

Research

Practices, Opportunities and Challenges of Rural Livelihood Diversification Strategies: the Case of Five Selected Wereda of Ilubabor Zone, Oromia Regional State, Ethiopia

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The study of livelihood diversification is one of the major concerns in developing countries. It is, therefore, timely to investigate the practice, opportunities and challenges of livelihood diversification rural household. The main objective of this study was to assess the role of livelihood diversification strategies the practice, opportunities and challenges. The study employed both qualitative and quantitative research method in the form of triangulation. Therefore, survey, in-depth interview, and focus group discussion method has been used to collect information from household sample respondents. Out of 12 woreda of Ilubabor, the team of researcher selected 5 woreda"s which can be representative for the whole. Then, 3 kebele from each selected woreda"s were selected for information using simple random sampling technique. Finally, 555 households were selected from each selected kebele"s for survey questionnaire using systematic random sampling technique. On the other hand, in-depth interview, key informant and FGD"s with selected local community members and experts has been undertaken to get more detail and complex information from target groups. The finding of the study has revealed that, the all types of livelihood strategies are practiced in the study area (on-farm, off-farm and non-farm) even though, on-farm take the line share and comprises of more than 90% of the all livelihood strategies. Furthermore, the finding of the study reveals, opportunities for livelihood diversification, like the five community capital (human capital, social capital, physical capital financial capital and environmental capital) are not well utilized by local community and it is more potential resource than actual resource in the process of diversifying local community livelihood strategies. Along with the challenges of livelihood diversification strategies, lack of awareness creation and training services, lack of finance, infrastructural problem, lack of opportunities in non-farm sector, low level of mass media exposure and more others are the major detrimental factor for livelihood diversification in the study area.

Key words: livelihood, on-farm, off-farm, non-farm, diversification, local community

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INTRODUCTION

Livelihood strategy is human beings' survival device on earth. There is no single definition of livelihood strategies. Thus, it viewed in different perspectives by several scholars and organizations. For instance, Ellis (1999) defined livelihood as „the activities, the assets and the accesses those jointly determine the individuals" or households" living. Chambers and Conway (1991) on their part defined livelihood as something which directly pertains with capabilities, assets (including both material and social resources) and activities that required for a means of living. It can be also seen as people's endeavor to access and use the assets within social, economic, political and environmental contexts.

It is very tough for rural people to lead their life using the sole agricultural practice. Consequently, generating means of life from multiple resources like *on-farm*, *off-farm* and *non-farm* activities is acknowledged as the superlative way to survive despite the unanticipated shocks in livelihoods (Archibald et al 2014). On-farm activity refers to people's endeavor to sustain their living using their own *assets* in the production of goods. It includes mechanization in the production of crop and livestock rearing. On the other hand, farmers would generate their income working on the others farm land in the form of sharing and daily wage. Non-farm strategy is also about generating a means of life from the non-farm activities such as wage employment, sale of charcoal and fuel-wood, processing of agricultural equipment, craft, and other strategies undertaken in order to supplement earnings from agriculture (Losch *et al.* 2010). In this manner, livelihood diversification strategy defined as a portfolio activity that households use to generate incomes from multiple sources in order to prolong their life (Hussein and Nelson 1998); Khatun and Roy (2012), indicates training, asset position, access to credit, rural infrastructure, agro climatic condition as the critical opportunities that rural people have to diversify their means of life. On contrary, poor asset base, lack of credit facilities, lack of awareness, fear of taking risk, lack of rural infrastructure and lack of opportunities in non-farm sector are regarded as the major challenges in rural livelihood diversification.

Thus, Ethiopia is a country in which more than 80% of its population lives in rural areas relying up on the subsistent agricultural production as a means of their livelihood (Zegeye and Hussein 2011). Nonetheless, Ethiopian agriculture is less productive while food insecurity is evident throughout the country (Legesse and Chala 2005). This would able to contribute for the fact that about to 10% of Ethiopian population is constantly food insecure (Birara et al 2015).

Therefore, the majority of the populations are living in rural area while their main livelihood (agriculture) is rain dependent which cannot recover from unexpected

shocks and stresses. This in turn exposes rural community to indefensible food security (food insecurity). As indicated by UNECA (2013), agriculture solely could not maintain sustainable food security for rural community. Instead, rural livelihood diversification strategy is a complementary strategy to reduce the vulnerability of rural people to eminent risks of the sole agricultural activity (Start 2001; Ellis and Allison, 2004). In this view, this study attempted to investigate rural livelihood diversification strategy and its significant contribution in maintaining peoples living thereby exploring the major factors that hinder the rural community from diversifying their livelihood strategy focusing on the five selected *woredas* of Illu Aba Bora zone.

STATEMENT OF THE PROBLEM

Ellis (1998) defined livelihood diversification as „the process by which people construct a diverse portfolio of activities and social support capabilities in their struggle for survival and in order to improve their standards of living. Moreover, the study by Hussein and Nelson (1998) also indicates that, livelihood diversification refers to an attempt that individuals or households find new ways of generating incomes in order to persist their survival.

Livelihood strategies of developing countries in general and that of Ethiopia in particular is slightly dependent on agricultural practice. However, some literatures are evident for an increasing share of people's income from non-farm sources. For instance, Haggblade et al (2005) reported that non-farm earnings account for 30% to 45% of rural people. In Ethiopia, about 25% of households earn their some income from non-farm enterprises or sectors (World Bank 2009).

There are various empirical studies that conducted at country level regarding the issue of household livelihood strategy and its determinant factors. For instance, Adugna and Wagayehu (2012) studied the factors that hinder rural households from diversifying their livelihood strategies. The finding of this study depicted that, factors like, age, educational level, sex of household, credit and land size as the determinant factors in affecting household's livelihood diversification strategies.

Moreover, study by Yishak et al (2014) on factors that motivate rural people in livelihood diversification indicated the role of farm size, livestock ownership, participation in social leadership; annual cash income, fertilizer use and improved seed use as motivating factors in rural household livelihood diversification.

Although, the issue of livelihood diversification has been studied by different researcher at different place, there is no scientific evidence that that clearly shows the livelihood diversification strategies of Illubabor zone rural population. Therefore, the researcher aim to investigate

the practices, opportunities and challenges of livelihood diversification in five selected woreda of Illubabor zone, to come up with scientific understanding of local community livelihood strategies and its pertaining challenges.

OBJECTIVE OF THE STUDY

General Objective

This study was attempted to assess the practices, opportunities and challenges of rural livelihood diversification strategy in five selected *weredas* of Illu Aba Bora zone, Oromia regional state.

