Original Research Article

Analyzing Demographic Context of Rural Households by Food Poverty level: A case of Humbo District, Southern Ethiopia

ABSTRACT

The major objective of this study was to look into analyzing demographic context of rural households by food poverty level: A case of Humbo district, Southern Ethiopia. In order to attain this objective, relevant data were collected through structured interview. The generated data were computed through descriptive (frequencies, percentages, ratios, mean values, standard deviation, standard error) and t-test inferential statistics to analyze desired household characteristics to poor and non-poor categories in Humbo district. Hence, Comparing with non-poor rural households, poor rural households have less average of family size in Humbo district than non-poor households showing significant difference at 1 percent significance level. There was insignificant mean difference between poor and non-poor with regard to dependence ratio and female –male ratio of rural households in the study area at 5 percent significance level. There was also insignificant mean difference between poor and non-poor in terms of average age household heads at 5 percent significance level in Humbo district. Our final conclusion is that effort should be made to improve those identified the demographic factors to alleviate rural food poverty of Humbo district.

Keywords: Demographic indicators, Food poverty level, Humbo district

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1. INTRODUCTION

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Food poverty is Cost of basic need approach relayed on aggregate consumption food. From the perspective of basic needs, World Bank (2000)and Ferreira *et al*. (2016) define poverty as deprivation in well-being and define the poverty line as minimum income/consumption expenditure need to buy food basic needs of 'shopping basket'. According

to FAO (2016) estimates, about 815 million people of the 7.6 billion people in the world, or 10.7%, were suffering from chronic undernourishment. Almost all the hungry people live in lower-middle-income countries. Many of developing countries in Latin America, Africa and Asia remain behind developed countries mainly due to lack of infrastructure, education, health services and higher incidence of poverty (Teshome, 2012). Hence, poverty is continued to be a highly threatening social problem that has claimed the lives of millions directly or indirectly in most of these developing world. The problem is more intense in Sub-Saharan Africa including Ethiopia where poverty is chronic in rural areas (Sembene, 2015).

Thus, extreme food poverty remains inadmissibly high in Ethiopia. For instance, Its Gross National Income per capita amounted to USD 619.2, which is less than 1258 USD average for sub Saharan African countries (World Bank, 2016). The growth elasticity of poverty reduction is -1.53 when using household consumption growth, considerably lower than the world average of -2.02 (Christiaensen *et al*., 2013). Ethiopia is among the list of identified 10 countries in the world receiving international humanitarian aid in 2014 (DI, 2016). In 2011, food inflation was 39 percent, three times the sub -Saharan Africa average of 13 percent. Hence, poverty is color of Ethiopia (Headey *et al.*, 2012; Minten *et al.*, 2014).

Comparing with Urban, the poverty issue of Ethiopia is increasing more in rural areas (Alemu *et al.*, 2011) where almost 83% of the population is living (World Bank, 2015).This means poverty is more widespread and severe in rural areas than in urban area. According to the HICES (2016) Survey result, the proportion of the population below the poverty line (poverty head count index) Mounted at 25.6% in rural areas with noticeable difference of 14.8% in urban areas. Hence, in this paper the researchers were interested to see saw or focused on relative distribution or snap shoot of poor and non-poor households by demographic characteristics of rural households in Humbo district.

2. OBJECTIVE OF THE STUDY

The Objective of the study was to identify demographic characteristics of rural households by poverty level in Humbo district.

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3. RESEARCH METHODOLOGY

3.1. Location of Humbo District

Humbo is one of the woredas in the Southern Nations, Nationalities and Peoples' Region of Ethiopia. Part of the Wolayita Zone located in the Great Rift Valley, Humbo is bordered on the southeast by Lake Abaya which separates it from the Oromia Region, on the south by the Gamo Gofa Zone, on the west by Offa, on the northwest by Sodo Zuria, on the northeast by Damot Weyde, and on the east by the Bilate River which separates it from the Sidama Zone. The administrative center of Humbo is Tebela(Humbo woreda,2019).

3.2. Population of Humbo District

Based on the figure published by the central statistical agency estimation in 2007, Based on the 2007 Census conducted by the Central Statistical Agency of Ethiopia (CSA), this Humbo district has a total rural households of 24370 and 1,513 Urban households totally 25,883 households. The majority of the inhabitants were Protestants, with 87.15% of the population reporting that belief, 7.87% practiced Ethiopian Orthodox Christianity, and 4.07% were Catholic. The three largest ethnic groups reported in Humbo were the Welaita (96.33%), the Amhara (1.28%), and the Sidama (0.86%); all other ethnic groups made up 1.53% of the population. Welayta is spoken as a first language by 96.8%, 1.5% Amharic, and 0.88% speak Sidama; the remaining 0.82% spoke all other primary languages reported.

