

# Educational Impact on Empowerment of Scheduled Caste Women of Koch Bihar District, West Bengal

\*Bikash Barman

Research Scholar, Dept. of Geography, University of Gour Banga, Malda, West Bengal (India)

---

## ARTICLE DETAILS

### Article History

Published Online: 07 August 2018

### Keywords

Women education, Scheduled Caste, Empowerment, Decision-making behaviour

### \*Corresponding Author

Email: barmanbikash2013[at]gmail.com

---

## ABSTRACT

**Summary:** The article focuses on the role of education on the level of empowerment through the decision making behaviour among Scheduled Caste women of Koch Bihar district in West Bengal, India. The primary data collected from 200 SC female respondents (aged 15-49 yrs old) from the two respective blocks Cooch Behar-I (100 respondents) and Sitai (100 respondents) of Koch Bihar district through a structured questionnaire.

**Findings:** The findings suggest that there was a high positive relationship between the educational attainment and the empowerment status through the decision making behaviour of Scheduled Caste women in the study area. There were also some other factors except education which also positively influence the empowerment status of the respondents i.e. marital status, age at marriage, husband education, household ownership, mothers education, employment status, personal asset, engage in SHG, access to social media and area of residence.

**Applications:** This work argues that the importance of women education for being empowered and it will help to understand the decision making behaviour of the Scheduled Caste women. It can also be used as source material for policymakers, administrators, NGOs, social workers, Academicians, students and others for taking different initiative measures for their further improvement.

---

1

## . Introduction:

Women are the inevitable part of any society (Banu & Rawal, 2015). Their every working role influences the society by any means. Education is mentioned as the main key factor in overcoming the barriers and obstacles that women face and the basic tool for empowering women through take her decision and bringing them into the mainstream of development (Kritz et al, 1990; Marlize, 1995 & Sundaram, 2014). Education and empowerment both are closely dependable to each other (Ahmed et al., 2006). Though both have own uniqueness, yet education is considered to be the vital device for empowerment as education's most efficient artefact is empowerment (Pandit, 1997; Anju et al., 2002). Education not only offers the knowledge and skills to improve health and livelihoods (Beena & Jothi, 2012), but it gives the power of fight to acquire her own place in society and the development process (Malhotra, 1997; Rafikul, 2010). Education gives higher social as well as political, economic and legal status and confidence in decision making (Ghuman, 2003; Yogendrarajah, 2013). Women's education is the key to diminish poverty (Kristin et al, 2000). The need for women education is emphasized all over the world (Dhamija, 2006). This fact is presented by Sharma (2004) as "One of our greatest needs is to spread education among our women. As a matter of fact there is room for the extension of education even among men. The condition of women's education is, however, such that any attempt as its spread deserves help and encouragement from all quarters". Illiteracy is the main obstacle for the lack of empowerment

among the female's mainly rural females which is stated by Bhatt and Sharma (1992) "The movement for improving women's status all over the world has always emphasized education as the most significant instrument for changing women's subjugated position in society". The literacy rate of women also has impact on the economic condition and reduction of poverty of the country (Karl, 1995 & Swarna 1997). Education can help each woman to educate their children as a good manager or good teacher of the family as well as the human society (Sharma, 2006 & Sen, 2008). Every child learns their behaviour and good manner from their home as well as from their parents, mainly mother are mostly responsible to give good behaviour or manner in their children because of father are remain busy to earnings (Dash & Savita, 2001). Every educated woman can maintain her children with maintaining the household manners. They can take their decision about her future, her likes, and her livelihood as well (Abraham, 2001 & Sharma, 2006). Now a day's women are equal as man in case of all things such as rights, opportunities etc. In democratic India education of women capture the top priority to development the status of women (Cameron & Mohammed, 2010). Educational development of women acts as a means of women empowerment which brings a positive attitudinal change among the women (Bhaimali, 2004; Seth, 2001 & Sharma, 2006). It is obviously required to strength the women in socially as well as politically for the overall progress of India (Kumari, 2006). Indian constitution adopts many affirmative action's for the empowerment of women by giving reservation seats in all the sectors such as education, politics

etc. There is no doubt about the role of education which may change of pattern of livelihood of women. Now a day's Women Empowerment is a global issue and discussion on its going over the world. The concept of women empowerment was first introduced in the International Seminar on "Women Empowerment" in Nairobi in 1985 (Kumari, 2006). Education is milestone of women empowerment because it enables them to take the different challenges, to confront their traditional role and change their life (Devadas & Rajgopal, 1989). That's why we can't neglect the importance of education to women empowerment. The increasing trend in women education shows the path of empowerment of women in present India by which we can determine the present status of women (Suguna, 2015).

**2. Objective:**

**Table-1 Composite Score of the Different Blocks of Koch Bihar District, 2011**

Block	X <sub>1</sub>	D.I.	X <sub>2</sub>	D.I.	X <sub>3</sub>	D.I.	X <sub>4</sub>	D.I.	X <sub>5</sub>	D.I.	X <sub>6</sub>	D.I.	X <sub>7</sub>	D.I.	X <sub>8</sub>	D.I.	X <sub>9</sub>	D.I.	Composite Score	Rank
Cooch Behar-I	931	0.3	54	0.67	24.8	0.48	231	1	14	1	22	1	32	1	5	1	24	1	7.46	1
Cooch Behar-II	928	0.3	60	1	16.8	0.01	210	0.9	8	0.4	11	0	21	0.6	1	0.2	4	0.17	3.97	3
Dinhata-I	936	0.4	52	0.6	22	0.32	191	0.8	7	0.3	12	1	13	0.3	1	0.2	4	0.17	3.59	4
Dinhata-II	914	0	57	0.84	19.1	0.14	171	0.6	6	0.2	11	0	9	0.2	0	0	0	0	2.47	9
Haldibari	969	1	42	0	33.4	1	68	0	4	0	4	0	3	0	0	0	0	0	2.1	11
Mathabhanga-I	940	0.5	46	0.26	31.4	0.88	154	0.5	10	0.6	2	0	10	0.2	1	0.2	0	0	3.19	8
Mathabhanga-II	944	0.6	53	0.64	21.2	0.27	152	0.5	10	0.6	4	0	16	0.5	1	0.2	6	0.25	3.57	5
Mekhliganj	936	0.4	48	0.34	26.2	0.57	120	0.3	4	0	4	0	11	0.3	2	0.4	1	0.04	2.44	10
Sitai	956	0.8	48	0.36	16.7	0	95	0.2	4	0	2	0	6	0.1	1	0.2	1	0.04	1.63	12
Sitalkuchi	968	1	44	0.13	24.4	0.46	125	0.4	11	0.7	6	0	9	0.2	1	0.2	0	0	3.23	7
Tufanganj-I	939	0.5	57	0.85	19.4	0.16	167	0.6	11	0.7	10	0	17	0.5	1	0.2	3	0.13	3.98	2
Tufanganj-II	943	0.5	53	0.65	22.2	0.33	142	0.5	12	0.8	6	0	10	0.2	1	0.2	0	0	3.41	6

Source: DCHB, Koch Bihar, 2011

D.I. = Dimension Index; X<sub>1</sub> = Sex Ratio (Female per 1000 male), X<sub>2</sub>= Female Literacy (in %), X<sub>3</sub>=Female Work Participation Rate (in %), X<sub>4</sub> =Number of Primary School, X<sub>5</sub> =No of Upper PRISC, X<sub>6</sub> =Number of Secondary School, X<sub>7</sub> =Number of Higher Secondary School, X<sub>8</sub> = Number of College, Universities; X<sub>9</sub>=Number of Professional & Technical School, Colleges and University.

