

Addis Ababa
University
(Since 1950)



Addis Ababa University
College of Development Studies
Center for Rural Development

The Contribution of Rural Productive Safety Net Program (RPSNP) for
Households Livelihood Diversification: The Case of Wadla Woreda,
Amhara National Regional State, Ethiopia

MA Thesis Submitted to Addis Ababa University as a Partial Fulfillment of
the Requirements to the Award of the Degree of Master of Arts in Rural
Development

Submitted to: Alemu Azmeraw (Dr)

By: Sabaye Lulie (GSR/0863/04)

June 2021
Addis Ababa

Contents

Content of Tables.....	iv
Content of Pictures.....	v
Acronym	vi
Acknowledgement	viii
Abstract.....	ix
Chapter One	1
1. Introduction.....	1
1.1. Background.....	1
1.2. Statement of the problem.....	3
1.3. Objective of the study.....	5
1.4. Research questions	5
1.5. Significance of the study	5
1.6. Scope and Limitation of the Study	6
Chapter Two	8
2. Review of Related Literature	8
2.1. Theoretical Reviews	8
2.2. Food security in Ethiopia.....	13
2.3. Productive Safety Net Program (PSNP).....	20
2.4. Empirical Literature Review	25
2.5. Synthesis of the research conceptual Map.....	30
3. Research Method	31
3.1. The Research Design.....	31
3.2. Sampling Procedure and Sample Site.....	31
3.3. Data Types and Data collection Methods.....	32
3.4. Data Collection Methods.....	34

4.	Results and Discussions.....	37
4.1.	Socio-Economic Characteristics of Respondents	37
4.2.	Bio Physical Information.....	37
4.2.1.	Data Analysis and Findings: PSNP and Diversification.....	43
4.2.2.	PSNP and Farm Income.....	43
4.2.2.1.	Farm size and Farm Income	46
4.2.3.	PSNP and Non-Farm Income	47
4.2.3.1.	Farm size and Non-Farm Income.....	51
4.2.4.	PSNP and Off-Farm Income.....	51
4.2.5.	PSNP and Livelihood Assets	57
4.3.	Social Capital.....	57
4.4.	Human capital.....	59
4.5.	Financial Capital.....	61
4.6.	Physical Asset.....	64
4.7.	Causes and Consequences of Livelihood Diversification	65
	Chapter Five.....	66
5.	Conclusion and Recommendation	66
5.1.	Conclusion.....	66
5.2.	Recommendation.....	67
	Reference	70
	Appendixes	78

Content of Tables

Table 1: Sample kebeles and households.....	32
Table 2: Age of Respondent	41
Table 3: Sex of Respondent	41
Table 4: Marital Status Respondent.....	42
Table 5: Educational status of Respondent.....	42
Table 6: Main Farm Activities and Percentage share of PSNP contribution.....	43
Table 7: Status of Livelihood and Farm Income	44
Table 8: Average HH and HH head, Farm Income	45
Table 9: The Main Non-Farm Activities and Percentage share of PSNP contribution	49
Table 10: Status of Livelihood and Non- Farm Income	50
Table 11: HH size and HH head and Non-farm Income.....	51
Table 12: Main off Farm Activities and Percentage share of PSNP contribution	52
Table 13: Household Livelihood Status and Off -Farm Income.....	53
Table 14: HH size and HH head	56
Table 15: Soil and water conservation work by PSNP	58
Table 16: Health posts constructed by PSNP	60
Table 17: Students enrollment in the school constructed by PSNP	60
Table 18: Roads constructed by PSNP	64
Table 19: water institutions constructed by PSNP.....	65
Table 20: Causes of Livelihood Diversification	65

Content of Pictures

Picture 1: Conceptual Map for the Contribution of RPSNP for livelihood Diversification	30
Picture 2: Men and women FGD discussions	35
Picture 3: Key Informant Interview	36
Picture 4: Wadla Woreda, Amhara National Regional State Map.....	40
Picture 5: PSNP's contribution for improving natural assets	59
Picture 6: PSNP Beneficiary households collecting cash payment	62
Picture 7: Livestock market, where PSNP beneficiaries transact their livestock	63

Acronym

A A	Addis Ababa
ACI	Africa Capacity Indicator
CIDA	Canadian International Development Association
CSA	Central Statistics Authority
DFID	Department for International Development
EEA	Ethiopian Economics Association
ESSWA	Ethiopian Society of Sociologist, Social workers and Anthropologist
EU	European Union
FDRE	Federal Democratic Republic of Ethiopia
GGN	Graduation Guide Note
HH	Household
IFPRI	International Food Policy Research Institute
MOFED	Ministry of Finance and Economic Development
MOARD	Ministry of Agriculture and Rural Development
MOLSA	Ministry of Labour and Social Affairs
PIM	Program Implementation Manual
PSNP	Productive Safety Net Program
RPSNP	Rural Productive Safety Net Program
UPSNP	Urban Productive Safety Net Program
RRC	Relief and Rehabilitation Commission
SIDA	Swedish International Development Association
SNNP	Southern Nations, Nationalities and Peoples
USAID	United States Aid for International Development
UNDP	United Nation Development program

Declaration

I hereby declare that Assessment of **The Contribution of RPSNP in Livelihood Diversification: A Case Study in Wadla Woreda, Amhara National Regional State, Ethiopia** represents my original work. All the sources, I have used have been indicated and acknowledged as complete references, and that it has not been submitted before to any other institution for any other purpose.

Name: Sabaye Lulie (ID No: GSR/0863/04)

Signature

Date:

Acknowledgement

I would like to take this opportunity to thank all those who have been involved in this research work, providing both advice and support during the research process and the writing. Above all, I would like to express my heartfelt gratitude to Samuel Lulie for the understanding, encouragement and support he extended to me and the sacrifices he made for the past years while I was working on this Master's program. I want to greatly appreciate my Advisor Alemu Azmeraw (PhD) for the valuable support and guidance in the process of the thesis writing. Last but not least, I also feel grateful to the PSNP beneficiaries who helped me by dedicating time to respond to the research questions. Without their assistance, this research would not have been possible.

Abstract

This paper analyzes the role of RPSNP in livelihood diversification. It uses mixed methods across 3 (three) kebeles in Amhara region, North wollo zone, Wadla woreda. Primary data was collected through, key informant interview, focus group discussions (FGD), survey and field observations. The central research question was, does PSNP played a role in increasing the livelihood options of its beneficiaries through increasing farm, non-farm and off-farm income? The result of the study shows the program contributed in diversifying the livelihood options as well as preserving and increasing the livelihood assets of beneficiaries. The main diversification scheme in the study area as a result of PSNP is off-farm and non-farm income. From the total sampled PSNP beneficiary households 72% and 39% responded their off farm and non-farm income increased their livelihood options respectively. The livelihood changes and increased livelihood options of beneficiaries were mainly reflected through the PSNPs resources investment on rural road, irrigation canals, health centers, spring water development, water and soil conservation. It further increased availability of forage, natural resource extraction, such as, charcoal and bee keeping as well as by increasing participation in off farm activities. Generally, livelihood diversification through the help of RPSNP (that is off farm, non-farm and farm income) has an effect on livelihood status of households in the study area.

Key words: *livelihood diversification, farm income, non-farm income, off farm income.*

Chapter One

1. Introduction

1.1. Background

Located in the Horn of Africa, Ethiopia is the second most populous country in Sub-Saharan Africa with an estimated population of about 109 million, of which 80.5 percent are rural dwellers (World Bank, 6). The Central Statistics Agency, 2017 Population Projection estimated the Ethiopian population at 94,351,001 with 47,364,009 male and 46,986,992 females. With an estimated per capita income of US \$790 in 2019, Ethiopia remains one of the poorest countries in the world, but it has achieved substantial progress in economic, social, and human development over the past decade. Between 2011 and 2019, Ethiopia's economy continued to grow rapidly, with an annual GDP growth rate of around 9 percent. The national poverty rate decreased from 30 percent in 2011 to 24 percent in 2016 (Ibid). Fast economic growth translated into strong household consumption growth in urban areas but not in rural areas. The urban poverty rate reduced by 11 percentage points, while in rural areas poverty decreased by 4 percentage points (Ibid). Low levels of inequality have largely been maintained but vulnerability to poverty remains high, especially for those engaged in rain-fed agriculture and pastoralism. The natural resource base remains the foundation for most livelihoods and is subject to considerable environmental and climate risks.

The Government of Ethiopia has made important progress in laying down the policy framework for the implementation of social protection interventions in the country (World Bank, 2019:6-8). The country's National Social Protection Policy (NSPP) from 2014 and accompanying Strategy and Action Plan for the sector have charted a significant expansion of social protection to cover a larger proportion of the population and a wider range of risks, thereby ensuring that Ethiopia's strong economic performance is accompanied by a sustained reduction in poverty and vulnerability. The policy recognizes the contribution of social protection to the development goals of the country and commits human and financial resources to reduce poverty and maximize the provision of social protection to its poorest and most vulnerable citizens.

Due to this governments are forced to develop policies, strategies, programs to provide social protection to its citizens. Due to the limited success of the Agricultural Development Led Industrialization (ADLI) strategy in solving food insecurity in drought prone areas, the Ethiopian

government drew up the 1996 food security strategy for the first time and it is being implemented with various interventions since 2003. Furthermore, the 2000 drought and emergency relief operations, the food security strategy itself was updated in 2002. The 2002 food security strategy was followed by the 2003 food security program. The 2003 food security program was organized around three core pillars: namely, the Productive Safety Net Program (PSNP), the resettlement program and other food security activities.

The social protection sector is coordinated by the Ministry of Labor and Social Affairs (MoLSA), while the Ministry of Agriculture (MoA) and the Ministry of Urban Development and Construction (MoUDC) are responsible for the implementation of RPSNP and UPSNP, respectively.

Productive Safety Net Program is operational since 2005. The PSNP offers cash and or food payments to persistently food insecure households in order to close household food gap, prevent asset depletion at household level and create assets at community level. Beneficiaries receive either cash or food depending on what has been decided by each Woreda or what is available for transfer. Today's de facto expansive social protection strategy is managed by local level communities whose key role is to identify vulnerable people and target social protection services towards them. For instance, PSNP committees are charged with deciding who will be allowed to work on the scheme (public work scheme) and who should receive transfers without having work (direct transfer scheme) (Roser et. al, 2011: 11).

In Ethiopia, the safety net program was designed in response to the prolonged food insecurity of households. After the severe drought of 2002/03, that brought extreme hunger on almost one quarter of the population. Successive discussions between donors and government bodies led to the launch of the PSNP in 2005 largely owned by the Ethiopian government.

The PSNP's purpose is to provide support to recurrently food insecure households to ultimately prevent erosion of asset at the household level and develop or re-develop assets at the community level. The PSNP consists of two components: a labor-intensive public works with labor contribution of participants; and direct support to those vulnerable households who are destitute of labor, and or no other sources of sustenance, and are chronically food insecure. The PSNP aims to deliver timely, adequate and guaranteed transfers to food insecure households to both protect and build assets at household and community level. The duration of the first phase of the program was from January

2005 to December 2005 and delivered transfers for 4.84 million people in addition to establishing the program.

The PSNP delivers cash or food transfers to 7-8 million rural Ethiopians for six months of every year, either through public works (85%) or for those chronically food insecure households whose members cannot work, such as people with disability, elderly and others (15%) for free as direct support (Graham et.al, 2012: 271).

The development partners contributing to the financing of PSNP include World Bank, Department for International Development (DFID), EU, USAID, CIDA, SIDA, WFP, Irish Aid and Royal Netherland Embassy. It is currently the largest social protection program in sub-Saharan Africa. It differs from previous food- for-work programs, as it focuses on selected households over several years and its main objective is that it will eventually phased out” (Anderson, et. al, 2009: 2).

The available literature indicates that livelihood diversification can help households to manage risks and come out of shocks, including chronic food insecurity. In this context, as in many agrarian economies, most rural households in Ethiopia are diversified as they depend on a wide range of activities and income sources, since farming on its own rarely provides a sufficient means of survival (Degefa, 2005). Thus, this research investigates the RPSNP role in diversifying the livelihood options of farmers and livelihood assets in Wadla woreda of Amhara Regional state mainly focusing on public work beneficiary households.

1.2. Statement of the problem

Since the early 1990s, several plans have been developed that aimed to address the rights and privileges stated in article 41 of the FDRE Constitution. These include, the social security policy, youth policy, the developmental social welfare policy, women’s policy, national plan of action for children, family law, the health sector plan of action, the education sector plan of action, the national nutrition policy, GTP I, GTP II, poverty reduction program, health insurance schemes and the national food policy. All of these policies, plans and strategies have elements that support the realization of social protection rights.

According to Roser et. al, (2011: 2) social protection involves ensuring minimum standard of wellbeing among people to live a life with dignity and to enhance human capabilities, responses by the state and society to protect citizens from risks and vulnerabilities and deprivations. It also includes strategies and programs aimed at ensuring a minimum standard of livelihood for all people in a given country. This entails measures to secure education and health care, social welfare, livelihood, access to stable income, as well as employment.

Livelihood diversification is widespread and is found in all locations as well as across farm sizes and across ranges of income and wealth. According to a study by Saln and Reardon, cited by Ellis, 1998 show that between 30% and 50% of rural household income in Sub-Sahara Africa is typically derived from non- farm sources. In some regions, e.g. southern Ethiopia, this can reach to 80-90%. In south Asia, the average proportion is around 60%, reflecting in part the unequal land ownership structure in the region and dependency of many landless or near land less families almost wholly on non-farm income sources for survival (Ellis, 1998: 53-54).

Livelihood diversification in the form of nonfarm activities is very limited in rural areas when measured in terms of its contribution to rural income. For instance, indicate that the share of nonfarm income out of the rural income in Ethiopia is on average 23% which is 10% to 25% less than the average of countries of sub-Sahara Africa (Samuel, cited by EJE, 2009: 74).

A Central Statistics Agency (CSA) report (2007, cited by EEA, 2009: 74) confirms the low level of nonfarm employment in rural areas. According to the report, nonfarm sources accounted for about 24% of rural household expenditure. While, almost 91% of the rural economically active population were employed in agriculture and agriculture related primary activities. The implication is that non-agricultural activities accounted for only 9% of the rural employment.

Given the importance of diversification strategies, it is crucial to examine how PSNP helped to transform livelihoods and make beneficiaries resilient in the face of shocks. In this case, it is hypothesized that the transfer of resources in the form of food, cash, or both has a role on the diversification strategies of households, which in turn relates to their ability to improve their food security status.

Studies regarding the program were undertaken by different researchers, including, Workneh (2008), Jan–Gerrit (2013), Frank Ellis, Desalegn and Aklilu (2012), Camilla, Alemu and Jesper,

(March, 2009) and some others studied the impact of the program and its role as a food security program. These studies have not covered the role of PSNP in livelihood diversification. Thus, the proposed research believes that there is a need to conduct further research on livelihood diversification.

This research aimed to examine the RPSNP role in diversifying the livelihood options of farmers in Wadla woreda mainly looking at the participation in the program and the diversification of livelihood options as well as increasing livelihood assets, which increases the ability to come out of chronic food insecurity. In doing so, this study differs from the previous research as it focuses on the role of PSNP in livelihood diversification as well as increasing livelihood assets, which is not covered in earlier studies.

1.3. Objective of the study

The overall objective is to assess the contribution of PSNP in diversifying the livelihood options of farmers involved in the program.

Specific objectives cover,

1. Explain the livelihood changes among PSNP beneficiaries in the study area.
2. Explore the perception of farmers regarding livelihood diversification.
3. Examine whether the program was able to increase the livelihood assets of graduates and current participants of public work.

1.4. Research questions

The following research questions guided the research work to find answers for the general and specific objectives.

1. What is the contribution of productive safety net program in increasing the livelihood options of farmers?
2. Does the program increase the farmers' livelihood assets?
3. What were the new types of livelihoods brought about by PSNP?

1.5. Significance of the study

The purpose of this study is to prove whether PSNP in the study area brought about changes in the livelihood dimensions in general and contribution for diversifications. First, this study

focuses on the role of PSNP in diversifying livelihood options. So, it will give an insight on the contribution of the program in livelihood diversification. Second, it also identifies a recommendation for the effective implementation of the program and, the outcome of such a study is worthwhile to be considered by productive safety net program implementers and decision makers at different levels.

1.6. Scope and Limitation of the Study

The study limits its scope on assessing the contribution of rural productive safety net program on livelihood diversification. In addition, it deals with public work beneficiaries of PSNP to create conducive background to assess its contribution to livelihood diversification and generally excludes direct support beneficiaries.

Even though, the current study sheds light on the contribution of diversification of RPSNP, it suffers from some limitations. The first and most challenging problem was lack of updated documented materials, annual and monthly report of the program at the woreda level. Second, due to time and financial constraints, limits the scope of the study from being holistic and comprehensive.

Last, since the program is operational in rural Kebeles, it did not include the contribution of productive safety net program in diversifying the livelihood of urban dwellers such as Gashena and Kone kebeles.