3.3. Research Methods

Quantitative research methods are appropriate in measuring levels and changes in impact and to make inferences from the observed statistical relations between those impacts and covariates (Creswell, 2003). So, it maintains that research inquiry should be "objective". That is, time and context-free generalizations are desirable and possible, and real causes of social scientific outcomes can be determined reliably and validly (Mundar *et al*., 2012). According to this school of thought, researchers should eliminate their biases, remain emotionally detached and empirically justify their stated hypotheses/research question. Hence, for In this study, the researchers used quantitative research design to come up with best research analysis of this paper.

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3.4. Types and Sources of Data

Primary data was collected from sample rural households by means of structured interview with the help of enumerators. Before the actual survey, the interview schedule was written in English and then translated to its corresponding *Wolaitagna* version for ease of data collection. Field trips were made before the start of the actual survey to pretest the questionnaire on selected rural kebeles. For pretesting purpose, some household heads outside the sample households was interviewed. After incorporation of modifications, the final version of the questionnaire used to gather the data from rural households relevant for the study was prepared. Continuous supervision of the process was made to correct possible errors on the spot. Secondary data was also obtained and utilized from various sources such as reports of district agricultural bureau, zone report and regional reports on issues associated with rural households and rural poverty.

3.5. Methods of Data Collection

According to Kothari (2008) information obtained by means of questionnaires is free from bias as the person conducting the research cannot influence the respondents hence accurate and valid data can be obtained. They are also cheaper, easier to administer and convenient as the respondents are given time to fill in the questionnaires. So, the schedule interview is was the principal source of the data gathering tools in this research more than the other. It was designed to both close and open ended question by English language and translated to Wolaitagna for the sample respondents aiming for the clarity. Then the scheduled interview was accessed to sampled household by enumerator to gather both qualitative and quantitative data, which is assumed to relevant to the problem under study.

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3.6. Method of Data Analysis

To describe situation of rural poverty, descriptive statistics like frequencies, percentages, ratios, mean values, standard deviation, standard error and others were used to assess status of rural poverty based on demographic indicators in the study area. To make inferences from samples to populations, t-test inferential statistics was used to analyze desired household characteristics to poor and non-poor categories in Humbo district. Inferential statistics is linked with the chance of an event occurring so that the mean difference of poor and non-poor categories have been

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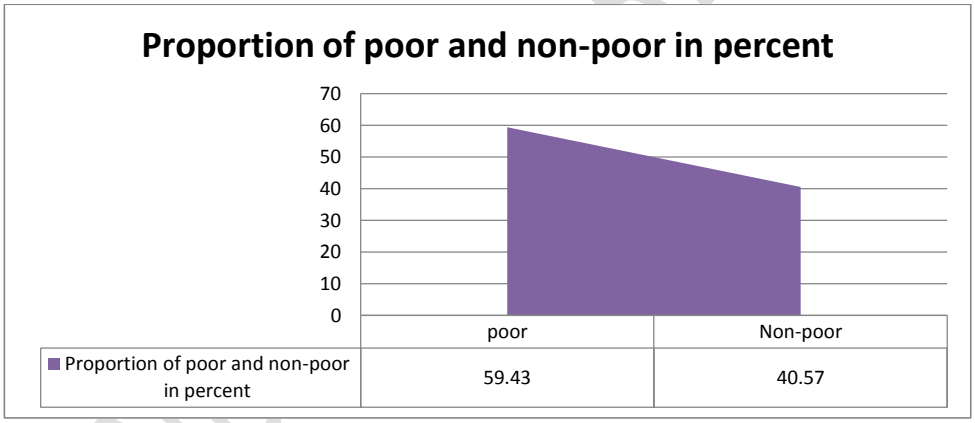
compared and contrasted with respect to the desired characteristics by independent sample t-test analysis for continuous variables was used.

4. RESULT AND DISCUSSION

4.1Food Poverty Level of the Surveyed Households

Before Demographic characteristics of rural households by food poverty level, it is better to compute food poverty level of the surveyed households as displayed in tTable 1 to create base line of our analysis. Using the Cost of basic need approach, aggregate consumption food poverty indices corresponding to selected Food for 2015/16 was computed to 3772.00 Ethiopian Birr per adult equivalent per year CSA/NPC, 2017). Hence, those households falling below the minimum requirement of 3772.00 Birr were considered to be poor, while those above 3772.00 Birr were classified as non-poor households.



