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## **Linking Poor Rural Households to Microfinance and Markets in Ethiopia**

Baseline Assessment of the PSNP Plus Project in Sire and Dodota

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## Acronyms and Abbreviations

CARE	Cooperative for Assistance and Relief Everywhere
CRS	Catholic Relief Services
DPPA	Disaster Preparedness and Prevention Agency
ETB	Ethiopian Birr
FGD	Focus Group Discussion
HC	Household Consumables
GFDRE	Government of the Federal Democratic Republic of Ethiopia
HH	Household
HI	Home Improvement
H5-N1	Avian Influenza ( <i>sub-type</i> )
IFPRI	International Food Policy Research Institute
IGA	Income Generating Activities
Kg	Kilogram
LIS	Longitudinal Impact Study
LIU	Livelihoods Information Unit (DPPA)
LVC	Livestock (fattening) Value Chain
M&E	Monitoring and Evaluation
MDTCS	Micro Development Training and Consultancy Services
MFI	Micro Finance Institute
MoARD	Ministry of Agriculture and Rural Development
MYAP	Multi Year Assistance Program
OCSSCO	Oromia Credit and Saving Share Company
OFSP	Other Food Security Programs
PPR	Peste des Petitis' Ruminants
PSNP	Productive Safety Net Program
PSNP-PIM	PSNP Program Implementation Manual
PSNP Plus	Linking Poor Rural Households to Microfinance & Markets (Project)
REST	Relief Society of Tigray
RFA	Request for Applications
RFA	Request for Applications
RIC	Rural Investment Climate
SCUK	Save the Children Fund (UK)
SILC	Savings and Internal Lending Communities
SNV	Netherlands Development Organization
USAID	United States Agency for International Development
VSLA	Village Savings and Lending Association
WPB	White Pea Beans
WVC	Wheat Value Chain

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## SUMMARY

This report presents the findings of the first stage of an assessment of the PSNP Plus project in Sire and Dodota *woredas*. These assessments are part of a broader longitudinal impact study of the PSNP Plus project, which aims to link poor rural households to microfinance and markets, as a strategy to assist people in accumulating assets, and graduating from the Government of Ethiopia's Productive Safety Net Program (PSNP). The PSNP provides poor food insecure households with either food or cash in exchange for work, or direct support to people who are physically unable to work. PSNP participants are expected to graduate from the program within five years, and certain types of financial and productive assets are used as benchmarks for graduation.

The PSNP Plus project started in the last quarter of 2008 and aims to link PSNP participants to both formal microfinance, and in the interim, or in the absence of this, to informal microfinance by establishing Village Savings and Lending Associations (VSLA's) alternatively called Savings and Internal Lending Communities (SILC). The project also aims to link PSNP households to markets, through the development of different types of commodity value chains. In Sire and Dodota the PSNP Plus project activities started in early 2009, and the project is supporting four value chains, cereals, white pea beans, honey and livestock fattening. This study specifically focused on the cereal and livestock value chains, and to a lesser extent on the SILC activities. The assessment also included a control (or comparison) group of non-project participants registered in the PSNP program.

The assessment described in this report had two key objectives:

1. To collect a retrospective baseline on specific types of household assets for both the intervention (treatment) samples and the control group sample.
2. To carry out a mid term assessment of the project, this included measuring changes against the assessed baseline for both the treatment and control samples.

Although these objectives were more or less met, a drought occurred in the study area during the first year of the project and this event has largely determined the results of the assessment, and defined how these should be interpreted.

The drought resulted in household food and income shortages in the project area, characterized by the distress sale of livestock, and the employment of other economic coping strategies. As such, the assessment findings show a significant decrease in household livestock assets amongst project and non-project participants alike. This can largely be attributed to the combination of livestock sales and an increase in livestock mortality associated with the drought. The results indicate that project and non-project participants alike relied heavily in the PSNP program in order to cope with the effects of the drought.

