

Analysis of Factors Affecting Economic Empowerment of Rural Women in Ethiopia: A Logistic Regression Model

Almaz Giziew¹ and Assaye Tesemma²

Abstract

Without the participation of women in national activities, the social, economic or political progress of a country will be stagnated. However women are hampered by socio-cultural norms, lack of resources and economic opportunities. Women's economic empowerment helps to insure gender equality and the well being of nations. The purpose of the study was to identify factors influencing economic empowerment of rural women in Bahir Dar Zuria district of Amhara region. The study was conducted using quantitative study design. The total sample size of the study was 120 respondents from four randomly selected kebeles of Bahir Dar Zuria District. The data collection was done through structured interview for quantitative survey and analyzed by using inferential statistics like chi-square test, t-test, Cramer's V, Pearson Correlation Coefficient and regression model. Statistical Package for Social Sciences (SPSS) version 16.0 was used for data analysis. The study found that majority of rural women (75.83%) were illiterate. The researchers found that majority of rural married women (42.4%) were economically dependent on their husbands and this economic dependency affected their decision making power and made them submissive and subordinate. According to binary logistic regression model result: decision making on household matters, credit utilization and participation in non-farm activities affected women's economic dependency positively and significantly; whereas age of the respondents affected rural women's economic independence negatively. Gender responsive programs should recognize that practices such as lack of access to and control over resources, and the absence of decision-making and negotiation power all negatively affect women's economic independence. Special promotion and support have to be given to women during policy formulation and designing women sensitive issues and need based development.*

Key words: Economic dependence, Economic empowerment, Ethiopia, logistic regression, women

¹Bahir Dar University, College of Agriculture and Environmental Science, Department of Rural Development and Agricultural Extension, Ethiopia. Email: almazgzw@gmail.com

²Agro-BIG a Finish international NGO, Amhara Region, Bahir Dar, Ethiopia. Email: rohama97@gmail.com

*Kebele refers to the smallest administrative unit/level below a district and consists of a number of villages (i.e. it is a collection of villages). It is part of a district.

Introduction

Economic empowerment is important as a means for guaranteeing families' secure livelihoods and overall well-being. Rural women's economic empowerment can have a positive impact on, and is interconnected with, their social and political empowerment, through their increased respect, status, and self-confidence and increased decision-making power in households, communities, and institutions (Hill, 2011). Women's economic empowerment is the most important factor contributing to equality between women and men. Besides, a specific focus on women is essential as they comprise the majority of economically disadvantaged groups (Bediru, 2011).

Women have substantial contributions both as labor and mentor in the household and outside, but their role is often underestimated and not counted as an economic activity as they suffer from social, cultural and political biases. Traditionally, women's roles are confined to household chores and farming activities, which, in general engage them for longer hours than men (14-16 hours compared to men's 7-9 hours a day) each day (UNDP, 2004; ADB, 2001). This implies that we live in a society in which there is substantial level of gender inequality. The inequality in the provision of education reflects the deep rooted traditions and values within the ideological, political, economic and socio-cultural structure of societies (Lynda, 1991 cited in Bedru, 2011).

In spite of the policy options provided by the Ethiopian Government, there is very little empirical evidence for determinants of rural women's economic dependency to design appropriate policies for the improvement of rural women in Ethiopia. It is, therefore, significant to identify factors affecting economic empowerment of rural women. Recently a few studies have been done (Bedru, 2011 and Mahlet, 2016) on rural women's economic dependency. Moreover, analytical methods employed in both studies were more of a descriptive nature. However this study, unlike the other studies, used econometric analytical model to examine the objective situation in the study area. Therefore, this research activity was initiated to bridge the gaps by focusing on identifying factors contributing to economic empowerment of rural women in the study area.

Research Methodology

The study was conducted at Bahir Dar Zuria district, one of the 168 districts in the Amhara Region of Ethiopia. Administratively the district is divided into 32 rural kebeles and all of the kebeles are rural kebeles.

