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Determinants of Rural Poverty in Ethiopia: A Household Level Analysis in the Case of Dejen Woreda

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Abstract

This study examines the main determinants of rural household poverty in the district of Dejen Amhara regional state using primary data collected through questionnaire. Through multi-stage sampling technique the data was collected from a total of 204 sample households from rural area of Dejen district in the year 2016. The FGT poverty index (Foster, Greer and Thorbecke) was employed to examine the extent and severity of rural poverty in Dejen. Accordingly, nearly 49% of the sampled rural households' lives below poverty line with an average poverty gap of 0.083 and poverty severity gap of 0.065. The probit model used to analyze the main determinants of rural poverty. Based on the probit model analysis output, household size, sex of households, dependency ratio and livestock ownership are found to be the key determinants of rural poverty. Poverty status is negatively correlated with total number of livestock a household owned and sex of household heads (male dummy). On one hand, family size and dependency ratio are positively related to poverty status of households. So, as parts of policy implication this study suggests that promoting and giving awareness about family planning and putting the existing policy in effect and integrated health service with appropriate access would result in curbing the degree of poverty among rural households. Technical advice and training, how to use their cattle's, should offer from the concerned body in order to strengthen their benefits for the rural poor and help them to exit from poverty. There should also be a need to encourage and give awareness to the population that females are productive and means of development and a way to combat poverty and gender basis development policy measures targeting anti-poverty involvements are useful to curb poverty in rural areas of Dejen.

Keywords: Rural poverty; Livelihoods; Probit; Household level; Dejen

Background of the Study

Poverty has many manifestations and definitions depending on the view point of different scholars. Usually it refers to lack of resources or qualities needed for decent survival. According to the World Bank's Development Report poverty is a pronounced deprivation of well-being related to lack of material income or consumption, low levels of education and health, vulnerability and exposure to risk and weakness [1]. It also reflects "socially perceived deprivation" of basic human needs; its understanding also considers the minimum living standards of the people.

With the start of the third millennium, more than one billion people are living on less than a US dollar a day and another two billion are just little better off in the world. The share of people living on less than US$1.90 per person per day has been steadily declining [2]. World Bank (2007) also indicates that the proportion of the population living in family units with expenditure or income per individual below the poverty line has been on the decrease in the world's regions since 1990. Notwithstanding this decline in poverty, the existence, persistent and incidence of poverty in developing countries and continues to be the main challenge.

Especially, in rural parts of developing countries like Sub Saharan Africa, poverty persists despite of decades of development efforts. In 2013, Sub-Saharan Africa accounted for more of the poor, 389 million people, than all other regions combined; the share of the region in the global total was 50.7 percent [3]. These days across Sub Saharan Africa rural infrastructure has almost deteriorated, farming has languished, food systems have stagnated, and inequalities have deepened [4]. Though the rapid growth and quick reduction in poverty continue to be witnessed in Eastern Asia, growth in SSA could not be fast enough to eradicate extreme poverty.

According to UNICEF (2016), a large household surveys in 89 developing countries reveals that the global poor are predominantly rural, young, poorly educated, mostly employed in the agricultural sector, and live in larger households with more children. That is about 80 percent of the worldwide poor live in rural areas; 64 percent work in agriculture; 44 percent are 14 years old or younger; and 39 percent have no formal education at all. This calls everybody to study and give focus to rural population. That is why this research deals with the main determinants of poverty (one of the most sensitive issues in the globe) in rural areas.

In Ethiopia today, the prevalence of poverty, as reflected in the number of poverty stricken population, is determined on the basis of a poverty line that separates the per capita income or consumption below which an individual is considered to be poor. The proportion of people in Ethiopia who are absolutely poor was 44% [5,6]. Survey results of HICES indicated that the proportion of population below poverty line in Ethiopia stood at 30.4% in rural areas and 25.7% in urban areas in the 2010 fiscal year [7]. Although there is a declining trend of poverty both at regional and national levels, the highest food poverty was renowned in Amhara National Regional State with a head count index

of 42.5% according to the regional statistical figures of MoFED (2012). Rural and urban poverty head count index in the region stood at 30.7% and 29.2%, respectively in which the former is above the national head count index of 29.6% during the 2010/11 indicating that rural poverty is a widely spread problem in the region leaving rural households still poor.