Aside from the drought, the project has faced a number of challenges resulting in extensive delays in implementation. For example, at the time of the assessment, activities implemented under the honey and livestock value chains had been limited to planning and training, and no actual asset transfers had taken place. Given the combination of the drought and delays in implementation, little impact on household assets was expected at the time of the assessment and the results confirmed this expectation. As such, and given these considerations, the results presented in this report should be viewed strictly as baseline data against which future changes or project impact might be assessed.

## 1. INTRODUCTION

### 1.1 PSNP Plus Project Background

Although responses to food insecurity in Ethiopia have typically been dominated by emergency food assistance, over the past two decades, ‘and in spite of a steady increase in humanitarian food aid, recurrent shocks and structural food insecurity have resulted in an ever increasing number of chronically food-insecure Ethiopians’ (Devereux et al, 2006). This has largely been attributed to the fact that humanitarian food aid has had little impact on poverty, asset depletion, and the resulting vulnerability to food related shocks (Devereux, et al, 2006). In recognition of this, and with the objective of addressing the underlying causes of vulnerability to food insecurity, in 2005 the Government of Ethiopia launched its PSNP, as one component of a broader food security strategy including a Voluntary Resettlement Program and Other Food Security Programs (OFSP).

The PSNP was designed to assist chronically or ‘predictably’ food insecure households as opposed to households affected by transitory food deficits as a result of a specific event. The program provides either cash or food in exchange for labor on rural infrastructure projects, or direct cash and food transfers for households unable to participate in physical labor. The overall goal of the program is to address predictable food insecurity through interventions designed to build households assets, household asset protection, and community asset creation (Gilligan et al, 2008). Ultimately participating households are expected to ‘graduate’ from the PSNP and out of chronic food insecurity. However, the concept of graduation is fairly nuanced and graduation remains one of the key technical and policy issues associated with the PSNP.

For example, the PSNP Program Implementation Manual (PSNP-PIM) recognizes that in order for households to graduate from the program (or out of food insecurity), there is a need for them to be linked to OFSP that go beyond the PSNP food and cash safety net transfers (MoARD, 2006). The OFSP include interventions that provide credit and loans for agriculture as well as non-farm income generating activities, and the provision of ‘agricultural technologies’ such as extension services, and inputs (Gilligan et al, 2008). The overall goal of these programs is to address food insecurity through household asset protection, and community asset creation. Participating households are expected to graduate from the PSNP within five years and thresholds for graduation are based on household asset levels. Although a number of different definitions for graduation have been proposed, most of these involve the concept of households moving out of chronic food insecurity (for example see, PSNP-PIM, 2006, Slater et al, 2006, and Devereux et al, 2006). Essentially graduation involves a two-stage process: the first stage is graduation from the PSNP program, and the second stage involves graduation from the OFSP. A recent PSNP graduation guidance note defines graduation as follows (MoARD, 2007: 2):

*“A household has graduated when, in the absence of receiving PSNP transfers, it can meet its food needs for all 12 months and is able to withstand modest shocks. This state is described as being food sufficient”.*

As such, households that have graduated from the PSNP are no longer considered to be food insecure, and they are therefore no longer entitled to PSNP food or cash transfers (MoARD, 2007).

Annual assessments to determine PSNP graduation are carried out by a Community Food Security Task Force using broadly defined regional benchmarks based on household assets, such as education levels, land, livestock and tool holdings. However, flexibility in assessing graduation based on these asset portfolios may be applied to different livelihood zones within a region (MoARD, 2007). Essentially, households with asset levels higher than the established benchmarks are expected to graduate from the PSNP, although some households may chose to self-graduate on a voluntary basis (MoARD, 2007).

The use of assets as a benchmark for graduation is then partly based on the consideration that these are a more reliable indicator of long-term food insecurity, and partly in recognition of the fact that these are easier to observe and therefore measure than income based indicators (MoARD, 2007).

Nonetheless this rationale is supported by a growing body of evidence that suggests the poor prioritize assets over income (Narayan et al, 2000) and recent research that focuses on identifying the existence of an asset-based equivalent of a poverty line, or an asset (or Micawber) threshold (Carter and Barrett, 2007). People falling below such a threshold are essentially caught in a poverty trap (chronic poverty), whereas those above the threshold can “productively invest and accumulate” and even recover in the event of a livelihoods shock (Carter and Barrett, 2007 cited by Carter *et al*, 2008: 126).