Chapter Two

2. Review of Related Literature

The purpose of this chapter is to review theoretical and related literature on the role of RPSNP in livelihood diversification which includes theoretical and empirical literature review. In line with this, the first part deals with theoretical literature and the second part reviews empirical study in RPSNP.

2.1. Theoretical Reviews

i. Livelihood

The term livelihood has recently come into occurrence in connection with studies of rural development and rural poverty (Ellis cited by Desalegn and Aklilu, 2002: 6).

Livelihood refers to the ensemble of activities that a household (or an individual) regularly undertakes and the entitlements it makes claims to sustain a given standard of living (Desalegn and Aklilu, 2002: 6). A livelihood is just more than income. A livelihood, a household's entitlement consists of access to assets (physical or financial), social resources (networks, institutions, values), and human endowments (skills, aptitudes, initiatives). A household entitlement may be improved through investments not only physical assets but also in education, health, or institutional assets. Conversely, they may be deteriorated because of the lack of such investments (Ibid).

Basic security is essential if the goals of social progress and economic growth are to be achieved. What constitutes basic security depends on the standard of living, policies and institutions in each country, and the values and expectations of the population concerned. In poor societies, basic security is taken to mean that each family is able to ensure its subsistence requirements with reasonable effort, and in conditions that do not violate the dignity and endanger the wellbeing of its members (Desalegn and Aklilu, 2002: 6). Different definition has been given to livelihood among this; let us see some of the definitions.

The African Capacity Indicators (ACI) (2012: 96) defines livelihood as “livelihoods refers to the resources –tangible and in tangible- and strategies that individuals and households use to meet their need (produce food, income etc.) and accomplish their goals”. Livelihoods involve

households making choices, taking in to account the institution environments, to combine resources in different production and exchange activities, generate income, meet various needs and goals, and adjust resource endowments to sustain the process.

Moreover, Chambers and Conway (1992) provided the most widely used definition as, “a livelihood comprises people, their capacities and their means of living, including food, income and assets.”

‘A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for means of living’ (Nagel Selome et. al., 2009: 8). A livelihood environment is sustainable when it maintains or enhances the local and global assets in which livelihoods depends and has net beneficial effects.

ii. Types of Livelihood Assets

The Sustainable Livelihoods Framework has identified five assets as basis to livelihoods:

I. Financial capital: consists of financial resources that determine the livelihood strategies and even access to other assets; such as, education, health, transport services and housing, income, saving, insurance, remittance, credit (formal and informal) institutions and pension are the major sources of financial capital (Rakodi and Rigg as cited by Banchayehu, 2012; 66-67). According to DFID (1999), there are two main sources of financial capital. Namely, available stocks, which can be held in several forms: cash, bank deposits, or liquid assets such as livestock and jewelry. Financial resources can also be obtained through credit providing institutions. Secondly, regular in flow of money: excluding earned incomes, the most common types of inflows are pensions, or other transfers from the state and remittances.

II. Human capital: refers to ‘skills, knowledge, ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives’. At the household level the quantity and value of labour available defines human capital. This varies according to household size, skill, leadership potential, health status etc. Its accumulation can also be an end in itself. Many people regard ill –health or lack of education as a core dimensions of poverty. Thus, overcoming these conditions may be one of their primary livelihood objectives (DFID, 1999).

III. Physical capital: refers to the reproduction and household assets, including tools, equipment, housing and household goods, as well as stock (such as jewelry). Physical capital comprises the basic infrastructure and produced goods needed to support livelihoods. Infrastructure consists of changes to the physical environment that help people meet their basic needs and be more productive. The following components of infrastructure are usually essential for sustainable livelihoods: affordable transport, secure shelter, and buildings, adequate water supply and sanitation, clean, affordable energy and access to information (DFID, 1999).

VI. Natural capital: is a term used for the natural resource from which resource flows and services (e.g. nutrient cycling, erosion protection) useful for livelihoods is derived. There is a wide variation in the resources that make up natural capital, from intangible public goods, such as, the atmosphere and biodiversity to divisible assets used directly for production (trees, lands, etc). Examples of natural capital and services includes, land, forests, marine/wild resources, water, air quality, erosion protection, waste assimilation, storm protection and bio-diversity degree and rate of change (DFID, 1999).

V. Social capital: according to DFID, (2001; 9) social capital is defined as a category of livelihood assets which relates to the formal and non-formal social relationships or social relationships or social resources up on which various opportunities and benefits can be drawn by people in their pursuit of livelihoods. These social resources are developed through investment in interactions that increase people's ability to work together. Membership of more formal groups in which relationships are governed by accepted rules, norms and trust that facilitate cooperation reduced transaction costs and sometimes help in the development of informal safety nets amongst the poor.

iii. Livelihood Diversification

Rural livelihood diversification refers to the process by which households construct an increasingly diverse portfolio of activities and assets to survive as well as improve their standard of living. Diversification thus refers to the maintenance and continuous alteration of a highly varied range of activities and occupations (Ellis, cited by Zerihun, 2011: 6).

Within and beyond agriculture diversification is widely recognized strategy for reducing risk and increasing wellbeing (Ellis cited by A-Z consult, 15; 2010). It is ongoing process enabling households to build resilience by spreading risk. It is not easy to attribute a single cause to diversification, rather a combination of factors are driving change, factors which are economic (e.g., increased market integration), political (e.g., change in land use policies) and environment (increased climatic uncertainty) (Ellis, cited by Zerihun, 2011: 6).

According to Barret, Readson and Webb (2001), diversification is mostly measured by using income earned from different activities/sources (although assets and activities can also serve the same purpose).

Mwabu cited by EEA (2007/08: 71) explained diversification “diversified subsistence orientation is the diversification of sources of income of livelihood by farm households and involves engagement in farm (as wage laborer) and nonfarm activities. The significance of diversification may be multi-dimensional, both in the short and long term. More diversified household livelihoods may provide more capital to invest in new agricultural technologies and resource improvement and be better able to with stand shocks and risks (Ibid). Small farms that diversify may prioritize nonfarm activities which provide more regular income, thereby giving low priority to farming and may not take up promising new technology options that compete for their available labour time (Ibid).

Rural livelihood, should, therefore, diversify away from agriculture to agriculture and other non-farm employments policy makers’ awareness of the need to stimulate nonfarm employment opportunities for the rural poor has also grown recently, as clearly reflected in the plan for accelerated and sustained development to end poverty (PASDEP), Ethiopia’s guiding strategic frame work for the five year period 2005-2010 (EEA, 2007/08: 71). Diversification improves employment opportunities and augments farm income especially to those with marginal or no land (Ibid).

Livelihood security is defined as adequate and sustainable access to income and resources to meet basic needs such as adequate access to food, potable water, health facilities, educational opportunities, space and time for community participation and social integration. Livelihood

security is much wider than food security as it includes all food and non-food services (T.R. Frankenberger and M.K. McCaston, 2000).

Within agriculture and beyond agriculture, diversification is a widely recognized strategy for reducing risk and increasing wellbeing (Ellis cited by Ac fetal, 2010: 15). It is a process enabling households to build resilience by spreading risk.

iv. Reasons for Livelihood Diversification

The Ethiopian Economic Association (EEA), (2007, 08:72) explained the reasons for livelihood diversification as follows, "increasing income and income prospects, smoothing consumptions, and reducing risks associated with failure of credit and other rural markets".

Literatures (e.g. Gordon 2000; Islam, 1997) classified these factors broadly into two-growth induced and distress push groups. The former implies diversification where rural people respond to new opportunities; while the latter is a result of distress push where risk is a major "push" factor and the chance for diversification into marginal activities that hold low potential for reducing poverty and sustainable growth is very high (Ibid).

It is not easy to attribute a single cause to diversification, rather a combination of factors are driving change, factors which are economic (e.g. increased market integration) political (e.g. change in land use policies) and environment (increased climatic uncertainty) (ACF et.al, 2010: 16).

According to Ellis cited by EJOE, (2009) the following key factors should be considered as causes for diversification: seasonality, risk strategies, coping strategies, as well as labour and credit market conditions. Seasonality refers to the heavy resilience of farming on weather conditions and fluctuations in prices as a response to change in demand and supply conditions. Seasonality in crop production and income results in some slack seasons during which farmers may have time to engage in off farm activities. It is also possible that households diversify activities to ameliorate the threat to its overall welfare from risky concentration in a single farm activity.

v. Determinants of Livelihood Diversification

The factors that play role for livelihood diversity are complex, ranging from relative productivity of the local area to level of risk, markets and demand. Determinants of diversification include land and common property resources, access to transport services, market and related infrastructure through which access to credit and other inputs at a broader context, exogenous factors such as drought and macroeconomic policy that affect price (devolution of currencies, political change) are similar influential factors of diversification (Ibid).

In communities highly dependent on increasing erratic climatic conditions, livelihood diversification is a key adaption strategy, vegetable gardening, artisan activities and petty trade not only help households reduce their sensitivity to climatic impacts, but have visibly helped empower women and increase household's commitment to enroll their children in education (Ibid).

vi. Sustainable Livelihood

A livelihood is sustainable when it copes with and recovers from stresses and shocks. Sustainable livelihoods approach to rural development represents an evolution in development thinking's but also a significant breakthrough by focusing on lives rather than project resources and out puts.

The ACI, 2012: 98 explained principles of sustainable livelihood approach as follows: being people centered, beginning by giving attention to strength, focusing on long term perspectives, operating in dynamic participatory and socially inclusive way, utilize holistic perspective and explicitly committing to long term sustainability.

Moreover, sustainability can be understood in terms of maintaining or increasing a household's ability to produce desired goals and incentives. Livelihoods depend on not only on current incomes but on how individuals, households, and nations use resources over time.

2.2. Food security in Ethiopia

Food security is a concept that includes several important issues the magnitude of which range from micro to macro-economic conditions. The most widely used definition of food security is access by all people at all times to enough food for an active, healthy life (World Bank, cited by Yonas, 2006; 33).

The world food summit in 1996 defined food security as a situation in which all households have both physical and economic access to adequate food for all members, and where households are not at a risk of losing such access (Yonas, 2006; 33-34).

Food is the material consisting essentially of protein, carbohydrate, fat, minerals and vitamin used in the body of an organism to sustain growth, repair, and vital processes and furnish energy.

Food security signifies that all individuals, alone or in the community, enjoy physical and economic access to adequate, safe and nutritious food or the means for its procurement to meet their dietary needs and food preferences for an active and healthy life (Nagel and Selome, 2009: 8). Household food means the food necessary for every members of a household. Household income is the total money that is usually earned by each of the household members from different sources which a household can purchase its food and non-food needs.

Given the severity of food insecurity in Ethiopia, a consensus was reached to formulate a food security program. The food security program aims at increasing agricultural production and improving access or entitlement to food while managing such crises when it occurs in large magnitude. The major components of the program are increased agricultural production, small scale irrigation, natural resource conservation, management and use; infrastructure development; credit services; health and education; water supply and capacity building.

According to 2004/05 poverty analysis report, poverty remains widespread in Ethiopia. Using a consumption-based measure of poverty, 38.7% of Ethiopian's were poor in 2004/2005, implying that 27.5 million people were living below the poverty line. Poverty is slightly higher in rural areas (39.3%) than in urban areas (35.1%). The region with largest number of poor people was Oromia (9.3 million), accounting one third of Ethiopian's living in poverty in 2004/05. Large number of poor people were also found in Amhara (7.3million) and the SNNPR (5.3million) (EEA, 2006/07; 3).

i. Types of Food Insecurity

Food insecurity is a lack of access, at all times, to enough food for an active and healthy life. The cause of food insecurity is multiple and intertwined involving both short term and long term structural factors. In Ethiopia long term factors; such as, population growth, environmental

degradation, diminishing size of land holdings, lack of on-farm technological innovations, and lack of off farm income sources have led to decline in productivity per household (Workneh, 2008: 1).

These factors combined with effects of frequently occurring drought continuously erode the productive assets of households and communities. The effect of these casual factors have been exacerbated by lack of policies and strategies in the last three or more decades (Ibid). Based on time factor, food insecurity can be classified as either chronic or transitory (Befekadu et.al cited by Yonas, 2006:34).

a. Chronic Food Insecurity: is a constant failure to access food or a continuous inadequate diet caused by the inability to acquire food. Regularly households are unable to get enough food even during normal rain. It is “a sign of poverty and illustrates a long-term structural deficit in production and lack of purchasing power”. People who suffer from chronic insecurity comprise those who are in short of draft animals and cash, landless, elderly, people with disability, female headed, poor pastoral, non-farming and newly established households.

b. Transitory Food Insecurity: is a temporary decline to the household’s access to enough food and “it implies short term variability in food prices, production or income. It emanates from drought, displacement of people and refugee inflow. A household is said to be secure if it has a protection against the above types of insecurity.

Food security can be observed at different levels: the household, the local, the national and even the global. Households that are food secure are those that can provide each member of the family, no matter what their sex, age or physical condition with an adequate supply of nutritious food on a sustainable basis.

ii. Components of the Food Security Strategy in Ethiopia

Given the magnitude and severity of food insecurity, Ethiopian government has given top priority to solve the problem and consequently developed the national food security strategy (FDRE, 1996) and then presented it to the international community in December 1996 for discussion. The strategy was jointly ratified both by the government and donor’s community (Yonas Ketsela, 2006; 43).

The strategy is based on two principles. First, food security is sought within the context of comparative advantage in international trade of food crops. This entails Ethiopian agriculture needs to be efficient enough to compete in the international food market and hence reduction of import, tariffs, removal of subsidies to small holder agriculture, deregulation of import price, and a flexible exchange rate. Secondly, food security assistance would continue to enable the transition to self-reliance (Ibid.).

The food security strategy further aims at addressing both the supply and demand sides of the food equation, which is interpreted as availability and entitlement, respectively. The strategy has three components: economic growth and employment; additional entitlement/access and targeted programs (Ibid).

The strategy aims to approach the national food deficit (estimated to be between 750,000 to 1million tons of food grains) in five years by a faster growth of food production. To this effect, the strategy focuses on diffusion of a simple technology package through the extension system, within small holder agriculture in areas of reliable rain fall. The strategy also includes construction of new rural roads and rehabilitating the existing roads to reduce marketing costs and improve distribution of food (Yonas Ketsela, 2006; 43).

Following the development of national food security strategy, food security programme /FSP/ was prepared in 1998. The proposed program contains a set of measures directed at 156 chronic food deficit Woredas of four regions (Amhara, Tigray, Oromia, and SNNP) with an estimated budget of approximately US\$819 million (6 billion birr) over five years. The food security programme is designed to address entitlement thereby increase the access to food for the population living in the chronic food deficit woredas of the country (Zelege cited by Yonas, 2006; 44).

There is an international perception that food aid to food insecure households in poor developing countries being associated with a dependency syndrome. One hears arguments food aid may change the behavior of its recipients by making them dependent on it and thus less active in their economic and social activities (Little cited by Camela et. al., 2009: 1).

In Ethiopia, food insecurity has long been a widespread problem. Over 80% of Ethiopia's 80 million people live in rural areas and are heavily dependent on rain feed agriculture; this makes

them extremely vulnerable to changes in weather conditions. Over the last four decades, there have been several severe famines due to droughts. In Ethiopia, even in years with normal rain fall, food shortage and hunger are recurrent problems for millions of people. More recently, this problem has been exacerbated by increases in food prices. The problem of food insecurity in Ethiopia has to a large extent, been addressed through an annual emergency food aid from abroad. During the past two decades, Ethiopia has been the largest recipient of food aid in the world (Little cited by Camella et. al., 2009; 2).

The first objective of the national food security program (NFSP) includes enabling more than 8million chronically food in people to attain food security within a five year period. Chronically food insecure individuals and households are those who are permanently or temporarily unable to work or are households those who are permanently or temporarily unable to work, are labour poor (Melaku et al., 2011; 98).

According to Workneh, (2008; 3), the food security strategy has four major components. Direct food production intervention program, voluntary resettlement program, income diversification program, and productive safety net program (PSNP).

- 1. Direct food production intervention program:** with the aim of increasing food availability in the country in the medium and long term, different and agro- ecologically variable agricultural package interventions are designed to increase agricultural production and productivity.
- 2. Resettlement program:** aims at increasing food availability by cultivating potential and unused arable land. The plan has been to resettle chronically poor farmers and agro pastoralists voluntarily in suitable and underutilized areas intra regionally. The program simultaneously solves problems resulting from high degradation, population pressure and declining of plots of land at their origin. For the effective implementation of the program the government provides infrastructural facilities; such as, schools, health facilities, roads, water facilities, provision of credit as well as oxen.
- 3. Income diversification program:** focusing only on crop and livestock production would not solve food insecurity in drought prone areas. Income diversification through engagement in non- agricultural activities is desirable. The main purpose of this program is to increase the purchasing power of food in securing household by participating them

in tailoring, restaurant, petty trading, small scale grain milling, black smithing, and retailing.

4. **Productive safety net program** is initiated in 2004/05 whose implementation started in 2005. The program initially targeted approximately five million chronically food insecure households in 262 chronically food insecure woredas. The program was planned for five year. Currently, the population of chronically food insecure people is slightly more than eight million.

iii. Social Safety Net and Protection

The term safety net encompasses various transfer programs designed to play both a redistributive and risk reduction role in poverty reduction. Safety nets are a form of social transfer that usually involve cash or in-kind payments to marginal income groups gratuitously or through public work programs (Tafesse, 2011: 131).

