



**Article title:** Determinants of Urban Poverty in the Case of Female Headed Households of Ibinat Town

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# Determinants of Urban Poverty in the Case of Female Headed Households of Ibinat Town

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## Abstract

*The aim of this study was to examine the determinants of urban poverty in the case of Female headed household of Ibinat town. Both primary and secondary data sources are used. Primary data was collected directly from sample respondents of female headed households. To collect the data structured questionnaire was prepared and distributed for the respondents. To select the appropriate sample households, simple random sampling technique was used. A total of 180 female headed households have been taken as a sample. To analyze the collected data both descriptive and econometric model have been used. To identify the status of poverty Foster- Greer –Thorbecke measures of poverty was used. The headcount ratio( $P_0$ ) shows that about 45 percent of the sampled female headed households are below the poverty line. The poverty gap index ( $P_1$ ) indicates that average poverty gap in the sample living below the poverty line is 11%. The severity of the poverty indicates that the poorest people in Ibinat town are 9 percent worse off compared to those total households living below the poverty line. To identify the determinants of urban poverty in the case of female headed household, binary logistic regression model was used. The results of logistic regression revealed that family size, age of the household head, number of dependent family member and access to credit are significantly affecting urban poverty. It is recommended to policy makers to act accordingly on credit policies, family planning activities and investments (both public and private. Government policies should encourage financial institutions (both formal and informal) so that households get an access to credit and reduce poverty. There*

*should be family planning practice by local level governments to increase the number of family size, since an increase in family size is negatively associated with household poverty. To reduce the number of dependent people government and other stakeholders should encourage investment in the town so that those dependent people will be employed and generate income. If every family member is generating income, household poverty will decline.*

***Key words: Urban poverty, female headed, FGT, Logistic regression***

### **1.1. Background of the Study**

Poverty is one of the significant trauma and the most common social problems on the planet. It has no geological limit. It has found in every way and in every corners (Borko, 2017). Notwithstanding, uncommon world advances in science, innovation and riches creation, poverty in the entirety of its indications stay profound and dynamic. Poverty is multifaceted and has no single commonly acknowledged definition. In reality, it is multidimensional. Thus, writing on the idea of destitution shows different understandings in monetary, social, political, institutional, ecological, and social settings.

Poverty in Africa is currently the continent's most pressing development concern. Poverty is prevalent, intense, chronic, gender-biased, and mostly a rural condition on this continent. According to World Bank, the number of poor people continues to rise in Sub-Saharan Africa, despite a slow decline in the poverty rate.

Ethiopia is one among the world's poorest countries in all standard poverty measures (UNDP, 2018). According to the UNDP (2019) human development report, Ethiopia's HDI ranking is 0.463, which is lower than the Sub-Saharan African average (0.537) and even lower than the low human developed nations (0.504). Ethiopia is possibly one of the world's poorest country, ranking 174th out of 188 nations in terms of Human Development Indicators (ADBG, 2015). Around 23 million

Poverty is pervasive in the Amhara region and the rate is higher than the national average. In 2011, the Amhara region had a child poverty rate of 34 percent. Based on the 2016 Household income and Consumption Expenditure Survey (HICES), about 26.1 percent of the populations in the region were below the nationally defined poverty line compared to 23.5 per cent for the entire country. Poverty in the rural areas is more prevalent (28.8 percent) than in the urban areas (11.6 percent). However, the level of poverty in the region has significantly declined from 30.5 per cent in 2010/11

to 26.1 % in 2016. The food poverty situation in the region is also critical. The region has the highest percentage of people living in food poverty in Ethiopia, 31.3 % in 2016. According to the WB, 2015, childhood malnutrition (stunting) in the region is among the highest in the country (46 percent in Amhara while 38 percent in the whole country).

### **1.2.Statement of the Problem**

Poverty is a multifaceted worldwide issue that includes more than simply a lack of money or expenditure; it also includes a lack of adequate food, health care, education, and transportation. It also incorporates lack of control over productive assets, as well as fragility and impotence.