Although it was originally anticipated that PSNP households would graduate from the program within five years, a recent evaluation of the PSNP and OFSP, while suggesting that the PSNP has had a significant impact on food security, proposes that the combination of PSNP plus OFSP does not guarantee household graduation (Slater et al, 2006). The same report argues that for certain PSNP households to accumulate assets: “*they require access to a wider range of package options to support diversification into new agricultural activities – especially high value crop production and irrigated agriculture*” (Slater et al, 2006: VII). Similarly the report identifies access to investment capital and savings as an important enabling factor in facilitating graduation (Slater et al, 2006).

Consistent with this, one of the two pillars of the World Bank’s poverty reduction strategy focuses on the Rural Investment Climate (RIC), and recent pilot studies identify markets and financing as significant constraints to promoting a healthy RIC (World Bank, 2006).

In view of these considerations, and in support of a continuation of the Government of Ethiopia’s Food Security Program, and building on the achievements and lessons learned from the PSNP, and other initiatives including the Market-Led Livelihoods for Vulnerable Populations project, in March 2008, USAID launched a Request for Applications (RFA) entitled linking poor rural households to microfinance and markets in Ethiopia.

## **1.2 Linking Poor Rural Households to Microfinance and Markets in Ethiopia.**

The RFA recognized that without the additional OFSP packages such as microfinance and complementary market development interventions, PSNP households were unlikely to move out of poverty (USAID, 2008). Although the PSNP was established with the view that OFSP interventions would complement the program, evaluations of the PSNP highlighted the limited uptake of microfinance or credit amongst PSNP households (USAID, 2008). The RFA was therefore launched with the objective of demonstrating that the “adoption of market –led livelihood options for the persistently poor through sustainable links to markets and microfinance services” results “in increased assets at the household level and therefore more resilient households (USAID, 2008: 18). The RFA also suggests that the value chain approach be considered as an appropriate methodology for linking poor households to markets.

More specifically, the RFA called for projects that would contribute to the following higher goals (USAID, 2008: 18-19):

- Reduced food insecurity and improved resiliency in vulnerable households
- Increased rural economic growth opportunities for the poor to diversify livelihoods
- Demonstrate a new market-driven approach to poverty reduction in Ethiopia

- Expanded adoption and scaling up of market-driven approaches by new actors such as the Government of the Federal Democratic Republic of Ethiopia (GFDRE)
- Improved access to microfinance services through a graduated assistance program

The RFA also required that proposals demonstrate how project results, outcomes, and the ‘replicability’ and sustainability of interventions would be measured and documented. Consistent with this, the RFA called for a preliminary causal model presenting the logic of how the project would achieve the desired outputs, outcomes and impacts, and how these would be measured (USAID, 2008).

The PSNP Plus project proposal was designed by a consortium of partners led by CARE in response to this RFA. The PSNP Plus consortium was awarded the RFA grant of \$ US 12,000,000 during the last quarter of 2008.

## 2 THE PSNP PLUS PROJECT

### 2.1 PSNP Plus Overview

Consistent with the objectives of the RFA, the PSNP Plus project was designed to facilitate the graduation of poor rural households from the PSNP through the provision of microfinance services and market-driven interventions aimed at building assets and diversifying livelihoods.

The project, which is being led by CARE, was launched towards the end of 2008, and is being implemented by CARE and Catholic Relief Services (CRS) and partners in Oromia, the Relief Society of Tigray (REST) in Tigray, and Save the Children UK (SCUK) in Amhara. The project will be implemented in ten *woredas* across the three regions<sup>1</sup>.

The project specifically intends to target households that are currently enrolled in the PSNP, with the objective of graduating these households from the program. The project aims to provide a variety of microfinance products to participants, through interventions such as Village Savings and Loan Associations (VSLA), and through direct linkages with formal microfinance institutions. The project also aims to link households to markets through livestock, cereal, honey and white pea bean value chain interventions. Technical support for the value chain development activities is being provided by SNV<sup>2</sup>, while the Feinstein International Center, Tufts University is conducting a Longitudinal Impact Study (LIS) of the project in selected areas. The project will run until the middle of 2011, and is expected to assist a total of 42,414 participating households.