Sampling techniques and sample size

Rural women were the primary data sources in this study. The rural women from male-headed households and female-headed households were selected for this study because our society is patriarchal and women's roles have been taken into account. Therefore, populations of women from rural households in four kebeles of Bahir Dar Zuria district were used for data collection. Each household was represented by women (from both female-headed household and women in male-headed households (MHHH)). The sampling unit for this study was individual woman household of the district.

According to the district environmental protection and land administration office, kebeles with distance of ten and below kilometers were considered as near kebeles and those kebeles whose distance were more than ten kilometers were considered far kebeles when measured from Bahir Dar.

The district was purposively selected for the study and the 32 kebeles of the district were stratified as near and far based on the distance as distance affects rural women's economic independence. Then by using simple random sampling technique, two kebeles which were far and two which were near were selected. Finally by using probability proportional to size sampling, sample respondents from their respective kebeles were selected.

From a population of 1,200 (sampling frame) from the four kebeles of the district 10 per cent (120) was taken as the sample size purposively as the population of the district was homogenous in its characteristics (similar religion, almost similar educational status, language, living styles, etc) and the researcher believed that it could be representative.

Therefore sample size for each sample kebele was Sebatamit =31; Wondata = 20; Feres Woga= 32 and Kinbaba= 37. Thus, 120 sample respondents/units from four kebeles of the district (Sebatamit, Wondata, Feres Woga and Kinbaba Kebeles) were selected using systematic random sampling method.

Data collection Procedure

The quantitative data was collected by employing eight enumerators.

Data Processing and Analysis

The data was analyzed using the Statistical Package for Social Science (SPSS) version 16. It has been presented using statistical techniques such as, frequency distributions, Tables and simple measures of dispersion specifically ranges using

percentiles and/or counts and inferential statistics such as chi-square, t-test. As women's economic independence is dichotomous, binary logistic regression model was used for data analysis.

Therefore; the operational definition of economic independence is equal to (=) (earning self income in Birr minus (-) income earning from others in Birr) over (/) earning self income plus (+) income earning from others. If the value is greater than or equal to zero, women are economically independent, and if the value is less than zero, they are economically dependent (Greenstein, 2000).

Multicollinearity Diagnosis

Prior to running the logistic regression model, both continuous and discrete explanatory variables were checked for the existence of multicollinearity problems. The problem arises when at least one of the independent variables is a linear combination of others. The existence of multi-collinearity might cause the estimated regression coefficients to have wrong signs and smaller to t- ratios that might lead to wrong conclusions.

To make a decision for existence of multicollinearity among discrete variables, the value of contingency coefficients was also checked. Thus, based on variance inflation factor and tolerance results for continuous variables and contingency coefficient for discrete variables, the data as shown in Table 1 and 2 respectively indicated that the data were found to have no serious multicollinearity problem and therefore, both the continuous and discrete explanatory variables were retained in the model i.e. no independent variables were found to be dropped. Thus, to study factors affecting rural women's economic dependency, data gathered from 120 respondents were subjected to logistic regression analysis.

Table 1. Multicollinearity diagnosis for continuous variables

Variables	Collinearity Statistics	
	Tolerance	VIF
Age	.982	1.018
Landhold	.776	1.289
Toanfain	.964	1.038
Distamark	.977	1.024
Noltlu	.768	1.303

Source: Own computation from survey results, 2016; AGE represents Total years since birth; TOANFAIN=Total on farm income; DISTAMARK= Distance of the respondents' house from the market; LANDHOLD= Land hold of household; NOLTLU=Total livestock owned by the farm household (TLU).