The redistributive role is intended to reduce the impact of poverty and hunger and the risk reduction role is intended to protect individuals, households, and communities against uninsured income and consumption risks. Risks can be household specific (seasonal unemployment), community or regionally based (i.e., drought, famine), or nationwide (drought, global financial risks) (Ibid).

Social protection encompasses a range of protective public actions carried out by the state or others in response to unacceptable levels of vulnerability and poverty. It includes social assistance to extremely poor individuals and households; social services to groups who need special care who would otherwise be denied access to basic services, social insurance to protect people against the risk and consequences of livelihood shocks and social equity to protect people against social risks such as discrimination or abuse (Stephen Deverux, et.al, cited by Tafesse, 2011: 127).

Across Ethiopia, there are informal, traditional safety nets (which are usually considered as a mechanism to cope with shocks) in both urban and rural communities. The roots of these traditional, informal safety nets are typically constituted in the ethical belief that those who have should provide support to those who have less, at least to ensure that those within that community. For obvious reasons, the socio-economic interaction on which these safety nets rely tends to be stronger in resource poor areas, especially in those affected by recurrent drought (Melaku et. al., 2011: 73).

In the Ethiopia case, government efforts to deal with deep seated social and economic disadvantage were made under difficult circumstances. The government has been determined to face these challenges by introducing various policies and programmes including Disaster Risk Management Policy, Revised family Code (2005) the Revised Labour Proclamation (2004), Social Security Policy and Program, HIV/AIDSs policy, Developmental social welfare policy

(1996), and with the implementation of the largest productive safety net program in Africa the search for the most efficient social protection instrument to reduce poverty continues since 2005 (Ibid).

iv. Modes of provision of social protection

Tafesse (2011: 128) explained modes of social protection provision as,

- **Informal:** such as storing wealth in livestock, trees or land, or transfers of cash or food within the household or some other social group.
- **Market based:** such as taking out insurance for arrange of risks – not only accident or health but also productive assets.
- **Publicly mandated:** including social insurance, transfer payments of various kinds, and public works.

v. Objectives of Social Safety Net

The Ethiopian MoLSA set objectives of social safety net to; (i) expand predictable social transfers (conditional and non-conditional) and protect vulnerable groups from falling in to extreme poverty, food insecurity and mal nutrition, (ii) contribute to the building of human capital of the poor individuals and households to stop intergenerational poverty, and (iii) promote public works program to enhance community assets and introduce social pension schemes for older and other vulnerable persons.

2.3. Productive Safety Net Program (PSNP)

The productive safety net program (PSNP) is the biggest social protection instrument in sub-Saharan Africa. It differs from previous food-for-work programs since it focuses contentiously over selected households over several years and set out explicit objectives for eventual phase out. For this reason, its impacts and effectiveness are important, because they have implications for the food-for-programs elsewhere (Camella et. al., 2009; 2).

The PSNP is a public program through which food insecure people are employed in public work for five days a month during the agricultural slack season. This is intended to enable households to smooth consumption, so that they will not need to sell productive assets to overcome food shortages. The public work investments are intended to create valuable public goods (Ibid).

After a five-year, implementation of PSNP, the government and nine development partners agreed to further program for another five year, under the government of Ethiopia's food security program.

The programme targets 7.8 million beneficiaries, initially, in 260 woreda's of 4 regions (Amhara, Tigray, Oromia and SNNP) and gradually addressing 324 Woredas including Woredas from Afar and Somali regional state (Tafesse, 2011: 136).

The focus areas of PSNP include; chronically food insecure Woredas', primarily food insecure households but also addresses food consumption, addresses the underlying causes of food insecurity, play positive impact by stimulating market, enhance natural resource rehabilitation, and access to other social services.

i. Objectives of PSNP

PSNP aimed at to provide transfers to chronically food insecure population in a way that prevents asset depletion at community level and creation at community level. The program implementation manual explains the objective of the program as it addresses immediate human needs and at the same time; supporting the rural transformation process, preventing the long term consequences of short consumption shortage, encourages households to engage in production and investment and promoting market development by increasing the purchasing power.

ii. Elements of PSNP

According to Melaku et. al., (2011; 35) PSNP has the following elements to achieve its objective. This includes transfers to food insecure households. The PSNP provides timely and predictable transfers to chronically food insecure households to allow them to ensure their food consumption without causing the sale of their household assets. Transfers may be in kind or in cash.

- A. Conditional Transfers:** is a transfer for those households facing regular food shortage but have able bodied between the ages of 16-55 and contributes in public work.
- B. Unconditional Transfers:** is a transfer for those households who face regular food shortage but do not have contribution (participation) in public work.

1. Transfers for households affected by Shocks: is a transfer when there is a shock such as drought or flood, the PSNP is able to expand temporarily to protect households which are affected by shocks.

2. Public works to create sustainable local Infrastructure: the availability of labour from able bodied PSNP clients is used to construct and ensure maintenance and further sustainability of appropriately priority local infrastructure and soil and water conservation activities.

3. Capacity building for effective PSNP delivery: PSNP invests in systems processes and resources to ensure that capacity of delivery organization is adequate to allow essential for timely and predictable transfers.

4. Coordination between program implementers and other development efforts: The PSNP is a multi- sectoral program implemented by a number of different organizations which works effectively. The PSNP is a federal government program implemented largely through government systems and structures. The institutional framework of the PSNP is predicted on the administrative structure of the Ethiopian government.

iii. Components of PSNP

PSNP has two components: namely labour intensive public work and direct support.

- 1. Public works:** are labour intensive community-based activities designed to address underlying causes of chronic food insecurity through provision of employment for chronically food insecure people who have able bodied labour.
- 2. Direct support:** people who are too young to qualify for public work, People who are too old to qualify for public work, physically disabled people, mentally ill, people with disability and temporarily unable to work.

iv. Linkage between PSNP and other food security programs

PSNP is a component of the government's food security program for chronically food insecure woredas of the country. The Ethiopian government is committed to achieve food security of the

country in short period. This intent assumes that this is achieved if PSNP is effectively linked to ongoing and future food security program in the area in which the program is function.

PSNP is purposively linked with other food security program (OFSP) so as to enable beneficiaries create assets and increase income at the household level and help them reduce vulnerability and create resilience to withstand shocks without depletion of assets and finally be able to graduate from the program (Tassew et. al, 2011; 136). Beneficiaries of the program, totaling more than 8 million (1.6 million households) in 2007/08, are expected to be self-reliant in three to five years. This is to be achieved by combining the PSNP activities with OFS targeted interventions, known as OFSP (Beyene, 2009: 13).

OFSP includes a range of interventions, such as extension services for increasing productivity of cropping systems and livestock, micro credit programs, expansion of irrigation infrastructure, development of water resources and small scale water harvesting mechanisms, diversification of on farm and off- farm income, and resettlement (Ibid).

According to PSNP program implementation manual, block grants are given to woreda's for the implementation of a range of activities including resettlement, water harvesting, irrigation, feeder roads and household agricultural packages. In addition, complementary to the safety net program include the food security program, and food security projects. Many safety net beneficiaries also benefit from OFSP complementing to create assets. Participation in PSNP does not prevent chronically food insecure households being eligible in OFSP and vice versa.

v. Graduation

The PSNP graduation guidance note explains graduation as a key goal of the food security programme to which the PSNP contributes. Each year, there is an assessment to check if a household should stay in the program or not.

Graduation is the movement of a household out of PSNP. This occurs when a household has improved its food security status to a level that shifts it from being classified as chronically food insecure to food sufficient, and thus is no longer eligible for the PSNP (GGN, 2007; 2). A household has graduated when in the absence of receiving PSNP transfers, can meet its food needs for all 12 months and is able to withstand shocks.

Graduation arises from the combined effect of food security program components and other activities of the PSNP alone. Some ultra-poor households will never move into food sufficiency (graduated from the program) and will always require unconditional transfers to meet their food needs. Graduation can be asset base or voluntary base.

Graduation from the PSNP is a long term process that will not be possible if only PSNP resources are available. It requires that the same households receive interventions from other food security programme /OFSP/ consisting of household packages and credit. Hence, other development programmes contributing to this process (GGN, 2007: 2).

Households graduated from the program but affected by different shocks can re-enter into the program and contingency can be used if the shock does not have a long impact. Assets not fully owned by households cannot be considered for household asset level determination. Graduation is a two-stage process in PSNP. The first stage is graduation from the PSNP and the second is graduation from the food security program.

vi. Benchmark for graduation

These benchmarks describe the level of assets, a food sufficient household is likely to have in each region. When the status of household's assets reaches this level, the household is no longer eligible for getting the programme benefits. Until this point, a household remains eligible to participate in the PSNP and cannot be taken off the programme.

vii. Assessing household assets

The benchmark use household assets to verify and refine the eligibility of households to participate in the PSNP. This is because assets better reflect lasting changes in chronic food insecurity status than income. Income tends to fluctuate between seasons and years, while assets are likely to remain more stable, except for periods of several shocks. The regional benchmarks are designed to be applied in a flexible manner that considers arrange of household assets. In addition, the regional benchmarks take into account differences between livelihood zones. The benchmarks may consider differences in types of assets holdings in each livelihood zones.

viii. Self-Graduation

This occurs when a household voluntarily leaves the PSNP. This occurs when household members can earn a higher wage through wage employment on the labour investment, own production is more valuable than time spent in the public works. The assessment of whether or not a household can graduate from the program is based on asset of household asset benchmarks designed at regional level and refined at woreda level as appropriate, only those households participating in the PSNP, that have taken OFSP household packages and credit will be considered for graduation.

2.4. Empirical Literature Review

Samuel et. al., (2011) finds out that on the food security project of Amhara regional state launched in 2002 in which households from food shortage decreased during the project period. The study found that the average month of the food shortage per annum was reduced from nearly three months to a month and half. It was also confirmed by contacted beneficiaries that there was increase in the average number of children going to school in beneficiary families, in comparison with the situation prior to participation in the project. In addition to this, the project has contributed to improved food security by enhancing entitlements and building their endowments, improved social status and general wellbeing, as well as improved financial capital at household level. On the contrary, the study also identified institutional constraints such as limitations in food security program policies and implementing procedures, less program synchronization, loose vertical and horizontal integration, weak and unresponsive service delivery at woreda level and limited access to services.

Shimeles (2011) in his study on social protection revealed that most of the existing programs lack transparent and proper targeting procedures for identification of the needy. Other challenge includes lack of skilled personnel and administrative structures to administer and implement these programs and, not least, resource leakages and corruption.

On the other hand, the study conducted by ESSWA (2011) revealed that the health facilities are suffering from periodic shortage of drugs to treat opportunistic infections, anti-retroviral and equipment and supplies, and lack of care and support provision for needy mothers.

There is a general perception and understanding that PSNP has reduced to some extent the socio-economic burden of those people who are not targeted for PSNP. Among the studies undertaken in PSNP let us see some of the findings.

Evaluation of safety net programs in Zimbabwe, Rwanda and India show that they have made positive contributions to food security and reducing the depth of poverty. Particular relevant to Ethiopia's PSNP is the case of Rwanda's intensive labour program. A recent HIMO (Rwanda 's national labour intensive works) evaluation found out that HIMO contributed to consumption smoothing of poor households but appears to have had limited impact in terms of structural livelihood improvements (JanGerrit, V.U, 20, 2013).

Workneh, (2008: 17) identified the strengths of productive safety net program. He stated that, in addition to solving the short term food insecurity problem of the household it also lay foundation for achievement of other food security program objectives. It has shown strong preference for purchases from local markets, which could be useful to stimulate local crop production and productivity. Furthermore, programs ambition to move away from pure relief type of assistance to that simultaneously promotes productive investment may help to prevent any attitude of dependency on food aid. The program document has paid attention to participation of women in public works with the intention of enhancing the income and productivity of female headed households.

On the contrary, Workneh (2008) identified the gaps observed on the program. The number of people who suffer from chronically food insecurity is high because of the limited capacity of the program. It excludes a large portion of food insecure households from the program. The program gives attention to rural areas and do not provide support to people residing in urban areas and in pocket areas of some food secure woredas. Further, the wage rate in all woredas of participating eight regions is fixed at birr 6 per day. The monitoring and evaluation system is not well developed, the ownership of community assets that are created by public works need clear definition.

Moreover, Sharp and Brown, cited by Workneh (2008) identified constraints faced in the implementation of the program. In most of the study areas public works are undertaken during the peak season of agricultural activities, payments to the beneficiaries are not made on time, and

there is no functional appeal procedure and where it exist, there is low success rate for appeals. The proportion of direct support beneficiaries is determined by quota not on need assessment, unprecedented dependency attitude has been experienced in many areas after the introduction of PSNP. The number of chronically food insecure people is higher than the resource of the program. The result of the study further revealed that constraints on accountability and transparency, the payment for PSNP, public works was low as compared to local unskilled labour wage, and issues related to targeting.

On the other hand, Tassew et. al., (2011: 146) identified challenges of PSNP including; (i) global climate related: the increasing trend of global climatic, hydrological hazards, recurrent drought and other natural hazards (e.g., Belg rain failure in 2008 and 2009), global economic, financial and food prices crisis has shifted preferences for food than cash transfer and food market inflation; (ii) targeting problem, initial state exclusion and inclusion and currently full family targeting; (iii) graduation related: lack of full awareness among beneficiaries on graduation benchmark results led to lack of confidence especially at grass roots level; push factors for self graduated and lack of budget for other food security program. The fate of direct support beneficiaries is unknown, which can create lack of confidence and uncertainty.

On the other hand, Camilla et. al., (2009: 26) the increase in forestry activity is taking place as a result of PSNP that improved credit access (which is part OFSP, but not PSNP) leads to increase in livestock holdings. The first of these impact is somewhat unexpected; the second impact is expected, but it is surprising that this factor appears to be more important than the existence of PSNP to the extent that PSNP and OFSP has lasting effects on household welfare, their effects appear to be complex and indirect than expected.

World Bank (2011), project performance assessment using adaptable program loan, consisting of relevance, efficacy and efficiency, revealed that the PSNP is efficient compared to international experience on public works programs on targeting, high wage intensity, and low administrative costs due to use of existing government systems and economies of scale given the size of the program. Moreover, there was progress towards decreasing the upward trend in food insecurity in 2005 and 2006 although progress was thwarted by the 2008 food price shock and a case load of over 7 million remains in PSNP by 2010.

Another study conducted by Gilligan et. al., (2008) that implemented propensity score matching to assess the impact of Ethiopia's PSNP found that positive and statistically significant effect of PSNP. Relative to non- PSNP beneficiary households are more likely to borrow for productive purpose, use more improved agricultural technologies, and operate non- farm own business activities. However, while asset level grew, relative to non-PSNP beneficiary households, PSNP beneficiary households did not experience faster growth of assets.

Rachel et. al., (2010) there is positive program effects on income growth and food security, especially for food only and mixed (cash plus food) payment households. PSNP food recipients have enjoyed accelerated income growth relative to cash recipients, whose income gains have been beneficiary attitudes are hardening against cash and in favor of food transfers. On the other hand, these findings support the view that a reliance on un-indexed cash transfers to deliver social protection in an inflationary environment is not an optimal strategy because commodity based transfers retain their value whereas the purchasing power of cash transfers are eroded by rising commodity prices.

Although agriculture remains the main source of income and employment, rural non-farm income is gaining importance in most rural areas in developing countries. As a result, 35–50% of rural incomes were attributed to the rural non-farm economy in developing countries at the start of the new millennium (Haggblade et. al., 2010). A figure frequently cited for Ethiopia is 36% (Degefa, 2005), and a recent report by the World Bank estimates 25% of rural households participate in the non-farm sector (World Bank, 2009). The importance of non-farm activities in Ethiopia varies by region (Carswell, 2002) and livelihood zone (LIU, 2011). The most important source of cash income for most rural households is crop sales in the cropping livelihood zone (broadly comprising Tigray, Amhara, Benishangul Gumuz, Gambella, South Region and the western and northern parts of Oromiya) and livestock sales in the pastoral and agro-pastoral zones (roughly corresponding to Somali and Afar). Migrant labour is common in parts of Amhara and Tigray that were the epicentre of famines in the 1970s and 1980s. In these areas, income from migrant labour ranges between 31% and 54% of total household income respectively. Income from non-farm and off-farm activities such as petty trading and self-employment constitutes up to 60% of households' income in some parts of the country. For instance, petty trading is significant in densely populated areas of the SNNPR. The collection of

firewood and fodder sales (defined as self-employment by LIU, 2011) is common in the lowlands and pastoral areas. Income from firewood and charcoal sales contributes more than 9% of total cash income in Western Tigray, Southern Amhara, Southern Afar and the southern foothills of Hararge (LIU, 2011).

Recent studies show that even though the PSNP has been effective in protecting people from hunger, it has not brought any lasting impact on promoting livelihoods (Devereux et.al., 2008; Devereux and Guenther, 2009; Gilligan et. al., 2009; Andersson et. al., 2011; for instance, Andersson et. al. (2011) found that participation in the PSNP does not appear to help households when they are faced with major climatic shocks, since households tend to sell livestock because of a lack of alternative income sources. Similarly, Devereux and Guenther indicate that during critical shocks, or during the hungry season, the PSNP does not seem to keep many households from selling productive assets (as the small transfers and late deliveries do not meet households' needs).