Under the original proposal, the goals and the objectives of the project were stated as follows<sup>3</sup>:

The goal of the PSNP Plus program is: “*Targeted PSNP households’ resiliency improved and livelihood assets<sup>i</sup> enhanced as a means towards achieving graduation.*” This goal is met through three interlinked objectives:

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<sup>1</sup> Originally it was nine *woredas*, however Sire/Dodota *woreda* has since been split into two separate *woredas*

<sup>2</sup> Netherlands Development Organization

<sup>3</sup> Following the start up of the project, a supplemental water, sanitation and health (WASH) component was included and the geographical scope of the project was expanded. The objective of the WASH component is to improve the health and productivity of the targeted participants through improved access to water. However, the research activities outlined in this report focus on the three objectives stated above.

- **Objective 1:** Targeted PSNP households have increased their financial assets as a result of access to financial products and services.
- **Objective 2:** Targeted PSNP households are engaged in functioning markets.
- **Objective 3:** Government and private sector strategies show greater support for engaging PSNP participants in market-based activities.

The objectives have been structured to bring immediate, positive impact to participants while building upon lessons learned (PSNP Plus, 2008).

As discussed, the RFA called for a preliminary causal model. The causal model proposed under the PSNP Plus assumes that as part of the OFSP, improved linkages between poor households and commodity markets, plus enhanced use of microfinance services leads to asset accumulation at household level with associated improvements in PSNP graduation. Essentially, this causal model seeks to validate the assumption that the activities and strategies implemented under Objectives 1 and 2 do indeed result in asset accumulation and more resilient households.

## 2.2 Study Overview

In order to test this causal model the LIS was included under objective 3, this is being implemented by Tufts University in four of the ten project *woredas*. The selected *woredas* are Doba, Sire, Dodota and Raya Azebo *woredas* in Oromia and Tigray respectively. It was originally proposed that the LIS would focus on one value chain in each of the study areas. The study areas were selected to capture different socio economic and livelihood zones. However practical and budgetary considerations were also taken into account.

The overall objective of the LIS is to generate evidence on how combinations of microfinance and market oriented interventions leads to asset accumulation at the household level, with associated improvements in PSNP graduation. This evidence will be used to influence and inform the Government of Ethiopia and other stakeholders on their strategies pertaining to the design of food security and safety net programs around microfinance and market based interventions. With this objective in mind, the study will specifically involve measuring the impact of the projects micro-finance and value chain activities on the livelihood assets of the project participants, these being proxy indicators for both resiliency and PSNP graduation.

In summary, the original design of the LIS was as follows:

- Baseline assessment focusing on household assets
- After six months, to document project implementation, re-measure household assets, and conduct a preliminary assessment of project attribution
- Final assessment, using panel data collection to complete documentation of project implementation, re-measure household assets, and finalize assessment of project attribution

This report covers the first two stages of the LIS in Sire and Dodota viz. the baseline and mid term data collection.

## 2.3 Overview of PSNP Plus Project Approach in Sire and Dodota

### 2.3.1 Microfinance Linkage Component

Under the microfinance component, the project in Sire and Dodota aims to improve participant's access to financial products and services, by linking participants to formal microfinance institutions (MFI). For example, the project will provide credit through microfinance institutions (MFI) for value chain commodities such as improved seed varieties and modern beekeeping accessories. Over the course of the project, participants will also be linked to other financial services such as credit and loan facilities. In the interim these services will be provided through informal microfinance mechanisms using the village savings and lending association (VSLA) approach, alternatively called savings and internal lending communities (SILC).

### 2.3.2 Savings and Internal Lending Communities

The SILC approach typically involves a group of between 10-25 members. The project aims to provide training and resources to these groups to enable them to manage, maintain and increase their own financial assets such as savings and loans. Under the SILC approach, members should use their own cash resources to lend funds to one another, charge an acceptable interest rate, and re-lend funds on a rotating basis.