For the fulfilment of the entire objectives different methods have been used i.e.

**3.1. Decision Score:** In order to quantify the extent of Scheduled Caste women's role in decision making in various areas, they were asked to mention their degree of involvement in decision making (Pal, S. & Halder, S., 2016) and response were considered on the basis of Likert scale i.e. four points Likert scale –

Decision	Score
NI	0
OS	1
JD	2
SD	3

Though the main objective of this chapter is to examine the educational impact on the level of women empowerment through decision-making behaviour among the respondents' in the study area, some additional objectives also considered-

- i) To find out the importance of education and other socio-demographic factors of the empowerment status of the respondent.
- ii) To examine the relationship between education and women empowerment.

**3. Materials and Methods:**

The entire study has been completed with the help of primary data which have been collected from 200 (100 from Cooch Behar-I and 100 from Sitai) SC women (age 15-49) respondent through a structured schedule.

(NI= Not Involved, OS= Opinion Was Sought, JD= Joint Decision, SD= Self Decision)

It was calculated using the following formula-

$$DecisionScore = \frac{NI * 0 + OS * 1 + JD * 2 + SD * 3}{100}$$

**3.2. Factor Analysis (PCA Method):** Factor analysis is by far the most often used multivariate technique of research studies, especially pertaining to social and behavioural sciences. It is a technique applicable when there is a systematic interdependence among a set of observed or manifest variables and the researcher is interested in findings more fundamental or latent which creates this communality. This technique allows the researcher to group variables into factors and the factors so derived may be treated as new variables and their value derived by summing

the values of the original variables which have been grouped into the factor. In the present study Principal Component Analysis (PCA) is one of the most popularly used for factor analysis have been considered.

The aim of the principal component analysis is the construction out of a given set of variables  $X_j$ 's ( $j=1, 2, \dots, k$ ) of new variables ( $p_i$ ), called principal components which are linear combinations of the  $X_s$

$$\begin{aligned}
 P_1 &= a_{11}X_1 + a_{12}X_2 + \dots + a_{1k}X_k \\
 P_2 &= a_{21}X_1 + a_{22}X_2 + \dots + a_{2k}X_k \\
 &\vdots \\
 P_k &= a_{k1}X_1 + a_{k2}X_2 + \dots + a_{kk}X_k
 \end{aligned}$$

The method is being applied mostly by using standardized variables, i.e.,  $Z_j = (X_j - \bar{X}_j) / \sigma_j$

The  $a_{ij}$  are called loadings and are worked out in such a way that the extracted principal components satisfy two conditions: (i) principal components are uncorrelated (orthogonal) and (ii) the first principal component ( $p_1$ ) has the maximum variance, the second principal component ( $p_2$ ) has the next maximum variance and so on.

Following steps are usually involved in principal components method-

- (i) Estimates of  $a_{ij}$ 's are obtained with which  $X$ 's are transformed into orthogonal variables i.e., the principal components. A decision is also taken with regard to the question: how many of the components to retain into the analysis?
- (ii) We then proceed with the regression of  $Y$  on these principal components i.e.,
 
$$Y = y_1p_1 + y_2p_2 + \dots + y_m p_m (m < k)$$
- (iii) From the  $a_{ij}$  and  $y_{ij}$ , we may find  $b_{ij}$  of the original model, transferring back from the  $p$ 's into the standardized  $X$ 's.

#### 4. Conceptual Framework:

The existing studies on female empowerment largely follow two approaches. The first set of studies considers the determinants of female empowerment and the second is different factors for female empowerment (Rahman & Rao, 2004). Generally female or women empowerment is measured by the woman's ability to make all the decisions related to household, relative to her husband's ability to make household decisions (Bloom, 2001 & Agarwal, 2001). Since this ability cannot be clearly measured, many economists suggested that there are many variables which are very significantly associated with women empowerment i.e. education, contraceptive use, parental education, household ownership, personal asset, employment etc (Bogg, 1995). These self-reported variables reflect the wide variety of choices and decisions at pledge in the household haggle: employment, fertility, and resource allocation. Empowerment has been measured by a woman's relative physical mobility, economic security, decision-making ability, freedom from domestic violence, and political awareness and participation (Desai & Thakkar, 2007; Anderson & Eswaran, 2009). Though the other factors are the most important for women empowerment, education of the women is very most effective to the female empowerment over the world. Many studies consider the formal education and organizational work as the effective factors of women empowerment (Sundaram et al., 2014; Sindhe, 2011). When women have formal education and enter in the higher education she start doing part time or full-time jobs in organizations, they can have a better control over their lives (Singh & Parveen, 2006). Studies show that in developing countries, women's education and employment opportunity make stronger the situation of women in society, and increase their authority and power (Mason, et.al 2002). Also, according to the researches done in western countries, education and working empower women and increase their effectiveness in their personal, social and organizational life (Connel, 1987). In the contemporary world knowledge or education is the main source of power which enables more power to the person as well as learning to the concept of gender equality (Sharma, 2002).

CONCEPTUAL FRAMEWORK

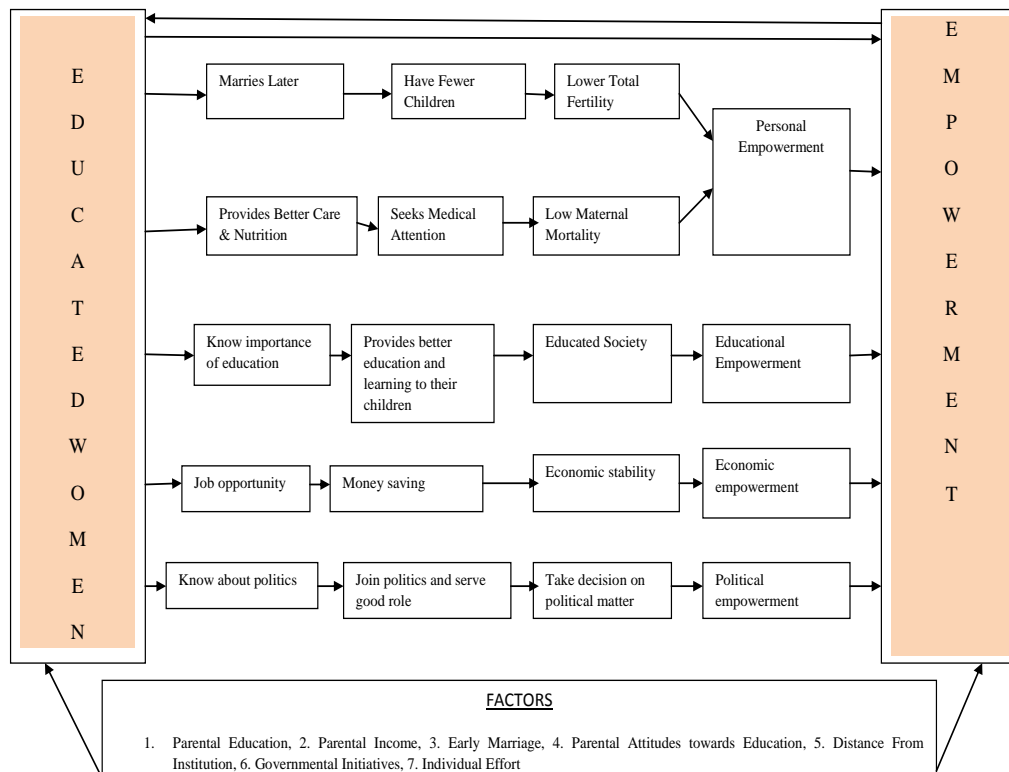


Figure-1 Conceptual Framework of the study

Education help to acquire much knowledge about all the decisions related to household or out of the household. An educated woman always tries to take the proper decision about herself or about the family, about the household or about the participation of outside societal activities (Jejeebhoy, 2000 & Duflo, 2011). From this point of view, there are many dimensions of women empowerment i.e. personal empowerment, educational empowerment, economic empowerment, political empowerment, societal empowerment and legal empowerment (Visvanathan et al., 2005). Personal empowerment implies on the taking decisions related to herself i.e. her choice of life, her treatment-seeking behaviour, time of marriage, number of taking children and mobility to go outside etc (Baird, 1994). In a favourable situation, an educated woman takes the self-decision about in all of these. Additionally, she always tries to give better education and better care for her children. Not only personally or educationally but also she engaged in the social activities to give some better known to her societal development and there are many opportunities for educated women as the engaged in the economic activities in the outside of the household. In the present days, another important dimension has been added to the women empowerment i.e. political empowerment which means the involvement of the females in the political activities, ability to take the decision to vote or ability to choose the candidate to vote etc (Himmelstrand, 1990).