Source: Survey result, 2019

Fig.1, Food poverty level by National Poverty line (3772.00 Birr per year)

Information presented in Table1 showeds that 59.43% of the respondents come under the category of poor, while 40.57% were non- poor in the study area. This implieds that majority of rural households were endowed with food poverty in Humbo district.

4.2. Demographic Characteristics of Rural Households by Food Poverty Level

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The demographic variables of rural households are were critical important in analysis of the food poverty level as indicated below.

4.2.1. Average Household Size by Food Poverty Level

Average household size for the poor and non-poor households with respect to food poverty level is indicated in Table1. Accordingly, Figure computed from survey indicated that, the average household size of the poor rural household was found to be 7.13 ± (2.58*0.146) persons per household and 5.92± (2.58*0.134) non-poor in Humbo district (Table1). This means the average household size of rural inhabitant of poor is more than the average household size of non-poor in Humbo district.

Table 1 Average person per households by poverty level in Humbo district

Poverty level	Mean	Std. Err.	Std. Dev.	t -value
Poor	7.13	0.146	2.12	
Non-poor	5.92	0.134	1.68	5.9027***

Notes: *** indicates that the coefficient is significant at 0.001 significant levels

Source: Survey result, 2019

4.2.2. Female-Male Ratio by Food Poverty Level

The poverty level of female-male ration of the rural household members is presented in Table 2. The table showeds that relative number of Female members in poor households (86.95%) was greater than Female members in non-poor households (79.96%) in the study area. Hence, we can concluded that female –male ration is was higher among poor households than non-poor. However, the average Female-Male ratio for poor sample households was 0.97 with standard deviation of 0.648 while average Female-Male ratio for poor sample households was 0.99 with standard deviation of 0.674 in Humbo district. The average Female-male ratio of poor group was less than non-poor in Humbo district. However, there is insignificant mean difference (t=-0.229)

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between poor and non-poor with regard to female –male ratio of rural households in the study area.

Table2 Female-Male ratio by poverty level

Poverty level	Percent.	Mean	Std. Err.	Std. Dev.	t -test
Poor	86.95	0.97	0.045	0.648	-0.229
Non-poor	79.96	0.99	0.054	0.674	

Note: Female-male ratio is converted to percentage in column two of above table

Source: Survey result, 2019

4.2.3. Age of the Household Head in Years by Poverty Level

Table5 describes the poverty level of average age household heads. The average age of poor household heads were 45.86 year with standard deviation of 10.084 while average age of Non-poor household heads was 49.65 years with standard deviation of 11.560 in the study area. This means, the highest proportion of poor households related with those household heads that have the lowest average of age. Relative higher average age of household heads was related with Non-poor household heads in Humbo district. However, there is in significant mean difference (t=-1.470) between poor and non-poor in terms of average age household heads at 5 percent significance level

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Table3 shows the average age of the poor and non poor head of households.

Poverty level	Mean	Std. Err.	Std. Dev.	t –test
Poor	45.86	0.665	10.084	-1.470
Non-poor	49.65	0.923	11.560	

Source: Survey result, 2019

4.2.4. Dependence Ratio by Poverty Level

The poverty level of dependence ratio is calculated and given in Table_6 and it showeds the relative bigger number of children and old person in poor households (76.69%) than Non-poor

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households (62.24%) in the study area. On the other hand, the average dependence ratio for poor sample households were 0.628 with standard deviation 0.458 and also the average dependence ratio for non-poor sample households were 62.24 with standard deviation 0.473 in the study area. This showeds that there was is average dependence ratio difference between poor and non-poor. This meants that average dependence ratio is high in group of poor household in the study area. However, there is insignificant mean difference (t=-0.797) between poor and non-poor with regard to dependence ratio of rural households in Humbo district.

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Table4 Dependence ratio by poverty level

Poverty level	Percent.	Mean	Std. Err.	Std. Dev.	t –test
Poor	76.69	0.628	0.032	0.458	0.797
Non-poor	62.24	0.570	0.036	0.473	

Notes: Dependence ratio is converted to percentage in column two of above table

Source: Survey result, 2019

5. CONCLUSION AND RECOMMENDATION

Poor rural households have less average of family size in Humbo district in general and in all than Non-poor Households showing significant difference at 1 percent significance level. There was insignificant mean difference between poor and non-poor with regard to dependence ratio and female –male ratio of rural households in the study area at 5 percent significance level. There was also insignificant mean difference between poor and non-poor in terms of average age household heads at 5 percent significance level in Humbo district. Hence, all concerning body including Government and non-governmental organization have to give due attention to rural household characteristics by poverty level against poverty alleviation used for promotion and protection policy in the study area.

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