Table 2. Contingency coefficient for discrete explanatory variables

S.No.	1	2	3	4	5	6	7
1	1						
2	.190*	1					
3	.510**	.408**	1				
4	.008	.331**	.293**	1			
5	.111	.511**	.260**	.165	1		
6	.177	.252**	.293**	.122	.127	1	
7	-.075	.089	-.051	.078	.084	.192*	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Own computation from survey results, 2016

Description: 1=Head of a household, 2= Participation in income generating non-farm activities, 3= Decision maker, 4= Utilization of credit, 5= Participation in social organization, 6= Access to media, 7= Education level of a woman

Formulation of empirical model and description of the variables

Women’s economic independence was used as a dependent variable. If a woman can meet her own need as well as of her dependants, it is to be coded 1 and 0 otherwise. The general model of Women’s economic independency is therefore:

$$econid = f(\beta_0 - \beta_1 \text{ age} + \beta_2 \text{ headhh} + \beta_3 \text{ edu} + \beta_4 \text{ dmakr} + \beta_5 \text{ panonain} + \beta_6 \text{ toanfain} + \beta_7 \text{ distamark} + \beta_8 \text{ landhold} + \beta_9 \text{ noltlu} + \beta_{10} \text{ creditut} + \beta_{11} \text{ socialpart} + \beta_{12} \text{ accmed} + \mu)$$

Where the dependent variable women’s economic independence and age, head of household, Education level of a woman, Decision maker, Participation in income generating non-farm activities, Total on farm income, Distance of the respondents’ house from the market, Land hold of household, Total livestock owned by the farm household, Utilization of credit, Participation in social organization and access to media are the determinants of women’s Economic independence and μ is the error term (N 0, 1). Here negative and positive signs of the coefficients $\beta_0, \beta_1, \beta_2, \dots, \beta_{12}$ will reveal that they increase and decrease women’s economic independency. The t-test (p-value) performed to test the significance of each of the explanatory variables at alpha levels of five percent. The statistical criteria like chi square, generalized likelihood ratio test, pseudo R² the overall explanatory power of the (equation) regression, and CC (Coefficient of Contingency) and VIF (variance influencing factor) were used to measure and check whether there is multi-

collinearity or not among the categorical and continuous explanatory variables used in the study, respectively.

Table 3. Summary of variables included in the models

Variable	Variable Type	Variable Description		
Dependent Variable				
1. Women's Economic Independence	Dummy	"1" if independent; "0" otherwise.		
Explanatory variables				
S.No.	Variables	Variable Type	Description and measurement	Expected sign
1	AGE	Continuous	Total years since birth	(-)
2	HEADHH	Dummy	"1" head of a household; "0" otherwise.	(+)
3	EDU	Categorical	Education level of a woman	(+)
4	DMAKR	Dummy	"1" if decision maker and "0" otherwise	(+)
5	PANONAIN	Dummy	"Participation in income generating non-farm activities is a dummy variable. (=1, if yes; =0, Otherwise)	(+)
6	TOANFAIN	Continuous (In birr)	Total on farm income in birr	(+)
7	DISTAMARK	Continuous (In kilometer)	Distance of the respondents' house from the market	(-)
8	LANDHOLD	Continuous (in hectare)	Land hold of household	(+)
9	CREDITUT	Dummy	Utilization of credit (=1, if yes; =0, otherwise)	(+)
10	NOLTLU	Continuous (in TLU)	Total livestock owned by the farm household (TLU).	(+)
11	SOCIALPART	Dummy	Participation in social organization (1= participate in social organization; 0 otherwise)	(+)
12	ACCMED	Dummy	"1" if access to media, "0" otherwise	(+)

Results and Discussions

Relationship between Dependent and Independent Explanatory Variables

Based on the survey result shown in Table 4 below, most of the respondents (73.3%) were women in male-headed households (living with their husbands) and 26.67 per cent of the respondents were women in female-headed households.

When economic independence of rural women was analyzed, 50 per cent of women in female-headed respondents were economically dependent and 50 per cent of them were economically independent. Majority of women in male-headed (65.22%) respondents were economically dependent while 34.78 per cent of them were economically independent.

Table 4. Relationship between economic dependency and women farmers (women in male and female headed households)

Attributes	Economic independence		Total	%	χ^2 results	p-value	Phi
	Dependent	Independent					
Women in Female Headed	16	16	32	26.67	2.513NS	.113	-.145
Women in Male headed	58	30	88	73.33			
Total	74	46	120	100			

Source: Own Computation from survey results, 2016. NS represents non-significant.

