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EFFECT OF WOMEN EMPOWERMENT ON CHILD NUTRITION IN BANGLADESH: AN EMPIRICAL ANALYSIS

Rezoyana Kabir Rasha[1], Ripon Kumar Mandal[2] and Mohammad Mizanul Haque Kazal[3*]

Abstract

One of the most effective development strategies for improving child nutrition is women's empowerment. The key purpose of the present study is to investigate the effect of women's empowerment on child nutrition in Bangladesh. The data have been generated from the Bangladesh Integrated Household Survey (BIHS), 2015 that was published by the International Food Policy Research Institute (IFPRI). The analysis included a total of 3275 observations. Primarily, the method of ordinary least squares (OLS) is applied to assess the impact of women's empowerment on child nutrition. However, due to the limitations of the OLS, this relationship is estimated by using the instrumental variable regression. The data demonstrate that the child's height-for-age-z and weight-for-age-z scores are significantly and positively affected by the age of the household head, aggregate women empowerment score, gender parity gap, and food consumption score. As a result, it is apparent that as women's empowerment rises the nutritional status of their children also increases.

Keywords: Child nutrition, 5DS, Instrumental Variable, Endogeneity, Empowerment.

1. Introduction

Malnutrition among children is one of the major obstacles for poor peoples which also hindrance for economic development in Bangladesh. According to BER (2021), the child is mortality rate in Bangladesh is 21 (per 1000 live birth). Malnutrition in children is caused mostly by illness, a lack of care, a lack of enough healthy food, a lack of awareness and education among mothers, a lack of women's empowerment, and so on (Hossain, 2020; Melesse, 2021). Melesse (2021) revealed that women's knowledge and education on food security decline in child malnutrition. Therefore, women's empowerment increases their care for their children's nutrition, gives them the strength and authority to make effective decisions about their children's upbringing, and provides solid a grasp of their

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1. Introduction

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children's health and safety (Anwar *et al.*, 2013; Debnath and Bhattacharjee, 2016; Holland and Rammohan, 2019).

Women's empowerment is a continual development approach that enhances the inner power of women to become economically solvent, participate in many social organisations, speak in front of others, and acquire the power, energy, and voice to advocate for their rights (Anwar *et al*., 2013; Malapit and Quisumbing, 2015; Onah, 2021). Bhagowalia et al. (2010) found that a higher level of women's empowerment is associated with the greater long-term nutritional status of the children. Similarly, Malapit *et al.* (2015a) reported that women's empowerment had a positive impact on maternal and child nutrition. As a corollary, the evidence suggests that women's empowerment has a significant effect on child nutrition and maternal health.

Women make a substantial contribution to agricultural output, domestic tasks, and the care of their families and children (Bhagowalia *et al.*, 2010; Debnath and Bhattacharjee, 2016; Hossain, 2020). Malapit et al. (2015a) reported that women's participation in the workforce is increasing day by day in Bangladesh. According to Alkire *et al.* (2013), all five dimensions of women empowerment along with the ten indicators make women powerful and improve household food security. Likewise, Essilfie *et al.* (2020b), evaluated that women empowerment is positively aligned with child nutrition. Thus, the empowerment of women influences child nutrition. Finally, it appears that women's contributions to reducing household and child food security cannot be overlooked. Thus, it is essential to identify the impact of women empowerment on child nutrition and their growth.

The literature shows that women's empowerment has an impact on their children's nutritional status [z-score] (Bhagowalia *et al.*, 2010; Debnath and Bhattacharjee, 2016; Hossain, 2020; Melesse, 2021; Essilfie *et al.*, 2020b). Several studies have been undertaken by various researchers in various parts of the globe to examine the impact of women's empowerment on child nutrition. This impact can be positive or negative. The mechanism behind this positive or negative impact is the crucial factor that influence the growth of children. Still there is lack of studies that focuses on the impact of women empowerment on child in Bangladesh. As a result, it's crucial to investigate the impact of women's empowerment on child nutrition in Bangladesh using a large sample that is a representative of the population. Thus, the present study investigated on this ground and identified the impact of women empowerment on child nutrition. Finding the causal association between women's empowerment and children's height-for-age-Z score (stunting) and weight-for-age-Z score (wasting) seemed to be fascinating.

