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# Impact Of Women's Empowerment On Sustainable Food Security: A Case Study Of Gobindapur Village, Uttar Dinajpur District, West Bengal

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**Abstract:** Sustainable food security is an emerging research topic and interest among the researchers, global leaders, institutions and scientists. Food security is related to access and availability of nutritious food irrespective of gender, class and religion. The Second Sustainable Development Goal (SDG) adopted by the UN (2015) under Agenda 2030, promotes the need to end hunger or zero hunger by adopting food security and sustainable agriculture. Globally food insecure population has increased since 2014 and in 2017, it was 821 million, among which worst affected are rural women. ([www.fao.org](http://www.fao.org))

This paper concerns with the role empowerment of rural women in achieving sustainable food security. The study investigates the relation between the household food securities in terms of nutritional status and health status of women and children corresponding to the levels of women's empowerment by considering their education level, family income, access to credit and banking, participation in self-help groups, mobility etc. To arrive at a conclusion, association between the variables of food security and level of women empowerment has been studied. The whole study is based on primary field survey of rural women of Gobindapur village under Islampur Block of Uttar Dinajpur District, West Bengal. The study indicates higher level of empowerment is positively associated to better nutritional status and food security.

**Keywords:** Sustainable food security, Nutritional status of Women, Sustainable Development Goals, Empowerment of Rural Women, Agenda 2030.

## Introduction:

Food security has been a global concern and a topic of extensive deliberation among the global leaders, organizations and scientists; especially in the face of burgeoning population growth and excruciating population pressure on the limited agricultural resources. ([Shaw, 1992](#)) The Second Sustainable Development Goal (SDG) adopted by the [UN \(2015\)](#) under Agenda 2030, recognizes and promotes the need to "End hunger, achieve food security and improved nutrition and promote sustainable agriculture. ([Babatunde & Sophia, 2017](#)).

Food security is multi-dimensional concept that includes availability, accessibility and stability of food to all members of a society. Food security has been defined as a condition 'that exists when all people, at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life' (FAO, 2011)

Rural women play a vital role in attaining food security at the household level as the producer, provider, and manager of food sources (Agarwal, 2018) that not only contributes to better nutritional and health status but also helps to improve the economic and educational condition of the members of their family. (Wei et al., 2021) Rural women take care of cooking, cleaning, collecting woods, fetching water, tending kitchen gardens, rearing of livestock, cattle and children in addition to working in agricultural fields as wage laborers and cultivators. (Balakrishnan, 2005) But in actuality much of these works remain underappreciated and disparagingly still categorized as non-economic activity. Whereas, these domestic and social responsibilities are infected directly and/or indirectly hinder the economic participation of women in labour market (Beneria, 1981) which is further aggravated due to lack of knowledge, skill, and access to productive resources like land, fertilizer, agricultural technologies, training, market, credits and finances rural women have marginal position in the socio-economic hierarchy. According to studies 'women receive only 5 percent of the agricultural extension services worldwide' and 'if women had the same opportunities of access to productive resources as men, agricultural productivity would increase by 20-30 %' (FAO, 2011). In light of above discussion, the present paper attempts to investigate the role empowerment of rural women in achieving sustainable food security.

### **Study area:**

Gobindapur village lies in the western part of Islampur block of Uttar Dinajpur district, in West Bengal. The study area is located between 26°18' 29" N to 26° 13' 33" N latitudes and 88°13'55" E to 88° 19' 31" E longitudes. It covers about 174.82 hectares of area, supporting 1110 populations of which 48.55 percent is comprised of male and 51.44 per cent female population. Only 54.19 per cent of its people are literate out of which 48.34 per cent are women and 60.5 per cent are men. 94.86 per cent of the main workers are directly engaged in agriculture and agriculture allied activities. (Census, 2011) As, the economy here is not diverse people very much dependent on only one way of life and income; and thus, are often poor due to lack of earning opportunity.

### **Objectives:**

The present study aims to investigate the influences of empowerment of rural women on the sustainability of food security at the micro level. The main objectives of the study are:

1. To examine the status of empowerment of the rural women of Gobindapur village.
2. To measure the effects of empowerment of the rural women on the sustainability of food security at the household level.