5. Study Area:

The present study attempt to analysis the educational mobility of Scheduled Caste women and its impact on their level of empowerment in Koch Bihar district. On the basis of composite score (Table-1) Cooch Behar-I (Rank 1) and Sitai (Rank 12) block has been select for the study. According to Census of India, 2011 among all the district of West Bengal Koch Bihar contains near about 50% Scheduled Caste population to total population. The Koch Bihar District (also known as Coochbehar or Cooch Behar) lies in the North Eastern part of the state of West Bengal. Geographically, Koch Bihar district is surrounded by district Jalpaiguri to the North and West, State of Assam (Kokrajhar and Dhubri districts) to the East and International Boundary with Bangladesh towards South, South-East and South-West. The location of the district is spread over from 26<sup>0</sup>10' N to 26<sup>0</sup>30' N Latitude & 88<sup>0</sup>50' E to 89<sup>0</sup>40' E Longitude (DCHB, 2011). The effective literacy rate of Scheduled Caste population of the district was 64.35% (male 90.68 and female 44.60) in 2001 which was increased about 9.21% in decades (2001-2011) i.e. 73.57% (male 80.67 and female 66.01) which indicates about the higher achievement of the educational sector for the female population. Some demographical statistics of sample block (Cooch Behar-I and Sitai) have been shown by the following table-

Table-2 Some Demographic Profile of the Sample Blocks

Block/District		Cooch Behar-I	Sitai	Koch Bihar
Area (Sq KM.)		361.17	160.82	3387
% of SC Population		39.77	66.09	50.17
Literacy Rate	Male	83.63	70.65	80.67
	Female	69.36	56.38	66.01
Sex Ratio		931.00	969.00	942
Work Participation Rate	Male	60.00	60.59	58.24
	Female	25.00	33.36	20.67

Source: DCHB, Koch Bihar, 2011

6. Result and Discussion:

6.1. Role of Education for the Empowerment of the Respondents:

It is often argued that education is a powerful tool in the unrestraint and empowerment of women. Indeed, the different organs of United Nations (e.g. UNICEF) and experts on women’s freedom argue for women’s education as the basic measure in women’s equality (Robert, 1986). Education is a milestone for women empowerment because it enables them to respond to opportunities, to challenge their traditional roles and to change their lives (Saha & Debnath, 2016). Education is one of the most important means of empowering women with knowledge, skills and self-confidence required to participate fully in the development process. The role of education is not only learning of three R’s, ("Reading, Writing, and Arithmetic") but also includes raising awareness and critical analysis of various structures and acquiring knowledge for empowerment at all levels (Samarakoona et al., 2015). Education is often used as an agent of basic change in the status of women (Giriappa, 1997). In order to neutralize the accumulated advantages of the past, there will be a well-conceived edge in favour of women. The national education system will play a positive, interventionist role in the empowerment of women. It will foster the development of new values through redesigned curricula, textbooks, training and orientation of teachers, decision-makers and administrators (Duflo, 2011).

6.2. Decision Score:

Decision score of the sampled women have been calculated from the surveyed data (Appendix) which stated that the different educational attainment and their decision score has been shown by table 3. Decision score was calculated on the basis of different type of decision taken i.e. NI, OS, JD and SD having the weight age of 0, 1, 2 and 3 respectively. This table clearly stated that the decision score is high among the respondents having the higher education i.e. the decision score is less among the low educated respondents compare to the high educated women in the study area. In every field of empowerment it was found that the decision score was increased with the increased of educational attainment i.e. in case of personal empowerment, decision about her children, decision about household or family, decision about involvement of societal activities, decision about involvement of political participation, decision about involvement of economic participation decision score was 5.68, 17.23, 33.3, 62.98 and 26.53 of BP, PRI, HS and GRAB respondents; here it is mentioned that the number of graduate respondents was less (25) compare to HS that’s why the decision score was low compare to HS but the decision-making behaviour is very strong among the GRAB respondents means they take most of all the decision in all the field of women empowerment by herself. Mean (S.E.) decision score for the respondents having different educational attainment i.e. BP, PRI, SEC, HS and GRAB was 0.12(0.124), 0.37(0.261), 0.72(0.304), 1.37(0.620) and 0.58(0.380) respectively.

Table-3 Decision Score of the Sampled Women according to their Educational Attainment

Decisions	Educational Attainment				
	BP	PRI	SEC	HS	GRAB
	Score	Score	Score	Score	Score
<b>Decision Score of Sampled Women Beneficiaries by Type and Level of Decision on Herself/ Personal Empowerment</b>					
Purchase of bangles, beads, tika, daily clothes etc. for herself	0.1	0.34	1.16	2.13	0.71
Attending classes	0	0	1.19	1.79	0.6
Buying medicine/ seeking medical treatment for herself	0.1	0.26	0.61	1.38	0.75
Medical treatment related to reproductive post partum stages for herself	0.3	0.96	0.94	1.81	0.73
Determining the number of children to have	0.2	0.52	0.82	1.63	0.69