However, there are a bunch of factors that can influence women's empowerment (Malapit *et al.*, 2015b; Hossain 2020). These factors are the prime source of women empowerment that can strongly influence the empowerment of women

(Malapit *et al.,* 2015b). As the women are more empowered, the higher would their child nutrition (Hossain 2020). Therefore, these are the indicators of women's empowerment (Alkire et al., 2013; Holland and Rammohan, 2019). These indicators are originating from production, income, asset ownership, leadership, and time allocation dimensions of women empowerment (Melesse, 2021). There are ten indicators of women empowerment which combinedly forms the aggregate women empowerment score (Alkire *et al.,* 2013). Thus, it is essential to identify the impact of aggregate women empowerment score on child nutrition in Bangladesh. Different studies have been conducted in Bangladesh to identify the impact of women's empowerment on child nutrition (Hossain, 2020; Malapit *et al.,* 2015b). But still, there is a lack of studies on identifying the influence of women empowerment on child nutritional status by considering all the indicators of women empowerment. Thus, the present study focused to identify how the empowerment of women affects their child nutrition in Bangladesh. Consequently, the study assessed the effect of aggregate women empowerment score on child nutritional status (haz and waz scores) in Bangladesh. Finally, some policy recommendations were suggested based on the findings.

2. Methodology

Sources and Management of Data: The study's data is obtained from the Bangladesh Integrated Household Survey (BIHS), which was conducted by the International Food Policy Research Institute (IFPRI) applying the multistage random sample technique and published this harmonized dataset in 2015. The dataset includes data from households and communities, as well as information on farm production activities and the women empowerment index. The data is collected from the 7 divisions considering 64 districts of Bangladesh that represents 325 primary sampling unit. The dataset is being used as a pooled-cross section data that represented information from the same household in 2011 and 2015. A total of 3275 observations are included in the study after sorting and management of data. The missing values and blank observations are deleted from the dataset to ensure smooth analysis. Statistical software STATA is used to examine, sort, manage, and analyse the data.

Data Description: Height, weight, body mass index, height according to age, and weight according to age are some of the metrics that represent a child's optimal nutritional development (Debela *et al.,* 2020; Essilfie *et al.,* 2020b). Considering these parameters height for-age and weight for-age z-scores are taken as the key-dependent variable of the study. Child stunting and wasting, which are defined as haz and waz scores followed by Essilfie *et al.* (2020b) are analogous unique indicators. Different household-level variables, such as the household head's gender, age, education, and literacy, are also used as explanatory variables. Furthermore, the aggregate women empowerment score is regarded as an endogenous variable with

direct implications for infant nutrition. Various indicators of women's empowerment are also deployed as an instrument. Among different indicators of empowerment, ownership of an asset by the women, women's power to speak in front of the public, and women's authority over the use of their income are used as the instrument in model 1 and model 2 respectively. Table 1 shows the detailed definitions and descriptions of all the variables used in the research.

Table 1. Description of all the variables used in the study

Name of the Variables	**Variables definition and description**
Dependent variables/ Outcome variables	
Haz-score	Height-for-age-Z-Score of the children in the household
Waz-score	Weight-for-age-Z-Score of the children in the household
Explanatory variables	
Gender of the household head	If the gender of the household head is male = 1, otherwise = 0
Age of the household head	Age of the household head in years
Education of the household head (in years)	If the household head completed Pre-school = 1, class 5 = 5, S.S.C = 10, H.S.C or Diploma = 12, BA/B.Sc. = 14, BA/Fazil = 15, M. Sc = 16, reads in = 17, & never attend at a school = 0
Literacy of the household head	If the household head can sign only = 1, can read only = 2, and can't read or write = 3
Food consumption score (FCS)	Household food consumption score
Gender parity gap	Gender parity gap in the household. It is the difference between aggregate men and women empowerment scores or index
Endogenous variable	
Aggregate women empowerment score or aggregate women empowerment index	Women empowerment score or five-dimension score at the aggregate level. Aggregate women empowerment in an agricultural index is constructed in the dataset. It is a multidimensional index that is constructed with ten indicators from the five dimensions of women's empowerment (Alkire et al., 2013).

Table 1. Cont'd.