The issues of poverty, like countries of Africa mainly Sub Sahara Africa, is a daily issue. In due its pervasiveness particularly in the agricultural fed economies of Sub Saharan Africa, of which Ethiopia is among them, needs to be given high attention. Among many researches done in Ethiopia in the area of poverty some of them are mostly descriptive, focus on explaining the extent of poverty and most are associated with studies that primarily related on food entitlement issues [8,9]. Even if there are studies done on some household characteristics like rural land holdings, agricultural populations; lacks economic analysis, meaning and interpretation, do not show the near aspects of poverty and failed to consider the major poverty determining factors in rural areas of Ethiopia in depth. These include: Ayalneh et al. [10]; MoFED [7]; Ahmed [11]; Muhdin [12]; Nega [13]. Apart from that determinants of rural poverty in Dejen district East Gojjam Zone is unexploited area of study.

From those studies mentioned above; determinants of rural poverty are remaining in question because the arguments for and against the approaches has been many and the results they provide are contradict each other. As such on one hand, no consensus has been reached and on the other they are not explaining the near aspect of poverty status due to the nature of poverty as dynamic phenomena. And, studies with special focus on the extent of poverty, incidence, depth and severity of poverty and demographic and socioeconomic characteristics of poor and non-poor households that affect rural households' are not yet studied in the rural areas of the Dejen district of East Gojjam Zone. This is the motive behind the need to analyze rural poverty at household level in Dejen district.

With the view point of that, this study tried to examine the incidence, depth and severity of poverty in the rural community in rural areas of Dejen district, analyze demographic and socioeconomic characteristics of poor and non-poor households that affect rural households and provides some policy implications based on the result found.

Determinants of Rural Poverty in Developing Countries

The empirical studies about poverty confirm that rural poverty is complex in terms of its determinants. Apata et al. [14] examined the determinants of rural poverty in Nigeria using probit model on a sample of 500 smallholder farmers to establish factors that influences probability of households' escaping chronic poverty. Results show that access to micro-credit, education, participation in agricultural workshops/seminars, livestock asset, and access to extension services significantly influencing the probability of households' existing chronic poverty. On the other hand, female headed households' and distance to the market increases the probability of persistence in chronic poverty.

Arif and Shujaat [15] using the three rounds of the panel datasets conducted in 2001, 2004 and 2010 and examine the poverty dynamics in rural Pakistan through multivariate analysis and found out that demographic variables, household size and dependency ratio have a significant positive association with chronic poverty as well as falling into poverty. Economic variables such as the ownership of land and livestock, housing structure (pacca) and availability of room have a significant and negative association with the chronic poverty. Both,

the inflationary and natural shocks are likely to keep households either in chronic poverty or push them into the state of poverty. As a policy implication they suggested that improvement in human capital as well as the employability of working age population; creating assets for the poor, with provision of microfinance being one source; lower the dependency ratio by reducing fertility; and minimize the risks associated with shocks are a way to overcome chronic poverty.

Yang [16] analyzed the determinants of the poverty status at the household-level Vulnerability in Small-scale Fisheries Communities in Vietnam and found out households vulnerable to poverty depends on their primary activities to gain income and their location and the households with high vulnerability have an evenly possibility to be poor and non-poor, but those with relatively lower vulnerability are highly possible to be better off.

Arjun et al. [17] analyze the major determinants of rural poverty in Nepal through two stages sampling method which applied to generate cross sectional data and randomly selecting 279 households from one Village Development Committees of six districts of Western Development region of Nepal. They found that thirty three percent of households were lying below poverty line as per the poverty scoring method. And also by employed binary logistic regression, they identified age of household head; size of land holding, female's involvement in service, family occupation and caste as major determinants of rural poverty. Contrary to general view, remittance does not show any significant effect on rural poverty as per this study. They also concluded that poverty in rural parts of Nepal is entangled in structural and cultural web, and the remittance sent by migrant family members to rural households might have been siphoned off to urban areas.

In Ethiopia poverty studies show that the poor are extremely vulnerable and the chances of remaining into poverty both in rural and urban areas following shocks such as drought or the death of the head of the household are very high. The level of poverty would have dropped nearly by half had it not been for risks associated with vulnerability of households. This vulnerability and the associated persistence of poverty is often related to the lack of structural transformation that is in turn related to lack of technical progress in agriculture, lack of strong institutions, access to markets, as well as low asset accumulation in the country [18].

Dercon and Krishnan [19] assess changes in poverty levels between 1989 and 1995 and tested the robustness of measured changes to the problems of choice of poverty lines and impact of uncertainty in measured inflation rates. They found that poverty declined between 1989 and 1994 but remained virtually unchanged between 1994 and 1995 and that households with substantial human and physical capital and better access to roads and towns have both lower poverty levels and are more likely to get better off overtime. They have also observed that human capital and access to roads and towns reduce the fluctuations in poverty across the seasons.