Mobility within the same village to go to the health centre or market	0.3	0.56	0.97	2.18	0.75
Mobility to go outside the village but return within the same day	0.28	0.83	0.9	2.31	2.31
Mobility to spending one night or more outside the village	0.12	0.5	0.75	2.19	0.71
Mobility to go to the market	0.32	0.6	0.89	2.12	0.75
<b>Distribution of Sampled Women by type and level of Decision about Her Children</b>					
Purchase to clothes, extra foods, milk, toys, books and stationary	0.24	0.7	1.03	1.76	0.69
Sending children to school	0.32	0.68	1.01	1.71	0.68
Buying medicine or taking treatment for their children	0.22	0.52	0.9	1.72	0.56
Other decision about children's education (such as stream, private tutor, type of school etc.)	0.12	0.63	0.84	1.56	0.58
Sending Female child to other village or city for higher education	0.14	0.48	0.83	1.71	0.62
Regarding Marriage of children	0.1	0.36	0.7	1.38	0.75
<b>Distribution of Sampled Women by type and level of Decision about Household or Family</b>					
Purchasing daily consuming goods (Foods, salt, spices, sugar etc.)	0	0.58	0.76	1.28	0.57
Growing vegetables and fruits	0.22	0.5	0.92	0.8	0.1
Rearing Livestock	0.24	0.52	0.83	0.86	0.06
Making Handicraft	0.21	0.38	0.87	0.96	0.24
Selling Food grain	0.16	0.2	0.28	0.36	0
Selling vegetables and food grain	0.08	0.3	0.44	0.6	0.07
Selling Handicraft	0.02	0.18	0.66	0.58	0.24
Selling Livestock	0	0.22	0.68	0.67	0.04
Lending Cash	0	0.12	0.49	0.94	0.68
What item to cook	0.35	0.82	1.32	2.28	0.73
About Family Planning	0.14	0.5	0.93	1.79	0.66
Purchase of Machinery	0	0.08	0.14	0.32	0.16
Sale of Agricultural Output	0.04	0.38	0.28	0.24	0.08
Type of seed sowing	0	0.2	0.18	0.34	0
<b>Distribution of Sampled Women by type and level of Decision about Involvement of Societal Activities</b>					
Attending Meeting related to community activities	0	0.24	0.6	1.24	0.65
Involvement of Social Activities such as advocacy against alcohol, gambling, property rights etc.	0	0	0.3	0.88	0.56
Going to hospital or other medical centre with the neighbours when she is ill	0.37	0.71	1.11	2.14	0.71
Giving advice to the other women to send school of their children	0	0	0.58	1.96	0.67
<b>Distribution of Sampled Women by type and level of Decision about Involvement of Political Participation</b>					
Attending political meeting or reception or Gram Sabha	0.04	0.14	0.52	1.38	0.56
Choice of candidate for voting	0.29	0.59	0.82	1.51	0.61
Taking decision as a political candidate	0	0.19	0.44	0.87	0.46
<b>Distribution of Sampled Women by type and level of Decision about Involvement of Economic Participation</b>					
Purchases of Every day food item	0.22	0.71	1.19	2.24	0.67
Electric, gas bill	0	0.02	0.84	1.59	1.45
Purchases of clothes	0.32	0.74	1.07	1.87	0.71
Spending money on marriage or other occasion	0.02	0.18	0.8	1.63	0.67
Saving and its utilization	0	0.12	0.65	0.68	0.53

Purchases of jewellery	0	0.13	0.71	1.53	0.55
Purchases of land/property	0	0.14	0.33	0.82	0.44
Control over expenditure	0.1	0.32	0.67	1.54	0.67
Control over saving	0	0.08	0.35	1.52	0.6
Control over salaried/ wages/ govt. money	0	0	0	0.18	0.51
<b>Mean</b>	<b>0.12</b>	<b>0.37</b>	<b>0.72</b>	<b>1.37</b>	<b>0.58</b>
<b>S.E.</b>	<b>0.124</b>	<b>0.261</b>	<b>0.304</b>	<b>0.620</b>	<b>0.380</b>
<b>Total</b>	<b>5.68</b>	<b>17.23</b>	<b>33.3</b>	<b>62.98</b>	<b>26.53</b>

Source: Calculated from the Field Survey, 2017-18

Overall decision matrix has been produced with the help of educational attainment and decision type of the respondents which was shown in table 4. From the table, it was very clear that with the increase of educational attainment, the

percentage of the self decision also increased. The percentage of the joint decision was very much among the BP (26.39%), PRI (45.90), SEC (47.52%) and HS (46.86%) respondents compare to GRAB (26.40%) respondents.

Table-4 Overall Decision Matrix (in %)

Decision Type	SD	5.42	6.32	16.22	24.64	50.67
	JD	26.39	45.90	47.52	46.86	26.40
	OS	4.72	5.00	7.00	4.33	3.73
	NI	63.47	42.78	29.27	24.17	19.20
		BP	PRI	SEC	HS	GRAB

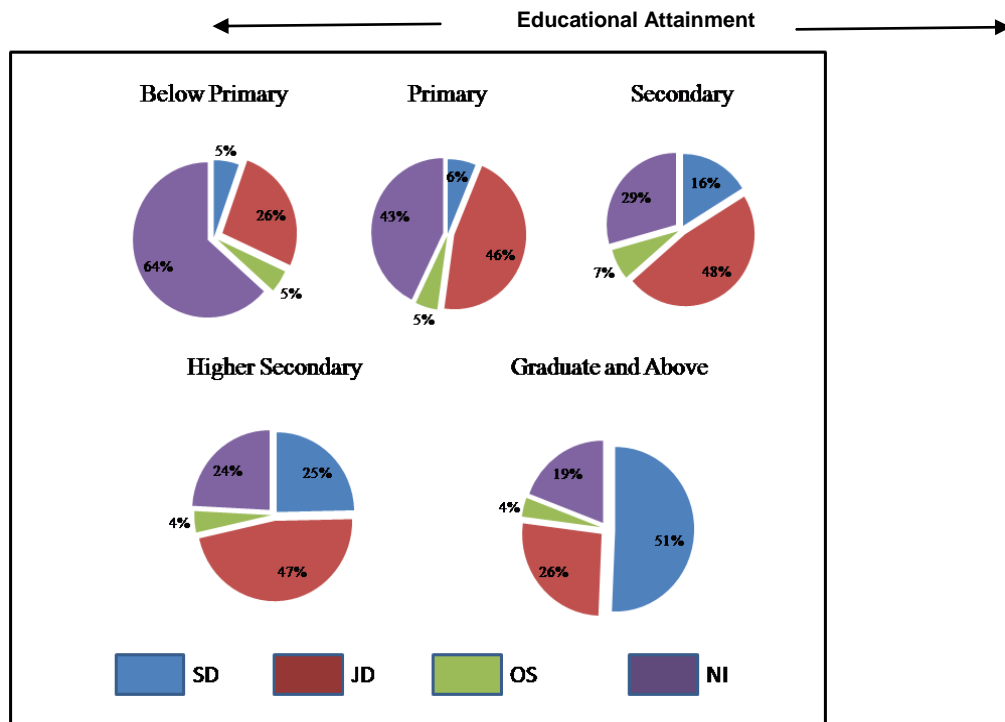


Figure-2 Educational Attainment and Decision Type of the Respondent

**6.3 Hypothesis Testing on there is a Positive Relationship between the Education and Women Empowerment:** From the table 4 it can be easily said that there is a positive relationship between the education and women empowerment status of the respondents'. As the capability of taking the self decision was considered as the empowered women, the figure 3 stated that there is a high

positive relationship between the respondents' educational attainment and the percentage of self-decision maker in the study area i.e.  $R^2$  value is 0.861 and the slope was very positive (10.88). S it can be concluded that the null hypothesis ( $H_0$ ) was rejected and the alternative hypothesis ( $H_1$ ) was accepted.

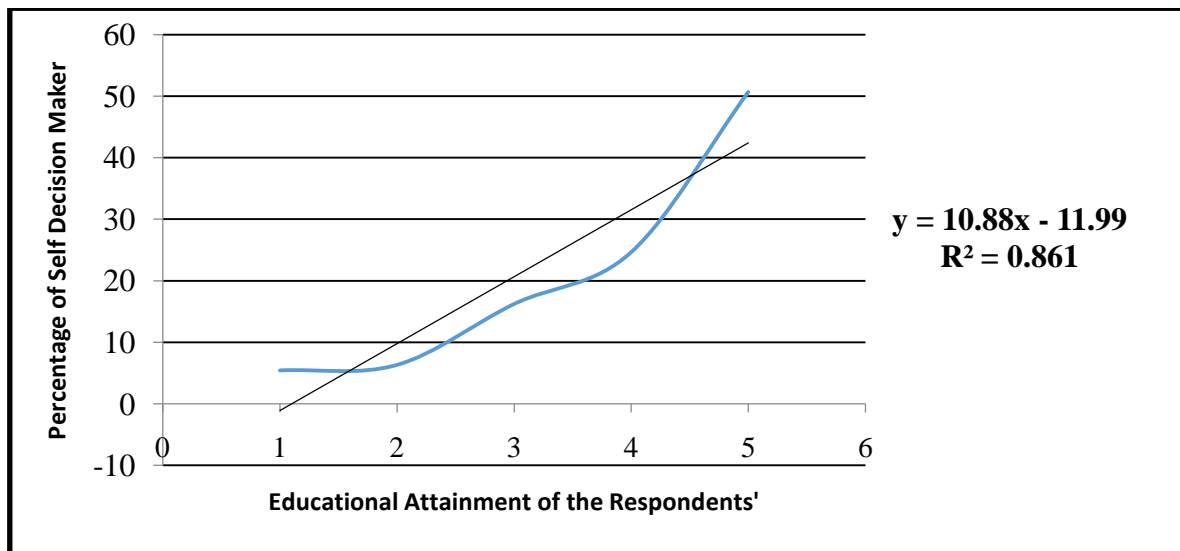


Figure-3 Relationship between Education and Women Empowerment

**6.4 Association between Women’s Education and other Socio-Demographic variables for Women Empowerment among the Respondent:**