Our results concur with the argument that the PSNP may protect households in the short term but is not building resilience to risks in the longer term. Our results suggest that the PSNP is not promoting investments in agriculture. These results are broadly consistent with previous studies. For instance, Devereux et. al. (2006), using a 2006 PSNP dataset that generated information from the same households, indicate that cash transfers had limited impacts on on-farm investment in terms of the purchase of inputs. For instance, they state that out of 768 participants surveyed in 2006, 11.5% used cash transfers to purchase seeds while only 3.4% purchased fertilizers.

The timing of public works reduces the supply of labour for other activities this might make households more dependent on PSNP (decreasing streams of income from wider activities). In particular, since farm income is often a crucial determinant of investment in non-farm activities (as it often provides start-up capital, see Woldehanna, 2002), a reduction in farm income could influence the ability to diversify.

Similar findings have also been reported in Devereux et. al.'s (2008) study where only 2% of PSNP beneficiaries invested in business activities, compared with 16% who used the cash transfer to pay off debts. Possible factors for the lack of investment in nonfarm activities include the existence of entry barriers through a lack of skills, the small amount of cash transfers, as well

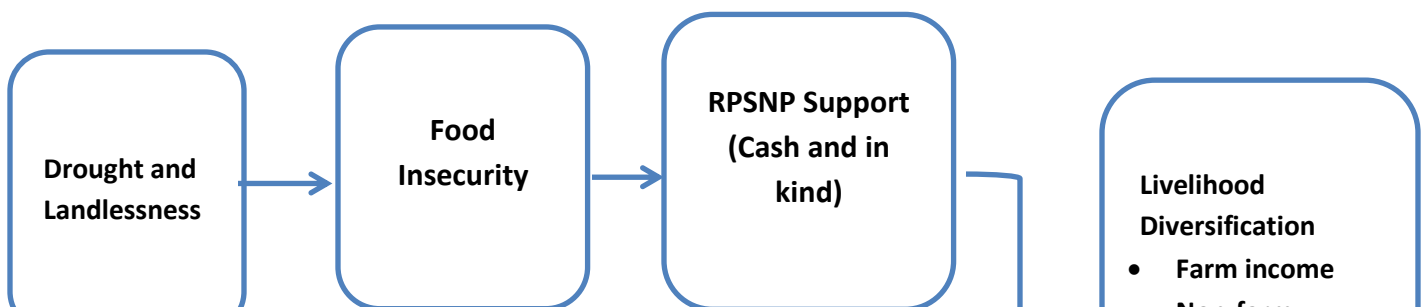
as high food prices and inflation in the Ethiopian economy at the time of the survey (Kebede, 2006; Devereux et. al., 2008; Sabates-Wheeler and Devereux, 2010). There is also the clear possibility that if the PSNP is not stimulating greater levels of farm income, there is neither the start-up capital nor the requisite level of demand to support non-farm rural enterprises.

According to Tigabu D. G, et. al., 2020, the 2015/2016 National Socioeconomic Survey showed that around 98% of the rural households depended on agriculture (CSA, 2017). Non-farm activities are limited in rural areas, primarily because of lack of financial services (35%), poor access to markets (30%) and poor transportation (14%). Tracking 580 rural youth and households from 2007 to 2013 in Southern Ethiopia, Bezu and Holden (2014) found that youth in rural areas have limited access to agricultural land because of land scarcity and land market restrictions. They also found that only 9% of the rural youth planned to pursue agriculture as their livelihood. Using data from the Ethiopia Socioeconomic Survey (ESS) and the National Labor Force Survey (NLFS), Schmidt and Bekele (2016) found that youth (aged 25 to 34 years) have a greater probability of working in nonfarm enterprises (mostly small-scale trade activities) compared to mature individuals (aged 35-64). These is because of factors such as less favorable agricultural potential areas with fewer assets and less access to agricultural credit and since wage labor opportunities are scanty and temporary in rural Ethiopia. Results from the Ethiopian rural household surveys over the period 1994–2009 showed that relatively profitable non-farm income diversification in rural Ethiopia was a strategy by wealthier households to accumulate capital (Weldegebriel et. al., 2015).

2.5. Synthesis of the research conceptual Map

The research visualized the conceptual map and interlinkage of concepts based on the empirical and theoretical review in this section. The concepts encompass the drivers of food insecurity, through mitigation measures that help address the causes, RPSNP support in kind and cash for households participating in public works program. The research discussed both with public work participants and graduates on the contribution of RPSNP on diversification of livelihoods to farm, off-farm, non-farm income.

Picture 1: Conceptual Map for the Contribution of RPSNP for livelihood Diversification



Chapter Three

3. Research Method

This part explains the method used to conduct the research. It provides the research design and the way sample size is determined, sampling procedures and gives readers visual on how the needed information was gathered, processed, and analyzed.

3.1. The Research Design

This research primarily used exploratory qualitative research. However, as no one method alone can lead to produce all the data and help to have a validated research finding, it was necessary to triangulate different data collection tools whereby the strengths of one augmenting the weaknesses of the other and consequently enabling the research to be of good quality. Hence the research adopted a mixed methods design. The research relied on key informant interview and focus group discussions for collecting qualitative data supplemented by a household survey for substantiating the findings from the qualitative tools.

3.2. Sampling Procedure and Sample Site

Wadla woreda was purposively selected because this woreda is frequently hit by drought and is one of the 48 woredas identified as the most drought prone and food insecure in the Amhara national regional state. Secondly, even though many studies were undertaken in north eastern part of the country especially on food security, rural livelihoods, and social protection, Wadla woreda is not included to the knowledge of this researcher.

With the help of development agents and woreda food security coordination team households were first categorized in to two groups; one with public work component participants and the other those graduated from the program. The sample respondents were selected from public work participants and graduates of the program between 2005 -2012 E.C. Therefore, the length of time of their participation ranged above 7 years, a time span that could be sufficient to provide information on the contribution of PSNP on livelihood options and increasing livelihood assets.

For the study, three of the 27 kebeles implementing PSNP were randomly selected. The selected kebeles include, 03 (Bethore), 05 (Belenga kola) and 012 (Bête Yohannes) with a total of 699

households currently participating in public work component and 442 graduates of the program. In choosing the study participants the inclusion criteria were being graduates and public work participants from both sexes were selected to enable the researcher to measure the programs role in diversifying the livelihood options as well as increasing livelihood assets.

Table 1: Sample kebeles and households

Name of kebeles	Total population (Male+Female)	Number of HH	Current PSNP beneficiary (Male + Female) A	PSNP Graduated HHS (Male + Female) B	Total (A+B) = C	Sample HH (D)
Bethore (03)	4,171	916	187+78= 265	131 (M+F)	396	120
Belenga kola (05)	5,360	1,178	125+ 60 =185	116 (M+F)	301	90
BeteYohannes (012)	6,518	1,387	106+143=245	195 (M+F)	440	120
Total	15,995	3,332	695	442 (M+F)	1,141	330

Source: Woreda agriculture office (2013).

This research sampled 30% of the total households from each kebele administration. Once the total sample size is fixed, male and female headed households were drawn based on principles of proportionality to sample size, to maintain the gender balance. Households covered by this study were finally selected using systematic random sampling. In this process, master lists of graduated and current participants of public work was obtained from the Kebele register and used to select sample households.

3.3. Data Types and Data collection Methods

a) Data Types and Data Sources

In order to meet the objective of this study information will be collected regarding contributions of PSNP to livelihood assets and for increasing the livelihood options, challenges facing in diversifying the livelihood option. In addition, the required information about demographic characteristics, asset ownership (human, financial, natural, physical assets) and PSNP related

issues will be gathered. The study also employs secondary data obtained from woreda, the CSA and relevant documentary.

b) Primary Data

To attain stated objectives, mainly primary data is used. Primary data was collected through household survey using open ended and close ended questionnaires, key informant interview, direct observation, and focus group discussion.

c) Household survey

The household survey captured information on social, demographic and economic characteristics of sample households, asset holding, access to livelihood assets, access to irrigation and access to credit, loan repayment, access to market, in cash and in kind benefit from the program. Data at household level was collected by visiting each one of the sample households.

For the data collection three enumerators were recruited and training was given on the practical issues of data collection. The three data collectors were accompanied by the researcher to follow up and monitor the quality of the household survey. Prior to main data collection pretest were conducted to assess the comprehensiveness of the questionnaire and evaluate any technical problems that may affect the data collection process. Based on outcomes of the pretest the necessary corrections have been made to the questionnaire.

d) Secondary Data

Secondary data was used to supplement primary data collected from various sources which include, published and unpublished documents to get background information about PSNP and target woreda and kebeles. The woreda office of agriculture extension work stream and food security work stream, woreda office of finance and economic development, kebele agriculture and development office have been the main source of secondary data.

3.4. Data Collection Methods

a) Focus Group Discussion (FGD)

Focus group discussions were held with beneficiaries of the program to collect qualitative information regarding the role of RPSNP on livelihood diversification, challenges of the program and the credit facilities provided to graduates. The focus of these discussions was to obtain information on the community itself and to gather data on various topics (for example the packages provided for PSNP graduates, contribution of PSNP in livelihood diversification, challenges in livelihood diversification). The focus group discussions were conducted.

The focus group discussions was facilitated by the researcher using focus group discussion guide and the researchers' role was be purely facilitating and guiding the participants through the interview guide, maintaining sufficient level of flexibility for grasping valuable information that will be raised during the discussion.

Scheduled focus group discussion was held with graduates as well as beneficiary households. In each sample kebeles two focus group discussion sessions were held having a member of 8-10 participants consisting for women and men groups held separately in the respective kebele. The total number of six FGD participants is 54 of which 24 are women. This was done for the purpose of creating conducive environment for active and inclusive participation of group members engaged in the program and be able to share their perspectives. Furthermore, the focus group discussions aimed to identify the problem related to productive safety net program in the study area and challenges encountered by beneficiaries.



Picture 2: Men and women FGD discussions

b) Key Informant Interview

Collecting information from different stakeholders will help to increase the quality and reliability of the data. To gain firsthand impression of the RPSNP's contribution on livelihood diversification, woreda administration, woreda rural development and agriculture office head, woreda food security asset building officer, Woreda food security main work stream coordinator, off farm income generating officer, Amhara Credit and Saving Institution (ACSI), Organization for Rehabilitation and Development of Amhara (ORDA) and experts on the programs coalition with NGO's and OFSP, Development gents (DAS) and community food security task force, have been interviewed to triangulate the information gathered using interview guide developed beforehand. The total number of KIIs conducted is 11, of which three are women.



Picture 3: Key Informant Interview

c) Direct Observation

The researcher employed field observation to get an in-depth information on the overall role of PSNP. This is mainly undertaken on productive assets such as land, household goods, livelihood activities, other plant assets and livestock, different activities undertaken under the support of the program, such as soil and water conservation structures and plantation, basic social services, housing. The daily and weekly market of the locality mainly goods and services and market are also included in the observation.

d) Analysis

After transcribing the interview and FGD notes, issues were thematically organized and analyzed according to the research objective and questions. The survey information was analysed to complement the issues identified in the thematic analysis. As the data collected include both qualitative and quantitative, the data was analyzed using both qualitative and quantitative data analysis methods.

The quantitative data was entered into the program which is called Statistical Program for Social Sciences (SPSS) and analyzed using descriptive statistics like mean, percentage, tabulation and frequency distribution. In order to address the research question, the qualitative data will be categorized, organized, and arranged into themes to complement qualitative data through narration, description of people and documentation, pictures, words and images which reveals the reality.

Chapter Four

4. Results and Discussions

4.1. Socio-Economic Characteristics of Respondents

In this chapter, the researcher examined current beneficiaries of PSNP, those graduated from the program and the programs role in increasing their livelihood options and livelihood changes through diversification. It also tried to understand the effect of the program on livelihood assets and demographic characteristics of the household understudy. This chapter is organized in two parts,

4.2. Bio Physical Information

a) Geographical Location

Walda Woreda is in Amhara National regional State of North Wollo administration zone at about 665, 239 and 132 kilo meter from Addis Ababa, Bahir Dar and zonal capital Woldia respectively. The capital of the woreda is Kon. The Woreda is bordered on the south east by Delanta, on the south west by Dawent and north by Meket, and on the North East by Gubalafto. The Woreda has a total of 29 kebeles. Wadla is situated between Latitude 11°49'59.99 N, Longitude 38°49' 59.99 E. The latitude of the woreda ranges from 700 to 3200 meters above sea level. It lies in the watershed of the Beshilo; rivers include the Zhita.

b) Agro Ecology of the Study Area

The agro ecology of the woreda grouped into four Agro Ecologies: constituting, 7.7%, 53%, 34.6%, 3.8% were in high land (Werch), Dega (Mid land), WeynaDega and Kola (low land) respectively. There are also two rainy seasons: March to May/ April and July-September/October. Moreover, the yearly annual temperature of the area is 4.8o^c, 21.40o^c the lowest and the highest respectively. The yearly annual rain fall ranges between 800 - 1200 millimeter.

c) Demographics

The study focused on rural inhabitants with emphasis on those involved (benefited) from public work component of PSNP and graduated. The total population of Wadla Woreda is estimated at

128,170 (64, 574 and 63,596 are males and females) where 96.65% resides in rural and 3.35 % and urban areas. Moreover, religiously 97% were Christians and 3% Muslims. With an area of 855.29 square km, Wadla has a population density of 149.86 per square km which is greater than the zone average of 123.25 persons per square km. A total of 28,414 households were counted in this Woreda, resulting in an average of 4.51 persons total household, and 2,748 housing units (CSA, 2007).

d) Economic Activities and Livelihoods

The major occupation of the people in Wadla is rain fed agriculture and mixed farming. According to Woreda office of agriculture, the main crops cultivated in the Woreda include barley, wheat, bean, and lentil. Furthermore, according to office of agriculture extension work stream 2012 counting, the Livestock population of the Woreda was cattle, 71,057, sheep, 175,604 goat, 24,863, donkey, 8 411, horse, 12,408, mule, 2,372, poultry, 128,356, modern beehive, 4569, traditional beehive, 3557, transitional beehive, 172.

Since feed is short supply, livestock owners often have to hand feed their animals with crop residues and feeders bought in the market. Income from off farm activities is the second most important source of livelihood in the Woreda. Petty trading plays an important role in generating off farm income. There are weekly markets where a range of industrial and agricultural products were traded. In addition, pottery, weaving, tannery and black smith generate income to some households in the Woreda.

There are two agricultural production seasons: *Meher* (long rain season) and *Belg* (short rainy season). The Meher season rain starts in June and extends up to mid-September while the Belg rain season begins in March and ends in May. In the Woreda 13 kebeles were growing crops in Meher season. On the other hand, 8 kebles are fully growing crops in Belg season. On the other hand, the other 8 kebles are semi Belg, Meher season contributes the highest share to the annual crop production and is the most important cropping season in the livelihood of the people. Moreover, yearly crop production of the Woreda was 776,256 quintals in 1999, 415,721 quintal in 2000, 429,579 quintal in 2001, 440,386 quintal in 2002, 406,859 quintal and 504,594 in 2004.

e) Administrative Structure of wadla woreda

Wadla woreda consists of 2 urban and 27 rural kebeles. Three of the sample kebeles, namely, Bethore, Belenga kola and Bete yohannes are located at 10, 20 and 15km from the capital of the woreda kon respectively.

Sample kebeles

a) Betehore kebele (03 Kebele)

Betehor is in the North of Kone and Delanta, South Dawint, West Kone and Gorora and east by Yewekt. It is 10 km far away from wereda capital Kon. The kebele has total population of 4,171 out of these 2,117 were male and 2,054 were females. It has a total of 916 households and 903 housing units (CSA, 2007).

In line with PSNP beneficiaries, 187 male headed and 78 female headed household were included as public work participants with total number of beneficiaries male 433 and 469 female participants. Moreover, 82 male headed and 155 female headed household were also currently engaged as direct support beneficiaries with 170 total number of families out of this 55 were male and the other 115 were females.

b) Belenga Kola Kebele (05 kebele)

Belegna is located North by Bety in the South, Yewekt and Dawit in the West, Betehore in the west by Chana and Semerena. It is 20 km far from Kone, the Woreda town. It has a total population of 5,360 which comprises 2,666 male and 2,694 female and total of 1,178 households and 1,142 housing units (CSA, 2007).