### Database and Methodology:

To accomplish the aforementioned objectives, data has been gathered from several sources; but as the available secondary sources of information (e.g., the Census of India 2011 and Statistical handbook of Uttar Dinajpur district) provide only a limited perspective regarding the subject matter, the study for the most part is based on primary data collected through the schedule survey of Gobindapur village.

According to [Census 2011](#), the village of Gobindapur has 240 households, out of which 50 households have been surveyed for the present study using random sampling technique. Detailed information has been collected with the help of structured interview schedules consisting of close ended questions essentially focusing on measuring the agency, decision making power and freedom of choice of rural women of Gobindapur in correspondence to the availability, accessibility and stability of food security of their respective households. To measure the extent of empowerment of the women of Gobindapur village, the empowerment index is calculated taking into account seven variables e.g. education level, family income, earned income, access to credit, access to personal bank account, participation in Self help groups, and equal say in household decision making.

To study the household food security following five variables were employed i.e. availability of balanced diet, access to daily proper meals, per head household dietary expenditure per day, BMI, malnutrition and/or anemia among women and Children. Finally, the levels of women empowerment and household food security conditions are compared.

### Analysis and Discussions:

The present paper analyses the household food security corresponding to the empowerment of rural women, to gain greater understanding regarding the influence of women empowerment in securing sustainable food security at the micro-level.

Women's empowerment is the ability to make strategic life choices particularly when it was denied to them in the past. Empowerment is a process of gaining resources, agencies and achievements that broadens their world of experience and provides women with greater freedom of choices and decision making power to make better life choices ([Kabeer, 1999](#)).

**Table 1. Determinants of Women empowerment (n= 50)**

Variable	Category	Score	Observed Frequencies
Education Level	Illiterate	0	11
	Functionally Literate	1	6
	Primary	2	4
	Upper Primary	3	9
	Secondary	4	14
	Higher Secondary	5	6
Family Income	less than 3000	0	2

	3000	1	2
	3000-5000	2	8
	5000-8000	3	13
	8000-10000	4	14
	10000-12000	5	1
	12000-15000	6	4
	15000-18000	7	2
	20000-25000	8	2
	25000- 30000	9	1
	30,000 above	10	1
Earned Income	nil	0	36
	less than 1000	1	1
	1000-3000	2	7
	3000-5000	3	1
	5000-8000	4	3
	8000-10000	5	2
Access to credit	No	0	37
	Yes	1	13
Access to Personal Bank Account	No	0	6
	Yes	1	44
Participation in Self Help Groups	No	0	35
	Yes	1	15
Equal Say in Household Decision Making	No	0	17
	Yes	1	33

Source: Field Survey, 2022

In the present study the variables chosen for computing empowerment index represents some of the basic resources and agencies, existence and/or absence of which can determine the availability of choices to improve social and economic condition of their life.

Table 1. Shows the variables, their categorization and their respective scoring that were used to make the Empowerment Index. Based on the scoring, the respondents were classified into: High, Medium and Low levels of empowerment. The greater score indicates high level of women empowerment while poor score means low level of omen empowerment.

**Table 2. Level of Women Empowerment in Gobindapur**

Empowerment Index	Score	Frequency	Per cent
Low Level of Empowerment	2-8	23	46
Moderate Level of Empowerment	9-17	24	48
High Level of Empowerment	>18	3	6

Total		50	100
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Source: Computed by Author

To identify the association between food security and levels of women empowerment five variables of food security such as availability of balanced diet, access to daily proper meal, per head household dietary expenditure per day, Body Mass Index (BMI), malnutrition and/or anemia among women and Children have been used.

**Availability of Balanced Diet and Women Empowerment:** According to table 3, 14 households out of 50 have regular balanced diet, the women of these households belong to moderate to high level of empowerment. Whereas, 21.73 per cent women partaking to mostly low level of empowerment of declared to never have balanced diet. Rest of 30 households i.e., 60 per cent with low level of empowerment and moderate level of empowerment occasionally eat balanced diet containing animal protein, fish and/or milk in their daily diet.