Women empowerment is a result of a combination of different factors which affect the women’s autonomy, ability to take a self decision, ability to the involvement of developmental works, involvement in politics etc. Though the main factor is women’s education, another factor also impacts the empowerment status of women in the study area. For the showing of role of education and another factor of women empowerment different controlling factors have been selected i.e. women’s education, marital status of the women, age at marriage, husband education, household

ownership, size of family, mothers education, employment status, personal asset, engage in SHG, access to social media and area of residence. Analysis of Bivariate association and Pearson’s Chi-Square between the empowerment status and selected variables have shown by the table 4 which depicts that there was significant association between empowerment status of women and most of the variables having p value < 0.05 i.e. women’s education, marital status of the women, age at marriage, husband education, household ownership, mothers education, employment status, personal asset, engage in SHG, access to social media and area of residence except the size of family which p value was >0.05 (table 5).

Table-5 Bivariate Association showing percentage distribution and Pearson’s Chi-Square test between Empowerment Status of SC women and different socio-demographic characteristics

Socio-Demographic Characteristics	Empowerment Status		$\chi^2$ Value	P value
	Yes (%)	No (%)		
<b>Education</b>			157.13	0.000
Below Primary	0.00	8.50		
Primary	0.00	15.00		
Secondary	3.50	18.50		
Higher Secondary	39.50	2.50		
Graduate and Above	12.50	0.00		
<b>Marital Status</b>			11.14	0.001



Married	70.00	75.00		
Un-Married	41.00	14.00		
<b>Age at Marriage</b>			25.37	0.003
18-20	4.00	12.50		
20-22	13.00	20.50		
22-24	9.50	6.00		
24-26	16.50	13.00		
<b>Husband Education</b>			106.45	0.000
Below Primary	1.00	2.50		
Primary	3.50	14.50		
Secondary	2.50	16.00		
Higher Secondary	25.00	4.00		
Graduate and Above	23.50	2.50		
<b>Household Ownership</b>			107.89	0.001
Male	46.00	40.50		
Female	9.50	4.00		
<b>Family Size</b>			143.00	0.214
Nuclear	51.50	3.50		
Joint	4.00	41.00		
<b>Mothers Education</b>			113.00	0.000
Literate	0.50	14.00		
Illiterate	55.00	30.50		
<b>Employment Status</b>			113.78	0.000
Employed	28.00	0.00		
Un-Employed	27.50	44.50		
<b>Personal Asset</b>			39.00	0.004
Yes	28.00	4.00		
No	27.50	40.50		
<b>Engage in SHG</b>			38.02	0.001
Yes	40.50	13.00		
No	15.00	31.50		
<b>Access to Social Media</b>			143.95	0.000
Yes	51.50	3.50		
No	4.00	41.00		
<b>Area of Residence</b>			39.95	0.000
Rural	15.00	32.00		
Urban	40.50	12.50		

Significance level <0.05

Source: Computed from Field Survey Data, 2017-18

**6.5. Determining the other important controlling factor of empowerment by Factor (PCA method) Analysis:**

Bivariate association shows relationship between two variable i.e. one is dependent variable and another is independent variable which analysis done on the present study to find out the relationship between women empowerment status and different variables (table 6) where it was found that only one variable i.e. age of the respondents shows the insignificant association with women empowerment status of the respondents and rest of the variables shows the significant association. To find out the most important socio-demographic variables affecting the

empowerment status Factor analysis (PCA Method) have been done which easily stated that which variables have the higher loading (table 6). Principle component Analysis (PCA) create some component (i.e. 1,2,3,4.....etc) on the basis of loading of the variables; one component is a set of variables. In the table 4, it was found that 1<sup>st</sup> component explained the 36.07% of variance whereas 2<sup>d</sup> component explained about 12.81% of the variance and with the increase of the component percentage of explained variance will be less. The number of the component is equal to a number of variables i.e. 16. From the 16 component, 5 components explained about 70.22 percentage of variance which will be taken for the explaining.

**Table-6 Factor loading of different variables of Empowerment**

Component	Total Variance Explained	
	Initial Eigen values	

	Total	% of Variance	Cumulative %
1	5.771	36.067	36.067
2	2.05	12.811	48.878
3	1.266	7.913	56.791
4	1.126	7.035	63.826
5	1.023	6.393	70.22
6	0.906	5.662	75.882
7	0.888	5.551	81.433
8	0.688	4.3	85.733
9	0.654	4.087	89.82
10	0.488	3.049	92.869
11	0.409	2.554	95.423
12	0.309	1.929	97.352
13	0.236	1.477	98.829
14	0.132	0.827	99.656
15	0.047	0.291	99.947
16	0.008	0.053	100

Extraction Method: Principal Component Analysis.

Source: Computed from Field Survey Data, 2017-18

Table 7 stated about the factor loadings of the different variables on the basis of major 5 components. In the 1<sup>st</sup> component, the high loading was in the variables of access to social media (0.938), having the bank account (0.938), involvement in different saving scheme (0.923), ownership of the household (0.879), and having a personal asset (0.714).

In the 2<sup>nd</sup> component, the age of the respondent (0.630), marital status (0.677), mothers education (0.513), occupation (0.472) and family income (0.356) have the high loading to affect the empowerment status. Husband education (0.811) and engage in SHG member (0.749) placed in the 3<sup>rd</sup> and 4<sup>th</sup> component respectively.

**Table-7 Rotated Component Matrix of the major component**

Factors	Rotated Component Matrix				
	1	2	3	4	5
Age of the Respondent	-.014	.630	-.216	.174	-.138
SHG Member	.292	.147	.038	.749	.057
Marital Status	.104	.677	.171	.001	.178
Age at marriage	-.371	.148	-.061	.281	.378
Husband Education	.006	-.077	.811	.224	-.093
Household Ownership	.879	.002	-.063	.220	-.098
Family type	.145	-.107	-.720	.256	-.112
No of Children	-.022	-.003	.025	-.046	.900
Mothers Education	-.610	.513	.074	-.253	.006
Occupation	-.456	.472	.131	-.506	.203
Bank account	.938	-.026	-.043	.226	-.107
Personal Assets	.714	.181	.091	-.356	.116
Involvement of different saving schemes	.923	-.029	-.082	.191	-.107
Residence area	-.612	-.346	-.364	.254	-.083
Access to social media	.938	-.031	-.049	.220	-.104
Family Income	-.562	.356	.258	-.031	-.106

Rotation Method: Varimax with Kaiser Normalization

a. Rotation Converged in 11 iteration

Source: Computed From Field Survey Data, 2017-18

## 7. Findings :

➤ There was a positive relationship between female education and their empowerment status which has been

shown by the decision score .With the increase of educational attainment of the respondents the frequency of taking the self decision was also increased. In case of

below primary, the percentage of respondents was 63.47 (NI), 4.72 (OS), 26.39 (JD) and 5.42 (SD).