The statistical analysis of Phi coefficient revealed that there is no significant association between women in male and female headed households and economic independence ($\chi^2 = 2.513$, $r = -.145$, $p = .113$). The negative association indicates that women in female-headed are better than women in male-headed in terms of economic independence (Table 4). This is due to the fact that women in male-headed have less decision making power in the household as compared to women in female-headed. Moreover, women in male-headed have less mobility and less decision making in large household purchases and sales than women in female-headed households. This finding is consistent with studies conducted by Roomana and Jahanzaib (2013) and Azanaw and Asamnew (2017).

Table 5. Relationship between economic dependency and age of respondents

Variables	Economically dependent N(74)		Economically Independent N(46)		Total		t-value sig.(2-tailed)	Mean difference
	Mean	SD	Mean	SD	Mean	SD		
	Age	30.76	7.680	36.62	11.451	34.38		
Minimum	20		19		19			
Maximum	74		55		74			

Source: Own computation from survey results, 2016. *** represents at 1% level of significance

Table 5 indicates that respondents' age ranged from 19 to 74, i.e. the minimum and maximum age of respondents was 19 and 74, respectively. Mean of economically dependent respondents was found to be 30.76 with standard deviation of 7.680 whereas the mean of economically independent respondents was found to be 36.62 with standard deviation of 11.451. The Mean difference 5.861 showed that there was statistically significant difference between economically dependent and independent sample respondents at 1 per cent level of significance (t-value 3.067, $p=0.003$). Economically dependent respondents were older in age than economically independent respondents (Table 5). This may be because relatively aged women may not decide on household matters, they may not be mobile for different income generating activities. This finding is consistent with the finding of Ahmed (2013).

Table 6. Distribution of respondents by livestock holding

Variables	Economically Independent N(46)		Economically dependent N(74)		Total		t-value sig.(2-tailed)	Mean difference
	Mean	SD	Mean	SD	Mean	SD		
Livestock holding(in TLU)	2.93	2.925	3.97	2.752	3.577	2.853	1.968** (.051)	1.041
Minimum	0		0		0			
Maximum	13.526		12.381		13.526			

*Source: Own computation from survey results, 2016. ** represents 5% level of significance*

As indicated in Table 6, the minimum and maximum livestock size of the sample respondents was 0 and 13.526, respectively by tropical livestock unit. Mean of economically dependent respondents was found to be 3.97 with standard deviation of 2.752 whereas mean of economically independent respondents was found to be 2.93 with standard deviation of 2.925. Mean difference 1.041 showed that there is statistically significant difference between economically dependent and independent respondents at 5 per cent level of significance (t-value 1.968, $p=0.051$). The result showed that there is an association between livestock size and economic independence of sample respondents (Table 6). This is congruent with the report of Akinbode (2017) and Juliet *et al.*(2013). A literature review confirmed that rural women play a key role in the livestock management and household activities. However, it is often argued that their contributions are undermined and their decision making power is highly limited. This result is consistent with Mihiret and Tadesse (2014) and Greenstein (2000).

Moreover, there are differences in access to and control over livestock among women in female and women in male headed households. Mostly large animals were accessed and controlled by husbands whereas small livestock were controlled by wives. This is supported by Damisa and Yohanna, (2007).

Table 7. Relationship between economic dependency and dummy independent variables

Discreet independent variables	Chi-square test		
	χ^2 results/ Fisher's exact test	P-value	Cramer's V/ Phi
Heads of households	2.513NS	0.113	-0.145
Educational status	2.898NS	0.779	0.148
Decision on any household matters in a family	29.109***	0.000	0.493
Access to mass media	5.061**	0.024	0.205
Credit utilization	22.778***	0.000	0.436
Member of any association	25.687***	0.000	0.463
Participation in non-farm activities	88.513***	0.000	0.859

*Source: Own computation from survey results, 2016. *** and ** represent 1% and 5% level of significance, respectively and NS represents non-significant.*

The output of chi-square test/Fisher's exact test in Table 7 revealed that among seven discrete and categorical independent variables, decision on any household matters in a family, access to media, credit utilization, member of any association and participation in non-farm activities showed positive and significant association with the dependent variables at 1 per cent and 5 per cent significance levels, respectively. The other two variables such as head of household and educational status of respondents were non-significantly associated to the dependent variables.