### **1.3.Research Questions**

- ❖ What is the status/extent of urban poverty in the case of female headed households of Ibinat town?
- ❖ What are the determinants of urban poverty in the case of female headed households of Ibinat town?

### **1.4.Objective of the study**

- The grand objective of the study is to examine the determinants of urban poverty in the case of female headed households in general.

#### **1.4.1. Specific Objectives**

- To evaluate the status/extent of urban poverty in the case of female headed households of Ibinat town.
- To identify the factors that makes female headed households vulnerable to poverty in Ibinat town.

## **2.1. Theoretical Literature Review**

### **2.1.1. General Overview of poverty**

#### **Definitions of poverty**

The concept of poverty is very diverse, ranging from mere incompetence to meet basic consumption needs and improve the situation, the lack of business opportunities, up to a broader sense that includes social and moral aspects. Poverty is multidimensional and may be defined both by monetary and non-monetary indicators. Poverty in its most general sense is the lack of

necessities. Examples of necessities are, basic food, income, shelter, education, health, and safety based on shared values of human dignity. Needs may be relative to what is possible and are based on social definition and past experience. Poverty can be shown by the per capita income which exists in the economy. In other words, the basic meaning of poverty is relative deprivation. A social definition of poverty allows community flexibility in addressing pressing local issues, while objective definitions allow tracking progress and comparing one area to another (Haan, 1997).

### 2.1.2. Urban Poverty

Urban poverty refers to the set of economic and social difficulties that are found in industrialized cities and that are the result of a combination of processes such as: the establishment of comfortable living standards, the increase of individualism, processes of social fragmentation, and the dualization of the labor market, which translates into social dualization. Urban poverty is seen as a type of poverty with the primary characteristic that it occurs in industrialized societies (World Bank, 2018).

This is made worse by the lack of voice for low-income urban dwellers and their lack of influence within governments and aid agencies. We are living in what is often described as the "urban century" – most of the world's economy and more than half its population are now in urban areas. The world continues to urbanize – and most of the growth in the world's population is in urban areas in low- and middle-income countries. (International Institute for environment and development, 2022).

#### 2.1.2.1. Indicators of urban Poverty

Poverty diagnostics and monitoring of results require appropriate indicators. Selecting indicators is an important basic task in strategy formulation. The indicators thus validated can then be used for increasing the accountability of the public and private sectors to poor people.

**Table 2:0:1 Indicators of Urban poverty**

Poverty Dimensions	Intermediate Indicators	Impact/outcome Indicators
Income	<ul style="list-style-type: none"> <li>Access to credit: (e.g., % of the target population using (or eligible for) credits from formal finance organizations (including for housing and productive uses); or, the share of credits used by</li> </ul>	Poverty headcount—U,C,I · Poverty gap—U,C,I · Extreme poverty incidence μ Female headed households in poverty—U,C,I