- In case of primary education, the percentage of NI, OS, JD and SD respondents was 42.78, 5.00, 45.90 and 6.32 respectively.
- Percentage of secondary respondents in taking NI, OS, JD and SD was 29.27, 7.00, 47.52 and 16.22.
- In case of higher secondary education percentage of respondents was 24.17 (NI), 4.33 (OS), 46.86 (JD) and 24.64 (SD).
- Among the GRAB respondents, the percentage of self-decision maker was high i.e. NI (193.20), OS (3.73), JD (26.40) and SD (50.67).
- There were also some other factors except education which also positively influence the empowerment status of the respondents i.e. marital status, age at marriage, husband education, household ownership, mothers education, employment status, personal asset, engage in SHG, access to social media and area of residence.
- Factor analysis (PCA Method) stated that except for education another most important factor for affecting the empowerment status was access to social media (0.938), having the bank account (0.938), and involvement in different saving scheme (0.923), ownership of the household (0.879), and having personal asset (0.714).

#### 8. Successful SC Women in the Study Area:

- **Pratima Roy (Nursery School Teacher):** Resident of Guriahati near the river Torsa. She studied in her village school. It is about 12 KM distance from Cooch Behar town. Pratima is not so meritorious, her family was so poor, but she has tried best and completed her degrees. Now she is a Nursery school teacher. According to her she always said that "education is for all so why I will be a fardistance from education, I also try".
- **Mamata Barman (Primary School Teacher):** A permanent residence of Sitai B.H.Q. She is now living happily with her well-established husband who is also Chamar. She says 'civilized society despite us, but I have proved myself. Every men and woman should educate first and then prove themselves'.
- **Sujata Barman (SHG Worker):** A well-known lady in the village of Maghpala of Cooch Behar-I block for her good effort in Self Help Group creation. She already formed 10 groups to empower the backward women. She says that, 'When I start this job, only 9 women were engaged with me, but after 9 months I have formed 2 groups i.e. 20 women and I was very glad to know that woman is coming to me for involvement with SHG and after that I am now in this position and I always feel that 100 women (10 group) are always with me and I feel very empowered and I always said that every woman have to empowered in every field'.
- **Nirmala Roy (ASHA Worker):** Nirmala feels an empowered woman with the involvement with ASHA. She says that when I joined with ASHA, I came to know all the

health-related issue and I always teach the other woman to know the various care and schemes of ASHA. They always respect me as a doctor of them, in this situation I feel proud of myself.

- **Urmila Rajbanshi (Political Leader):** Urmila a permanent residence of Ward number 6 of Cooch Behar municipality. She was a graduate woman who is acting as a political leader of Trinamool Congress. She says that, 'I always try to go to the villages and different wards for knowing the women's conditions and also said that to involve with me. After involved with the party I get much respect from the people and feel empowered and always try to give all opportunities for the women which have been sanctioned by the government'.
- **Lakshmi Das (Beautician):** "I was the only child of my parents. Unfortunately, my father died when I was reading class v"- Lakshmi said. She has to more and more interest in education but her mother cannot effort her educational expenditure that's why she went to a beautician didi and she learned how to do that work and now she is the most renowned beautician in the Cooch Behar municipality.
- **Chandana Mandal (Tailor):** Chandana who passed higher secondary with the carrying of different problems of her family. Now she is a ladies tailor and also gave training to the other three women. She earned 10000 monthly from her job and well maintained her family. She says that 'instead of unemployment I always tried to do something which can be done from home and which will be less laborious'.
- **Himani Roy Sarkar (Athlete):** A down trodden Rajbanshi girl who is the state level athlete. She lives at Gabua near Sita B.H.Q. Every day her parents fight against poverty. She says 'almost I come to my school (class xi) without food, I take the mid day meal'.
- **Nili Roy Karjee (Handicraft Worker):** Madhyamik passed girl has been carrying out her own family only selling her creativity. She makes designer dolls, flower vase with the help of bamboo pieces. Every year she profits approx sixty thousand rupees. Nili has bought a Scotty in this year. Now she is well known in her village Chamta situated in Sitai block.

#### 7. Conclusion:

Women account for more than half of the world's illiterate population and achieving literacy for them could be one of the first steps in the direction of empowering women to participate more uniformly in society and free them for economic opportunity. The education enhances their decision-making capacity in vital areas, especially in the areas of reproduction. Education is one of the most important means of empowering women and giving knowledge, skills and self-confidence which is necessary to make them to be full partners in the development process. From the above discussion, it can be said that the women's educational status i.e. female literacy and educational attainment in various field of education are increasing with the passage of

time with the help of different governmental positive initiatives which very important to leads the empowerment of the Scheduled Caste women in the study area. The data stated that the most of the women in the study area were felt un-empowered which was shown by the behaviour of decision making according to their educational attainment. The result depicts that the decision making power was high among the well-educated respondents' compare to less educated respondents', though there were some other factors which affect the empowerment status of the respondents, confidently education is the very most one which leads to empowered them. Women empowerment through education is ideally seen as a continuous holistic process with cognitive, psychological, economic and political dimensions in order to achieve liberation. There is complexity in political, social, religious, cultural ethical, moral, administration, institutional, and demographical aspects as well as in inter-state, national and international interrelations in India. Therefore, one has to systematically think about the strategies and concrete proposals for future action if one hopes to achieve such a goal. A set of strategies for education, research/documentation, campaigns, networking, influencing acts, legislation, policies, schemes, training and media has to be developed.

However, in addition to the above issues and existing provisions the following solutions are proposed for helping women achieve empowerment in all aspect of their life which in turn can ensure holistic development of the individual as well as of the nation:

- i) Steps should be taken to improve the health status of women, reduce maternal mortality especially in the areas which do not have good medical facilities.
- ii) Awareness programmes, workshops, seminar and street drama etc. need to be organized for creating awareness among women; especially belonging to weaker sections about their rights.
- iii) Strict implementation of programs and acts should be there to curb the mal-practices prevalent in the society.
- iv) The Ministry of Education both central and state level should work out strategic steps to

- v) stop firmly the ongoing high drop outs among girls especially in rural areas to realize zero drops out among girl.
- vi) Women should be allowed to work and should be provided with enough safety and support to work.
- vii) Literature and publications are a major area through which the whole nation of women empowerment can be inculcated to the society.
- viii) Ensure there is a stable team of gender-aware expertise, concurrent program budget for girls and women's education, and mentors to assist government managers in creating gender-responsive planning, implementing and monitoring processes.
- ix) Arranging programmes for interaction with other empowered women in the society is another important way of motivating women.
- x) The institution that is engaged in the various field of social work can start short-term diploma or certificate courses in rural development with special emphasis on projects for women's development.
- xi) Ensure a synergistic partnership between formal and non-formal education that features responsive internal and external communications; information feedback loops with all delivery agents (public, private and civil society); multiple crossover and entry points for students; merit linked recognition for advancing girls and women's education.
- xii) The government should ensure that each official body has a sufficient number of women members.
- xiii) Instigate methodical observation and evaluation of girl's and women's learning outcomes. Monitoring and evaluation systems need to be considerably depended to expose the needs, successes and failures of girls and women's education.