Other features of the SILC approach are as follows:

- These groups typically meet twice a month, and each member will contribute a specified amount of money to a savings pool, and a smaller amount to a social fund. After a certain amount of capital has accumulated in the savings fund, members can take out loans, which they are obliged to repay with interest within a certain time period. Group members will collectively agree upon the contribution amounts, interest rates and repayment periods. However, the approach is meant to be flexible and in principle, individuals can contribute whatever amount they can afford. In such cases, the amount they can borrow is proportional to their accumulated savings.
- Group members will also collectively decide which members can borrow during a given loan disbursement cycle. In order to borrow, a member will present a proposal to the group, outlining what they intend to use the loan for, and how they will be able to repay it. For example, members might use the loan to invest in petty trading or other income generating activities. In principle, members will select the person with the most convincing proposal. However it is also not uncommon for loans to be given to the person who appears to need it most, for example to cover medical expenses, as long as the members are confident that the person can repay the loan. Penalties are imposed on members who fail to repay their loans within the specified time period, which is usually between 1-3 months.
- In some cases, a group may also decide not to disburse loans on an individual basis, but to collectively invest their savings in a group business venture and then share the profits.
- After a certain period, usually between 9-12 months, the group will share the savings and any interest accrued with all the members. As such SILC members can earn dividends on their savings whether they borrow from their group fund or not.

- The social fund is typically meant to provide group members with insurance against idiosyncratic shocks such as illness, although it can be utilized in other ways. No interest is applied to social fund disbursements, and again group members will collectively decide on who gets this support. However, seeing as the social fund is smaller than the savings fund, as discussed, in certain cases members may be allowed to borrow from the savings fund to pay for medical expenses or other contingencies. For some groups, they may decide to use the social fund for other activities that the group as a whole might benefit from.
- Each group selects a chairperson and a treasurer. A secretary is also selected to keep records on savings and loan transactions. The savings are kept in a wooden or metal box, with either two (sometimes three) padlocks. The keys for these locks are given to different members, selected by the group based on their honesty and standing within the community. As such, the box cannot be opened by any individual group member, and would only be opened in the presence of the entire group during the bi-monthly meetings. In Sire and Dodota, SILC participation is not limited to PSNP households, and anyone in the community is eligible to join the groups.
- In terms of inputs, the project pays community facilitators to provide support to the groups. The project also provides training in the SILC methodology to community agents or 'animators'. Training in business development skills and adult literacy is also provided to selected SILC members. Physical inputs include the savings boxes, padlocks, and a registration/savings book.
- In the absence of financial services for the poorest households, one of the key objectives of the SILC activities is to provide saving and loan services for participating households. However, the project also aims to use these groups as a vehicle to link SILC members to formal microfinance. By demonstrating that group members' financial literacy and knowledge on savings increases over time, the project aims to convince MFI's to accept groups and individuals as clients. As such, the SILC groups are intended as a catalyst to provide the linkage between informal and formal microfinance (MDTCS, 2010).

### 2.3.3 Market Linkage Component

Under the market linkage component, the project in Sire and Dodota is supporting four-commodity value chains viz. livestock, honey, white pea beans, and cereals. Among other criteria, the value chains were selected by consortium partners based on the anticipated production potential of these commodities in the project area, income earning potential, and market potential in terms of demand and growth.

The project aims to assist PSNP Plus participants in the production and marketing of these commodities. On the supply side, the objective of these interventions is not only to increase production, but also to improve the quality of these products with a view to adding to their market value. On the production side, the project will provide technical support, such as training, as well as certain types of specific inputs such as honey production accessories and improved seed varieties. The training components and transfer of inputs will be facilitated through producer or marketing associations to be established under the project. The production side will also be complemented by the microfinance component, in that production inputs such as seeds, livestock and beehives will be supplied to project participants on a credit basis. This will be done through a project grant to OCSSCO.