Mahammad [20] using the 1997 round of household survey data from the Ethiopian rural household survey analyzes rural poverty in Ethiopia through FGT Model and estimating consumption based two-step procedure and found that household head who has at least completed primary school suffers from most incidence of poverty. On the other hand, households consisting of household heads with higher age and available of farm land are relatively less poor.

Muhdin [12] analyzes Determinants of Rural Income Poverty in Ethiopia by considering a sample of 217 household heads from two rural areas Dodola district, Oromia Regional State, using binary logistic

model and find out that family size is positively related to poverty. On the other hand Poverty status and number of income sources of the household, livestock and farm land ownership are negatively related. Nega [13] by employing the same methodology with Muhdin [12] but in different study area and carried out using cross-sectional household survey data of 191 sample households and examine determinants of rural poverty at Gulomekeda Wereda of Tigray National Regional State and found that family size and dependency ratio have positive association with poverty of the household. But farm size, total livestock owned, value of asset, educational status of the household head, access to credit and access to off farm income have strong negative association with poverty status of households. Both Muhdin and Nega [12,13] using Binary logit model found that family size and poverty status of households have positive relationship, and livestock, farm land ownership and income are negatively related.

Methodology of the Study

The study area was located in Dejen district East Gojjam zone, Amhara national regional State, Ethiopia. It is one of the fourteen districts in East Gojjam Administrative Zone of Amhara National Regional state (ANRS).The district is composed of 22 rural kebeles and 1 town administration (Dejen town). The total population of the district is estimated to be 95,483 persons among the 45,952 are males and the rest 49,531 are females [21]. In the district of Dejen the populations' livelihood mainly depends on mixed-farming system, where crop and livestock production undertaken in an integrated way.

In order to get the required information on poverty in the study area, both primary and secondary sources of information were used. Primary data were collect through structured questionnaires. Apart from structured questionnaires, qualitative data collected from key informants within the district through interview. Secondary sources include unpublished materials and pertinent published documents such as previous reports, and checklists of facts and figures.

The total number of samples was determined by applying a simple formula [22] although there are many options to do so. Because of its simplicity, cost effectiveness for large populations and lower error committed bias, for this study Yamane is preferred from others. Multi-stage sampling procedure was used to select the total number of samples. The first stage involved stratification of the district consisting of 22 rural kebeles in to two agro-ecological zones (Woiyna Dega and kola) for representativeness of the sample households. All rural kebeles within each stratum were listed out with the help of district extension experts. Then, a total of 11 kebeles (Kurar, Kol, Minji Yibza, Gelgelie, Muyan Teskare Mariyam, Tik, Shebshengo Alekitam, Woblat Getem, Hagere Selam, Enajima Yeziba and Koncher Sasabere) representing the aforementioned agro ecological zones were selected randomly in proportion to the area coverage of the agro-ecologies. Finally, after identifying the sampling frame which contains the complete list of all households within each selected kebele with kebele leaders, a total of 204 sample rural households were randomly selected from the selected kebeles in proportion to their total number of households.

The study used both descriptive and inferential statistics. Descriptive statistics such as frequency distribution tables, mean, and standard deviation were used to analyze the socioeconomic characteristics of the respondents. The collected survey data through structured questionnaire were manipulated and analyzed using MS-Excel and STATA13 software.

Measuring poverty requires defining a threshold (line) that distinguishes the poor from the non-poor. Every individual or household in the population with a measure below the line (threshold) were considered as poor. Due to poverty lines are country specific and governments ultimately define what is meant by poverty in each country, almost all countries in the world have their own national poverty lines to identify citizens whose income falls below a level necessary to maintain a minimum acceptable standard of living [12].

For the purpose of this study the absolute poverty line which is the value of income of 3781 ETB per year (HICES, 2010/11 absolute poverty line) was used. On one hand this poverty line is the highest poverty line considering other studies in Ethiopia. Or it is the highest poverty line when compared with the threshold used by other researchers in Ethiopia. For example, Muhdin [12] used ETB 2606 per year, Tsegaye ETB 3650.75 per year, Dercon and Krishnan [19] ETB of 1075 per year, Hagos and Holden ETB of 1033.45 per year, etc. On the other, deflating this poverty line (3781 ETB per year) with the current price level does not have effect on the study. Because of the optimal inflation level in Ethiopia are between 8 to10 percent [23] and the actual inflation rate in Ethiopia from 2006-2017 is about 8.7%, it is not required to deflate the poverty line used in this analysis by current average price level.