**Appendix:**

**Appendix-1 Distribution of Sampled Women by Type and Level of Decision on Herself/ Personal Empowerment**

Decisions	Decision Type	Educational Attainment					Total
		BP	PRI	SEC	HS	GRAB	
Purchase of bangles, beads, tika, daily clothes etc. for herself	NI	6	15				21
	OS	10		6	4		20
	JD		17	13	19	4	53
	SD			28	57	21	106
Attending classes	NI	16	32	12	6	5	71
	OS			14			14
	JD			21	43		64

	SD			21	31	20	72
Buying medicine/ seeking medical treatment for herself	NI	10	14	17	7		48
	OS	2	2	4	19		27
	JD	4	12	21	43		80
	SD			5	11	25	41
Medical treatment related to reproductive post partum stages for herself	NI						
	OS						
	JD	16	32	47	59	2	156
	SD				21	23	44
Determining the number of children to have	NI	8	6	3	3		20
	OS						
	JD	8	26	35	68	6	143
	SD			4	9	19	32
Mobility within the same village to go to the health centre or market	NI	2	4	4			10
	OS	3	2	2			7
	JD	11	24	28	22		85
	SD		2	13	58	25	98
Mobility to go outside the village but return within the same day	NI		5	4			9
	OS	4	3	4			11
	JD	12	24	31	9		76
	SD			8	71	25	104
Mobility to spending one night or more outside the village	NI	9	6	10	3		28
	OS	2	2	4	1		9
	JD	5	24	28	9	4	70
	SD			5	67	21	93

Source: Field Survey Data, 2017-18

**Appendix-2 Distribution of Sampled Women by type and level of Decision about her children**

Decisions	Decision Type	Educational Attainment					Total
		BP	PRI	SEC	HS	GRAB	
Purchase to clothes, extra foods, milk, toys, books and stationary	NI	4					4
	OS						
	JD	12	26	38	64	6	146
	SD		6	9	16	19	50
Sending children to school	NI						
	OS						
	JD	16	28	40	69	7	160
	SD		4	7	11	18	40
Buying medicine or taking treatment for their children	NI	5	6	6			17
	OS						
	JD	11	26	33	68	19	157
	SD			8	12	6	26
Other decision about children's education (such as a stream, private tutor, type of school etc.)	NI	10	3	9	8		30
	OS				2		2
	JD	6	24	30	54	17	131
	SD		5	8	16	8	37
Sending a Female child to other village or city for higher education	NI	9	8	8			25
	OS						
	JD	7	24	34	69	13	147
	SD			5	11	12	28
Regarding Marriage of children	NI	11	14	12	10		47
	OS				2		2
	JD	5	18	35	68	21	147

	SD					4	4
--	----	--	--	--	--	---	---

Source: Field Survey Data, 2017-18

**Appendix-3 Distribution of sampled women by type and level of decision about Household or Family**

Decisions	Decision Type	Educational Attainment					Total
		BP	PRI	SEC	HS	GRAB	
Purchasing daily consuming goods (Foods, salt, spices, sugar etc.)	NI	16	2	7	8	3	36
	OS		2	4	2	2	10
	JD		28	36	54	8	126
	SD				6	13	19
Growing vegetables and fruits	NI	4	6	7	26	20	63
	OS	2	2		4		8
	JD	8	24	28	26	5	91
	SD			12	8		20
Rearing Livestock	NI	8	12	11	42	23	96
	OS						
	JD		8	25	28		61
	SD	8	12	11	10	2	43
Making Handicraft	NI	9	18	15	44	17	103
	OS		2				2
	JD			12	12		24
	SD	7	12	21	24	8	72
Selling Food grain	NI	8	21	33	62	25	149
	OS		2				2
	JD	8	9	14	18		49
	SD						
Selling vegetables and food grain	NI	12	18	24	50	20	124
	OS		2	7	8	3	20
	JD	4	8	11	14	2	39
	SD		4	5	8		17
Selling Handicraft	NI	14	24	17	52	17	124
	OS	2	2		6		10
	JD		6	24	14		44
	SD			6	8	8	22
Selling Livestock	NI	16	21	30	50	23	140
	OS				4		4
	JD		11	3	15	2	31
	SD			14	11		25
Lending Cash	NI	16	25	22	40		103
	OS		2	5			7
	JD		5	16	26	7	54
	SD			4	14	18	36
What item to cook	NI	3	2				5
	OS						
	JD	4	8	9	12	2	35
	SD	9	22	38	68	23	160
About Family Planning	NI	9	8	4	2		23
	OS				5		5
	JD	7	22	36	45	9	121
	SD		2	7	28	16	53
Purchase of Machinery	NI	16	28	40	64	17	165
	OS						
	JD		4	7	16	8	35



	SD						
Sale of Agricultural Output	NI	14	12	33	62	21	142
	OS		2				2
	JD	2	18	14	18	4	56
	SD						
Type of seed sowing	NI	16	22	37	60	25	160
	OS			2	6		8
	JD		10	8	14		32
	SD						

Source: Field Survey Data, 2017-18

**Appendix-4 Distribution of Sampled Women by type and level of decision about the involvement of Societal Activities**

Decisions	Decision Type	Educational Attainment					
		BP	PRI	SEC	HS	GRAB	Total
Attending Meeting related to community activities	NI	16	16	13	14		59
	OS		8	8	8	2	26
	JD		8	26	58	6	98
	SD					17	17
Involvement of Social Activities such as advocacy against alcohol, gambling, property rights etc.	NI	16	16	28	38	3	101
	OS			8	5	2	15
	JD			11	28	6	45
	SD				9	14	23
Going to the hospital or another medical centre with the neighbours when she is ill	NI						
	OS		2	4	4		10
	JD	11	21	22	18	2	74
	SD	5	9	21	58	23	116
Giving advice to the other women to send a school of their children	NI	16	32	22	12		82
	OS			6	4	4	14
	JD			5			5
	SD			14	64	21	99

Source: Field Survey Data, 2017-18

**Appendix-5 Distribution of Sampled Women by type and level of Decision about Involvement of Political Participation**

Decisions	Decision Score	Educational Attainment					
		BP	PRI	SEC	HS	GRAB	Total
Attending political meeting or reception or Gram Sabha	NI	14	24	19	9	4	70
	OS	2	2	4	4		12
	JD		6	24	67	7	104
	SD					14	14
Choice of a candidate for voting	NI		2	3	3		8
	OS	3	1	6	5	2	17
	JD	13	29	38	69	10	159
	SD				3	13	16
Taking decision as a political candidate	NI	16	18	21	31	1	87
	OS		9	8	11	8	36
	JD		5	18	38	10	71

	SD					6	6
--	----	--	--	--	--	---	---

Source: Field Survey Data, 2017-18

**Appendix-6 Distribution of Sampled Women by type and level of Decision about Involvement of Economic Participation**

Decisions	Decision Type	Educational Attainment					Total
		BP	PRI	SEC	HS	GRAB	
Purchases of Everyday food item	NI	6					0
	OS		2	3	4		9
	JD	4	21	16	8	4	106
	SD	6	9	28	68	21	396
Electric, gas bill	NI	16	30	8	4		0
	OS		2	6	4		12
	JD			21	61	11	186
	SD			12	11	14	111
Purchases of clothes	NI	1					0
	OS	2	3	5	11		21
	JD	9	16	24	31	4	168
	SD	4	13	18	38	21	282
Spending money on marriage or another occasion	NI	14	21	5	5		0
	OS	2	4	6	8		20
	JD		7	34	46	8	190
	SD			2	21	17	120
Saving and its utilization	NI	16	13	14	23	3	0
	OS		3	4	11	2	20
	JD			26	41	9	152
	SD			3	5	11	57
Purchases of jewellery	NI	16	23	12	8	4	0
	OS		5	3	2	1	11
	JD		4	28	59	6	194
	SD			4	11	14	87
Purchases of land/property	NI	16	24	26	34	2	0
	OS		2	9	10	2	23
	JD		6	12	36	21	150
	SD						
Control over expenditure	NI	11	18	12	8		0
	OS		6	5	2		13
	JD	5	8	28	58	4	206
	SD			2	12	21	105
Control over saving	NI	16	28	24	8	1	0
	OS			11		2	13
	JD		4	12	64	8	174
	SD				8	14	66
Control over salaried/ wages/ govt. money	NI	16	32	47	74	4	0
	OS					3	3
	JD					6	12
	SD				6	12	54