Name of the Variables	**Variables definition and description**
Women empowerment indicators	
Instruments	
Women's authority over the use of income	If the women have sole or joint control over the use of their income = 1, otherwise = 0
Asset ownership	If the women have sole or joint ownership of an asset in their household = 1, otherwise = 0
Speaking in front of the public	If the women have the power and self-confidence to speak in front of the public = 1, otherwise = 0
Women input into a productive decision	If the women have the power to take production decisions solely or jointly regarding different production matters = 1, otherwise = 0
Women's access to and decision on credit	If the women have access and decision on the use of credit solely or jointly = 1, otherwise = 0
Women group membership	If the women have a membership in a group or have the power to participate in a group = 1, otherwise = 0
Women leisure time	If the women have some time for leisure activities in the household = 1, otherwise = 0
The workload of the women	If the women have a workload in the household and do not get time for themselves = 1, otherwise = 0

Source: Bangladesh Integrated Household Survey (2015).

Table 2 demonstrates the sample summary statistics of all the variables. The average mean values of the children's height-for-age-z score and weight-for-age-z score are -1.74 and -1.60. This negative sign implies that optimal child nutrition and growth are lacking in Bangladesh. The findings show that males account for 99 percent of household heads. Similarly, the average age of the household head is 39.74 years, indicating that most of them are middle-aged. Meanwhile, the average gender parity gap between males and females is 0.09 points, and the average food consumption score is 63.49 points. In addition, the average overall score for women empowerment is 0.65. Likewise, 81 percent of respondents reported that women have sole or shared authority over how their income is spent. Furthermore, 78 percent of respondents stated that women have exclusive or partial ownership of their household assets. Women also have the power and confidence to speak in public, according to 44% of respondents. Finally, 74% of the respondent said women have a severe workload in the household.

Table 2. Sample summary statistics of all the variables (n= 3275)

Variables	Mean	Std. Deviation
Height-for-age (haz-score)	-1.74	1.40
Weight-for-age (waz-score)	-1.60	1.06
Body mass index (BMI)	-0.72	1.23
Gender of the household head	0.99	0.04
Age of the household head	39.74	12.31
Education of the household head (in years)	5.72	5.20
Literacy of the household head		
Can sign only	0.31	0.46
Can read-only	0.50	0.50
Cannot read and write	0.19	0.39
Aggregate women empowerment score (Five- dimension score-5DS)	0.65	0.19
Women input into a productive decision	0.74	0.44
Women control over the use of income	0.81	0.39
Ownership of assets by the women	0.78	0.41
Women's access to and decision on credit	0.52	0.50
Women speaking in public	0.44	0.50
Membership of a group by the women	0.26	0.44
Availability of leisure time	0.71	0.45
Women workload	0.74	0.44
Gender parity gap (GAP)	0.09	0.20
Food consumption score (FCS)	63.49	18.94

Source: Bangladesh Integrated Household Survey (2015).

Analytical techniques: The study employs both descriptive and econometric analytical approaches. To characterise the features of data, descriptive statistics are used. A multiple regression analysis leveraging the ordinary least squares (OLS) approach is used to analyse the influence of women's empowerment on child nutrition (OLS) followed by Sen and Begum (2015). Unfortunately, the OLS approach failed to uncover a causal link between women's empowerment and maternal nutrition. The value of R^2 in models 1 and 2 is very poor which indicates that the model goodness of fit is not good enough to explain the variation in the model. Although the value of R-squared are almost same in model 1 and 2 in OLS, but the IV coefficients are much higher than the OLS coefficients. Hence, the IV apprehended the downward bias. Moreover, OLS could be used since coefficients in OLS and IV are almost the same. Moreover, most of the variables have an insignificant relationship with the child's nutritional parameters. The problem of omit variable bias in the model, measurement error, and reverse casualty are all possible causes of OLS failure (Holland and Rammohan, 2019).

The researchers have applied all the diagnostic tests on both models before accepting the OLS to figure out the problems in the model. There is no collinearity

among the explanatory variables that have been used in the models (Appendix - table 1). Furthermore, the outcome of the Breusch-Pagan test of heteroskedasticity shows that models 1 and 2 have no problem with heteroskedasticity. Because the chi-square test statistic (0.98 and 1.47) results are not statistically significant ($p>0.05$). Furthermore, the outcome of the Ramsey-reset test statistic reveals that there is no presence of omitted variable bias in the first and second models. Because the value of the F-statistic (0.31 and 1.94) is not statistically significant (p-value = 0.82 and 0.12). Though the study did not apply the double log model to check for any further improvement in OLS using the data.