	<p>the target group in the total loans offered by formal finance organizations—C,I</p> <ul style="list-style-type: none"> <li>✓ Shares of informal employment—C,I</li> <li>✓ Share of household expenditures on housing (lowest 2 quintiles)—U,C,I</li> </ul> <p>μ Model shares of transport for work trips—C,I</p> <ul style="list-style-type: none"> <li>· Share of household expenditures on transport (lowest 2 quintiles)—U,C,I</li> <li>· Mean travel time to work—C</li> <li>· Access to electricity—U,C,I</li> </ul> <p>μ Regulatory delays (licensing burden on SMEs, etc.)—C</p> <ul style="list-style-type: none"> <li>· Land development controls—C</li> <li>· Coverage of social assistance—C</li> </ul>	<ul style="list-style-type: none"> <li>· Income inequality (Gini coefficient)—C,I</li> <li>μ Quintile ratio of inequality—C,I</li> <li>· Unemployment rate—U,C,I</li> <li>· Housing price/income ratio—C</li> </ul>
Health	<p>Share of household expenditures on potable water and sanitation—U,C,I</p> <p>μ % Household connected to water/sewerage—U,C,I</p> <ul style="list-style-type: none"> <li>· Per capita consumption of water—C,I</li> <li>· % Wastewater treated—C</li> </ul> <p>μ % Households with regular solid waste collection—C,I</p> <ul style="list-style-type: none"> <li>· % of solid waste safely disposed—C</li> </ul> <p>μ Crowding (housing floor space per person)—C,I</p> <ul style="list-style-type: none"> <li>· Air pollution concentrations—C</li> <li>· Shares of sources of household energy—U,C,I</li> <li>· Access to primary health services—U,C,I</li> <li>· Access to nutritional safety net—C,I</li> <li>· Share of household expenditures on health care (lowest 2 quintiles)—U,C,I</li> <li>· Share of household expenditures on food (lowest 2 quintiles)—U,C,I</li> </ul>	<p>Infant and under-5 mortality—U,C,I</p> <ul style="list-style-type: none"> <li>· Maternal mortality rate—U,C,I</li> <li>· Life expectancy at birth—U,C,I</li> <li>· Female-male gap in health (under-5 mortality rate by sex)—U,C,I</li> <li>· Malnutrition rate of children—U,C,I</li> </ul> <p>μ Morbidity and mortality rates from public health/environment-related diseases (e.g., diarrheal, respiratory, malaria)—U,C,I</p> <ul style="list-style-type: none"> <li>· Death rates by violence—U,C,I</li> <li>· Injury/death rates by transport accidents—U,C,I</li> <li>· Mortality rates by disaster—U,C,I</li> </ul>
Education	<p>Primary and secondary school enrollment rates—U,C,I</p> <ul style="list-style-type: none"> <li>· Access to vocational training—U,C,I</li> <li>· Share of household expenditures on education (lowest 2 quintiles)—U,C,I</li> </ul>	<p>Literacy rate—U,C,I</p> <p>μ School completion rates—U,C,I</p> <ul style="list-style-type: none"> <li>· Gender gap in education attainment—U,C,I</li> <li>· Child labor—C,I</li> <li>· Street children—C,I</li> </ul>
Security Tenure Personal	<p>Population in unauthorized housing—C,I</p> <ul style="list-style-type: none"> <li>· Population living in precarious zones—C,I</li> <li>· Scope of disaster prevention/mitigation measures—U,C</li> <li>· Access to police and legal system protections—C,I</li> </ul>	<p>% of households with secure tenure—C,I</p> <ul style="list-style-type: none"> <li>· Deaths from industrial or environmental disasters—U,C,I</li> <li>μ Murder rates (and rates of other crimes such as: domestic violence, child abuse, robbery, etc.)—C,I</li> </ul>

Empowerment	Extent of public consultation in local government budget decisions—C,I · Participation of residents in political or community organizations—C,I · Discrimination in access to services/jobs—C,I · Access to telephones and internet—U,C,I	Citizen involvement in major planning decisions—C,I · Public access to information about local government decisions, services, and performance—C,I μ Satisfaction with city services—C,I
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Indicator can be collected at different levels of aggregation: U = Nationwide urban average or total (all urban areas combined), C = City-specific (citywide rate), I = Intracity (e.g., neighborhood/ward level)

Source: (Baharoglu and Kesside, 2001)