Specifically it aimed:

- To describe the major livelihood diversification strategies in the study area.
- To examine opportunities of livelihood diversification strategies in the study area.
- To explore challenges those local communities are facing to diversify their livelihood strategies.

REVIEW OF RELATED LITERATURE

Livelihood Diversification Strategies of Rural Household

Livelihood diversification is a process by which rural households construct a diverse portfolio of activities and social support capabilities in their struggle for survival and improvement in their standards of living (Ellis, 1998). Rural livelihood sometimes not rely on a single economic activities as their main stay (like, crop production or livestock rearing) but, combine a range of occupation to construct a diverse portfolio of activities (Khatun and Roy, 2012). Furthermore, Warren (2002), added that, rural livelihood diversification means the exploitation of multiple assets and sources of revenue and it is an intrinsic attribute of many rural livelihood strategies.

In their study Khatun and Roy, (2012) stated rural household livelihood diversification, as an attempts by individual and households to find new ways to raise incomes and reduce vulnerability to different livelihood shocks. Livelihood diversification of rural household can take place through both agricultural diversification i.e., production of multiple crops or high-value crops; and non-agricultural livelihood diversification i.e., undertaking small enterprises, or choosing nonagricultural sources of livelihood like casual labour or migration.

Several studies reveal that, majority of rural population in developing countries has survived and reproduced by growing a mix of staple and cash crops, keeping some

livestock, fishing, and gathering forest products. Subsistence production, aimed at meeting food needs, combined with selling of small surpluses on the local market including, often labor surpluses (Birhanu et al 2013; Oluwatayo, 2009; Warren, 2002).

RESEARCH DESIGN AND METHODOLOGY

Research Design: in terms of time dimension, this study was employed cross-sectional research design i.e., one point at a time collection of data from target group. However, based on its relevance, this design was supplemented with approximation of longitudinal study design where by respondents were asked to furnish data relevant to the past with the aim of collecting relevant retrospective data concerning the livelihood strategies, its diversification process and challenges pertaining to livelihood diversification. On the other hands, in terms of research approach, this study employed both qualitative and quantitative research approach to substantiate and cross-check data obtained in one method to that of the other.

Research Setting: The target population of this study was agrarian community of Illubabor rural households, which located in south-western part of Ethiopia, Oromia regional state. The data collection process was lasted from the first week of June to the end of September, 2018.

MAP OF THE STUDY AREA



Population: For this study, the team of researchers selected 555 households for survey questionnaire and 2 development agents (DA"s) from each selected 5 weredas for key informant interviews. Furthermore, 10 respondents were purposively selected to get more detail and complex information about the issue under investigation.

Sampling Technique: Both probability and non-probability sampling technique were used to draw the required number of sample. Thus, 555 household were selected using systematic sampling technique for household survey sample and respondents for in-depth interview and key informants were selected using purposive sampling technique.

Instruments: three main data collection instruments such as, questionnaires, interview and focus group discussion were used to obtained the required information from respondents.

Questionnaire: Both close ended and open ended question was prepared and administered through translating to local language of the community (Afaan Oromo), as the sample respondents cannot read and write. Furthermore, development agent workers were hired as enumerator in the data collection process to

support the team of researchers.

Interview: The researchers employed semi-structured interview which also used to supplement the ideas and question designed in the household survey. Informants for in-depth interview and key informants were selected from the member of the local community and other administrative member based of the purposive selection of the researchers.

Focus Group Discussion: One focus group discussion in each selected kebeles of the research site was conducted by the researchers. The discussion was carried out with the member of local community who participated in different livelihood diversification activities.

DATA PRESENTATION, ANALYSIS AND DISCUSSION

Data Analysis and Interpretation

In this chapter, the primary data collected by survey, in-depth interview, observation and focus group discussion was analyzed, interpreted and presented. Accordingly, the findings of the study were discussed alongside with the specific objectives stated under the first chapter of

this paper. Consequently, various sections and sub-sections were produced to incorporate all the relevant information collected from the field through the aforementioned methods. Thus, the overall paper consists of three major sections. The first section mainly focuses on the major livelihood strategies of local community, these includes different farm, off-farm and non-farm activities that households carryout. In the second section, opportunities of livelihood diversification, like human, social, physical financial and financial capitals has been discussed. Furthermore, the last and the third section consists the challenges that households faces in livelihood diversifying process.

Major Livelihood Strategies of Study Area Community

Conventional single means of living is one of the major problems of rural household's vulnerability to poverty and food insecurity. This is evident especially, in less developed countries like Ethiopia, for their shock that often occurs in household life. Different stakeholders like, GO's, NGOs and others suggest the diverse means of living as possible alternative to cope with uncertainty and reduce rural households' vulnerability to poverty and food insecurity. Therefore, in this study, although the level of livelihood diversification is low and unsatisfactory, there is some sort of livelihood diversification practice among the study area communities. The following table shows the description of different types of livelihood strategies that practiced by local community as follow.

Table 1: Major Types of Livelihood Strategies

Livelihood strategies	Frequency	Percent	Cumulative Percent
on-farm	430	77.0%	77.0%
off-farm	70	13.0%	90.0%
on-farm + off-farm	27	5.0%	95.0%
on-farm + non-farm	28	5.0%	100.0%
Total	555	100.0%	

As shown on table 1, the majority (77%) of respondent engage in on-farm livelihood strategies. On farm activities like, producing mainly cereal products (including, teff, sorghum, maize, wheat etc), forest and forest derived resources like, coffee, honey, timber extraction and charcoal are also the major livelihood strategies among local community members. Furthermore, livestock is also another component of on-farm livelihood strategy which households are mainly relying on. Activities like, fattening, milk production and so on are practiced by local community to support other kinds of on-farm means of living.

Off-farm livelihood was reported as the second most important means of living next to on-farm, which account up to (13.0%) of the total livelihood strategies. Share harvesting and hired labor are the major off-farm livelihood activities in the study area. As the above survey result indicated, together on-farm and off-farm means of living consist more than 95% of the total livelihood strategies in the study area. This implies that, agriculture is the main stay of the local community economic system.

Non-farm livelihood strategy accounts only (5%) of the total sample respondent's livelihood strategy. Activities like, small-scale trade, daily labor, remittance and informal sectors are the major means of stay for local community in non-farm sector. This implies that, despite its higher significance, non-farm sector does not effectively utilized by the household of the study area

community.

According to data that obtained from key informants, the study area community mainly involve in only one type of livelihood strategies particularly of on-farm and their diversification to others like off-farm and non-farm sector is very low and poor. With this regard, an agricultural office manager of Bure woreda stated that:

"Agriculture is a dominant means of living for majority of local community members. They mainly concentrated on single means of living in do or die kinds of principle other than endeavoring to diversification in others non-farm sectors." (Field interview 10/07/10).