Complementary projects (non PSNP Plus) in the study area also establish facilities such as storage and collection centers to prevent spoilage and facilitate marketing, and try to link farmers to government extension services and the private sector. Under PSNP Plus, market information systems and platforms will also be provided by the project. Ultimately, the project aims to link producers to international markets where the demand and price for these commodities is encouraging. Table (2.1) gives a summary of the objectives and expected outputs of the value chain activities.

Table 2.1 Value chain outputs under PSNP Plus

<b>Objectives</b>	<b>Expected Outputs</b>
Critical bottlenecks for each value chain inhibiting PSNP household's entry to value chain identified.	<ul style="list-style-type: none"> <li>• Existing value chain assessments updated and new value chains validated.</li> </ul>
Targeted PSNP households start production or improve productivity and quality of selected products.	<ul style="list-style-type: none"> <li>• Targeted PSNP households have formed producer or marketing associations.</li> <li>• Newly formed producer or marketing associations have access to production inputs.</li> <li>• Targeted PSNP households received training or technical assistance on productivity and quality of production.</li> <li>• Government, private sector, research institutions and others are providing targeted PSNP households with market extension services, post-harvest storage, assistance with handling and marketing.</li> <li>• Women have the skills necessary to be successful entrepreneurs.</li> <li>• Private sector engaged in value chain activities and linkages based on market demand created.</li> <li>• Private sector and producer/marketing associations engaged in contracts, trader credit, warehouse receipt schemes and other contract farming.</li> </ul>
Stakeholder forums and coordination groups help value chain actors and stakeholders resolve problems and meet shared goals.	<ul style="list-style-type: none"> <li>• Coordination group and stakeholder forums established for value chain development.</li> </ul>
Market information platforms provide targeted producers with the information necessary to negotiate fair prices, access to technical assistance and productive inputs.	<ul style="list-style-type: none"> <li>• Market information platforms created.</li> </ul>

Source: PSNP Plus Project Proposal (2008)

The project in Sire and Dodota ultimately aims to support 240 households under the honey value chain component, 1,200 households will be supported under the white pea bean value chain, 1,130 under the cereal value chain (CARE, 2008), and 420 households under the livestock value chain.

## 2.4 Research Questions

The overall objective of the study is to test the following causal model:

*“Improved linkages between poor households and commodity markets, plus enhanced use of microfinance leads to asset accumulation at household level with associated improvements in PSNP graduation”.*

Based on this, the key research question for the study is:

### 1. Do combinations of Microfinance and Value Chain Activities enhance asset accumulation at the household level?

Under this key question, the following sub set of questions were investigated during the assessment in Sire and Dodota:

- ***What land, livestock and productive assets did participants own before the project started?***
- ***What changes in these assets have occurred since the project started?***
- ***What factors contributed to any assessed change in these assets?***
- ***What was the relative contribution of project factors to any assessed change?***

Additional research questions focused on identifying strategies and interventions that lead to asset accumulation and household food security, and more generally how these can support PSNP graduation and poverty reduction. Specific research questions included but were not limited to:

- How do communities and PSNP participants define relative wealth status, and what indicators do they associate with the poverty and food insecurity, and conversely what indicators do they associate with food security and relative wealth?

The assessment also investigated current income and credit sources, and actual expenditures and loan utilization of project and non-project participants.

## 3. ASSESSMENT METHODOLOGY

### 3.1 Study Approach

Most definitions of impact in the humanitarian and development literature involve the concepts of change and attribution, and a project level impact assessment essentially tries to answer the following three questions (Watson, 2008):

1. What changes have occurred in the project area since the start of the project?
2. Which of these changes can be attributed to the project?
3. What difference have these changes made to the lives of the project participants?

With these three questions in mind, the overall goal of the Longitudinal Impact Assessment (LIS) is to measure changes in the physical and financial assets that are currently being used by the

Government of Ethiopia as proxy benchmarks for PSNP graduation, such as land, livestock and tool holdings. The study also aims to assess changes in income and expenditure. For example, changes in income sources will capture livelihoods diversification, or an increase in the relative contribution of income from specific sources such as those being promoted by the project, namely honey, cereals, livestock and white pea beans. Changes in certain key expenditures will be used as a proxy for real income. These will also capture investments in livelihoods assets, such as land, livestock, education, etc, facilitated through project derived loans or indirect project income transfers. Positive changes in productive and financial assets will also capture household resiliency, these being proxy indicators for resiliency particularly in the event that no major shocks occur during the project timeframe.