There is a positive ($\chi^2 = 29.109$), strong (Phi = 0.493) and significant relationship ($p = 0.000$) between economic independence and decision making on household matters in a family. In accordance, the survey revealed that economic independence is strongly associated with decision making on household matters in a family positively; as women are free to decide on household matters in a family, they tend to be economically independent. Women become free to spend either when they are non-married and heads of the household, or when they have equal decision making power with their husbands for a given family.

The test of association between the two variables using chi-square also showed that there is positive ($\chi^2 = 5.061$), moderate (Phi = 0.205) and significant relationship ($p = 0.024$) between economic independence and access to media (Table 7).

As indicated in Table 7, the association between credit utilization and economic independence of rural women was also found to be very significant ($\chi^2 = 22.778$, $p < 0.000$); Women who did not have access to credit were found more likely to be economically dependent and those who had utilized credit were economically independent, with an effect size of (Phi=0.436). In accordance, the survey revealed that economic independence is strongly associated with access to credit positively; when women have access to credit they tend to be economically independent. When women have access to credit, they become engaged in different income generating activities. Farmers obtain credit from cooperatives, relatives, friends and local money lenders. Women had high priority in getting access to credit in the study area and another factor was repaying capacity. Most of the respondents did not take credit because of the reason that the interest rate is high followed by fear of inability to pay back the loan/credit.

Data in Table 7 shows that, the test of association between participation in any formal or informal association or organization and economic independence of rural women showed that there is positive ($\chi^2 = 25.687$), strong (Phi = 0.463) and significant relationship ($p = 0.0.000$) at 1 per cent level of significance. As women involve in various formal or informal associations or organizations, they will have access to information related to income generation which might help for their economic independence.

The association between the two variables using chi-square showed that there is a very significant association between economic independence and participation in non-farm activities ($\chi^2 = 88.513$, $p < 0.000$); Women who did not participate in non-farm activities are found more likely to be economically dependent and those who participated are found economically independent, with an effect size of (Phi=0.859). In accordance, the survey revealed that economic dependency is strongly associated with participation in non-farm activities (food for work, daily wage labor, liquor selling and petty trading are the common nonfarm activities in which the respondents of the study are involved) positively; as women participate in non-farm activities; they tend to be economically independent (Table 7). Hence, women should be encouraged to get involved in non-farm activities.

Table 8. Relationship between economic dependency and land ownership

Variable	Attributes	Economic independence		Total	%	χ^2 results/ Fisher's exact test	p-value	Cramer's V/Phi
		Dependent	Independent					
Land ownership	No	4	4	8		.494NS	.482	-.064
	Yes	70	42	112				
Total		74	46	120	100			

*Source: Own computation from survey results, 2015. ** represents 5% level of significance and NS represents non-significant*

With regard to land ownership of respondents, 8(6.9%) of the respondents did not have land access and the remaining 112 (93.3%) of the respondents did have access to land (Table 8). When economic independence was analyzed within land ownership, 50 per cent of the respondents having no access to land were economically dependent and the remaining 50 per cent were independent, 62.5 per cent of the respondents with access to land were economically dependent and the remaining 37.5 per cent were economically independent. The statistical analysis of Phi coefficient also showed that there is no significant association between land ownership and economic independence ($\chi^2 = .494$, $r = .064$, $p = 0.482$) at 1%, 5% and 10% level of significance.