**Access to Daily Proper Meals and Women Empowerment:** About 46 out of 50 randomly surveyed households (92 per cent) reported to have access to daily proper meals 4 times a day, while about 8.69 per cent women of low level of empowerment faces serious problem in accessing 4 square meals a day.

**Dietary Expenditure per Person per day and Women Empowerment:** Most women of moderate level of empowerments spend (91.66 per cent) between Rs 25-50 per person per day for their diet; while women with higher empowerment level (33.3 per cent) invest more than Rs 50 for their meal. Large share of women belonging to low level of empowerment group (39.13 per cent) also have low dietary expenditure per person per day that is <25 Rs.

**Table 3. Association between Different Variables of Food security and Level of Empowerment of Women**

Food security		Level of Empowerment of Women						
		Low Level of Empowerment		Moderate Level of Empowerment		High Level of Empowerment		
Name of Variables	Categories	Frequencie s	Per cent	Frequenci es	Per cent	Frequenci es	Per cent	Total
Balanced Diet	Never	5	21.73	1	4.16	0	0	6
	Occasional ly	18	78.26	12	50	0	0	30

	Regularly	0	0	11	45.8 3	3	100	14
<b>Total</b>		<b>23</b>	<b>46</b>	<b>24</b>	<b>48</b>	<b>3</b>	<b>6</b>	<b>50</b>
Proper Daily Meals	Never	2	8.69	0	0	0	0	2
	Occasional ly	2	8.69	0	0	0	0	2
	Regularly	19	82.6 0	24	100	3	100	46
<b>Total</b>		<b>23</b>	<b>46</b>	<b>24</b>	<b>48</b>	<b>3</b>	<b>6</b>	<b>50</b>
Dietary Expenditure Per Person Per day	Less than 25 Rs	9	39.1 3	2	8.33	0	0	11
	25- 50 Rs	14	60.8 6	22	91.6 6	2	66. 6	38
	> 50 Rs	0	0	0	0	1	33. 3	1
<b>Total</b>		<b>23</b>	<b>46</b>	<b>24</b>	<b>48</b>	<b>3</b>	<b>6</b>	<b>50</b>
BMI	Underwei ght	4	17.3 9	2	8.33	0	0	6
	Healthy	17	73.9 1	18	75	3	100	38
	Overweig ht	2	8.69	3	12.5	0	0	5
	Obese	0	0	1	4.16	0	0	1
<b>Total</b>		<b>23</b>	<b>46</b>	<b>24</b>	<b>48</b>	<b>3</b>	<b>6</b>	<b>50</b>
Malnutrition and Anemia	No	18	78.2 6	24	100	3	100	45
	Yes	5	21.7 3	0	0	0	0	5
<b>Total</b>		<b>23</b>	<b>46</b>	<b>24</b>	<b>48</b>	<b>3</b>	<b>6</b>	<b>50</b>

Source: Field Survey, 2022

**BMI and Women Empowerment:** BMI or Body Mass Index is a scientific measure to calculate height and weight ratio. Based on this index a person is classified into following categories underweight, healthy, overweight, obese and very obese. Being underweight as well as overweight can create serious consequences upon human health. Having balanced diet and proper meals are necessary to have healthy BMI and thus it is an important measure of food security. In the present study most underweight (17.39 per cent) instance is seen

among the women with low level of empowerment where as women of medium and high level of empowerment mostly has better BMI.

**Malnutrition and Anemia and Women Empowerment:** Malnutrition and anemia among women and children is a direct sign of food insecurity and nutritional imbalanced. In the present paper 21.73 per cent women of low level of empowerment suffer from malnutrition and anemia related diseases.

Therefore, the above analysis reveals that empowerment of women significantly influences the awareness, choices, and decisions of women regarding the dietary preferences, supply of food, affordability of proper meals and maintenance of proper nutritional balance for themselves and their families.

### **Conclusion**

The study demonstrates that household food security in its many form is meaningfully connected to the attainment empowerment of women. Women empowerment in terms of education level, earned incomes, equal say in decision making in household etc. positively influences the dietary practices, expenditure over food, nutritional conditions among family members and so on.

Therefore, to overcome poverty, hunger and food insecurity especially in such small villages with limited economic potentials, incorporation of principles of women empowerment in the developmental policies and practices is of utmost importance.

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