Empirical Model: Firstly, the method of ordinary least squares (OLS) is deployed to estimate the relationship between women's empowerment and child nutrition**.** The following model specification is used in the study followed by Holland and Rammohan (2019).

$$Y_1 = \beta_0 + \beta_1\, gender + \beta_2\, age + \beta_3\, education + \beta_4\, literacy + \beta_5\, AWE\ score + \beta_6\, gender\ parity\ gap + \beta_7\, food\ consumption\ score \ldots \ldots (1)$$

$$Y_2 = \beta_0 + \beta_1\, gender + \beta_2\, age + \beta_3\, education + \beta_4\, literacy + \beta_5\, AWE\ score + \beta_6\, gender\ parity\ gap + \beta_7\, food\ consumption\ score \ldots \ldots (2)$$

Where Y_1 and Y_2 is the dependent variable which denotes children's haz and waz scores for the regression model 1 and 2. Also, the variable literacy is the vector dummies of the literacy of the household head. AWE score is the aggregate women empowerment score.

Instrumental Variable (IV) Estimation: Due to the inconsistency in the OLS, the instrumental variable regression model is deployed to investigate the effect of women's empowerment on child nutrition. As the data are observed, there is a high probability of measurement error at the moment of data collection. There could be inaccuracies in the data, collected on a child's height, age, and weight. Secondly, women do not always respond spontaneously to questions in front of their husbands. As a result, all these factors point to the presence of endogeneity in the data. The instrumental variable regression (IV) technique can be used to measure the effect of endogenous variables. Thus, IV is used to control the problem of endogeneity. As a result, the researcher used the IV to determine whether there is a causal association between women's empowerment and child nutrition in Bangladesh.

Likewise, the equation of the OLS children haz and waz scores are taken as the outcome or dependent variables in models 1 and 2. In addition, household head gender, age, education, literacy, gender parity gap between males and females, and household food consumption score are considered as the explanatory variables. Similarly, the aggregate women empowerment score or index is used as the endogenous variable. Furthermore, women empowerment indicators such as ownership of an asset by the women, women's power to speak in the public, and

their authority over the use of income are taken as the instrument in model 1 and model 2 successively.

Diagnostic Test and Identification Checks: To validate the IV estimation and the acceptance of external and internal validity, the essential diagnostic tests are done. The results of the Durbin-Wu-Hausman test of endogeneity identify the presence of the endogenous variable in both models. As the value of the test statistic is significant (p-value = 0.03 and 0.09). Thus, the findings reveal that the variable is not exogenous. Therefore, the result of the weak identification test (Stock-Yogo-Week-ID-test) implies that the instrument is strong in both models as the value of the Cragg-Donald Wald F statistic (F = 236.74 and 523.77) is greater than ten. Moreover, the chi-square test statistic (0.88 and 0.07) of the overidentification test is insignificant (p-value= 0.34 and 0.79) in both models. Thus, the insignificant Sargan statistic of the overidentification test determines the instruments are strong in both models. Therefore, it is evident from the first stage regression that all the instruments- women's ownership of assets, women's authority over the use of income, and speaking in public are significantly affiliated with the aggregate women empowerment score (Appendix- table 2). It is apparent from the outcomes that IV estimates suit the present study and can identify the causal relationship between women's empowerment and child nutrition.

3. Results and Discussion

Table 3 illustrates the findings of the estimated coefficient of all the explanatory variables that are used in the method of ordinary least squares (OLS) and instrumental variable regression (IV). It is evident from column 5 of Table 3 that the age of the household head has a positive (0.003) and significant ($p<0.001$) effect on the child weight-for-age-z score (wasting) which is aligned with the findings of Essilfie et al. (2021a), and Rasha (2020). This output notifies that a one-year increase in the age of the household head would enhance the child was score by 0.003 points which means it would reduce child wasting. Because aged and experienced household head has good knowledge and awareness of their child's nutrition and health. Moreover, they are more concerned about their child's health.