For the purpose of this study due to the reason that logit models are vulnerable to overconfidence that is, the model can appears to have more predictive power than they actually do and tobit model applicable only in the cases where the latent variable (basic variable) can in principle take negative values and observed zero values, probit model is preferable from other binary models [24].

In simplest way the dependent and independent variables which will be included in the model are the following:

Dependent variable: poverty status of households (Povstat) i.e. 1 if the head of a household poor and 0, otherwise.

Independent variables are:

- Sex of the household a male dummy (Sex), Discrete variable
- Age of the household head (Age), Continuous variable
- Household (family) Size (HHS), Continuous variable
- Marital status of household heads (Maritalstatus), Discrete variable
- Dependency ratio in Adult Equivalent (Deprinaeu), Discrete variable
- Education level of household heads (Edu), Discrete variable
- Total cultivated land holdings of the household in hectares (Tlhs), Continuous variable
- Proximity to the nearest market center (Ptmc), Continuous variable
- Access to Credit and Credit utilization (Acu), Discrete variable
- Livestock ownership in tropical livestock unit (TLU), Continuous variable
- Household off-farm income (Hoinc), Continuous variable

Results and Discussion

Poverty and major socio-economic factors

The major socioeconomic factors collected from rural areas of Dejen district are Age of household heads, sex, marital status, household size, education background, dependency ratio, total number

of livestock a household owned, proximity to the nearest market center, access to credit and credit utilization and household off-farm income.

The age of the households, under this study, are grouped in five age categories starting from 27 up to 79. Relatively small percentage of households, about 41.27%, is found poor out of the households who are in the age 49-59 and the percentage of poor households in the age 70-79 are much higher i.e. about 88.24%.Statistically, age of household is insignificant.

Large household sizes tend to be associates with poverty [25]. The effects of household size on household wellbeing very much depends up on the degree of rivalry in consumption among household members. From the table above, in the case of Dejen district, out of the total of 204 sampled households almost 48.5% are poor households. The Table 1 also shows that as the household size increase the percentage of poor households also increase in all family categories and on the other hand the percentage of non-poor households are decline as the number of family (household) size increases. The highest percentage of poor households about 64.1% are recorded in the third family category (i.e. between 8 and 12). The statistical result shows that household size of household heads is statistically significant at 5% level of significance and as the number of families in the household increases the probability of being poor also increases (Table 2).

From the Table 3 above among the total 54 female headed households in the data, 63% are poor and the other 37% are non-poor household heads. And among a total 150 sampled male headed households 43% are poor and 57% are non-poor house hold heads. This shows that the percentage of poor female headed households are higher than the counter poor male household heads and the percentages of

poor male headed households are smaller and is about 43%. So, from the above, we infer that female headed households are poorer than female headed households and statistical analysis shows that sex of households was statistically significant (Table 4).

The percentages of poor households, in general, decrease as the head of households education level increasing and the percentage of poor increase in illiterate society is higher i.e. about 51%. Among the poor households who can read and write and who completed their education levels in primary and in junior are 43% and 39% respectively, which is higher than from those who completed their education in secondary and higher levels. In general, the percentage of non-poor household heads increase as education level of household head increases and those household heads who's completed their education level in secondary and higher levels is about 61.5%. And also the statistical result showed that the level of education of household head statistically insignificant.

In poverty analysis, marital status of the household head is a vital component of the demographic variables. On one hand economic theory and most empirical literatures support the notion that the chance of falling into poverty increases as one is married. This is due to when people get married household size will increase as new children are born and expenditures increase which in turn leads to searching for mechanisms of fulfilling additional needs and necessities for the family.

On the other hand as one is married the probability of falling into poverty decreases, as there would be more labor forces in the household. Table 5 explains this situation as: among the total of 99 of poor households, the highest percentage (about 59 and 51) are those household heads that are divorced and widowed respectively. On the other hand the highest percentages of non-poor household heads (about 55%) are married. The statistical result showed that the marital status of a household is statistically insignificant [26-29].