As it grasped from the above quotation, agriculture more specifically single crop production is the major livelihood strategy of local community members. In some occasion, households forced to turn their face in to the other sector especially, when they face scarcity of rain due to seasonal fluctuation and unable to get good yield from crop production sector. These sudden disturbances in household life, force them to look another means of livelihood strategies like daily labor. Hence, in the study area community involvement in others means of living is more or less aiming to reduce their vulnerability to the shocks that arises from seasonal fluctuation in rain fall and productivity of on-farm sector.

On-Farm Livelihood Strategy

On-farm is one of the major rural household livelihood strategies, a means by which household relies and generate income from their own farm land. On-farm livelihood strategy is mainly consists of crop production

(maize, sorghum, teff etc), livestock rearing (sheep, cow, goat, donkey etc), forest product (honey, timber extraction, charcoal etc), and milk productions. The following table shows the several types of on-farm livelihood activities that practiced by the study area community.

Table 2: Major types of livelihood strategies in on-farm sector

Types of livelihood diversification	Yes	No	Total
Crop production	527 (95.0%)	28 (5.0%)	555 (100%)
Livestock rearing	471 (67%)	183 (33%)	555 (100%)
Forest product	222 (40%)	333 (60%)	555 (100%)

The above table 2: reveals that, 95% of the respondents are involved in the crop production, while (67%) of them were participating in livestock rearing. Moreover, (67%) of the population were reported as they were generating livestock rearing. Furthermore, forest and forest derived resource shares (40%) of the total livelihood activities. As depicted on the above table 4.4, the majority of the respondents were involved on crop production (i.e. seasonal and rain dependent) and livestock production which is not mechanized.

In support of this, qualitative analysis was performed. Accordingly, the study key informants and FGD participants discussed that, on-farm sector is traditional and the yield from this sector is subsistence, not for commercial purpose.

Off-Farm Livelihood Strategy

Off-farm livelihood activity is other type of survival strategy in rural area. It is types of livelihood activities by which household mainly used as a means of living through in the form of income from other farm and wage labor. Information from study respondents indicated that, off-farm livelihood strategies are the second largest means of living for local community next to on-farm sector. Households, who involved in this sector, often generate their income in the form of share harvesting and being hired for daily wage. As revealed in the survey result, (13%) of respondent maintain their livelihood relying up on the sole off-farm activity while (5%) of them were practicing off-farm alongside with that of with on-farm activities. Furthermore, respondent were also asked what factor(s) that force(s) them into off-farm activities. The following table summarized as follow.

Table 3: Factors Force Households to Engage In Off-Farm Livelihood Strategies

Factors that force rural households into off-farm activity	Yes	No	Total
Unable to feed all family members	499 (89.9%)	56 (10.1%)	555(100%)
To support family's livelihood	289 (53.3%)	226 (47.7%)	555(100%)
Lack of enough farmland	282 (50.8%)	273 (49.2%)	555(100%)

As it shown in the above table 3, from the sample of total households, the majority (89.9%) of respondents responded, they engaged in off-farm activities because of their inability to feed their household members relying on single livelihood activity. Moreover, (53.3%) of household on the other hand answered that, they need to supplement their on-farm with that of off-farm livelihood strategies. Finally, (50.8%) of respondent posited, lack of enough farm land force them to engage in to off-farm activity. According to the qualitative data that obtained from local communities and the study key informants, off-

farm activity is the most exploitative as compared to other types of livelihood strategies. In this regard 8 informants from FGD participants stated as follows:

"Despite off-farm livelihood strategies is exploitative for us; we often prefer to practice it since we do not have enough production in on-farm sector to feed our entire family members. It is the most challenging and boring work but, it is the must do task to ensure our household food

security problem. We considered it as the best option whenever that we have no enough land, low on-farm productivity due to seasonal fluctuation in rain and so forth” (from field interview: 16/08/10 E.C).

Hence, it is evident from the forgoing quotation that, rural household engage in off-farm activities aiming to feed their family members, to supplement or diversify their means of living and lack of enough farm land.

Further, the survey result showed that, from the total sample household (50%) of them participated in off-farm activities on permanent base, whereas, (40%) of them participated in temporarily bases and the remaining (10%) of them are participating in off-farm activities in seasonal bases. Above all, the data shows that, few households are participating in off-farm activity permanently, which means, rural people are not willing to participate in off-farm activities on permanent bases; due to the exploitative nature of share harvesting system,

they prefer it as an alternate approach instead.

Non-Farm Livelihood Strategy

The data which collected for the present study using various methods identified, non-farm livelihood strategies are one of the most significant but, least utilized sector in the study area. It is a livelihood strategies that household used to generate income using activities that are non-agricultural by their nature like, being hired in certain organizations as guard, cleaner, rural informal sectors, small trade activities, remittance and so on. As the survey result indicated, in the study area only (5%) of the total sample of respondents reported as they participated in non-farm activities. This shows, the non-farm sector is not yet as such significance in the diversification livelihood strategies of study area local communities. The following table presents the different types of non-farm activities that household used to practice in the study area.

Table 4: Major Types of Non-Farm Livelihood Activities

Non-farm activities	Frequency	Percentage	Percent of Cases
Renting farm and non-farm materials	275	22.6%	49.5%
Informal services	388	31.8%	69.9%
hired Labor	222	18.2%	40.0%
Remittance	28	2.3%	5.0%
Pension	28	2.3%	5.0%
Small trades	278	22.8%	50.1%

NB: cases are greater than of the total sample size because it is multiple responses.

Table 4, shows, there are various activities that can be categorized under non-farm livelihood strategies. From the total sample of the study respondent, (69.9%) of them are hired in local organization, while (50.1%) of them are engaged in informal sectors like traditional beverage drinks. On the other hand, (49.5%) of respondents are participated in small trade activities like shops, tea and coffee house and so forth. The remaining 40% and 5% of respondents reported renting of different farm and non-farm materials, remittance and pension respectively. The survey result depicted that, the role of hired lobar and informal sector paramount in non-farm livelihood strategies in the study area.

Regarding their reason to participate in non-farm activities, from the total sample of household, the majority of the respondents answered, as they forced to engage in non-farm sector to supplement their household livelihood strategies. On the other hands, the others answered, problem of productivity in on-farm sector and lack of enough farm land to harvest leads them to look the non-

farm sector.