The estimated coefficient of the aggregate women empowerment score is positively (1.96) and significantly ($p<0.01$) amalgamated with the child height-for-age-z score (stunting) which implies that as the aggregate women empowerment score rises, their child have scores would increase (Table 3, column 3). Thus, child stunting will be declined. This result is consistent with the findings of Cunningham et al., 2015; Malapit and Quisumbing, 2015; Mekonnen et al., 2021; Holland and Rammohan, 2019; Onah 2021; Rasha, 2020, Shafiq et al., 2019. It is manifested from Table 3 that a one-point increment in the aggregate women empowerment score would enhance the child nutrition (haz score) by 1.96 points. Consequently,

the more would be women are empowered, the higher would be their child haz score, and the lower would be the child stunting. Aggregate women empowerment score has a positive significant effect on child nutrition. Mother's education can play the vital role for the child health care which adds the value on child nutrition. When mother is educated, have the power to earn, have the power to speak for their right, have the power to make any decision irrespective of their children wellbeing, have the power to take any family decision, then it would have positive and influential impact for their children and family. Thus, higher women empowerment would generate higher positive output for their children.

Table 3. Results of the estimated coefficients from the method of OLS and IV regression

Variables	**Model 1** **Dependent variable:** Height-for-age Z score (haz-score)		**Model 2** **Dependent variable:** Weight-for-age Z score (waz-score)	
	OLS	**IV**	**OLS**	**IV**
	Coefficients	Coefficients	Coefficients	Coefficients
(1)	(2)	(3)	(4)	(5)
Gender of the household head	0.17	0.01	0.23	0.29
	(0.62)	(0.63)	(0.47)	(0.47)
Age of the household head	0.002	-0.00	0.003***	0.003***
	(0.00)	(0.00)	(0.00)	(0.00)
Education of the household head	0.01	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Literacy of the household head				
Can read only	0.04	0.05	0.04	0.03
	(0.10)	(0.10)	(0.07)	(0.07)
Can't read and write	-0.07	-0.05	-0.06	-0.07
	(0.07)	(0.07)	(0.05)	(0.06)
Aggregate women empowerment score (5DS)	0.75***	1.96***	0.27	-0.22
	(0.21)	(0.60)	(0.16)	(0.33)
Gender parity gap	0.48***	1.38***	0.28	-0.09
	(0.20)	(0.47)	(0.15)	(0.26)
Food Consumption Score (FCS)	0.01***	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)	(0.00)
Constant	-3.06***	-3.63***	-2.60***	-2.37***
	(0.64)	(0.69)	(0.48)	(0.50)
R-squared	0.03	0.02	0.02	0.02
Adjusted R-squared	0.02		0.02	
F-statistic	11.06***	776.18***	10.43***	951.07***
Wald chi-square (IV)		81.19***		86.06***
No. of observations	3275	3275	3275	3275

Source: Bangladesh Integrated Household Survey (2015).

[N.B: Figures in the parenthesis indicate the standard error, *** indicates significance at a 1% level of significance]

The estimated coefficient of the gender parity gap between male and female aggregate empowerment score is positively (1.38) and significantly ($p<0.01$) linked with the child height-for-age-z score (stunting) which signifies that the gender parity gap between male and female increases the child haz score rises (Table 3, column 3). This is opposite to the findings of Seymour et al. (2019) but similar to the output of Malapit and Quisumbing (2015). In line with the literature, it seems that as the gender parity gap between male and female aggregate empowerment score declines, the child haz scores rises (Seymour et al., 2019). In Bangladesh, the society is male-dominated and male empowerment contributes remarkably to family and children consumption (Malapit et al., 2015b). This might be one of the reasons for the positive impact of the gender parity gap on child nutrition. However, the gender parity gap between male and female aggregate empowerment scores is insignificantly related to the child weight-for-age-z score (wasting).

The food consumption score has a positive (0.01 and 0.01) and significant ($p<0.01$) effect on the child's height-for-age-z score (stunting) and weight-for-age-z score (wasting) which notifies that the food consumption score rises the child haz and waz scores improve by 0.01 and 0.01 point (Table 3, column 3). Thus, it indicates that the larger would be the food consumption score, the higher would be the child's nutrition which exceedingly declines the stunting and wasting of children. This result is in line with the outcomes of Essilfie *et al.*, 2021a; Holland and Rammohan, 2019.