Table 9. Distribution of Respondents by their Landholding size

Variables	Economically Independent		Economically dependent		Total		t-value sig.(2-tailed)	Mean difference
	N (46)		N (74)					
	Mean	SD	Mean	SD	Mean	SD		
Land Size in hectare	0.706	0.460	0.630	0.270	0.659	0.355	-1.132NS (0.260)	-0.075
Minimum	0.25		0.25		0.25			
Maximum	1.25		1.75		1.75			

Source: Own computation from survey results, 2016. NS represents non-significant

With regard to land size of respondents, the data collected on land size in the study area showed that the maximum land size of respondents was 1.75 hectare and the minimum land holding size of respondents was 0.25 hectare (Table 9). Mean of economically dependent respondents was found to be 0.630 with standard deviation of 0.270 whereas mean of economically independent respondents was found to be 0.706 with standard deviation of 0.460. Mean difference -0.075 showed that there is statistically non-significant difference between economically

dependent and independent respondents (t-value -1.132, $p=0.260$) at 1%, 5% and 10% level of significance. The probable reason for non-significant association is that majority of the respondents' land size is below 1.5 hectare and this shows that there is no significant landholding size difference among respondents.

Results of the binary logistic regression model

Women's economic independency: in this study, if women were economically independent 1 point was given and if women are economically dependent 0 point was given. Accordingly, out of the total 120 sample respondents 46 of them were economically independent and the rest 74 of them were economically dependent.

Economic Dependency and associated Factors

Twelve explanatory variables were hypothesized to explain factors affecting economic independence of rural women. Out of these twelve factors, four of the explanatory variables were found to be significant while eight were found to be insignificant in explaining the dependent variable (Table 10).

In order to see the relationship between economic independence and associated factors, binary logistic regression analysis was used. Accordingly, participation in non-farm activities, credit utilization, decision making on HH matters in a family and age of respondents were found to be significantly associated with economic independence of rural women sample respondents. Head of the household, on farm income, land holding size, distance to the nearest market, livestock size, educational status of respondents, access to media and participation in social organization were found to be insignificantly affecting economic independency of rural women (Table 10).

Elaboration on significant explanatory variables

Participation in non-farm activities: It was hypothesized that participation in non-farm activities (daily laborers, liquor seller and petty trading) affects economic independence positively. Thus, results of the model confirmed that participation of women in non-farm activities was found to be positively and significantly affecting women's economic independency at 1 per cent level of significance (Table 10). As participation in non-farm activities increases by one unit keeping other things constant, odds ratio in favor of economic independence increases by 14.90. This is due to the fact that the more women participate in the non-farm activities, the more income they can generate and accordingly the more they become economically

independent. This finding is consistent with a study conducted by Victoria (2007) and Kongolo and Bamgose (2002).

Decision making on household matters: As expected decision making power of rural women on any household matter in a family is supposed to affect economic independence of a woman positively. Accordingly, the result of the logit model indicates that decision making on any household matters in a family affects women's economic independency significantly at 5 per cent level of significance. As decision making on household matters increases by one unit, keeping other things constant, odds ratio in favor of economic independence increases by 6.19. This is due to the fact that when women become decision makers on household matters they will become more confident to participate in farm and non-farm activities to generate income and to become economically independent. This finding is consistent with and supported by a study conducted by Bhutta and Haider (2013).

Credit utilization: it was hypothesized that utilization of credit increase the probability of being economically independent. Thus accordingly, the logit model result indicates that credit utilization of rural women affects women's economic independence positively and significantly at 5 per cent level of significance. This is consistent with the prior expectation. As credit utilization increases by one unit keeping other things constant, odds ratio in favor of economic independence increases by 9.49. This is due to the fact that access to credit and other financial services are necessary to provide low income women with opportunities to increase their incomes and their assets as a result they will become economically independent. This study is also consistent with a study conducted by Hariharan (2014) and Assefa (1989).