Source: Field Survey Data, 2017-18

**Acknowledgement:** With immense pleasure and profound gratitude, I take this opportunity to express my most sincere, deep and heartfelt thanks to my supervisor Dr. Pradip Chouhan, Associate Professor, Department of Geography for his invaluable support, skilful guidance, continuous

encouragement and scholarly directions that helped me in this work. He was always available to vouchsafe his help and guidance. But for his wholehearted guidance and supervision, it would have been difficult for me to accomplish this.

## References

1. Abraham, G. (2001). Empowerment of women in rural India. Paper presented at the Conference of Empowerment of Women in Developing Countries, Action Alliance on Women's Health, Santa Fe, New Mexico, USA. 26-27 April 2001.
2. Agarwal, B. (2001). *Gender Inequality, Cooperation, and Environmental Sustainability*. In Economic inequality, Collective Action, and Environmental Sustainability. ,ed. P. Bardhan, S. Bowles and J.M. Baland. Princeton University Press.
3. Ahmed, Nabi and Siddiqui, Mohd Abid (2006). Empowerment of women through education: commitments and challenges. *University News Journal*, 44(37), 16-20.
4. Anderson, S., and J.-M. Baland. (2002). The economics of Roscas and intrahousehold resource allocation. *The Quarterly Journal of Economics*, 117(3), 963–995.
5. Anju, M., Schuler, S.R., and Boender, C. (2002). Measuring women empowerment as a variable in international development. World Bank Social Development Group.
6. Baird, S. (1994). Self-empowerment: Your first step toward excellence. *Journal for Quality & Participation*, 17(7), 40-44.
7. Banu, N. and Rawal, S.K. (2015). Regional disparities in determinants of educational status in West Bengal, India: a spatial descriptive approach. *IOSR Journal of Humanities and Social Science*. 210(4), 32-39.
8. Beena Dominic and Amrita Jothi C. (2012). Education- a tool of women empowerment: historical study based on Kerala society. *International Journal of Scientific and Research Publications*, 2(4).
9. Bhuimali, A. (2004). Education, employment and empowering women. *Serials Publication*, New Delhi, 332.
10. Bloom, Sheuah S. (2001). Dimensions of women's autonomy and the influence on maternal health are utilization in a North Indian city. *Demography*, 38(1), 67-78.
11. Bogg, J. (1995). The practice of empowerment making the most of human competence. *Leadership and Organization Development Journal*, 16(6), 46—47.
12. Cameron L.A, J. Makolin Dowling and et al. Education and labour market participation of women in Asia, evidence from five countries. *Economic Development and Cultural Change*, 49(3), 459-477.
13. Desai, N. and U. Thakkar (2007). Women and political participation in India. *Women in Indian Society*, New Delhi, National Book Trust.
14. Devadas, R.P., Rajgopal, L.S. et al (1989). Home science education and women's empowerment, Paper Presented at the Conference on Global Empowerment of women by Association for women in Development at Washington DC, *M. D. Publications*, New Delhi, 1-12.
15. Dhamija, Neelam (2006). Women empowerment through education; role of universities. *University News Journal*, 44(27), 12-15.
16. Duflo, E. (2011). *Women's empowerment and economic development*. National Bureau of
17. Ghuman, Sharon (2003). Women's autonomy and child survival: a comparison of muslims and non-muslims in four Asian countries. *Demography*, 40(3), 419-436.
18. Giriappa, S. (1997). Women empowerment and decision making analysis in rural enterprises. Paper Presented at International Conference on Gender Equity through Women's Empowerment, 23-29 December, Lucknow.
19. Himmelstrand, K. (1990). Can an aid bureaucracy empower women? In K. Staudt (ed.) *Women, International Development and Politics: the Bureaucratic Mire*. Temple University Press, Philadelphia, 101-113.
20. Jejeebhoy (2000). *Women's Autonomy in Rural India: Demographic Behaviour*. Oxford University Press, New York, 204-238.
21. Karl Marlize (1995). *Women and Empowerment: Participation and Decision Making*. New Jeesy, zez Books Ltd, London.
22. Karl, M. (1995). *Women and Empowerment: Participation and Decision-Making*. London: Zed Books Ltd.
23. Kristin Mammen and Christina Paxson (2000). Women's work and economic development. *Journal of Economic Perspectives*, 14(4), 141-164.
24. Kritz and Makinwa and etal (1999). Determinants of women's decision making authority in Nigeria: The Ethnic Dimension. *Sociological Forum*, 14(3), 399-424.
25. Kumari, S. (2006). *Dynamics of Women Empowerment*. Alfa Publications, New Delhi, 340.
26. Malhotra, Anju and Mark Mather (1997). Do schooling and work empower women in developing countries? gender and domestic decisions in Sri Lanka. *Sociological Forum*, 12(4), 599-630.
27. Pal, Subhadip (2014). Comparative study on decision making power of self help group and non-self help group women in relation to farm activities. *International Journal of Agricultural Extension*, 02(01), 21-28.
28. Pandit P. Vijayalakshmi (1997). *Empowerment of Women through distance Education: A Case of Dr. B. R. Ambedkar Open University*. Book links Corp., 211.
29. Rafiqul, Islam Mohammed, Women's Empowerment for Sustainable Development in Bangladesh (September 11, 2010). *OIDA International Journal of Sustainable Development*, 1(8),77-83.
30. Saha, S, & Debnath, G. (2016). Gender gap in literacy and composite index of literacy development in West Bengal: a district wise analysis. *International Multidisciplinary Research Journal*, 6 (2), 1-13.
31. Samarakoona. Shanika, Parindurib. A. Rasyad (February, 2015). Does education empower women? evidence from Indonesia. *World Development*, 66, 428–442.
32. Sen, Ruchira (2008). Education for women's empowerment: an evaluation of the government run schemes to educate the girl child, CCS Working Paper No. 183, Centre for Civil Society, India.
33. Seth, Mira (2001). *Women and Development- The Indian Experience*. Sage Publication, New Delhi.
34. Sharma, B.M. (2004). *Women and Education*. Commonwealth Publishers, New Delhi.
35. Sindhe, J. (2011). Women's empowerment through education. *National Monthly Refereed Journal of Research in Arts and Education*, 1(11).
36. Singh, Awadesh& Parveen, Parveen (2006). Educational empowerment of scheduled castes: a study on the working patterns of training schemes. in: dalits in India:

- past and present. Edited by Dr. R. M. Sarkar. *Serials Publication, New Delhi*, 115-143.
37. Sundaram, S., Sekar, S. & Subburaj, A. (2014). Women empowerment: role of education. *International Journal in Management and Social Science*.2 (12).
- 40.
38. Swarna Jayaweera (1997). Women, education and empowerment in Asia. *Gender and Education*, 9(4), 411-424.
39. Yogendrarajah, Rathiranee, (2013). Women empowerment through decision making. *The International Journal of Economics and Business Management*, 3(1), December 2013 EAST Publications.