It is apparent from the findings of the present study that the age of the household head, aggregate women empowerment score, gender parity gap, and food consumption score are the main determinants or factors that affect the child nutrition in Bangladesh (Table 3). All these factors have a positive and significant effect on reducing child stunting except the age of the household head has a positive significant influence on declining infant wasting (Table 3). Besides, it can be said that the aggregate women empowerment score is the most influencing indicator that positively and significantly affected the child haz score (Table 3). The aggregate women empowerment score is the endogenous variable that has a direct impact on infant nutrition. Ownership of assets by the women, women's authority over the use of their income, and women's power and confidence to speak in front of the public is the key instrument that has a positive and significant effect on the aggregate women empowerment score at the first stage regression (Appendix table 2). Thus, this signifies that as the indicators of women empowerment rise consequently the aggregate women empowerment score will also be enhanced. These instruments have an indirect causal relationship with the child's nutritional status (haz and waz scores) which is consistent with the result of Jones et al. (2019), Sen and Begum (2015). It is diaphanous from the identification test that the instruments are strong enough to influence the aggregate women empowerment score. However, it is undeniable that the more would be women are empowered, the higher would be their child's nutrition.

The food consumption score has a positive and significant effect on both the haz and waz scores of the children in Bangladesh (Table 3). It is manifested from the literature that empowered women can positively and significantly contribute to their family's dietary diversity score (food consumption score) (Essilfie et al., 2021a; Mekonnen et al., 2021; Rasha, 2020). Because, empowered women are educated, more knowledgeable, aware, and more concerned about the diverse food consumption of their children and household member which especially enhances the food consumption score. Thus, the food consumption scores positively and significantly reduced the stunting and wasting of children in Bangladesh. The result from the instrumental variable regression can illustrate a causal relationship between women's empowerment and child nutrition.

4. Conclusion

Child nutrition and women empowerment are indispensable to each other. This paper sought to assess how women's empowerment influences the stunting and wasting of children in Bangladesh. It is manifested from the findings of the study that the aggregate women empowerment score is the most significant indicator that can influence the child's nutritional status in Bangladesh. Besides, asset ownership by the woman, control over the use of their income, and speaking in the public is the most influential indicators and significant instrument that have a positive impact on the aggregate women empowerment score. It is evident that as much as the women are empowered, the child stunting would be lower. Thus, women empowerment is playing a tremendous role in reducing child malnutrition in Bangladesh.

Due to the male-dominated society, a lack of women's power to engage themselves in productive activities, a lack of speaking power and voices for their rights, and societal obstacles hinder the growth of women empowerment in Bangladesh (Sen and Begum, 2015). Thus, it can be suggested that different awareness programs and community-involved participatory training programs should be provided by the local government authority to ensure higher participation of women in productive activities, making the society concerned about the benefits of women empowerment which generally enhances child nutrition. It is evident from the study that women empowerment has significant effect on diminishing the child malnutrition in Bangladesh.

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Appendix Table 1. Correlation matrix of all the explanatory variables used in the study

Variables	gender	age	education	5DS (AWES)	Gender parity gap	FCS
Gender	1.00	-0.00	-0.00	-0.01	0.05	0.002
Age		1.00	-0.10	0.07	0.03	0.16
Education			1.00	0.03	0.06	0.21
5DS (AWES)				1.00	-0.50	0.15
Gender parity gap					1.00	-0.06
FCS						1.00

Source: BIHS, 2015.

Appendix Table 2. Results of the first-stage regression of the estimated coefficient of the instrumental variable regression

Variables	Model 1 Dependent variable: Aggregate women empowerment score		Model 2 Dependent variable: Aggregate women empowerment score	
	Coefficient	Std. error	Coefficient	Std. error
Gender of the household head	0.13***	0.05	0.12***	0.04
Age of the household head	0.001***	0.00	0.001***	0.00
Education of the household head	0.002***	0.00	0.002***	0.00
Literacy of the household head				
Can read only	-0.01**	0.01	-0.01	0.01
Can't read and write	-0.01***	0.01	-0.01	0.01
Gender parity gap	-0.65***	0.01	-0.54***	0.01
Food consumption score	0.00***	0.00	0.00***	0.00
Women asset ownership	0.06***	0.004	0.07***	0.00
Women speaking in public	0.07***	0.003		
Women control over the use of income			0.15***	0.01
Constant	0.42***	0.05	0.33***	0.05
R-squared	0.68		0.72	
Adjusted R-squared	0.68		0.72	
F-value	776.18***		951.07***	

Source: BIHS, 2015.