Poverty indices

Given the information on welfare measures such as consumption and poverty line, the only remaining problem is deciding on appropriate measures of aggregate poverty. Even though, there are a lot of aggregate poverty measures, the most widely used poverty indices are the percentage of the poor (headcount index), the aggregate poverty

Age	Poor		Non-poor	
	Frequency	Percentage	Frequency	Percentage
27-37	12	50	12	50
38-48	27	43.55	35	56.45
49-59	26	41.27	37	58.73
60-69	19	50	19	50
70-79	15	88.24	2	11.76
Total	99		105	

Pearson chi^2 (4)=12.7286 Pr.=0.713.
Source: own survey and calculation, 2017.

Table 1: Poverty and age of household heads.

Family size	Poor		Non-poor	
	Frequency	Percentage	Frequency	Percentage
<5	28	41.79	39	58.21
05-Aug	46	46.94	52	53.06
>8	25	64.1	14	35.9
Total	99		105	

Pearson chi^2 (2)=35.1038 Pr.=0.038.
Source: own survey and calculation, 2017.

Table 2: Poverty and household size.

Gender (Sex) of household heads	Poor		Non-poor		Total
	Frequency	Percentage	Frequency	Percentage	
Male	65	43.33	85	56.67	100
Female	34	62.97	20	37.03	100
Total	99		105		204

Pearson chi^2 (1)=31.251 Pr.=0.013.
Source: own survey and calculation, 2017.

Table 3: Poverty and sex of household heads.

Poverty status of households heads	Illiterate	Read and write	Primary and junior	Secondary and higher	Total
Poor	49	31	9	5	55
	51.04	43.06	39.13	38.46	
Non-poor	47	41	14	8	149
	48.96	56.94	60.87	61.54	
Total	96	72	23	13	204

Pearson chi^2 (3)=1.7238 Pr.=0.632.
Source: own survey and calculation, 2017.

Table 4: Poverty status and household head's education level.

Marital status of household heads	Poverty status of household heads				Total
	Poor		Non-poor		
	In no.	In %	In no.	In %	
Married	64	45.39	77	54.61	141
Divorced	19	59.38	13	40.62	32
Widowed	16	51.61	15	48.39	31
Total	99		105		204

Pearson chi^2 (2)=2.1813 Pr.=0.336.
Source: own survey and calculation, 2017

Table 5: Poverty and marital status of household heads.

gap (poverty gap index), and the distribution of income among the poor (poverty severity index). In the case of this analysis using poverty line FGT classes of aggregate poverty measures (Pα) are computed.

Accordingly, 0.49, 0.083, and 0.065 are the computed head count index, poverty gap and poverty severity, respectively.

As shown in Table 6 above, the head count index (α=0) is about 0.49, shows the percentage of poor people measured in absolute head count index is about 49%. This figure indicates that 49% of the sampled households in Dejen district are below absolute poverty line 3781 ETB and implies that these proportions of sample households are unable to meet their minimum amount of consumption expenditure per adult equivalent per year. The poverty gap index (α=1), is a measure of poverty which captures the mean aggregate consumption shortfall relative to poverty line across the whole population and is found to be 0.083, and implies that the percentage of total consumption needed to bring the whole population to the poverty line is about 8.3%. As a final point, the FGT severity index (α=2) in consumption expenditure indicates that 6.5% fall below the poverty line, implies that existence of severe inequality (high degree of inequality) in the district of Dejen compared to the 2010/11 national poverty severity index of 3.2% in rural areas of Ethiopia.

Socio-economic determinants of poverty

In the probit analysis a dummy variable, poverty status of household heads (1 if poor and 0 if non-poor) were used as a dependent variable in the regression analysis and the result is described below in Table 7.

Setting the household poverty status 1 if a household is poor, or 0 if household is not poor: Among the broadly categorized predictors of demographic factors, only sex of household head and household (family) size are statistically significant at 10% and 5% level of significance.

Poverty indices	Index values
Head count index (α=0)	0.49
Poverty gap/depth index (α=1)	0.083
Squared poverty gap/index (α=2)	0.065
Source: own Computation, 2017.	

Table 6: Poverty indices of sample households.