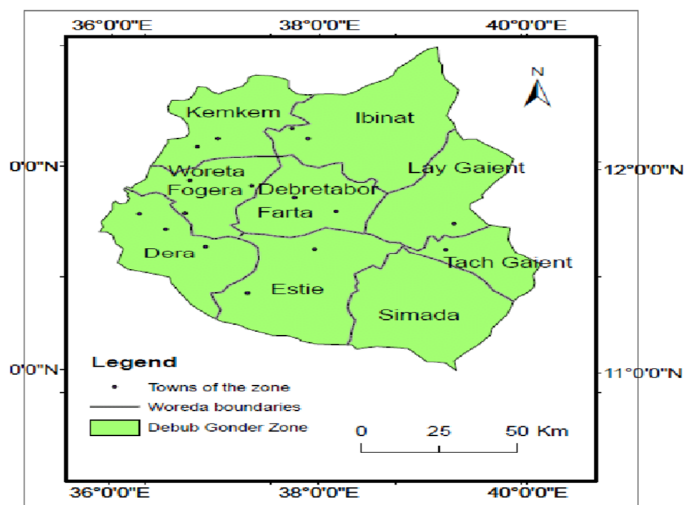
### 2.1.3. Poverty measures

There is no single measure of poverty; and all choices have their own pros and cons. The presence of a lot of instruments though each with some drawbacks, nevertheless, helps us to see the type and extent of poverty in a given society. Concepts of poverty thresholds and lines have a long history extending back into and beyond the poor Laws in England. Despite their long history of operation, the methodology is still deeply flawed for analysis and the design of antipoverty policy interventions (Baharoglu and Kesside, 2001).

### 3.1. Description of the study area

Ibinat is a town in the South Gondar Zone of the Amhara Region, It has a latitude and longitude of 12°7'N 38°3'E /12.117°N 38.050°E. It is the administrative center of Ebnatworeda and is at an elevation of 2972 meters above sea level. Ibinat is about 660 km far from Addis Ababa and 128 km from Bahir Dar, the regional capital.. It is found in North of Debre Tabor, east of Libokemkem, south of Central Gondar and west of Waghmra.

**Demographic structure;** according to Ibinat woreda administrative office (2020) the town has 2 kebeles (kebeles 01 and kebeles 02) with the total number of households (2290 in kebele 01 and 2717 in kebele 02).



Source: (research gate, 2021).

### 3.2. Type and Sources of data

The type of data employed for this study is cross-sectional data which was collected from target respondents. The source of data for this study was both primary and secondary. Primary data were collected from sample female headed households of Ibinat town. Secondary sources have been taken from, Ibinat woredas administrative office and other published and unpublished sources. Sampling Method and Sample size

There are two kebeles in Ibinat town (kebeles 01 and kebeles 02). Both kebeles have been included in the sample to get more representative sample on the determinants of urban poverty in the case of female headed households. The total numbers of households living in both the two kebeles are 5707 (Ibinat woredas Administrative office, 2022). From this total population 1500 are female headed households. The thesis used Yamane formula to determine the appropriate sample size.

$$n = \frac{N}{1 + N(e^2)}$$

$$n = \frac{1500}{1+1500(0.07^2)} \quad n = \frac{1500}{8.35} = 180$$

The error of margin  $e$  is just set as 7% in this thesis. In this thesis it is believed that only 7% error may be committed by taking a sample of 180 from the total 1500 population. The reason for setting the error term 7% is to minimize the sample size. Since the total population in the study area is 1500, then taking 180 sample size is assumed to be representative. Moreover, there is a general



rule that says in economics research the level of significance can be set between 1%-10%. If the researcher expects a minimum error in taking the sample,  $e$  can be even 1% and if the researcher expect the maximum error in taking the sample  $e$  can be set as 10% (Thompson &Liu, 2005)

The 180 sample households will be taken to conclude about the whole female headed householdsof the town. The sample size is taken proportionately from each kebeles as follows;

**Table3:1 proportional Sample size allocation**

Kebeles	Number of female headed households	Sample size taken
01	2290	82
02	2717	98

Source: own computation (2022)

The sampling frame was found from Ibinat woredas administrative office. The list of each female headed household is documented there with their specific kebeles. The sampling unit is taken from the sampling frame which is listed by name. Then lottery method was applied to select the sample unit. Then the structured questionnaire was distributed for the selected samples for both kebeles. The entire questionnaire were returned.

### **3.3. Data collection tool and procedure**

Data was collected by trained data collectors after one data training program on the procedure and purpose of the study. The questionnaire contains three parts; the first part contains socio demographic characteristics of the household and the second part include questions to identify whether the household is poor or not using food energy intake approach. The third part of the questionnaire includes questions that helps to examine the determinants of urban household poverty in the case of female headed households of Ibinat town.