According to wereda office of agriculture and food security work stream, this kebele has 125 male headed and 60 female headed households are engaged in PSNP as public work beneficiaries. Beside this, 56 male headed and 59 female headed household as direct support beneficiaries of 516 male and 610 female beneficiaries benefited from program.

c) Beteyohannes Kebele (012 Kebele)

It is located North Meket, south by kone and Denlata east kurkur shoal and cholla, west Gashena. It is 15 km away from the wereda capital kone. This kebele has a total population of 6,518 which

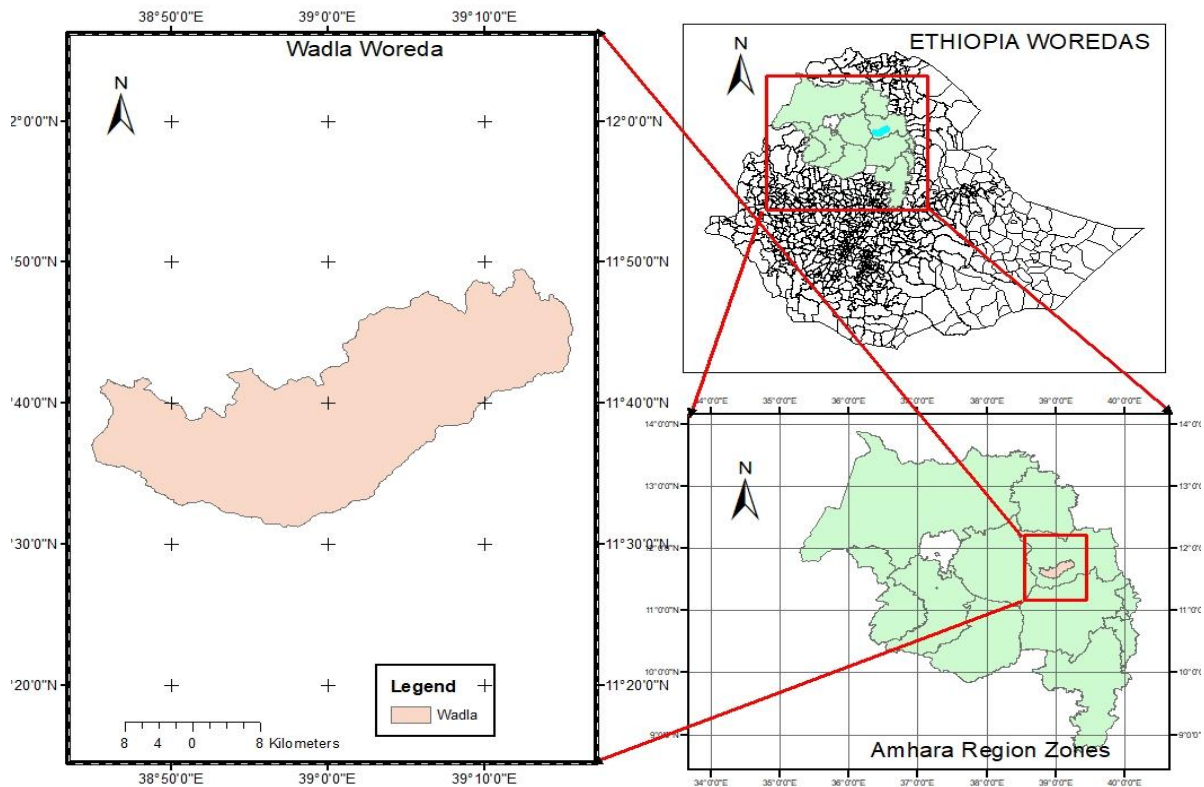
includes 3,387 and 3131 male and females respectively. Moreover, it has 1,338 households and 1,319 housing units (CSA, 2007).

According to wereda office of agriculture and food security work stream, this kebele has 106 male headed and 143 female headed households comprising a total family of 449 male and 490 females engaged in PSNP as public work beneficiaries. Beside this, 56 male headed and 59 female headed household as direct support beneficiaries of 516 male and 610 female beneficiaries benefited from program.

d) Soil and Rain fall

The major type of soil in the study area is red soil that shares 60%. The remaining soil types include black soil 25% and gray soil 15%. The annual average rain fall ranges between 800-1200 ml. The annual temperature of the woreda ranges between 4.8°C to 21.4°C.

Picture 4: Wadla Woreda, Amhara National Regional State Map



Source: GIS Meta Data from CSA and MoF updated, October 2020

e) Demographic Characteristics of the Sampled Household

f) Age of Respondent

In line with the age of the respondents 13.6% fall under young age. Adult population ranging from 18-60 years consists of 95.45% of the population. Whereas, old age population ranging from 61-75 consisting only 4.55 % of the total respondent. As far as the respondents were from the public work component of program, there were no less than 18 years old household head.

Table 2: Age of Respondent

No	Age	Kebeles						Total	
		Bete hore		Belenga kolla		Bete Yohannes		N	%
		N	%	N	%	N	%		
1	18-29	18	15	6	6.7	21	17.5	45	13.6
2	30-45	90	75	24	26.7	72	60	186	56.4
3	46-60	9	7.5	54	60	21	17.5	84	25.45
4	61-75	3	2.5	6	6.6	6	5	15	4.55
5	Total	120	100	90	100	120	100	330	100

Source: own survey (2013 E.C).

f) Sex of Respondents

As indicated from table 3 below, the percentage of male headed households were 70%, whereas female headed households consist of only 30% of the sampled household. From the sampled three kebeles, Bete Yohannes has the highest percentage of female headed households which accounts for about 40%.

Table 3: Sex of Respondent

Sex	Kebeles						Total	
	Bete hore		Belenga kolla		Bete Yohannes		N	%
	N	%	N	%	N	%		
Male	90	75	66	73	72	60	228	70
Female	30	25	24	27	48	40	102	30
Total	120	100	90	100	120	100	330	100

Source: own survey (2013 E.C).

g) Marital Status of Respondents

Table 4 shows the marital status of the heads of the sample household heads. As computed from survey result 92.7% of the heads of the households were married. The remaining sample household heads under the category of divorced and single were (3.65%), (3.65%) respectively. In line with the share of the kebeles, Belenga Kolla takes (93.4%) followed by Betehore and Bete Yohannes.

Table 4: Marital Status Respondent

No	Marital Status of Head of Household	Betehore		Belenga kola		Bete yohannes		Total	
		N	%	N	%	N	%	N	%
1	Married	111	92.5	84	93.4	111	92.5	306	92.7
2	Divorced	6	5	3	3.3	3	2.5	12	3.65
3	Single	3	2.5	3	3.3	6	5	12	3.65
4	Total	120	100	90	100	120	100	330	100

Source: own survey (2013 E.C).

h) Educational Level

Table 5 shows that about 34.5 % heads of household were illiterate (cannot read and write). It also showed the higher the education level the lower the number of household heads. 43.6 % of the household heads can read and write. Furthermore, only 21.8 % household heads attended formal education between 1-10 grades. This showed that the educational level of household heads in the sample kebeles is low.

Table 5: Educational status of Respondent

No	Educational Status	Betehore		Belenga kolla		Bete yohannes		Total	
		N	%	N	%	N	%	N	%
1	Illiterate	20	50	7	23.4	11	27.5	38	34.5
2	Read and write	15	37.5	12	40	21	52.5	48	43.6
3	Primary education	5	12.5	10	33.3	5	12.5	20	18.2
4	Secondary education	-	-	1	3.3	3	7.5	4	3.6
6	Total	40	100	30	100	40	100	110	100

Source: own survey (2013 E.C).

4.2.1. Data Analysis and Findings: PSNP and Diversification

For measuring the role of PSNP on household livelihood diversification, I utilized three main indicators of livelihood diversification on data collected from livelihood activities that correspond with the definitions of diversification.

1. **Farm income:** Income derived from crop production, irrigation agriculture and rearing and selling of animals. This includes income earned from commercial woodlots and beekeeping and poultry.
2. **Off-farm income:** income from temporary wages or exchange of labour on another farmer's land, and from the sale of natural products, food processing and drinking (local drinks), trading, crafting and weaving, environmental extraction, ploughing, weeding and harvesting, share cropping, wage exchange of labour, oil, grain (cash transfer) as off-farm income.
3. **Non-farm income:** This includes income earned from salaried employment, remittances and migration.

4.2.2. PSNP and Farm Income

On the basis of measuring increasing farm income as a result of PSNP, the following data is generated and summarized using the data obtained from household survey, key informant interview, and focus group discussion. As observed from table 6 below, PSNP contributed 37.2%, 13.8%, 38.6%, 10.4% increase on farm income of PSNP beneficiaries, such as, agricultural production, irrigation agriculture, rearing of animals and bee keeping respectively.

Table 6: Main Farm Activities and Percentage share of PSNP contribution

No	Types of Activities	Percentage
1	Agricultural production (Meher)	37.2
2	Irrigation agriculture	13.8
3	Rearing and selling of animals	38.6
4	Bee keeping and poultry	10.4

Source: own survey (2013 E.C).

As it can be seen in the table 7 below, 64.1% of sample households were male headed households while the remaining were female headed households. The result of farm income

increases due to PSNP among all households is 69% which belong to male headed households while the remaining 31% were female headed. On the other hand, among all that show no livelihood changes (farm income did not increase because of PSNP participation) 70.6% were male headed while the remaining 29.4% were female headed households. Thus, percentage for female households reveal high tendency for livelihood diversification (29.4%) than livelihood not diversified (i.e. 31%). This was further corroborated from the interviews, where Woreda asset building experts and development agents confirmed the PSNP participation benefit investment on livelihoods diversification is higher among women headed households than men.

Regarding the marital status of the households, about 92.7% of sampled households were married while 3.65%, 3.65% were divorced and single respectively. Considering the educational status of sampled households 55% were literate while 45% were illiterate.

The data collected indicates that livelihood diversified households are (farm income increase because of PSNP) (80.8%) were more literate than livelihood undiversified households (35.3%). Thus, educated households are in a better position to get information, services, knowhow to use modern agricultural technologies, perform farm activities based on cropping calendars and manage resources properly with the help of PSNP. These factors boost production and improve availability and accessibility of enough food.

Table 7: Status of Livelihood and Farm Income

		Status of Livelihood due to PSNP					
		Farm Income Increase		Farm Income did not Increase		Total	
		N	%	N	%	N	%
1	Sex of Household						
1.1	Male	87	69	144	70.6	77	64.1
1.2	Female	39	31	60	29.4	33	35.9
2	Marital Status of HHs						
2.1	Married	111	88	195	95.6	102	92.7
2.2	Divorced	9	5.8	3	1.5	4	3.65
2.3	Single	6	3.8	6	2.9	4	3.65
3	Educational Level						
3.1	Illiterate	60	47.6	54	26.4	54	34.6
3.2	Read and write	30	23.8	114	55.9	22	43.6
3.3	Primary education (1-8)	30	23.8	30	14.7	40	18.2
3.4	Secondary education (9-10)	6	4.76	6	3	4	3.6
4	Educational Status						

4.1	Illiterate	60	47.6	54	26.5	38	34.5
4.2	Literate	66	52.4	150	73.5	72	55.5

Source: Own Survey Data (2013 E.C).

As it can be shown in table 8 below, the mean family size of the sample households were 5.6 persons which is above national average family size of 4.9 persons per household (CSA, 2007). The mean household size of household with diversified livelihood and undiversified options as a result of PSNP was 5.2 and 6 persons respectively.

An increase in farm income of the households increases the likelihood of adapting to climate change using soil conservation, irrigation and livestock. Among KIIs and FGD participants, it is believed that compared to other livelihood strategies livestock, irrigation and soil conservation requires more financial resources than the others.

If farmers have more income, they can afford to procure livestock, develop irrigation and conserve soil using available technologies. This result is reflected on the actual behavior of the households; that is, when their income increases, and when they tend to shift to activities which require more capital. This, therefore, supports the argument that subsistence farmers are more likely to vary planting dates and diversify crops as their adaptation options.

The household survey suggests that on average, the PSNP is likely to increase farm income of 38% of sample households. According to KIIs conducted, most of the participants complained the overlap of PSNP soil and water conservation works and household agricultural activities, which has affected the potential increase of farm income beyond what is reported.

Table 8: Average HH and HH head, Farm Income

	Status of Livelihood		
	Diversified	Undiversified	Total
Average Household Size			
Mean	5.2	6	5.6
Age of Household Head			
Mean	42.5	44.5	43.5

Source: Own survey Data (2013E.C).

4.2.2.1. Farm size and Farm Income

Owing to rugged terrain of the area, land is a very critical resource to household livelihoods. Farmland use right possession means a lot to rural livelihood in the area. The survey result showed that the mean land holding of total households as livelihood diversified and not diversified. Thus, the mean land holding of livelihood diversified and livelihood not diversified households because of PSNP was 0.75 and 1.2 hectare 0.85 and 1.2 hectare of land cultivated by livelihood not diversified and livelihood diversified households respectively. This indicated that households with larger cultivable land had more diversified livelihood.

Excerpts from key informant interview

W/ro Aregash Belete is 39 years old, married, landless and former productive safety net program beneficiary. She lives with her husband Zewudu Ewunete at Betehore kebele in the Wadla woreda. She had no notion of changing her way of life prior to joining PSNP. She ploughs lands on a contractual basis (share cropping or cash lease) since she had no land to plough. Her farming was on a contractual basis and did not utilize improved technologies like fertilizer and seed varieties. The lack of financial resources, fear of access to credit from financial institutions and lack of extension support made her life miserable. Thereby, she could not be able to support her family's food for the whole year as her produce is only three quintals per year. Thus, she has family food supply gap. After 5 years of public work participation she graduated two years before this interview and narrated the benefit of RPSNP as follows.

“Fortunately, PSNP project came to Wadla Woreda in 2005/6 by considering the village economic level as an entry point for all project activities. After awareness creation about the project and how and in what areas to work, I along with my husband became voluntarily a member in the program public work component in 2006 and graduated from the program before 2 years ago. With the hope of that livelihood improvement, the project supported by offering various capacity building training and financial credit access. By being a customer of Amhara Credit and Saving Institution, the largest financial institution in the area, I and My husband saved ETB 30 up to 20 on a fortnightly basis respectively from the monthly payment of PSNP. I saved ETB 2,000.00 and my husband ETB 700.00.

After saving at ACSI, I took a loan three times and engaged on-farm poultry and off-farm

activities (coffee transaction). I took 1st cycle loan ETB 1,000.00, 2nd cycle loan ETB 1,200.00 and 3rd cycle loan ETB 2,000.00. Totally, I took ETB 4,200.00 and engaged in small income-generating activities. From small income-generating activities like coffee trading and poultry, I obtained ETB 2,123 net profit. After I earned a pity profit, I also became committed to taking loans from MFIs to engage in animal fattening. The project assists me to engage in animal fattening since it is feasible and profitable with quick return. Participating in animal fattening made me profitable. The byproduct of local beverages like “Areke” and “Tela” are easily available cheap animal feed. In addition to a concentrated feed from the area kept us free from any cost due to soil and water conservation work undertaken in it.

I took a first cycle loan in August 2017 ETB 12,000.00 from ACSI and fattened six cycles and earned a net profit of ETB 33,533.00. Then, I focused to fatten sheep for holidays like Easter, Christmas, epiphany, and other common local holidays. Before joining the Project, I had only one cow which indicates I had been living in chronic food insecurity. Surprisingly, after I joined the project, I created assets like two donkeys which is estimated to be sold ETB 4,000.00, fattening one ox by purchasing 10,000.00 expected to be sold ETB 37,000.00, sheep rearing (six sheep), and now I started ploughing lands by using improved technologies like fertilizers through recommendation by agricultural extension workers, using improved seed varieties. I paid back the loan I took from ACSI on August 21, 2020 including interest rate ETB 13,825.00. In the end, both myself and my husband Zewdu Yewunete expressed our polite gratitude for the benefits that came from the PSNP.”

4.2.3. PSNP and Non-Farm Income

The write up on non-farm income, was anchored on households who consider PSNPs contribution to Non-farm income to at least one of the following light activities. Owned no agricultural service, processed and sold any agricultural by products, owned a trading business, offered any service or sold anything on the street or in a market, owned a professional office or offered a professional business, or owned any other no agricultural business. During the survey period, close to 38% of the households answered yes to taking part in at least one of the above non-farm activities because of the PSNP contribution.

The data obtained from household survey confirmed on the contribution of PSNP in increasing non-farm income and diversifying the livelihood options of PSNP beneficiaries. The table 9 summarized these findings.

Table 9: The Main Non-Farm Activities and Percentage share of PSNP contribution

No	Types of Activities	Percentage
1	Remittance	32.3
2	Rental income	3.2
3	Seasonal migration (Metema and Raya)	64.5
	Total	100

Source: own survey (2011E.C.)

Table 10 shows that majority of sample households (70%) were male headed households while the remaining (30%) of the respondents were female headed households. The result of livelihood status among all households 79% belong to male headed households while the remaining 11% were female headed. On the other hand, among all that shows livelihood change 70.6% were male headed while the remaining 29.4% were female headed households. Thus, percentage figures for female households reveal larger tendency for livelihood diversification (29.4%) than livelihood diversified (i.e. 25%).

Regarding the marital status of the households about 92.7% of sampled households were married while 7.3% were single. Considering the educational status of sampled households 65.4% were literate while 34.6% were illiterate.

The survey result indicates that livelihood diversified households were (30.2%) less literate than livelihood undiversified households (35.3%). Thus, educated households were not in a better position to get information, services, knowhow to use modern agricultural technologies, perform farm activities based on cropping calendars and manage resources properly. These factors boost production and improve availability and accessibility of enough food.