According to the data that obtained from the study key informants, non-farm activity is more effective in accumulating capital that surpass bothering for their daily food. FGD participants divulge that, non-farm sector is the second steps that household looks for once they fulfill their survival strategies to accumulate capital in the form of assets. Further, data collection also performed whether they are practicing non-farm activities permanently. Hence, the majority of them responded as they practice non-farm livelihood strategies in temporarily ways. Others uncover their involvement in seasonal and permanent base respectively.

Furthermore, One-way ANOVA statistical test has been computed in order to identify the difference among the three dominant livelihoods that discussed above. This has done with aim of understanding the livelihood strategy that mostly practiced in the study area.

Table 5: Difference among the Three Types of Livelihood Strategies in The Study Area

	Sum of Squares	df	Mean Square	F
Between Groups	100493589.744	15	6699572.650	.000
Within Groups	750000.000	23		
Total	101243589.744	38		

As shown in the above table 5, there is statistically significant difference in the mean score of livelihood diversification strategies at least in one of the three types of livelihood activities as computed by one-way ANOVA ($F(15, 23) = 205.454, P = .000$). Here, the finding goes hand in hand with the hypothesis which states the population mean of livelihood diversification strategies of on-farm activity is higher than that of both off farm and non-farm activities in the study area. Accordingly, the mean score of on-farm activity (Mean=9591), off-farm (Mean=3590) and finally non-farm activity shares (Mean=8821) comparatively. Many literatures also indicated that, in sub-Sahara African countries on-farm income is higher than that of off-farm and non-farm income. Study by Birhanu et al (2013) depicted, majority of rural population in developing countries has survived and reproduced by growing a mix of staple and cash crops, keeping some livestock, fishing, and gathering forest products. In the current study area, on-farm activity which merely confined to crop production, forest production and livestock rearing in traditional system is dominant. According to qualitative analysis, households' absolute dependence on the sole and long-established on-farm activity is highly escalating their vulnerability to shocks in their livelihood at different times.

Opportunities of Livelihood Diversification

In this study, Livelihood diversification referred as the attempts by which households make to generate income from different sources like, on-farm, off-farm and non-farm activities. It recognized as the best mechanism that used by rural people in securing their survival strategy and accumulation of assets. In this section the finding of this study tried to show the existing actual and potential opportunities that can enhance livelihood diversification process in the study area. Five types of community assets have been discussed below as an opportunity in the process of household livelihood diversification

activities. These are social capital, human capital, physical capital, financial capital and environmental capital.

Human Capital

Human capital is the critical asset in livelihood diversification. It consists both productive age and the extra skills that household members have. Below, respondent's educational status, productive age group in household and their family size were seen together so as to depict the availability of human capital in the study area.

As it revealed in the below table, the majority of respondent were reported as they cannot read and write. Furthermore, the above data also shows that, the magnitude of respondent family size decreases as the educational level increases. In contrary to this, it is evident that there is high family size and productive age in the study area. The existence of unskilled labor forces in turn, negatively affects livelihood diversification effort.

Table 6. Cross Tabulation Result of Productive Age, Educational Status and Family Size of The Respondents

Family size			Educational status				Total
			Can't read & write	primary	secondary	college and above	
Less than 3	productive age	No	9	8	3	1	21
		Yes	16	11	7	1	35
	Total		25	19	10	2	56
Between 3-5	productive age	No	24	20	20	1	65
		Yes	41	32	21	7	101
	Total		65	52	41	8	166
Between 6-8	productive age	No	49	23	18	4	94
		Yes	60	37	21	10	128
	Total		109	60	39	14	222
above 9	productive age	No	22	15	5	0	42
		Yes	29	20	16	4	69
	Total		51	35	21	4	111
Total	productive age	No	104	66	46	6	222
		Yes	146	100	65	22	333
Total			250	166	111	28	555

As we informed by qualitative data, significant level of training have been offered to household regarding livelihood diversification strategies. As key informant says, even though it is not satisfactory, trainings that highly focused on agricultural activities like line plantation, crop rotation and irrigation has been given for few households in FTC center. Stakeholders from NGO's and GO's are to some extent participating in the process of material and training provision for selected household members based on their motivation, effort and educational levels.

With regard to the importance of training in diversification process, 45 years old, household head stated that:

"Once after I got training, I came to know that, relying on a single means of living was exposing my households vulnerable to shocks. Previously, I relied on monoculture (producing maize) alongside with rearing cattle in a conventional way, with low level of quality. But, after I got some FTC,,s training by DA's, I noticed that, diversifying crop and means of living are more helpful in the context of seasonal fluctuation and environmental variability. (from field interview" 10/07/10

As the above interview result indicated, household who has a fortune to get training are more likely informed the mechanisms of diversifying their means of living and able to think out of box as compare to those do not get

training. In sum, the overall result depicted that, even though human capital is one of the abundant resources that could help as a good opportunity in the process of livelihood diversification process, it is still not utilized well and considered as potential resources for local community for future livelihood diversification process.

Social capital

Social capital is one of the key assets that determine rural household livelihood diversification strategies. It contains different forms, which includes, instrumental, informational and emotional accesses that every individuals and households can get through the network they created with others. It could be also measure in terms of the social location that one possess in a given group or community. In this study, social capital approached as an acquaintance and companionship that exist within household members and among households in determining their access to information, instrumental gain and emotional support in the process of livelihood diversification. The following table presents the types of social capital that respondent possess.

As the below table indicated, there is a significant social network among the study respondents. This, probably inspire respondent in diversifying their livelihood. Accordingly, 60.2% of them reported as they have instrumental support, while 59% and 27% of them answered informational and emotional support respectively.

Table 7: Frequency and percentage distribution of respondent's social network

Types of social network Respondent have.	Yes	No	Total
Informational support	327.5(59%)	227.5(41%)	555(100%)
Instrumental support	334(60.2%)	221(39.8%)	555(100%)
Emotional support	150(27%)	405 (73%)	555(100%)

With regard to the importance of informational support, one male household heads aged 57 stated that:

"I have got information with regard to livelihood diversification through interpersonal relation and mass media. My cosmopolitan neighbor is an exemplary model for me and the rest of nearby village people; he frequently visited urban area and used to adopt the cosmopolitan way of life. He is first in adopting newly innovated agricultural practice and diversifying the means of living to cope with uncertainty. I and others in our village follow his footsteps to get new information about livelihood diversification." Further he added *"mass media is also another means of communication channel that I can get information about importance of livelihood diversification. (from field interview 12/07/10 E.C)*

As indicated above, information is one components of social capital that can trigger the issue of earning income from multiple sources for rural households. Household share what they saw on the others farmland, heard from radios and learnt from the experts of agriculture and so on.