### **3.4. Data analysis and presentation**

To analyze the collected data both descriptive and econometric methods were used. Using tables, charts, percentages and other descriptive tools the determinants of urban poverty have been analyzed. To measure the poverty line, food energy intake approach was The last one, the poverty

severity index, measures the inequality among poor people(Masood and Nasir, 2010). It can be written as

$$pa = \frac{1}{N} \sum_{i=1}^q \left( \frac{Z - Y_i}{Z} \right)^\alpha \quad (\alpha \geq 0)$$

Where  $\alpha$  is a measure of the sensitivity of the index to poverty and the poverty line is  $Z$ , the value of expenditure per capita for the  $i$ th person's households  $Y_i$  (i.e. the variable of interest) and the poverty gap for individual  $i$  is  $G_i = Z - Y_i$  (with  $G_i = 0$  when  $Y_i > Z$ ). If  $\alpha = 0$  the corresponding poverty index is called the headcount index ( $P_0$ ) If  $\alpha = 1$ , the poverty index is called the poverty gap index ( $P_1$ ). Lastly, where  $\alpha = 2$  the index is known as the poverty severity index and it measures the inequality among the poor (Foster et al., 1984).

### 3.5. Model Specification

#### 3.5.1. Logit model

The Logit model considers the relationship between a binary dependent variable and a set of independent variables, whether binary or continuous. The logistic regression model specified as below for urban household poverty;

$$\ln \left( \frac{P_i}{1 - P_i} \right) = Z_i = \beta_0 + \beta_i X_i + U_i \quad (3.2)$$

Where,  $P_i$  is the probability of being not poor and  $X_i$  shows set of independent variables. Therefore, the parameter  $\beta_i$  gives the log odds of the dependent variable and  $\beta_0$  is a constant. The probability of the occurrence of an event relative to non-occurrence is called odds ratio and is given by equation 3.3

$$\left( \frac{P_i}{1 - P_i} \right) = \exp(\beta_0 + \beta_i X_i + U_i) \quad \text{-----} \quad (3.3)$$

Moreover, the mathematical model can be specified as follows with some modifications from the previous studies;

Household poverty = f (Age of HH, Marital status of the household head, , family size, number of dependents, education level of the household head, Saving habit, Health status, House ownership, Employment, access to credit, access to electricity, handicap, urban agriculture) in short expression,

$$pov = \beta_0 + \beta_1 mstat + \beta_2 fsize + \beta_3 agehh + \beta_4 educ hh + \beta_5 emp hh + \beta_6 emp sec + \beta_7 dep + \beta_8 hown + \beta_9 accessh + \beta_{10} accessele + \beta_{11} sav + \beta_{12} credit + \beta_{13} uragri + \beta_{14} hcap + u_i$$

Where pov- stands for household poverty status of the female headed household

$\beta_0$  is the constant term;  $\beta_1$  -----  $\beta_{11}$  are coefficients of the explanatory variables and  $u_i$  is the error term included to capture the unforeseen variables.

### 3.6. Definitions of variables

#### 3.6.1. Dependent variable

The dependent variable in this study is household poverty measured by a dummy variable as poor=1 or not poor=0. In this thesis the Food energy intake approach was used to set the poverty line. The food energy intake (FEI) approach is used in the identification of the poor from the non-poor. This is done based on a predetermined value expressed in terms of calorie intake equivalents (Mulugeta, 2019).

There are some steps to be followed to determine the poverty line and to know who are poor and who are non-poor.

**Step one:** Identify the type of food items which are frequently consumed by the households in the study area. The most commonly consumed food items in the study area are Teff, meaz, barely, wheat, beans, peas, lentil, onion, meat, edible oil, sugar, butter, vegetables, milk, pepper, coffee, and potato.