Factors that determine the public work component beneficiaries from diversifying their non-farm income in the study area includes capital, skill barriers, the amount of transfer and high food price.

Table 10: Status of Livelihood and Non- Farm Income

		Status of Livelihood					
		Non -farm Income Increase as a result of PSNP		Non-farm Income not Increase as a result of PSNP		Total	
		N	%	N	%	N	%
1	Sex of Household						
1.1	Male	102	79	126	62.7	228	70
1.2	Female	27	11	69	34.3	96	30
2	Marital Status of Households						
2.1	Married	123	95.4	183	91	306	92.7
2.2	Divorced	3	2.3	9	4.5	12	3.65
2.3	Single	3	2.3	9	4.5	12	3.65
3	Educational Level						
3.1	Illiterate	90	69.8	24	12	114	34.6
3.2	Read and write	21	16.3	123	61.2	144	43.6
3.3	Primary education (1-8)	15	11.6	45	22.4	60	18.2
3.4	Secondary education (9-10)	3	2.3	9	4.4	12	3.6
3.5	Educational status						
3.6	Illiterate	90	69.8	24	14	114	35.7
3.7	Literate	39	30.2	147	86	186	63.3

Source: Own Survey Data (2013E.C).

As can be seen in table 11, the mean family size of the sample households were 5.3 persons which is above national average family size of 4.9 persons per household (CSA, 2007). The mean household size of household with diversified livelihood options and undiversified options because of PSNP was 5.2 and 5.4 persons respectively.

Table 11: HH size and HH head and Non-farm Income

	Status of Livelihood		
	Diversified	Undiversified	Total
Average Household Size			
Mean	5.2	5.4	5.3
Age of Household Head			
Mean	40	43	41.5

Source: Own Survey Data (2013 E.C).

4.2.3.1. Farm size and Non-Farm Income

As discussed in focus group discussions, the size of farm land owned per household has been shrinking due to the ever increasing human population and the sever problem of land degradation in the farm land which has transformed most of the farm land unfit for cultivation. As described in table, the ever-increasing population pressure could also be seen from the mean average household size of households, which is above the national average. The rugged nature of the Wadla Woreda topography and land tenure system practiced in the locality has set cap on the expansion capacity of the farmland.

The survey indicated that, 38% of the respondents replied PSNP contributed to increase their non-farm income. In addition, 65% of households have no land. This indicates that most participants benefited because their family size is larger, they have land shortage and lack of access to modern agricultural inputs.

During focused group discussion and household survey the key factors that prevented beneficiary households in participating in non-farm income generating activities include, inadequate farmland and severity of land degradation, which is aligns with the 65% households who fail to increase income as they have no land.

4.2.4. PSNP and Off-Farm Income

The off –farm activities that were practiced in the sample kebeles can be categorized into wage employment and self-employment. Three types of wage employment can be distinguished, namely, paid development work, manual non-farm work, and skilled (non- manual), non-farm work. Paid development work consists of jobs in community micro dam construction,

community soil and water conservation activities undertaken under PSNP. Manual non-farm work is an activity in which farm households work for private and public construction companies in and around urban areas.

Skilled (non-manual) non-farm work involves masonry, carpentry, cementing and related activities in public and private construction sites. Off farm self-employment comprises mainly petty trade, transporting goods using pack animals, stone mining, pottery, and handicraft, selling of wood and charcoal, drink making and selling of fruits. Despite diversity of non-farm activities, most people engage in trading (18.2%) and environmental extraction (18.4%) to generate needed income.

Table 12: Main off Farm Activities and Percentage share of PSNP contribution

No	Types of Activities	Percentage
1	Food processing and drinking (local drinks)	2
2	Trading	18.4
3	Crafting and weaving	2.2
4	Environmental extraction	18.4
5	Ploughing, weeding, and harvesting	11
6	Share cropping	34
7	Wage exchange of labour	5.5
8	Oil, grain (cash transfer)	8.8
	Total	100

Source: own survey (2013E.C.)

It can be seen from table 13, 69% of sample households were male headed households while the rest were female headed households. The result of increase in off farm income among all households 77.5% belong to male headed households while the remaining 22.5% were female headed. On the other hand, among all that shows no livelihood changes (no increase in off farm income) 46.7% were male headed while the remaining 53.3% were female headed households. Thus, percentage figures for female households reveal larger tendency for off farm income does not increase due to PSNP (53.3%) than off farm income increase as a result of PSNP (i.e., 22.5%).

Regarding the marital status of the households about 92.7% of sampled households were married while 3.65%, 3.65% were unmarried and divorced respectively. Considering the educational status of sampled households 65.5% were literate while 34.5% were illiterate.

The survey result indicates that, households who diversified livelihood (55%) were literate than livelihood undiversified households (93.3%). Thus, educated households are in a better position to get information, services, knowhow to use modern agricultural technologies, perform farm activities based on cropping calendars and wisely manage resources. These factors boost production and improve availability and accessibility of enough food.

Table 13: Household Livelihood Status and Off -Farm Income

		Status of Livelihood					
		Off -Farm Income Increase because of PSNP		Off -Farm Income not Increase as a result of PSNP		Total	
		N	%	N	%	N	%
1	Sex of Household						
1.1	Male	186	77.5	42	46.7	228	69
1.2	Female	54	22.5	48	53.3	102	31
2	Marital Status of Households						
2.1	Married	222	92.5	84	93.3	306	92.7
2.2	Divorced	12	5	-	-	12	3.65
2.3	Single	6	2.5	6	6.7	12	3.65
3	Educational Level						
3.1	Illiterate	108	45	6	6.7	114	34.6
3.2	Read and write	111	46.25	33	36.7	144	43.6
3.3	Primary education	9	3.75	51	56.7	60	18.2
3.4	Secondary education	12	5	-	-	12	3.6
3.5	Educational status						
3.6	Illiterate	108	45	6	6.7	114	34.5
3.7	Literate	132	55	84	93.3	216	65.5

Source: Own Survey Data (2013E.C).

Off farm self-employment has the higher return among all activities carried out farm households (graduates and current public work components of PSNP). There was rationing in off-farm labour market in the sample area. When farmers are asked why they do not work more in off farm activities about 66% of them responded that they could obtain off farm employment in and

around their district. This shows that agriculture is unable to absorb the available labour and there is potentially rationing in the off farm labour market.

The result indicates that program participation increased income of beneficiaries through the sale of natural products such as, charcoal, fuel wood and forage has contributed to the overall increase off-farm income. On the other hand, over utilization of natural resources exploitation that can aggravate current problems such as land degradation and deforestation.

The study findings underscore that there can be entry barriers in the off farm labour market because of activity setup capital and equipment. This is mainly, if households face binding liquidity and credit constraints, poor households do not afford the investment required in the off farm labour market. Hence, if there are entry barriers in the off farm labour market, the capacity to diversify income sources into off-farm income activities are lower for poorer farm households. As a result, less wealthy farmers spend most of their time in low paying off farm activities for which the entry barrier is low and measures can be taken to strengthen the role of PSNP in livelihood diversification.

First, rural non-farm investment programs need to focus on non-farm activities in which the poor would participate more than the better-off/wealthy. Second, the underlying elements that hinder the participation of farm households in non-farm activities must be addressed and removed. Measures such as, the establishment of training centers to tackle skill barriers, the provision of credit for the poor together with business extension services, provision of information to increase public awareness reduces the transaction cost searching for non-farm jobs. Thirdly, improving infrastructure could help removing the constraint for prior investment on equipment.

These recommendations can fit quite well to PSNP which involved farmers in public work components which can help to increase farm income, off farm income and non-farm income activities in the woreda.

As it can be shown from table 14 the mean family size of the sample households were 6 persons which is above national average family size of 4.9 persons per household (CSA, 2007). The mean household size of household with diversified livelihood options and undiversified options as a result of PSNP was 6.8 and 5.2 persons respectively.

Table 14: HH size and HH head

	Status of Livelihood		
	Diversified	Un Diversified	Total
Average household size			
Mean	5.2	6.8	6
Age of household head			
Mean	42.5	44.5	43

Source: Own survey data (2011E.C).

Excerpt from key informant interview

W/ro Atalel Yetayew, aged 35, is a resident of Beteyohannes kebele of Wadla Woreda in North Wollo Zone of Amhara Region. She is married and has three children (two boys and a girl). Her first and second sons are grade 7 and 4 respectively. Their livelihood depended on agriculture. However, water shortage makes their lives tough. Alike other parts of Ethiopia, lack of access to clean water, shortage, and poor sanitation were troubles to residents of Beteyohannes and its surrounding. W/ro Atalel is among beneficiaries of the RPSNP to be mentioned forefront and stated the benefits as follows.

"I have been traveling for an hour and half to fetch water from spring and rivers. We used to drink unprotected water sources and share these rivers with animals and wild beasts. People, mainly children were exposed to water borne diseases. They didn't have sufficient water to wash clothes and practice hygiene. For this reason, my first son, Zegeye was frequently ill due to unsafe water during his early childhood. My son also wasted his school and study time because of traveling long distance to fetch water. Beyond drinking safe water, the program created us opportunity for economic progress. Previously, I make a local alcoholic drink "Arekie" and earns 100 Birr profit weekly and feed my cow its residue. For this purpose, I used 10 to 15 jerrycan water for daily consumption. Currently, my husband is fully responsible for 2 years in fetching water since I gave birth a little child for the third time (aged only 20 months). We villagers use donkeys to fetch and transport water, due to the distance between residence and the water point. Commonly, I was supplying 10 liters of milk daily. Can you imagine how much water I need in a day? I'm grateful to PSNP who make our life better. Both myself and the family are no more wasting our time for fetching and transporting water. I am also happy in getting sufficient water. There are no line up queues waiting for turns to get

water. We are very much thrilled with water schemes.”

4.2.5. PSNP and Livelihood Assets

According to DFID (1999), a key component of sustainable livelihood framework is the asset base on which livelihoods are built. This can be divided in to five types of capital: *natural, social, human, financial, and physical*. As discussed in chapter two, review of related literature, these assets have significant role in diversifying the livelihood options of PSNP beneficiaries.

4.3. Social Capital

All the households have access to formal credit sources, such as Amhara credit and saving institution (ACSI). In all the kebeles of Wadala Woreda there are development agents. There is significant difference with respect to distance of the residence to Woldia/zonal capita market main asphalt road/ Woldia - Woreta road. The reason is that when the households are far away from the main asphalt road and town the transaction cost of finding market information and wholesale is very high.

Social capital plays significant role in transaction. High social capital means less probability of participation in the brokerage institutions. Education level of the household have negative effect in the participation decision of the household on livelihood diversification. People with higher education level are good at communication, information search, negotiations and undertaking transactions which lead to direct contact traders to sell their products in Wadla Woreda

Labour holding, it is the number of adults in the household that can be used as labour holding for the agricultural system. In most of the sampled households, strong organized groups were either non-existent or weakly formed; networking among individuals was not based on shared interest. There were no clear guidelines and manuals to take experience sharing, peer learning. On other hand, the following benefits were generated during their participation after joining PSNP.

Social institutions, such as, Equb a well-known form of local cash saving institution that is based repayment capacity and mainly organized for a specific period (until all members get their respective lottery payments) and purpose. Some PSNP beneficiaries replied their participation in equb, soon after they start benefiting from PSNP public work and engagement in petty trade as a

result of PSNP. It is also fair to say that PSNP enhanced beneficiary household’s credit worthiness.

Beneficiary household heads also clearly explained the contribution of PSNP in creating favorable condition in keeping the integrity of household units as well as reducing the risk of diseases. Furthermore, the asset rank of PSNP beneficiaries has improved or changed, about 70% of household heads showed this result after their participation as PSNP public work beneficiary.

Access to credit from local lender such as ACSI is not an easy task: besides trustworthiness, there is high interest rate, short and firm repayment schedule, in this respect, PSNP positively contributed to development of a sense of self-reliance and independence.

3.4.2. Natural Capital

The natural resources can be regarded as foundational assets for their livelihood for PSNP beneficiaries. Without considering an appropriate resource management and conservation they are unlikely to realize their livelihood objectives.

Table 15: Soil and water conservation work by PSNP

No	Type of Activities	Measurement	Work done (in birr)
1	Soil Terracing	Hectare	18,926.20
2	Soil terracing maintenance	Hectare	29,555.25
3	Mountain Terracing	Hectare	4,829.60
5	Half-moon Terracing	No	1,875,000
6	Trench	No	505,899
7	Aybro Basin	No	936,114
8	Terracing	km	1022.58

Source: woreda Agriculture office (2011 E.C.)

Beneficiary households covered by PSNP in this woreda are categorized under poor resource endowment (i.e., they faced land scarcity and lack of productive inputs).

The focus group discussion participants clearly argued that PSNPs role, such as the restoration of their land from local arrangements such as “megazo” and “lease of land”. In the former, the borrower claims any produce on land including crop residues. The residues which used to be

utilized by others turned out to be a resource for poor to feed their animals that reduce the pressure on existing pasture.



Picture 5: PSNP's contribution for improving natural assets

PSNP also introduced forage development in drainages where water and soil conservation activities were undertaken by public work component of PSNP that highly motivated beneficiaries to undertake fattening of animals as an alternative income source and to feed their animals in dry agricultural season.

4.4. Human capital

Human capital development due to PSNP encompasses access to education and school enrollment. The health and wellbeing dimension of human capital due to access to and ability to pay for health services.

i. Human capital and PSNP

According to DFID (1999, 7) “human capital represents the skills, knowledge ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives”. In line with this, I analyzed the contribution of PSNP in increasing human capital.

ii. Improved access to Health Services and PSNP

As part of human capital, good health can play an overriding role to get improved in various available livelihood options to meet their livelihood objectives. During this study, above 90

household heads confirmed that they were able to access improved medical services and cover their medical expense because of the income generated from PSNP.

Table 16: Health posts constructed by PSNP

No	Name of Health post	Location constructed	No of Beneficiaries
1	Gashena Rural Health Post	013 kebele	2,670
2	Kone Rural Health Post	01 Rural kebele	5,375
3	Debko Health Post	010	7,717

Source: Wadla woreda agriculture office (2013).

The health posts were constructed on the basis of one health post to 5000 people. Totally the health posts serving 15,762 people which account 11.2 percent of Woreda health coverage.

iii. Number of children going to school and PSNP

It was also confirmed from key informant interview and focused group discussions that there was an increase in the number of children going to school in beneficiary families, in comparison to the situation prior to participation in PSNP. Fortunately, some PSNP beneficiary households reported that they have started enjoying the return of their educational investment through regular remittance and other forms of support from their children. The income from PSNP helped families consistently support their children school supplies, including psychological stability (children know that their families have regular income to provide the needed support for their successful completion of school). Table 17 demonstrates the gradual increase of student enrollment over four years in Wadla Woreda.

Table 17: Students enrollment in the school constructed by PSNP

No	Year	Male	Female	Total
1	2008	179	95	274
2	2009	261	173	434
3	2010	201	260	361
4	2011	198	175	373

Source: Wadla woreda education office (2011 E.C).

iv. Skill development and PSNP

A total of 100 households in three kebeles recognized the acquisition of new skills and improved skills and practices. As a result, from focus group discussions further confirmed that PSNP as an opportunity to test, explore and experience their potential to engaged in off farm income generating activities.

v. Labor Force Available at household level and PSNP

From most households, seasonal migration to Humera, Metema and Raya and/or casual work with their localities for minimal wage are the common relief strategies in times of shortage of resources. PSNP further created favorable condition to household heads to stay with their families for cheap labour.

4.5. Financial Capital

i. Income Improved

Under this category of asset PSNP contributed to beneficiaries of the program. As it is clearly known household income can be easily converted into other forms of assets to achieve the livelihood options of beneficiaries. Under financial assets PSNP have an important role on the lives of beneficiaries. Nearly all the households interviewed for this study were found engaged in farming as their main occupation. The key informant interview and FGD participants confirmed that, the injection of cash payment from PSNP as payment for the public works component boosts the financial capital of beneficiaries. It also provides the flexibility for the participating households to choose the livelihood activity they would like to invest their cash earning.

Livestock and land holding are the most obvious financial capital held by beneficiary household. In line with livestock assets, the households joining the program earlier were able to accumulate the higher than those who does not own livestock.



Picture 6: PSNP Beneficiary households collecting cash payment

Excerpts from Key Informant Interview

Eyayaw Adane, aged 45, lives in Belenga kola kebele of Wadla woreda in North Wollo zone of Amhara Region. He is married and has one child. He leads his livelihood in small scale agriculture. Likewise, his colleague farmers who live in Belenga kola kebele, Eyayaw inherited 0.25ha farmland from his family through transfer and tries to cultivate crops once a year to accommodate his family food needs. However, the crop earned from his agriculture was used for consumption only and it did not cover other social expenses. He stated the benefits he earned by engaging in PSNP as follows,

“I completed my high school education with the insufficient result to get job and then became jobless. On this occasion, when PSNP retarget beneficiaries five years ago, I had been recruited as beneficiary for the public work component of the program. First, the program gives training about soil, water conservation and preservation of the area from grazing as well as how to use the forage available with in it for fattening. Then joined cattle fattening and horticulture development and improved my livelihood. On my half-hectare farmland, I was producing wheat and legume once a year. This is not enough to feed my family. I bought one water pump generator and started irrigation work in the dry season winter, using my safety net in cash payment as collateral. Furthermore, I bought two quintals of garlic seed and two quintals of potato seed, and I sowed. Finally, I earned 15 quintals of garlic product and sold Birr 60,000. Currently, I

bought two oxen with a cost of Birr 32,000 thousand for fattening. Besides, deposited Birr 10,000 at ACSI and have planned to cultivate garlic for the next dry season.”

ii. Available Stock

The PSNP’s contribution in preventing further depletion of existing asset base is significant. Most of beneficiary households clearly confirmed that livestock as their potential form of reserve, it is likely to be allocated for emergency family matter. In this regard, beneficiaries clearly confirmed that the present livestock size may not have existed or maintained without PSNP.