Moreover, social capital also enables households to get instrumental support from each other. Rural households share not only information but also significant instruments in agricultural practice. With regard to instrumental support key informants stated that, household of the study area help each other in cash and kind. One can lend the agricultural materials like oxen, plough, yoke and others and borrow as well which they do not "have like money, horses, donkeys and other.

Even though, the study area community underscore the importance of social capital in enhancing the sustainable livelihood diversification, its effectiveness in practice is very low. As FGD participants discussed, emotional support which shared among household as a major component of social capital is not used properly. In sum, from the above point we can generalize that, social capital which is one of good opportunity for livelihood diversification is not utilized well and it is potential resource in the process of household livelihood diversification.

Physical Capital

In this study, physical capital approached as different resources like land, house and different infrastructures like water service, electricity, irrigation canals, roads, and so forth. For this study the researcher mainly focuses on the role of land and infrastructural facilities that can enhance livelihood diversification in the study area.

Land and Tenure Security

In most of the cases, access of farm land is not problem for many household and it's one of the major opportunities for livelihood diversification. However, the problem lies with regard to tenure security. Traditional farm practice and lack of land certificate over the plotted lands are the major factors that reduce the productivity and motivation of farmers to engage in livelihood diversification activities. With this regard, respondents were asked whether they have tenure security, which is one of the big opportunities in livelihood diversification process and the following table summarizes it as follows:

Table 8: Cross Tabulation Result of Family Size and Tenure Security of Household

Land size	Tenure security		Total
	Yes	No	
Less than 0.5 hector	38	18	58
0.6-1 hector	157	64	221
1.1-2 hector	74	37	111
Above 2 hector	115	52	167
Total	384	171	555

As the above cross tabulation table shows, from the total sample respondent of household majority of the respondents which account 384 (69%) have certificate over their land and only 171 (31%) of sample respondents responded as they have no green card over their plotted land. This implies that, more than half of the respondent or farmers have tenure security over their farm land and it can be considered as good opportunities for local community members to participate in livelihood diversification activities.

As woreda level, male, agricultural office officer says, although farm land is abundant and there is no as such severe problem of tenure security that could be one of hindering factor for livelihood diversification, traditional way of farm practice is highly detrimental for farmer of the study area in their effort towards livelihood diversification.

The key informant from Hurumu woreda agriculture and development office says:

"In our woreda there is no problem of land, estimated more than average of the woreda population have 1.5 and above hector of land. The problem is that, in every part of the woreda, household used to practice conventional one crop types, predominantly maize and there is no use of fertilizer, improved seeds and modern farming system like, crop rotation, harvest in line, irrigation and diversification." From field interview 12/07/10 E.C)

In support of this idea, FGD result with a group of local community member indicated, lack of tenure security over farm land is another external factor that negatively affecting farmer livelihood diversification process. They underscore the importance of land certificate in enhancing farmer sense of ownership and their motivation towards diversification. Generally, land is the critical potential and abundant resource that can enhance livelihood diversification process but, it does not effectively utilized in diversifying the study area household means of living as it expected.

Infrastructural Facilities

According to data that collected for present study, there is poor infrastructure in all over the study site. Several empirical studies disclosed that, infrastructures like road, water supply, electric power and other facilities were considered as the major opportunities for livelihood diversification. In this regard, respondent were asked the types of infrastructure that are available and accessible in their area. As it revealed in household survey, access to electric service is relatively higher than that of access to road service and clean water. Moreover, the majority of respondent unveil the poor availability and accessibility of those major infrastructures. This implies that, there is poor provision of infrastructures in the study area which in turn hindering them from producing their crops in expected quality and quantity.

Moreover, it is also evident that, problem of infrastructure exacerbate the low level of livelihood diversification in the study area.

In addition to this, as it discussed by FGD participants, there is inadequate and uneven distribution of infrastructure facilities across kebeles. According to the study key informants, kebeles that are closest to the town are more access to electricity, water supply and visited by DA's more frequently than others. In contrary to this, the distant areas from town are vulnerable to several challenges in terms of multiplying their means of living.

Financial Capital

Financial capital refers to stocks of money to which the households are access to it. It comprises of money that saved by the households themselves and an access of credit services. Financial capital owes its role in rural livelihood diversification strategy in many ways. For instance, money serve as an start-up capital at the moment that households want to get involved in diversified on-farm activities and other than on-farm activities. Respondent were asked whether they have access to credit service. Moreover, chi-square test was computed to check if there is association between credit service and livelihood diversification. Hence, the two results are presented in the following cross tabulation.

Table 9: Cross Tabulation for Access to Credit Service and Livelihood Diversification Strategies

Access to credit service	Household diversification level			Total	χ ²
	less diversified	Moderately diversified	Highly diversified		
Credit Yes	0	13	15	28	.000
No	427	87	13	527	
Total	427	115	13	24	

As shown on the above table, from the total sample of households, (15%) highly diversified and (13%) moderately diversified individuals unveil as they have credit access. On the other hand, majority of the respondent which accounts 76.9% (less diversified), 20.7% (moderately diversified) and 2.3% (highly diversified) household have no access to credit service in their area. The above survey result implies there is poor credit access in the study area.

A non-parametric test (Chi-Square) is employed in analyzing the association between on access to credit and livelihood diversification strategies. As a result, the two variables are significantly ($X^2 = 121.822$ sig. (2-tailed) = 0.000) associated to one another. The statistical test shows that, there is association between access to credit and livelihood diversification, which means, the more household have an opportunities to access credit service, the more likely they diversify their livelihood strategies and vice versa.

According to the study key informants, although, fiscal capital highly functions, it is not satisfactory in the study area. These key informants argued that, there is low trend of saving habit as well as transforming capital from saving to investment.

Key informants from government wing stated that, pursuing one's own means of life via more than one occupation is constant in the study area. However, it is not satisfactory as it intended. People consider buying animals as a saving mechanism while their animal rearing mechanism is unscientific and it more focused on quantity than quality. In this manner, the existing fiscal capital exposed to extravagancy instead of allowing rural households diversify their means of living. This implies

that, rural households are not using an existing fiscal capital which can owe their contribution in the asset portfolio of households.

In opposition to the above idea, FGD participants on the other hand discussed as they have no credit service at all from government. Moreover, they added, credit service in their area is not easily accessed, the bureaucratic complexity lead them to give-up as the criteria to access credit is not an easy business. This in turn, exposes households to lack of finance to diversify their livelihood strategies in others sectors.