Age of respondents: The results of the binary logistic regression model showed that the age of respondents was significantly and negatively affecting women's economic independence at 5 per cent level of significance which is consistent with the general expectation. The negative association of age indicates that as the age of respondents' increases their economic independency decreases and vice versa. As age of respondents' increases by one unit keeping other things constant, odds ratio in favor of economic independence decreases 0.881. This may be for the reason that, at early ages, women as youngsters are relatively free to do their own will and struggle for ways to have their own means of income for self subsistence and beyond. However, as they get older, they will be obliged from the family side

to go outside, to get married, and the hierarchical system in such social bond of a typical rural community, will strap them to move free and earn income as usual. This finding is consistent with the finding of Roomana and Jahanzaib (2013) and Ahmed (2013).

Table 10. Estimates of logistic regression model result

Variables	B	S.E.	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
					Lower	Upper
Age of respondents	-.127*	.076	.095	.881	.759	1.022
Head of the household	-.570	1.919	.767	.566	.013	24.325
Educational status of respondents	.404	.704	.566	1.498	.377	5.949
Participation in non-farm activities	7.222***	1.894	.000	14.90	8.30	56.07
On farm income	-.002	.003	.355	.998	.993	1.003
Land holding size	4.132	2.939	.160	62.293	.196	1,979
Live stock in TLU	-.747	1.429	.601	.474	.029	7.805
Decision making on household matters	4.126**	1.763	.019	6.19	1.953	19.62
Credit utilization	2.970**	1.411	.035	9.49	1.26	30.9.8
Distance to the nearest market	.087	.480	.856	1.091	.426	2.795
Access to media	.927	1.531	.545	.396	.020	7.948
Participation in social organization	1.333	1.261	.290	3.792	.320	44.862
Constant	-4.672	3.269	0.153	0.009		
2log likelihood				27.717		
Omnibus Tests of model coefficients: chi-square(χ^2)				132.044		
Significance				0.000		
Correct model prediction				97.5%		
Correct prediction of economically independents				97.8%		
Correct prediction of economically dependents				97.3%		

***, ** and * represents level of significance at 1%, 5% and 10% , respectively.

Source: Own computation from survey results, 2016

Conclusion and Recommendations

This study has tried to look into the different factors which determine economic independence of rural women in Ethiopia analyzed using Binary Logistic Regression Model and inferential statistics (t-test, X²-test). The study has important policy, education and research implications; because, out of the total 120 sample respondents, majority (74 or 61.7%) of them were economically dependent. Besides, determinants of rural women's economic independence play a substantial role for both women in female headed and women in male headed households' income and livelihood. It is important to understand these factors for the benefit of poor women farmers in particular and in the rural parts of Ethiopia in general. From the findings of the descriptive survey result it can be concluded that decision on any household matters in a family, access to mass media, credit utilization, membership of any association, age of women and livestock holding had relationship with economic independence of rural women. Ethiopian Government in its growth and Transformation Plan (GTP) have taken different measures (legislative, political and socio-economic) to empower women, but, practically they are still more disadvantaged. Therefore, continuous follow up and supervision should be done.

The results of binary logistic regression model show that non-farm activities, credit utilization, decision making on household matters in a family and age of respondents were found to significantly determine economic independence of rural women sample respondents. Decision making on household matters is one of the variables affecting economic independence of rural women positively and significantly, hence it is necessary to empower women for making decision on all economic and income generating activities because the contribution of women in reducing poverty and hunger is as important as men.

As credit utilization is one of the variables affecting women's economic dependency significantly 5 per cent, a loud and clear message should be communicated to the rural women to use financial institutions as sources of credit as credit enables poor rural women to be economically empowered.

It is clear that if roles of men and women are effectively defined they would be empowered equally in their life circles and spheres. Therefore, the real economic empowerment of woman lies in her dignity, regard and respect she deserves. Men should have involvement with women in sharing family responsibilities, particularly parenting and promoting gender equity in the family with focus on

early socialization and youth and to create a positive environment for the effective participation of women.

In general, appropriate intervention strategies are needed to make economic empowerment of rural women effective and to bring about equitable and sustainable changes in the study area. Similar researches should also be carried out in a different set up.

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