Picture 7: Livestock market, where PSNP beneficiaries transact their livestock

iii. Income Inflow

One quarter of participants involved in petty trade are often landless female and male headed households in sub woreda centers are known to raise the required cash capital through regular income sources. As it is confirmed from focused group discussion, these households sell local drink. In most case, there was regular income flow from remittance as a result of PSNP resources on family members, often children in home and abroad.

4.6. Physical Asset

i. Household Level

A significant number of PSNP public work component beneficiaries stated the relative improvement of their production input, namely, plough animals, farm inputs, access to fertilizers and improved seeds. This suggests that PSNP has contributed to improve access to the most important elements of the physical endowment to the livelihood of beneficiary households. A total of 15 households from the total sampled households explained PSNP and its role in the creation of household assets mainly in the form of livestock and some others able to build relatively improved huts. Amongst them, about 40 households confirmed the creation of additional physical assets besides livestock as a result of PSNP. Its contribution is reflected through reclaim of previously rented land, small scale poultry, bee keeping and honey production and irrigation.

ii. Road

Since the inception of the program, it constructed 186.69 km road and restore 302.96 km road. Generally, it connected 26 rural peasant associations. Among sample kebeles more than 50% of household members travel less than 50 minutes to reach the woreda capita kone and the main road. Given the challenges of connectivity for market, these new road constructions and rehabilitations are vital in improving access to input and output market and mobility of people.

Table 18: Roads constructed by PSNP

No	Type of Activities	Year (1997-2010 E.C)
1	New Road	181.69 km
2	Maintaining Road	302.96 km

Source: woreda Agriculture office (2013 E.C.)

iii. Drinking water

In line with drinking water 30% of household replied the water institutions constructed by PSNP saved the time they spent to fetch water from 10 to 30 minutes. On the other hand, more than 85% of households used these water institutions as their main source of drinking water. The time spent for travelling and fetching water, including the physical hardship is improved, thanks to the investments made by PSNP resources. Communities can get clean water with sufficient amount.

Table 19: water institutions constructed by PSNP

No	Type of Activity	Year Constructed (1997-2010 E.C)
1	Spring Development	8
2	Family Hand dug well	26
3	Hand dug well	23

Source: woreda agriculture office (2013 E.C.)

4.7. Causes and Consequences of Livelihood Diversification

In order to identify the major causes of livelihood diversification at the household level, the sample PSNP beneficiary households were asked to respond by rating major causes and the level of contribution for livelihood diversification by ranking.

Table 20: Causes of Livelihood Diversification

No	Cause	Percentage
1	Shortage of farmland	24.5
2	Shortage of rain fall	24.2
3	Land degradation	20.6
4	Crop pest and animal diseases	13.4
5	Large family size	10.6
6	Lack of women participation	6.7

Source: own survey (2013).

Regardless of the differences in perceived magnitude of their influences, households ranked the shortage of farmland (24.5%) and shortage and unpredictability of rainfall (24.2%) as the most influential of all factors under consideration. also ranked are land degradation (20.6%), crop pest

and animal diseases (13.4%), largeness of family size (10.6%) and lack of women's participation (6.7%) as causes of livelihood diversification respectively at the farm household level.

A number of factors can also be cited, ranging from bio physical to socio economic factors that can explain the cause of livelihood diversification even though, it requires detailed investigation. According to key informants' interviewees, the major causes of livelihood diversification include drought, shortage of land, shortage of food production, cultural barrier, lack of modern technology and family size of household which makes unable to cope with the land that is used to produce crop that can cover the annual consumption. Moreover, focused group discussion also revealed that the major cause of livelihood diversification in the area include shortage of farmland, inadequate rain fall and severity of land degradation.

Chapter Five

5. Conclusion and Recommendation

The significance of ensuring food security at household level in Ethiopia, micro level analysis on the linkage between food security and livelihood diversification must be given adequate consideration. As such, this chapter presents what has been learned from the study as conclusion and forwards possible pathways to various stakeholders and development partners to address these problems.

5.1. Conclusion

This study was conducted in the northern central highland of Ethiopia where food insecurity is an almost all season concern of rural households, including this study participants. The prolonged effects of poor land management and increasing population pressure coupled with rugged terrain in the study area has resulted in land resource degradation. This in turn led to low productivity and diminishing cultivable land holding per household and decline in farmland productivity at household level. As elaborated in various sections of chapter four, the study findings corroborate this argument. The result of analysis from this study indicated that the determinants of households' food security are characterized by distinctive socio-economic and bio physical features that are mostly attributed to resource endowment of households.

Food shortage, land fragmentation and decline in agricultural production at household level are proved to be intricate and interlinked problems exerting greater challenge on the rural livelihood of farm households in the study area. Despite these challenges, the study revealed that farmers diversified their livelihoods into various types of non-farm activities to maintain income levels through the contribution of the PSNP.

Livelihood diversification to off-farm and non-farm activities has been found to reduce the food insecurity of rural households participating in PSNP public works by smoothing seasonal income fluctuations and improving resilience to shocks. The study participants fall back on resources and assets developed through the contribution of the PSNP during shocks and stresses.

The PSNP public work participant households including those graduated have diversified their livelihoods, augmented their farm income using improved agricultural technologies (improved seed, fertilizer, irrigation, water pumps, introducing new crops) and extension services. These led to cultivation of market-oriented crops such as garlic and potato, hence improved income from sale of production. Besides, improved production is possible due to use of irrigation and irrigation water pumps for twice annual production, which has not been practiced by PSNP participating households.

The improvements (accumulation, restoration, and enhancements) in livelihood assets has contributed for investments on farm, off-farm and non-farm activities. These has led to diversified livelihoods through distribution of potential risks of not to fall into the food insecurity traps by relying on single source of livelihood.

5.2. Recommendation

Hence based on assessment of the existing scenario on the livelihood changes and livelihood options in the study area, appropriate strategies and a range of intervention options that are viable both considering short-and-long-term livelihood diversification perspectives need to be considered in programs like PSNP. Even though, farmers are exposed to the same bio physical environment, their understanding of the process and subsequent action to livelihood diversification vary. In this study, it was found that those farmers who are aware of the effects of livelihood diversification are more likely to involve on non-farm and off farm activities.

PSNP investments should be accompanied by soft components to **improve the knowledge and experience of beneficiaries on diversification of livelihoods**, reducing reliance on single sources of livelihoods (risk distribution), investing on new ventures of off farm and non-farm (diversification) activities. Among others, entrepreneurial skills will help beneficiaries to take risks and invest in alternative activities.

PSNP design need to **integrate awareness creation on livelihood diversification through extension services** to help improve farmers capacity to diverse their livelihood, cope with and adopt to any food shortage problem.

Livelihood diversification is very important in the livelihood strategies of most rural farm households of the study area. Mere reliance on crop production seems necessary but not sufficient to sustain the livelihood of farming households. The outcomes from the PSNP participants demonstrated that diversification beyond crop production as viable source of livelihood venture.

PSNP public work component focuses on restoring (natural capital), creating financial capital, rehabilitate physical capital, enhance social and human capital is deemed the right approach. These approaches require **sequencing in investing on livelihood capitals that provide immediate relief to household's food insecurity situation.** These include, restoration of natural capital to help increase productivity, availability of water/soil moisture, restore soil fertility and use of improved technology. Then, accumulation of and access to financial capital would help beneficiaries diversify their livelihoods on natural capitals built by PSNP.

Prioritization and sequencing of activities should be made based on the potential of the respective area and the PSNP public work participants due to limited time and resource of projects and programs. Some areas may have comparative advantage to prioritize natural capital than human capital. Some may have immediate opportunities on human capital/financial capital, then physical capital. These will help that resources will be invested for impact than thinly distributing. In this regard, though several measures may be suggested to overcome the problems. The Woreda has a comparative advantage in plantation and timber, wood trading, bee keeping in areas where the drainage is rehabilitated, and natural capital is being restored areas by

PSNP. The area is also identified as agro-ecologically convenient for sheep rearing without compromising the accumulation of natural capital accounting for the carrying capacity.

Improved livelihood involves the use of different practices which require knowledge, and skill of application management. Education was found to have a strong relation with livelihood diversification, in increasing livelihood assets and changes in livelihood. Therefore, due emphasis must be given towards strengthening rural farmers education in general and that of PSNP beneficiaries. The introduction of the above measures into the picture of livelihood diversification, therefore, could enhance the change in livelihood and increases livelihood assets. Hence, expansion in the level of livelihood options would consequently, result in substantial change in livelihood, livelihood assets' on substantial basis.

This table shows the matched text that are identified by plagiarism checker and the changed text.

S/N	Matched text	Changed text	Page
1	Addis Ababa University College of Development Studies Center for Rural Development The Contribution of Rural Productive Safety Net Program.	This is the name of the university and center, hence could not be avoided.	Front page.
2	Livelihood Diversification: The Case of Wadla Woreda, Amhara National Regional State, Ethiopia MA Thesis Submitted to Addis Ababa University as a Partial Fulfillment of the Requirements to the Award of the Degree of Master of Arts in	Beyond the title, similarities are on standard texts used for thesis submission template.	Page i
3	Abstract ix Chapter One 1 1. Introduction 1 1.1. Background 1 1.2. Statement of the problem 3 1.3. Objective of the study 5 1.4. Research questions 5 1.5. Significance of the study 5 1.6. Scope and Limitation of the Study 6 Chapter Two 7 2. Review of	This is table of contents outline, and due to the standard format used, the similarities cannot be avoided.	
4	Ministry of Finance and Economic Development MOARD Ministry of Agriculture and Rural Development MOLSA Ministry of Labor and	This are names of sector Ministries and cannot be avoided.	
5	my original work, that all the sources I have used have been indicated and acknowledged as complete references,	I acknowledged the sources in complete references, and this is my novel work.	vii
6	The program provides cash and/or food transfers to chronically food insecure households in	The PSNP offers cash and or food payments to persistently food insecure households in	Page 2
7	The objective of the PSNP is to provide transfers to chronically food insecure households in a way that prevents asset depletion at the household level and creates or restores assets at the community level.	The PSNP's purpose is to provide support to recurrently food insecure households to ultimately prevent erosion of asset at the household level and develop or re-develop assets at the community level.	Page 2
8	two components: a labor-intensive	two components: a labor-intensive	Page 2

	public works; and direct support component to those households who have no labor at all, no other means of support, and are chronically food insecure.	public works with labor contribution of participants; and direct support to those vulnerable households who are destitute of labor, and or no other sources of sustenance, and are chronically food insecure.	
9	Objective of the study. The general objective of the study is to assess the contribution of	The overall objective is to assess the contribution of	Page 5
10	A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for means of living (‘A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for means of living’	Page 8
11	household level human capital is a factor of the amount and quality of labour available; this varies according to household size, skill levels, leadership potential, health status etc.	At the household level the quantity and value of labour available defines human capital. This varies according to household size, skill, leadership potential, health status etc.	Page 8
12	skills, knowledge, ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives. At	‘skills, knowledge, ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives’	Page 8
13	in the table 7 below, majority of sample households (64.1%) were male headed households while the remaining (35.9%) of the respondents were female headed households. The result	7 below, 64.1% of sample households were male headed households while the remaining were female headed households.	Page 41
14	of the farmland is not possible as the potential is limited by rugged nature of local topography and land tenure system.	The rugged nature of the Wadla Woreda topography and land tenure system practiced in the locality has set cap on the expansion capacity of the farmland.	Page 49
15	Majority of sample households (69%) were male headed households while the remaining (31%) of the respondents were female headed households. The result	It can be seen from table 13, 69% of sample households were male headed households while the rest were female headed households.	Page 49
16	off-farm activities requirement for	The study findings underscore that	Page 51

	investment for equipment purchase or rent, skill acquisition and license fees.	there can be entry barriers in the off farm labour market because of activity setup capital and equipment.	
17	Camilla Anderson, Alemu Mekonen and Jesper Stage. (March 2009). Impacts of the PSNP in Ethiopia on livestock and tree holdings of rural households, Environment for Development, Discussion paper series	This are referencing styles and will be maintained.	
18	Chambers, R. and Conway, G. (1992). Sustainable Rural Livelihoods: Practical Concepts for the 21st Century, IDS Discussion Paper 296, Brighton: Institute of Development Studies. CSA. (2007). Ethiopian Population	This are referencing styles and will be maintained.	

Reference

- Africa Capacity Indicators (ACIs). (March 2012). Africa Capacity Indicators 2012. Capacity Development for Agricultural Transformation and Food Security. Colour king printing press, South Africa.
- Arega Bazezew Berlie. (2015). Non-Farm and Off-Farm Activities in Achieving Livelihood Security in the Amhara Region: Case Study of Lay Gayint District. Journal of Agricultural and Environmental Sciences, 1(2): 36-56. Department of Geography and Environmental Studies. Bahir Dar University, Bahir Dar, Ethiopia.
- Banchayehu Tessema. (June 2012). EEA, Bahir Dar chapter, proceeding of the 3rd regional conference of the Amhara state regional state economic development, livelihoods in Debre Markos town, the role of social capital.
- Beyene Tadesse. (2009), Exploring Factors Behind the Agricultural Development in Ethiopia: A Favorable Conditions and Constraints, Proceeding of the 11th Annual Conference of the Agricultural Economics Society of Ethiopia, Addis Ababa.
- Camilla Anderson, Alemu Mekonen and Jesper Stage. (March 2009). Impacts of the PSNP in Ethiopia on livestock and tree holdings of rural households, Environment for Development, Discussion paper series DP 09-05.
- Chambers, R. and Conway, G. (1992). Sustainable Rural Livelihoods: Practical Concepts for the 21st Century, IDS Discussion Paper 296, Brighton: Institute of Development Studies.
- CSA. (2007). Ethiopian Population Census Commission, Population, and Housing Census. Addis Ababa, Ethiopia.
- Department for International Development (DFID). (April 1999). Sustainable Livelihoods Guidance Sheets. (94) Victoria Street, London SW 1E 5 JL, livelihoods@dfid.gov.uk.
- Desalegn Rahmato and Aklilu Kidane. (October 2012). Livelihood Insecurity Among Urban Ethiopia. Forum for Social Studies, Discussion paper 8 Addis Ababa.
- Devereux, Stephen and Amdissa Teshome. (2013). From Safety Nets to Social Protection: Options for Direct Support Beneficiaries of the Productive Safety Net Program in (ed). Edited by Desalegn Rahmato, Alula Pankhurst and Jan-Gerrit van Uffelen. Food Security, Safety Nets and Social Protection in Ethiopia. Forum for Social Studies, Addis Ababa, Ethiopia.

- ESSSWA. (2011). Food Insecurity and Rural Livelihoods: Intervention Impacts on Livelihood Assets in Amhara Region in Comprehensive Social Protection: Aspiring Board for Equitable and Sustainable Economic Growth in Ethiopia. Proceeding of the 8th Annual Conference, Addis Ababa.
- ESSSWA. (April 2011). Unconditional Transfer Clients in the PSNP: Conceptual, Policy and Practical Opportunities and Challenges for Social Protection in Ethiopia. In People at Risk Towards a Comprehensive Social Protection Scheme in Ethiopia Proceeding of the 7th Annual Conference. Addis Ababa.
- Ethiopian Economics Association (EEA). (2006/2007). Report on the Ethiopian Economy, Volume 6. Addis Ababa.
- Ethiopian Economics Association (EEA). (2007/08). Report on Ethiopian Economy volume 7th, Addis Ababa.
- Ethiopian Economics Association (EEA). (June 2011). Report on the Ethiopian economy, Addis Ababa.
- Ethiopian Journal of Economics (EJOE). (April 2009). volume XVIII, No 1, Addis Ababa.
- FDRE. (2012). The National Social Protection Policy of Ethiopia. Ministry of Labour and Social Affairs (MOLSA), Addis Ababa.
- Frank Ellis, Department for International Development (DFID). (ND). Livelihood diversification and sustainable rural livelihoods, in sustainable rural livelihoods, what contribution can we make, edited by Diana Carney.
- Gilligan, D. O, Hoddinolt, J. Seyoum A. T. (2008). The impact of Ethiopia's PSNP and its Linkages,
Journal of development studies 45(10), 1684- 170.
- International Development Association Project Appraisal Document on a proposed credit/Grant, to the Federal Democratic Republic Of Ethiopia For A strengthen Ethiopia's Adaptive Safety Net July 14, 2020
- Jan –Gerrit Van Uffelen. (2013). Social Protection Situations of Chronic Food In Security and Poverty Lessons from Different Models and Implications for Ethiopia, in Food Security, Safety Nets and Social Protection in Ethiopia. Edited by Desalegn Rahmato, Alula Pankhurst And Jan-Gerrit Van Uffelen, Forum for Social Studies.