Environmental Capital

Environmental capital also called natural capital which could be considered as indispensable for human survival. It consists of renewable resources like agricultural crops, vegetation and wild life and non-renewable resource like fossil fuel and mineral deposits. In the present study area, environmental capital is identified as the major potential capital in rural livelihood diversification process.

Respondents were mainly described environmental capital like, attractive areas, recreation areas, mineral resources and wild life habitats as the critical potential resource in their livelihood diversification. These natural capitals can help the local community livelihood diversification directly through, benefiting from existing natural resources or indirectly through providing services for visitors. In this regard, sample survey respondents were asked whether environmental resource have been providing positive contribution to local people's livelihood diversification or not. Results were presented as follows

Table 10: Frequency and percentage distribution of types and contribution of environmental capital as livelihood strategies

Types of environmental capital	Yes	No	Total
	Aesthetic /scenic area	105(19%)	450(81%)
Mineral resource	50(9%)	505(91%)	555(100%)
Wild life habitat	10(2%)	545(98%)	555(100%)

The above table reveals the low contribution of environmental in households' livelihood diversification. As it indicated, the role of aesthetic/scenic area which accounts 105 (19%), have relatively play a significant role in household livelihood diversification as compare to mineral resources and wild life habitats which account 50 (9%) and 10(2%) respectively. The study key informants and FGD participants also stated the underutilization of environmental capital among rural household as alternative means of livelihood strategies.

Challenges of Livelihood Diversification

As mentioned in previous section of this paper, the

success of livelihood diversification strategy is highly determined by the availability of opportunities, like human, social, physical, financial and environmental capitals. Livelihood diversification of the study area is merely pursued with the intention of survival strategy than capital accumulation. According to the data that obtained from key informants and FGD participants, household members often forced to involve in another means livelihood strategies other than agriculture, when the season fluctuated and they no longer unable to feed their family members.

The study area community found to be highly dependent on crop production, forest and livestock rearing. Data which obtained from FGD participants depicts that, the

major types of livelihood activities that widely produced in the study area includes; Maize, sorghum, coffee and in some part of the woreda activities like chili, fishery etc are used to practice. Furthermore, agriculture practices of the study area suffered by: lack of enough rain falls as it is rain dependent, modern farming techniques, and supply of agricultural inputs. This backward rain dependent farming system, expose household of the study area more vulnerable to poverty and food insecurity. There are several factors that hindering rural household livelihood diversification strategies in the study area, among these the followings are identified and presented as follows:

Access to Market

Market place is the stage at which rural household bring their product to potential customers and able to interact with certain organized social system. The existence of market enables local households to exchange their products including, cereals, livestock's and other in fair prices. However, in most of the study site access to market to reach potential customer is very challenging.

Regarding the difficulties of market access a 42 years old household head stated that:

"I produce cereal crops and rear domestic animals like cattle, sheep, goats, horses and so on. But, it is difficult to bring and sell them to potential user. Sometimes, I forced to walk to the maximum of three hour to reach specific market day with heavy material on horse and my back. Therefore, most of the time I let brokers benefited from my product as I can't reach out the target customers directly. Lack of access to market to provide what I produce for potential use discourage me to work harder for capital accumulation than subsistence (from field interview 15/09/10 E.C.)"

The above raw data implies, problem of market accessibility have direct association with livelihood diversification in the study area. The data which obtained from FGD participants also support the above data. Thus, lack of access to market services to reach potential user are negatively affecting the trend of livelihood diversification in the study area.

Seasonality and Agro-Ecological Condition

According to Ellis (1998), the spatial-temporal distributions of elements of climate determine cropping pattern, cropping calendar and type of livestock to be raised. Rain fed agricultural practice that local community relies upon is the other devastating factors for livelihood diversification strategies.

With regard to the impact of agro-ecological condition, the study key informants stated that, although, agriculture is the main stay and bread basket for many, agricultural system in the study area is obviously rain dependent and traditional. Moreover, the agro-climate condition is not favorable for agricultural practice. Agro-ecological problem like, harsh climate condition, poor soil fertility and uneven land scape (topography) of the study area more worsens the problem of livelihood diversification beyond looking for subsistence. Further, key informant added, the agro-ecological condition of the study area is not as such favorable to produce diverse agricultural products except, maize, sorghum and coffee forest. Even in case of these predominant crops, there is no expected quality and quantity which could surpass home consumption.

The problem of agro-ecological condition leads household more strive to cope-up shock during certain period of the season through timber extraction, fire wood and charcoal production. This in turn, causes for massive deforestation and ultimately distraction of flora and fauna in the forest. In sum, there is evidence that, rural households of the study area more endeavor not to accumulate capital through diversifying their means of living rather, survival strategy is what matters more them above all.

Lack of Awareness Creation and Training Services

Training and awareness creation about livelihood diversification strategy is very essential in motivating rural households since the issue of diversification strategy is not well practiced and unscientific in rural household livelihood strategies. Despite its significant role in rural livelihood, as more that 85% the country population is rural, the training and counseling service in relation to livelihood diversification seems neglected sector in many parts of the country including the specific study area. According to the data that obtained from the interview informants, even though farmer's training center is available in each kebele, most of them are not functional at this moment. This data also discloses the fact that development agent's (DA) often spends much of their time in nearby town than doing their regular job. In addition to this, lack independent fund for livelihood sector, centralized and accessible training centers for all farmers are the major problem which rose by the study key informants.

Key informants from agricultural extension development agent at Yayo woreda stated that:

"The training Land that given to our FTC center is very small. In principle around 2 and above hectares of land supposed to be given to each kebele for FTC training, to show practical training for farmers. However, we have limited land for

training which hinders us to effectively show everything. Moreover, in most case, land which given to training area is far from the FTC office, which is not reachable for both development agents and farmers” (from the field interview: 12/08/10 E.C).

The above raw data depicts that, there is no suitable condition to give training for farmers as there are a lot of structural defect is out there in hindering farmer access to training. Generally, poor access to training by farmer is another detrimental factor for livelihood diversification in the study area.

Lack of Opportunities in Non-Farm Sector

Participation of local community in non-farm sector is very low. This is the result of poor on-farm sector performance. As studies shows, household participation in non-farm sector, mainly affected by farm sector strong activities. When we see the local reality of our study area, most of the local community mainly depend on rain feed diehard agricultural activities and only few amount of households that participated in non-farm activities.

As the FGD result with local community members indicated, although it is slow, the main non-farm activities that households used to practice in the study area includes, small scale business activities like vending food items, informal sector like, local drinks, pottery activities and renting of different assets like, houses, oxen etc. remittance, small-scale business and other trade activities are poor at zonal level.