**Step two:** weight each item of the product consumed with an appropriate measure using kgs. or liters. Then to get the total amount of food bundle a household consumed in a month each of the weighted bundles of food items are summed up. That is

$$\begin{aligned} &Teff + maize + barely + wheat + beans \& peas + lentil + onion + meat + edibil oil \\ &+ sugar + butter + vegetables + milk + pepper + coffee + potato \\ &+ guaya + shrimp \end{aligned}$$

**Step three:** The aggregate value of baskets of food items consumed by a household in a month is divided to the corresponding sample size of the household to get the amount of kilograms each adult individual gets in a month. It can be mathematically indicated as follows

$$K = \frac{\sum_{i=1}^{180} X_i}{\sum_{i=1}^{180} Y_i}$$

Where  $K$  is amount in kilograms or in Liters that an individual consumed

$X_i$  is total baskets of different food items in kilograms or litters a household consumed in a month and  $Y$  is the family size of the surveyed household.

**Step Four:** The amount of Kilograms each household consumes in a month is again divided for 30 days to get the amount of kilograms each adult individual consumed in a day. This is equivalent to  $K/30$ .

**Step Five:** The amount of kilograms an individual consumed in a day is again converted into calorie intake and is calibrated to the predetermined 2200 calorie per day per adult equivalent. The quantity of the bundle of food is determined in such a way that the bundle supplies the predetermined level of minimum caloric requirement. It is at least 2,200 Kcal intakes per day that will leave an individual not to be poor (world health organization, 1985).

**Step six:** This is the last step in which the number of poor and non poor people are identified. If  $X$  is total calorie intakes of a household in a day and  $Y$  is the family size of the surveyed household in the town, then calibrating the poverty line using the FEI international agreed figure 2200 calorie per day for an adult person as recommended by nutritionists, yields

If  $\frac{\sum_{i=1}^{180} X_i}{\sum_{i=1}^{180} Y_i} < 2200 \text{ calorie}$ , those households are below the poverty line and are poor.

If  $\frac{\sum_{i=1}^{180} X_i}{\sum_{i=1}^{180} Y_i} > 2200 \text{ calorie}$ , those households are above the poverty line and are non poor.

### Independent variables

Table 3:2 Nature of independent variables and their description that used in the logistic model analysis

Variable Description	Nature of the variable	Variable representation in the model	Expected sign
Marital status of the household head	Dummy variable 1 if married	mstat	Negative/positive

	0 if otherwise.		
Number of family size	Continuous variable measured in numbers.	Fsize	positive
Age of the household head	Continuous variable measured in number of years.	Agehh	positive
HH dependent ratio	Continuous variable measured in numbers	Dep	Positive
Educational level of HH head	Continuous variable measured in number of years of schooling.	Eduhh	Negative
Employment of the household head	Dummy variable taking a value 1 if the household is employed and 0 if otherwise.	Emphh	Negative
Employment sector of the household head	Dummy variable taking value 1 if the household head is employed in government sector and 0 if otherwise.	Empsec	Negative/positive
Access to electricity (availability of power without major interruptions)	Dummy variable taking the value 1 if household have an access of electricity and 0 if not.	Accesssele	Negative
Access to credit	Dummy variable taking the value 1 if household head has an access to credit and 0 if otherwise.	Accessscr	Negative
Urban agriculture	Dummy variable taking the value 1 if households participate in a urban agriculture and 0 if otherwise.	Uragri	Negative
Handicap	Dummy variable taking the value 1 if the household head is handicap and 0 if otherwise.	Hcap	Positive

#### 4.1.Descriptive Analysis

##### Demographic information of the sampled female headed households

Table4:0:2 **Marital status of the sampled female headed households in Ibinat town**

Status	Amount in number	Amount in percentage
Single	<b>50</b>	<b>27.7%</b>
Divorced	<b>100</b>	<b>55.5%</b>
Widowed	<b>30</b>	<b>16.6</b>
<b>Total</b>	<b>180</b>	<b>100%</b>

Source: own computation(2022)

As indicated in the table 4.1 above, most of the sampled female headed households 100 (55.5%) are divorced, and the remaining 50 and 30 are single and widowed respectively. The majority of respondents are divorced it might be because of poverty and lack of respect to each other. In addition to this it may be because of misunderstanding marriage.