- Jan-Gerrit van Uffelen. (2013). From Disaster Response to Predictable Food Security Interventions: Structural Change or Structural Reproduction? in (ed). Edited by Desalegn Rahmato, Alula Pankhurst and Jan-Gerrit van Uffelen. Food Security, Safety Nets and Social Protection in Ethiopia. Forum for Social Studies, Addis Ababa, Ethiopia.
- John Graham, Shahidur Rashid, and Mehrab Malek. (2012). Disaster responses and emergency risk management in Ethiopia, In Food and agriculture in Ethiopia; Progress and policy challenges, edited by Paul A. Dorosh and Shahidur Rashid, published for IFPRI, University of Pennsylvania press, Philadelphia.
- MOARD. (2004). Productive safety net program (PSNP) program implementation manual, A.A
- MOARD. (December 2007). Food Security Coordination Bureau Productive Safety Net Program Graduation Guide Note. Addis Ababa.
- Ministry of Finance and Economic Cooperation. (August 2016). Urban Productive Safety Net Program (UPSNP). Financial Management Manual.
- Ministry of Urban Development and Housing. (June 2016). Urban Productive Safety Net Program Implementation Manual.
- Pernille Negel Sorensen and Selome Bekele. (2009). ‘Nice children don’t eat a lot of food’ Strained livelihoods and the role of aid in North Wollo, Ethiopia, Forum for social studies, Addis Ababa, Eclipse printing and graphics.
- Rachel Sabastes- Wheeler and Stephen Devereux. (January 2010). Future agricultures, explaining outcomes on Ethiopian’s PSNP.
- Robert F. Darke. (2001). The Principles of Social Policy. Palgrave.
- Safriansyah, R. (2008). social safety nets policy, program and institutional linkage, final report, September 2006.
- Shimeles Tsegaye, Negussie Dejen. (2011). Child -sensitive social protection schemes: lessons from sub- Saharan Africa, in compressive social protection: A springboard for equitable and sustainable economic growth in Ethiopia, proceeding of the 8th annual conference of the ESSWA, Addis Ababa.
- Seid Yassin. (June 2002). Small Scale Irrigation and Household Food Security: A Case Study of Three Irrigation Schemes in Gubalafto Woreda of North Wollo Zone, AAU.

- Sumatra, Suryahadi and Widyanti, W. (2005). Assessing the Impact of Indonesia Social Safety Net Programs on Household Welfare and Poverty Dynamics. *The European Journal of Development Research*,
- Tafesse Kassa. (2011). *Social Policy and Social Protection/Safety Net Measures for the Poor and Vulnerable*. Proceeding of the 7th annual conference of the ESSSWA, Addis Ababa.
- Tigabu D. G and Gebeyehu M. F. (2020). Enhancement of Employment and Income Opportunities for Rural Youth in Ethiopia: A Review of Four Large Youth Employment Initiatives. *FARA Research Report 5(4): PP 35*.
- Degefa, T. (2005). *Rural livelihoods, poverty and food insecurity in Ethiopia: A case study at Erenssa and Garbi communities in Oromiya zone, Amhara national regional state*. Trondheim: Norwegian University of Science and Technology, Faculty of Social Sciences and Technology Management, Department of Geography.
- T.R. Frankenberger and M.K. McCaston. (2000). *The Household Livelihood Security Concept*. <http://www.fao.org/3/X0051T/X0051t05.htm>
- UNDP. (2003). *Development partnership in Ethiopia, a summary of development cooperation funding*, compiled by UNDP Ethiopia.
- Workneh Negatu. (2008). *Food Security Strategy and PSNP in Ethiopia*, In *Digest of Ethiopian's National Policies, Strategies and Programs*, Edited by Taye Assefa.
- World Bank. (June 2011). *Project performance assessment report, Ethiopia Productive safety net project (CR.4004, IDA Grant H 136, TF 056013, Report No: 62549, IEG public sector evaluation, Independent Evaluation Group*.
- World Bank. (July 2020). *International Development Association Project Appraisal Document On a proposed credit/Grant, Report No: PAD3737*.
- Yonas Ktsela. (2006). *Ethiopia: politics, policy making and rural development*, Addis Ababa University Press, Addis Ababa.
- Zerihun Berhane Weldegebriel and Martin Prowse (2013) *Climate-Change Adaptation in Ethiopia: To What Extent Does Social Protection Influence Livelihood Diversification?* *Development Policy Review*, 31 (S2): o35-o56.
- Zerihun Tsegaye. (April 2011). *Food security and livelihood diversification in Ethiopia, the role of the PSNP*, proceeding of the 8th annual conference of the ESSSWA, A.A

_____. (May 2010). Changing climates changing lives, adaption strategies of pastoral and agro-pastoral communities in Ethiopia and Mali, ACF, International, IDS, Tear fund, IER, A-Z consult, ODES.

_____. (2013). informal and formal social protection systems in sub-Saharan Africa, Edited by S. Devereux and Melese Getu, Organizations for Social Science Research in Eastern and Southern Africa (OSSREA).

_____. (2016). Reflections on development in Ethiopia, New trends, Sustainability, and challenges, Edited by Desalegn Rahmato, Mehret Ayenew, Asnake Kefale and Birgit Haberman. Forum for Social Studies (FFS).

Appendixes

Appendix A: Key Informant Interview Guideline for Development Agent (DA)

Name: _____

Role /position: _____

Date: _____

Age: _____

Sex: _____

Education: _____

1. What are the roles of DAs in enhancing livelihood diversification of the community using PSNP?
2. What are the livelihood options of the community? Why are these options preferred?
3. How do you explain the role of PSNP in improving livelihood diversification of the community specifically in terms of enhancing?
 - Farm income.
 - Non-farm income.
 - Off- farm income.
 - Other achievements.
4. How do you explain the role PSNP in increasing live hood assets of graduates and current beneficiaries?
5. In the process of increasing livelihood assets were there challenges and what action has been taken to resolve?
6. Is there any change in the lives of farmers as a result of the livelihood diversification? If so, in what aspect? (Social, economic, psychological, etc.)
7. How do you explain the perception of farmers regarding livelihood diversification? Why is this perception developed?
8. Do you have any other issues that were not covered so far?

Thanks for your time

Appendix B: key Informant Interview Guideline for Woreda PSNP Officials (PSNP task force members and experts)

Name: _____

Role/ Positions: _____

Date: _____

Age: _____

Sex: _____

Education: _____

1. How are beneficiary households identified/ targeted for PSNP? What criteria were used?
2. Are there trainings provided for kebele decision makers and the community on livelihood diversification? If so, what types of training were provided on livelihood diversification?
3. What instructions or training did in this kebele for decision makers on Livelihood diversification?
4. Are there public work beneficiaries to graduate? What mechanisms have been used to identify households to graduate?
5. How many households were identified for PSNP?
6. Were there challenges in livelihood diversification and implementation process of PSNP? What action has been taken to resolve by the concerned stakeholders?
7. What outcomes registered because of PSNP livelihood diversification?
 - Farm income.
 - Non-Farm income.
 - Off-farm income.
 - Other Achievements’.
8. Challenges in implementation process of PSNP as a livelihood diversification?
9. What are the role of the task force / your role in the implementation of the livelihood aspect of PSNP?
10. How do you measure the contribution of PSNP in livelihood diversification?

11. Is there change in the livelihood of farmers? If so, how do the farmers accept the change?
What are the major changes? (Social, economic, psychological, etc).
12. What is perception of farmers regarding the livelihood diversification? How do they understand it and what is their reason?
13. Do the community members have the same kind of perception towards livelihood diversification? If they have different perception, why?
14. Do you have any other issues that you can share or are not covered in our discussion?

Thanks for your time

Appendix C: Key Informant Interview Guideline for Local administrator (Kebele Chairperson and kebele Manager)

Name: _____

Date: _____

Age: _____

Sex: _____

Education: _____

1. When was PSNP started in the kebele? And why?
2. How beneficiary households identified / targeted for PSNP?
3. How do you explain the contributions of PSNP for the community in terms of
 - Farm income.
 - Nonfarm income.
 - Off farm income.
 - Other achievement.
4. What mechanisms have been used to identify households either for direct support or public work?
5. Are there trainings provided for kebele decision makers? If so, what instructions or training given in this kebele for decision makers on livelihood diversification?
6. What were the challenges in diversification? What action has been taken to resolve?
7. Can you mention Local government role to achieve PSNP as a livelihood diversification tool?
8. Do you have any other issues have not covered on our discussion or any suggestions?

Thanks for your time

Appendix D: Focus Group Discussion/FGD/ Checklist for community members

1. What are the means of survival in your community?
2. In the process of identifying food insecure households what is the role of community elders?
3. What mechanisms have been used to identify households either their livelihood is diversified or not?
4. Were there challenges while identifying households for PSNP livelihood diversification?
5. What are the main activities implemented by PSNP in your community?
 - In terms generation of livelihood asset.
 - In terms of increasing livelihood diversification.
6. What outcomes or changes PSNP has been brought in line with increasing the livelihood assets of household?
 - In terms of livestock protection financial (credit) service household and production materials.
 - In terms of infrastructure: transport, water and extension services.
 - In terms of environment protection.
 - Economic, social, psychological.
7. What is the perception of the community about livelihood diversification? Do all community members have the same perception? Why?
8. Do you have any other comments?

Thanks for your time

Appendix E: Case Study Interview questions

1. Demographic characteristics of the case (age, sex, religion, education status, marital status, position in the community, family size, etc.).
2. What are the livelihood activities you perform now?
3. What has been your livelihood context prior to joining PSNP?
4. What is the change in your livelihood and the contribution of PSNP?
5. How did they identify you for livelihood packages?
6. What livelihood benefits / impacts have you experienced from PSNP contributed livelihoods?
7. What are the factors forced / contributed you to diversify your livelihood option using PSNP?
8. What are the challenges in diversifying your livelihoods?
9. What is your aspiration of diversifying your livelihood in the help of PSNP in the future?
10. How do you understand or perceive the livelihood activities undertaken by PSNP?
11. What additional comments you can share?

Thanks for your time

Appendix F: In-depth Interview questions for household heads

Name: _____

Date: _____

Age: _____

Sex: _____

Education: _____

1. What types of assets does your household own?
2. What types of assets are built through PSNP?
3. Do assets build under PSNP benefited you? If so, what are the benefits you gained?
4. Do you think PSNP contributed to diversify your Livelihood options?
5. Why you want to diversify your livelihood?
6. What are the factors forced / contributed you to diversify your livelihood option using PSNP?
7. What are the determinants to diversify your livelihood option using PSNP?
8. Is it vertically or horizontally PSNP diversified your Livelihood options?
9. Can you mention the livelihood options you get due to PSNP?
10. What is the change in your livelihood as a result of PSNP?
11. What are the challenges in diversifying your livelihoods?
12. Does the agricultural production help you to sustain your household food consumption throughout the year?
13. Do you benefit from other food security programs other than PSNP? How do you compare it?
14. What additional comments you can share?

Thanks for your time

Appendix G: Picture gallery of the filed work













Addis Ababa University
College of Development Studies
Office of the Associate Dean for Research and Technology Transfer
Template for Reporting Plagiarism Assessment

Name of the Center for Rural Development Program of study: Rural Development Program level (Masters/PhD): Masters. Please, check one: Regular/Continuing

Name of the Adviser/s Alemu Azmeraw (PhD)

Topic of the dissertation/thesis: The Contribution of Rural Productive Safety Net Program (RPSNP) for Households Livelihood Diversification: The Case of Wadla Woreda, Amhara National Regional State, Ethiopia.

S/N	Name and ID.NO. of the student/candidate	Percentage of plagiarism confirmed	Comments given and improvements made by the student/candidate
1	Sabaye Lulie Demsash (GSR/0863/04)	11%	The candidate has corrected similarities confirmed by plagiarism software.
2			
3			
4			
5			
6			
7			

Remark by adviser/s _____

1. Name of the center head/coordinator _____ Signature _____
Date _____
2. Name of the adviser/s _____ Signature _____
Date _____
3. Name of the adviser _____ Signature _____
Date _____

Note that:

1. All Centers and their faculty members should carefully read, understand and brief students/candidates working under their supervision about the plagiarism policy and the checker software.
2. By adopting the use of the software, it is assumed faculty members have read and shared the key provisions in the guidelines with students/candidates working with them.
3. Thesis/dissertation advisors shall first run and report the level of plagiarism on the submission of the thesis/dissertations of their respective students/candidate.
4. The anti-plagiarism policy of the university allows for a maximum of 20% report (green color) and, with further qualitative analysis and interpretation over this 20% report itself by the advisor/s. Please refer to the anti-plagiarism guideline for assessment results more than 20%.
5. Center heads/ coordinators shall further verify the plagiarism assessment results reported by the adviser/s
6. A thesis/dissertation not assessed through the university software and not signed by the adviser/s will not be endorsed by the head /coordinator to proceed for defense.
7. The final plagiarism assessment report will be attached with the thesis/dissertation for the consumption of examiners.

This table shows the matched text that are identified by plagiarism checker and the changed text.

S/N	Matched text	Changed text	Page
1	Addis Ababa University College of Development Studies Center for Rural Development The Contribution of Rural Productive Safety Net Program.	This is the name of the university and center, hence could not be avoided.	Front page.
2	Livelihood Diversification: The Case of Wadla Woreda, Amhara National Regional State, Ethiopia MA Thesis Submitted to Addis Ababa University as a Partial Fulfillment of the Requirements to the Award of the Degree of Master of Arts in	Beyond the title, similarities are on standard texts used for thesis submission template.	Page i
3	Abstract ix Chapter One 1 1. Introduction 1 1.1. Background 1 1.2. Statement of the problem 3 1.3. Objective of the study 5 1.4. Research questions 5 1.5. Significance of the study 5 1.6. Scope and Limitation of the Study 6 Chapter Two 7 2. Review of	This is table of contents outline, and due to the standard format used, the similarities cannot be avoided.	
4	Ministry of Finance and Economic Development MOARD Ministry of Agriculture and Rural Development MOLSA Ministry of Labor and	This are names of sector Ministries and cannot be avoided.	
5	my original work, that all the sources I have used have been indicated and acknowledged as complete references,	I acknowledged the sources in complete references, and this is my novel work.	vii
6	The program provides cash and/or food transfers to chronically food insecure households in	The PSNP offers cash and or food payments to persistently food insecure households in	Page 2
7	The objective of the PSNP is to provide transfers to chronically food insecure households in a way that prevents asset depletion at the household level and creates or restores assets at the community level.	The PSNP's purpose is to provide support to recurrently food insecure households to ultimately prevent erosion of asset at the household level and develop or re-develop assets at the community level.	Page 2
8	two components: a labor-intensive public works; and direct support	two components: a labor-intensive public works with labor contribution	Page 2

	component to those households who have no labor at all, no other means of support, and are chronically food insecure.	of participants; and direct support to those vulnerable households who are destitute of labor, and or no other sources of sustenance, and are chronically food insecure.	
9	Objective of the study. The general objective of the study is to assess the contribution of	The overall objective is to assess the contribution of	Page 5
10	A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for means of living (‘A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for means of living’	Page 8
11	household level human capital is a factor of the amount and quality of labour available; this varies according to household size, skill levels, leadership potential, health status etc.	At the household level the quantity and value of labour available defines human capital. This varies according to household size, skill, leadership potential, health status etc.	Page 8
12	skills, knowledge, ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives. At	‘skills, knowledge, ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives’	Page 8
13	in the table 7 below, majority of sample households (64.1%) were male headed households while the remaining (35.9%) of the respondents were female headed households. The result	7 below, 64.1% of sample households were male headed households while the remaining were female headed households.	Page 41
14	of the farmland is not possible as the potential is limited by rugged nature of local topography and land tenure system.	The rugged nature of the Wadla Woreda topography and land tenure system practiced in the locality has set cap on the expansion capacity of the farmland.	Page 49
15	Majority of sample households (69%) were male headed households while the remaining (31%) of the respondents were female headed households. The result	It can be seen from table 13, 69% of sample households were male headed households while the rest were female headed households.	Page 49
16	off-farm activities requirement for investment for equipment purchase or	The study findings underscore that there can be entry barriers in the off	Page 51

	rent, skill acquisition and license fees.	farm labour market because of activity setup capital and equipment.	
17	Camilla Anderson, Alemu Mekonen and Jesper Stage. (March 2009). Impacts of the PSNP in Ethiopia on livestock and tree holdings of rural households, Environment for Development, Discussion paper series	This are referencing styles and will be maintained.	
18	Chambers, R. and Conway, G. (1992). Sustainable Rural Livelihoods: Practical Concepts for the 21st Century, IDS Discussion Paper 296, Brighton: Institute of Development Studies. CSA. (2007). Ethiopian Population	This are referencing styles and will be maintained.	