429	.552
Profit Utilization Pattern	-.123	.402	-.385	.336	-.383
Decision making in Household Activities	-.110	.499	-.154	.773	-.527
Decision making in Agricultural Activities	.102	-1.247	-.151	-.156	.129
Socio-Economic status change	-.248	.183	.698	-.817	-1.003
Empowerment	-.413	-.302	.469	.675	1.017

**Table.7** Variance in dependent variables explained by canonical variables

CAN. VAR.	Pct Var DE	Cum Pct DE	Pct Var CO	Cum Pct CO
1	43.905	43.905	33.671	33.671
2	9.920	53.825	5.720	39.391
3	9.488	63.313	4.282	43.673
4	10.982	74.295	3.338	47.011
5	8.789	83.084	1.815	48.826

**Table.8** Standardized canonical coefficients for covariates can var

COVARIATE	1	2	3	4	5
Age	.101	.077	.561	-.392	-.863
Education	-.145	.217	.610	-.272	-.697
Marital Status	-.241	.158	-.579	.311	-.125
Caste	-.052	.033	.029	.012	-.085
Family Type	-.168	.303	-.141	.24 8	.373
Family Size	.041	-.384	-.024	-.595	.094
Land	.073	-.124	.397	-.113	.398
House	.097	.370	.403	.792	-.302

**Table.9** Constraints in empowerment as perceived by farm women

Serial No.	Constraints	Frequency	Percentage	Ranks
1.	Lack of acquisition	90	90	I
2.	Over burdened with dual responsibility of managing household and economic activities	87	87	II
3.	Lack of proper training	80	80	III
4.	Lack of finance to take up any activity	75	75	IV
5.	Income derived is too little	70	70	V
6.	Family restriction for mobility	40	40	VI
7.	Lack of freedom to take decision	35	35	VII
8.	Loans are not sufficient	25	25	VIII

In table 9 it has been found that the major problem faced by the farm women is Lack of acquisition (90%), it got the rank I, followed by dual responsibility (87%) ranked II (Saini *et al.*, 2010). Lack of proper training(80%)

ranked III, another important impediment for empowerment listed IV was lack of finance for taking up any activity (75%). Other problems ranked chronologically according to their severity that are Income derived is too

little (70%) ranked V, Family for mobility (40%) ranked VI, Lack of freedom to take decision (35%) listed VII and lastly Loans are not sufficient (25%) for survival of the enterprise and so got the last rank VIII.

### **Suggestion of the farm women**

There should be an arrangement of evening classes for every woman in the villages

Training programmes should be organized frequently by district rural development agencies, commercial banks and NGOs.

Bank officials should be cooperative to give them loans whenever necessary.

Family members should be understanding with them and give them enough freedom for mobility.

Adult members of the family should help them in managing both household and economic activities.

All the decisions should be made by male members after consultation with the female members of the family.

Government should take necessary steps so that their income should be high.

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