Table4:0:3 **Age group of the sampled female headed households**

Age group of the household head	Frequency of households	Percentage
18-30	11	6.1%
31-44	62	34.44%
45-58	78	43.33%
>58	29	16.11%
Total	180	100%

Source: own survey. 2022

As indicated in the table 4.2 above, most of the sampled households are found in the age brackets of between 31-58 years old (about 78%). Age is one of the important determinant factors of poverty. Studies suggested that there is an important link between poverty and age. Households with elderly, and especially elderly individuals are often not the most poor(Evans and Robert.

2015). Getting old presents a significant, additional risk of becoming or remaining poor. Identifying the poverty line

Using the FEI method, it is revealed that from the total sample households 81(45%) households live below this minimum daily calorie intake i.e about 45% of the sampled households live below the poverty line. The remaining 99(55%) households live above the poverty line.

Head count ratio (Po) is 0.45, this figure indicates that about 45% of the sampled households are unable to attain the 2200 minimum daily food calorie. Only 55% of the population are above the poverty line (above 2200 minimum daily calorie intake).

Consumption food items	Food energy intake
Teff	3
Maize	344
Wheat	340
Beans & Peas	310
Barely	370
Potato	75
Lentil	325
Onion	38
Meat	626
Edible oil	900
Sugar	375
Butter	700
Milk	79
Pepper	73
Vegetables	75
coffee	2.4
Guaya	175
Shrimp	353

Source: WHO & Mulugeta (2019)

## 4.1. Econometrics Result

### Diagnostic Tests

Before conducting the regression, the necessary diagnostic tests have been conducted. The specification, Multicollinearity and goodness of fit tests were conducted.

### Specification Test

The Stata command link test was used to detect a specification error, and it is issued after the logit command. Since the `_hatsq` is insignificant which is 66.6% there is no model specification error. The null hypothesis is accepted.

Linktest

Logistic regression

Number of obs	=	180
LR chi2(2)	=	18.69
Prob > chi2	=	0.0001
Pseudo R2	=	0.0798

Log likelihood = -107.80057

Pov	Coef.	P> z
<code>_hat</code>	.8420868	0.055
<code>_hatsq</code>	.1190081	0.666
<code>_cons</code>	.0030093	0.989

Since the `_hatsq` is insignificant (66.6%) there is no model specification error.

### Goodness of fit Test

The commonly used test of model fit is the Hosmer and Lemeshow's goodness-of-fit test. With a p-value of 0.4166, that Hosmer and Lemeshow's goodness-of-fit test indicates that our model fits the data well because the probability is insignificant. We accept the null hypothesis that says no goodness of fit problem in the model.

number of observations = 180  
number of groups = 10  
Hosmer-Lemeshow chi2(8) = 8.17  
Prob > chi2 = 0.4166

### Determinants of urban Poverty in the case of female headed households

In this part, the actual determinants of urban poverty in the case of female headed households of Ibinat town were estimated. The thesis applied the marginal effects after logistic regression to examine the determinants of urban poverty in the case of female headed households

Logistic regression Result



Pov	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
mstat	.3988377	.3404041	1.17	0.241	-.2683422	1.066018
fsize	-.281362	.1061593	-2.65	0.008*	-.4894304	-.0732936
agehh	.0532717	.0198987	2.68	0.007*	.014271	.0922724
educhh	.0102984	.0706916	0.15	0.884	-.1282546	.1488515
emphh	-.1211736	.4146942	-0.29	0.770	-.9339594	.6916122
dep	.2861029	.1608993	1.78	0.075***	-.029254	.6014599
hown	.3929425	.3743301	1.05	0.294	-.340731	1.126616
accessh	.1376598	.3717491	0.37	0.711	-.5909551	.8662746
accessele	.5203626	.3809101	1.37	0.172	-.2262076	1.266933
savhhh	.5864993	.4374267	1.34	0.180	-.2708412	1.44384
acesscr	-.6173324	.3632338	-1.70	0.089***	-1.329258	.0945927
uragri	.3617814	.3644635	0.99	0.321	-.352554	1.076117
hcap	-2.235587	1.21285	-1.84	0.065***	-4.612729	.1415547
_cons	.4035171	1.358683	0.30	0.766	-2.259453	3.066487