As the recent zonal level statistical data reveals, non-farm sector play scant role in household livelihood strategies local community, which account below five (5%) of the entire livelihood strategies. This low level of non-farm sector in turn has its own negative consequences in affecting the future livelihood diversification strategies of local community.

Low Level of Mass Media Exposure

Exposure to media also plays an important role in household livelihood diversification. However, the study participants unveiled the low level of information about diversifies their means of life. According to Yizergaw et al. (2015), households having access to mass media are more likely to diversify their means of life. The same is true in the study area, respondents who listen to the radio and watch the television once in a week increases the probability of smallholder farming rural households” participation into on-farm plus non-farm, and combinations of the three (on-farm, off-farm and non-farm) livelihood diversification strategies respectively.

In sum, there are many other factors like infrastructural problem like, road, transportation, credit facility problems, motivation of work, soil fertility, proximity to urban center

and many other factors are the major challenges for the study area community to engage in diverse means of livelihood strategies.

CONCLUSION AND RECOMMENDATION

Conclusion

Livelihood strategies of rural area household are mainly derived from three major sources, i.e., on-farm, off-farm and non-farm sectors. The same is true for the study area communities which are mainly depend on on-farm livelihood activities. According to the finding of this study, more than 85% of the total household in the study area depend on on-farm livelihood activities and only few which account 10 up to 15% of them used to practice off-farm and non-farm activities.

As the study indicated, on-farm livelihood strategy includes activities like, crop production, livestock rearing, bee keeping, timber extraction, cash crop production and other forest and forest derived products. On the other hand, off-farm livelihood strategy includes activities like, wage labor and share harvesting which mainly household used it as the coping strategies when they no longer able to feed their family member due to shortage of rainfall and limited land size.

Even though its contribution is less as compare to on-farm and off-farm sector, few individuals derived their income from non-farm source to support their family means of living. Activities like, renting assets (oxen), pottery, informal food and beverage vending are some of the non-farm livelihood strategies for few local community members.

The finding of this study also indicated there are plenty of potential opportunities that can enhance the livelihood diversification strategies of the study area community. As the finding of the study reveals, community assets like human capital, social capital, physical capital, financial capital and environmental capital are major opportunities in the study area. In the study area the potential opportunities for livelihood diversification is loosely used by local community. Lack of knowledge and awareness regarding how to change potential resource to actual resources are the major detrimental factor for livelihood diversification in the study area.

Some of these capitals are abundant and can easily accessed like, social capital, human capital, physical capital and the others are very difficult to access like, financial capital which can precipitate the diversification process more rapidly than others. In sum, opportunities of livelihood diversification strategies of the study area are more potential and not utilized well.

As the finding of this study result indicated, there are many factors that affect livelihood diversification process in the study area. Lack of public infrastructure like, road, transportation, access to market, access to credit service,

lack of awareness regarding the importance of livelihood diversification are major one. Moreover, the ineffective and weak nature of farmer training center, old age agricultural and rain feed conventional farming system, soil fertility and seasonal fluctuation of climate condition and others are also factors that detriment the capacity of local community to diversify their livelihood strategies in the study area.

Recommendation

Based on the finding of the research the following issues are addressed as recommendation.

- Provision of awareness creation service through FTC center and mass media regarding how to effectively utilize the opportunities of livelihood diversification strategies in a sustainable way. Some potential resources are cheap and accessible like, land and labor. So, giving awareness how to utilize them properly may increase the potential capacity of farmer to diversify into different direction.
- Provision of logistic and material service should also more strengthen than the previous way. Provision modern improved seeds and different fertilizer like, URIA and DAP is also very important to improve the productivity of agricultural sector. In order to improve farmer capacity of diversification, working on the productivity of agricultural sector is very important.
- Encouraging and re-introducing farmer training center (FTC). As it is the major link between the farmer and the different change agents, it is important to improve and reorganize the structure of farmer training center (FTC) in a new way.
- Facilitating credit service for local community to strength their involvement in livelihood diversification. As it is known, financial capital is one the essential element of livelihood diversification strategies. Therefore, government should facilitate credit service that should be freer from bureaucratic complexity.
- Improving access to infrastructural facilities also more important in precipitating the livelihood strategies of local community. Transportation service, concrete asphalt road, access to market and different infrastructural facilities can also be good opportunity for local community to introduce their production to the nearby market and diversify their livelihood strategies.
- Giving ownership certificate to those who do not

have green card over their land. Creating secured ownership of land and ensuring sense of ownership among farmer in turn, pave the way to diversify their livelihood strategies.

- Establishing clear-cut area of responsibility and coordination between different stakeholders participated in improving the livelihood diversification strategies of local community. To reduce misconception and fragment work of different stakeholders, the rule that clarifying the position and responsibility of different sector should be necessary.

REFERENCES

- Adugna Eneyew Bekele. (2008). Livelihood Strategies and Food Security in Wolaita, Southern Ethiopia: *The case of Boloso Sore District*. M.Sc. Thesis, Haramaya University.
- Ayantoye K., Amao J. And Fanifosi G. (2017). Determinants of Livelihood Diversification Among Rural Households In Kwara State, Nigeria.
- Amare M. Dinku. (2018). Determinants of Livelihood Diversification Strategies In Borena Pastoralist Communities of Oromia Regional State, Ethiopia.
- Birara Endalew, Mequanent Muche, And Samuel Tadesse. (2015). "Assessment of Food Security Situation In Ethiopia: A Review." *Asian Journal Of Agricultural Research* 9(2):55-68.
- Birhanu N. and Getachew D. (2017). Livelihood Diversification: Strategies, Determinants And Challenges For Pastoral And Agro-Pastoral Communities Of Bale Zone, Ethiopia: *American Journal of Environmental and Geoscience, Vol 1, Issue 1, (2017): 19-28 ISSN 0000-0000. www.scinzer.com*
- Birhanu N. and Getachew D. (2013). Livelihood diversification: Strategies, Determinants and Challenges for Pastoral and Agro-Pastoral Communities of Bale Zone, Ethiopia:
- Chambers, R. (1999). *Relaxed And Participatory Appraisal: Notes On Practical Approaches And Methods*. Brighton: Institute Of Development Studies, University Of Sussex.
- Chambers, Robert And Gordon Conway. *Sustainable Rural Livelihoods: Practical Concepts For The 21st Century. IDS Discussion Paper 296, IDS, Brighton, UK, February 1992.*
- Chambers R. 2004. Ideas for development: reflecting forwards. Working Paper 238. Institute of Development Studies, Brighton.
- DFID (Department For International Development). (2000). *Sustainable Livelihoods Guidance Sheets*. Available From The Livelihoods Learning Platform www.Livelihoods.Org
- Eliss F And Edward A. (2004). Livelihood Diversification