Independent variables	Coefficients	Standard error	Z	P>Z	Marginal effects (dy/dx)
Age	-0.0041791	0.011092	-0.38	0.706	-0.00167
Sex	-0.3777987	0.224716	-1.68	0.093***	-0.14951
Marital status	-0.0355365	0.133983	-0.27	0.791	-0.01417
Edu	0.0741345	0.107227	0.69	0.489	0.029567
Hhs	0.1670406	0.067909	2.46	0.014**	0.066621
Tlhs	-0.0067761	0.077282	-0.09	0.93	-0.0027
Acu	0.0859038	0.186142	0.46	0.644	0.03425
Ptmc	0.0100809	0.058654	0.17	0.864	0.004021
Deprinaeu	0.0122902	0.005244	2.34	0.019**	0.004902
Tlu	-0.1528668	0.076864	-1.99	0.047**	-0.06097
Hoinc	0.0000216	2.84E-05	0.76	0.446	8.61E-06
Constant	-0.558418	0.784831	-0.71	0.477	

Number of obs.=204 prob>chi²=0.190,
LR chi²(10)=22.78 Pseudo R²=0.0806,
Log likelihood=-1.2992193,
Source: own survey and estimation, 2017.
Note: **and *** indicate that the coefficients are statistically significant at 5% and 10% level of significance.

Table 7: Probit estimation results.

Sex of household heads is one of the determinant demographic variables of poverty in rural areas and in general compared to female headed households the probability of male headed households being poor is lower. This is due to the issue of Feminization of poverty. Numerous studies have discussed the issue of feminizing poverty which assumed that the prevalence of poverty is higher to female headed households the male headed households. This could be because of the presences of discrimination against woman in social life, or it might be due to women tends to have lower education than men do and they are in general deprived the opportunities of exercising when compared to men in many aspects. In this thesis finding the gap between male and female-headed households in the above poverty line is relatively significant in that most of the male-headed households have escaped from the status of being in the below poverty line while the females are experiencing more poverty. This result is in conventionality with most literatures, which assume that the probability of falling into poverty is higher to females headed households. The study found out that being in a household of female-headed one is more vulnerable to the prevalence of poverty in the district of Dejen than those of male headed ones. This result confirms Apata [14].

The other significant variable, household (family) size is related with rural household's poverty status positively. This shows that larger family size implies more dependent persons and hence a higher burden on the family for adequate food and non-food basic needs. The average marginal effect, holding all other variables constant, tells us that the probability of being nonpoor decreases on average by nearly 0.7% if household family size increases by 1 adult equivalent. As the numbers of families that are not belonging in their production age grow in number, the higher the probability of the household being poor.

The other determinants of poverty in rural areas are dependence ratio, and total livestock a households owned in (TLU). Dependence ratio in adult equivalent unit has negative relationship with poverty status of household heads. The result above shows that dependency ratio has positive impact on the probability of being poor in the study area. The marginal effect implies that, ceteris paribus, the probability of being poor increases by 0.1% as dependent adult equivalent increases by one. The possible explanation can be that those households with many dependent family members could be poor because of high dependency burden. This shows that those households with large economically non-active members tend to be poorer than those with small family size.

As hypothesized the livestock owned by the household has negative relationship with the poverty level of the households. The logic behind is that livestock rearing and possession of 16 livestock on the one hand increases the wealth of the rural household and raises the income earning potential, on the other serves the poor in many ways such as source of cash income(income from sale of products, emergency cash requirements), insurance against drought, tenancy for share cropping, household nutrition, fuel for cooking, manure for crops, drought power for farming, store of value and principal form of saving and investment etc. Centre paribus, the marginal effect tells us that the probability of being poor decreases on average by nearly 0.6% if the total number of livestock increases by 1 tropical livestock unit.

Conclusion and Policy Recommendation

Even if the concept and extent of poverty is a very complex and multi-dimensional issue that involve among other things, climate, culture, markets, and public policy, which cannot be effectively determined with in such quick observation and likewise, the rural

poor households are quite diverse both in the problems they face and the possible solutions to these problems, essential implications can be derived from the study which will be helpful and indicative.

Based on the findings the following recommendation was made.

- Promoting and giving awareness about family planning and putting the existing policy in effect and integrated health service with appropriate access would result in curbing the degree of poverty among rural households. And also the government through its policies should address problems relating to higher population in rural areas and try to boost rural household's income by: creating linkage with in the rural under developed agriculture and the urban industrial sector, stabilizing agricultural product prices, and giving subsidy to those highly venerable sections of the society.

- There should be a need to focus on gender-based poverty interventions [4], especially among female headed households in the district of Dejen. This can be explained by low access to capital, inadequate inputs, and lack of access to modern techniques both in the farm and non-farm activities. Thus in rural areas of Dejen, gender basis development policies measure targeting anti-poverty involvements and a need to encourage and give awareness to the population that females are productive and means of development and a way to combat poverty.

- Technical advice and training how to use cattle should offer from the concerned body in order to strengthen their benefits for the rural poor and make them to exit from poverty.

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