\*(significant at 1%) and \*\*\* (significant at 10%)

Source: own computation using stata.

From the above logistic regression result obtained using stata 13 software package, it is indicated that family size, age of the household head, number of dependent persons, access to credit and being handicap are significantly affecting the urban poverty in the study area. For interpreting the significant variables, the marginal effects of the logistic have been done as follows;

Table 4.4 The marginal effects of the logistic regression

Variable	dy/dx	P> z
mstat*	.089	0.244
Fsize	-.062	0.007
Agehh	.011	0.006
Eduhh	.002	0.884
emphh*	-.026	0.768
Dep	.063	0.073
hown*	.088	0.297
accessh*	.030	0.709
access~e*	.116	0.170
savhhh*	.1239065	0.152
acesscr*	-.1410993	0.094

uragri*	.0796504	0.313
hcap*	-.299197	0.000

Source: Own computation using stata 13

From the above the marginal effects, it is indicated that family size, age of the household head, number of dependent persons, access to credit and being handicap are significantly affecting the urban poverty in the study area.

### **Conclusion**

To achieve the two objectives of the study, the thesis used both descriptive and econometric analysis tools for the data collected in the case of Ibinat town. To identify the status of poverty in the study area the researcher used the FGT indices.

From the data collected it was found that 45 percent of the sampled households are unable to meet the daily minimum food calorie intake of 2200. The result also shows that the average poverty gap in the sample living below the poverty line is 11%. The severity of the poverty indicates that the most poorest people in Ibinat town are 9 percent worse off compared to poor people on average living below the poverty line in the same place.

After the identification of the status of poverty in the study area, the next task was to examine the determinants of poverty. To analyze the determinants of urban household poverty in the case of Ibinat town, the collected data have been analyzed using binary logistic regression. The dependent variable poverty was measured as a binary attribute taking the value 1 if the household head is poor and 0 if the household head is not poor. The minimum daily food energy intake 2200 kcal was used as the poverty line. This minimum daily food energy intake was set by (EthiopianHealth and Nutrition Research Institute, 2015). After the theoretical and empirical literatures, data was collected on various explanatory variables (both continuous and categorical) that determine poverty. The variables which significantly determines urban household poverty in the case of Ibinat town are family size, age of the household head, access to credit and number of dependent people in the family.

### **5.2. Recommendation**

From both the descriptive and the econometric regression results revealed, the following recommendations can be drawn.

The household with large number of family size are less likely to be poor compared to those with small number of family size. This is because family members will participate in various income generating jobs and boost the overall income of the household. Therefore, it is recommended for family planning authorities to take an appropriate measure that can increase family size in the study area.

Age and poverty goes in the same direction. When the household head becomes old, the probability of being poor also increases. Therefore, it is recommended to policy makers to take appropriate intervention that can minimize the poverty problem of old people.

The number of dependent families and probability of being poor goes in the same direction. When the number of economically inactive member increases, it creates a burden on the family and leads to poverty since the income generated by active members is consumed by dependent members. Therefore, policy makers should formulate policies which can create jobs for more people. If the dependent families are normal both physically and mentally, they can work and generate income. For disable member of the family, there should be a policy which can motivate them to work and feel like they can work and do everything.

Access to credit is negatively related with poverty. If the household head received an access of credit, he/she will use the loan for various income generating investments. Therefore, it is recommended for the government to take an appropriate measure on the supply of loans. Government can take a measure that can improve the financial inclusion of the households in the study area.

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