- And Natural Resource Access: Oversea Development Group: University Of East Anglia UK.
- Ellis, F. (1999). Rural Livelihood Diversity In Developing Countries: Evidence And Policy Implications. Natural Resources Perspective. Overseas Development Institute.UK.
- Ellis, F. (1998). Household Strategies and Rural Livelihood Diversification. *Journal of Development Studies*, 35(1), 1-38. <http://dx.doi.org/10.1080/00220389808422553>
- Ellis, F. (2000). *Rural Livelihoods and Diversity in Developing Countries*, New York: Oxford University Press.
- Geremew W. Kassie^{1*}, Kim S. And Fellizar Jr. P. Francisco (2017). Determinant Factors Of Livelihood Diversification: Evidence From Ethiopia: *Cogent Social Sciences* (2017).
- Hagblade, S., and Hazell, P. 2010. *Successes in African agriculture: Lessons for the future* John Hopkins University Press.
- Khatun D. And Roy B.C. (2012). Rural Livelihood Diversification: Determinants And Constraints: Visva-Bharati, Sriniketan - 731 236, West Bengal.
- Krantz, L. (2001). *The Sustainable Livelihood Approach to Poverty Reduction, An Introduction* Stockholm: Swedish International Development Cooperation Agency.
- Joseph K. Assan (2014). Livelihood Diversification And Sustainability Of Rural Non-Farm Enterprise In Ghana: *Journal Of Management And Sustainability*, Brandies University Of USA. <http://dx.doi.org/10.5539/jms.v4n4p1>
- Knutsson P. (2006). *The Sustainable Livelihoods Approach: A Framework for Knowledge Integration Assessment*. Human Ecology Section, School of Global Studies Goteborg University.
- Khatun D. And Roy B.C. (2012). Rural Livelihood Diversification In West Bengal: Determinants And Constraints: Institute Of Agriculture, Visva-Bharati, Sriniketan – 731-236, West Bengal.
- Laflamme M. (2010). *Sustainable Desert Livelihood: Across-Cultural Framework*. Desert Knowledge, Alice Spring, Australia. www.Desertknowledgecrc.Com.Au
- Legesse Dadi And Chala Erko. (2005). Reversing Vulnerability Of Rural Livelihoods In Ethiopian Options For Sustainable Development. Agricultural Economic Society Of Ethiopia. Addis Ababa.
- Manirho A. and Nilsson P. (2018). Determinants of Livelihood Diversification among Rwandan Households: The Role of Education, ICT and Urbanization: School of Economics, University of Rwanda, Kigali, Rwanda,
- Murambadoro M. (2009). How The Sustainable Livelihoods Framework Can Contribute Towards Sustainable Social Development: Council For Scientific And Industrial Research, South Africa. <http://www.researchgate.net/publication/237525500>.
- Mehta R. (2009). *Rural Livelihood And Its Measurement Issue: Minister Of Statistics And Performance Implementation*, Government Of India
- Morse S. Mcnamara N. And Acholo M. (2009). *Sustainable Livelihood Approach: A Critical Analysis Of Theory And Practice*. Department Of Geography, University Of Reading,Uk
- Oluwatayo B. Isaac, (2009). *Poverty and Income Diversification Among Households In Rural Nigeria: A Gender Analysis of Livelihood Patterns*: University of Ado-Ekiti, Nigeria.
- Petersen K. Elsemarie And Petersen L. Mechelle. (2010). *The Sustainable Livelihood Approach: Approach To Development*. Institute Of Biology, University Of Aarhus.
- Patel,K., Hom Gartaula, Derek Johnson And M. Karthikeyan.2015. *The Interplay Between Household Food Security And Wellbeing Among Small-Scale Farmers Agriculture And Food Security India 4(16):1-16*.
- Scoones, I. (1998). „Sustainable rural livelihoods: A framework for analysis“. *IDS Working Paper. No.72*. Brighton: IDS. <http://www.ntd.co.uk/idsbookshop/details.asp?id=419>
- Scoones, I. (2009). *Livelihoods perspectives and rural development Journal of Peasant Studies Vol. 36, No. 1, January 2009, Brighton: IDS*. <http://www.informaworld.com>
- Serrat O. (2008). *The sustainable livelihood approach: an approach to analyze livelihood*. Philippines: Asian development bank. www.livelihoods.org/index.html.
- Sarah L. Aloba. (2016). *The Dynamics of Rural Household Livelihood Diversification: Panel Evidence from Kenya: Paper prepared for “Journées de Recherches en Sciences Sociales, 10es JRSS - 2016,” Paris, December 8-9, 2016*.
- Senyo Archibald B. Agyeman, Brempong S. and Onumah E. Edward. (2014). *Determinants of Income Diversification of Farm Households in the Western Region of Ghana*: University of Ghana, Legon, Ghana
- Sileshi M. (2016). *Challenges Of Livelihood Diversification In Pastoral Lands Of Ethiopia: Evidence From South Omo Pastoralists : International Journal Of Scientific & Technology Research Volume 5, Issue 09, September 2016*
- Uneca. 2013. *Assessing Progress In Africa Towards The Millennium Development Goals: Food Security In Africa: Issues, Challenges And Lessons*. The United Nations Economic Commission For Africa (Eca).
- Warren P. (2002). *Livelihoods Diversification and Enterprise Development: An Initial Exploration of Concepts and Issues* .
- Yenesew S.Yizengaw, Okoyo E. Ndemo And Fekadu Beyene. (2015). *Determinants Of Livelihood Diversification Strategies: The Case Of Smallholder Rural Farm Households In Debre Elias Woreda, East Gojjam Zone, Ethiopia* .

<http://www.academicjournals.org/AJAR>

Yohannes Y. And Tafese M. (2017). Assessing Challenges Of Non-Farm Livelihood Diversification In Boricha Woreda, Sidama Zone: Journal Of Development And Agricultural Economics, *Received 18 October, 2016; Accepted 27 January, 2017*

Yishak Gecho, Gezahegn Ayele, Tesfaye Lemma, And Dawit Alemu. 2014. "Rural Household Livelihood Strategies: Options And Determinants In The Case Of Wolaita Zone, Southern Ethiopia." *Social Sciences* 3(3): 92-104.

Zegeye Tirfe and Hussein Hamda.2011. "Farm Households" Food Insecurity, Determinants and Coping Strategies: The Case of Fadis District, Eastern Oromia, Ethiopia." *Ethiopian Journals of Agricultural Economics* 8(1):1-33.