The study aims to use a before and after panel survey approach across three points in time (baseline, midterm and final assessment). This approach will be used to assess changes in the asset indicators against a baseline. Therefore, the same respondents, or representatives from the same households will be used during each assessment.

However, due to a number of practical and technical delays outside of the control of the assessment team, the baseline assessments had to be rescheduled until after the start of the project. As such a retrospective baseline approach was adopted to assess pre-project asset levels in households participating in the projects micro-finance and value chain activities. Given the timing of the baseline assessment, it was therefore proposed that a baseline and first impact assessment be conducted concurrently. In Sire and Dodota, this was done by measuring changes in assets against a retrospective baseline using methods described by Catley et al (2008). The actual assessment in Sire and Dodota was carried out from February 1<sup>st</sup> – March 6<sup>th</sup> 2010.

The second set of impact assessments will be carried out roughly six months after the first study, and a third set of impact assessments will be carried out roughly one year after the baseline. This report focuses on the baseline and first round of panel data collection in Sire and Dodota *woredas*.

The study in Sire and Dodota focused on two of the project value chains, livestock fattening and cereals. The decision to exclude the honey value chain was based on information collected during earlier visits to the project area. During these visits it became evident that delays in project implementation, specifically the transfer of transitional and modern beehives implied that few production benefits would be realized within the project timeframe. Secondly, observations during these visits indicated that honey production is only suited to a few limited localities in the two *woredas*, as such this value chain would not be representative of the project area. The white pea bean value chain was also rejected as this activity has been implemented for a number of years in the project area, as such attributing any impact from this activity to the PSNP Plus would be extremely challenging. Furthermore, an independent impact assessment of white pea bean production and marketing is currently being carried out in the project area, and so few additional learning benefits could be expected by duplicating this assessment. In addition to these factors, the white pea bean value chain is being comprehensively assessed in another of the LIS study areas.

The livestock fattening value chain was selected largely based on the fact that impact from this activity might be realized within the project timeframe. Similarly, the cereal (wheat) value chain was selected based on the production and income earning potential of cereals in the project area.

The SILC component was rejected as a sampling frame for a number of reasons, Firstly, shortly before the assessment project staff indicated that the informal microfinance component (SILC)

had only been implemented in 4 out of the 18 project *kebeles*' in the study area. Once the project participant lists were made available, they indicated that very few SILC members were involved in the projects value chains, at least in 2009. Furthermore, anyone can belong to a SILC group, as such, an unspecified number of non-PSNP households belong to the SILC groups. The assessment only partially focused on this component of the project, mostly through focus group discussions with SILC groups. Again the informal microfinance component is being comprehensively assessed in another LIS study area.

At the time of the assessment, the livestock value chain activities were limited to training and no transfer of assets had taken place. Therefore, this component of the assessment focused largely on collecting baseline data. For the wheat value chain, although improved seed varieties had been distributed and planted in 2009, production had been severely affected by drought and so little impact could be expected. However, a pre-project or retrospective baseline on household assets was collected for both of the value chains being assessed.

### **3.2 Overview of Methods and Indicators**

The assessment had two main components, household interviews and focus group discussions. As implied, the household component used an individual household as the unit of analysis. This component was designed to collect mostly quantitative data using a conventional questionnaire format, and including a number of standardized participatory assessment methods. The focus group component was designed to collect mostly qualitative contextual data on the project activities, communities, and areas. However, the focus group discussions were structured around a set of standardized participatory assessment tools providing some numerical data. A number of key informant interviews were also carried out with both project and non-project participants. These were used to collect secondary data on the project and study area.

### **3.3 Indicator Selection**

The choice of indicators was largely based on PSNP graduation benchmarks (land/tools/livestock). Although it should be noted that household items are not used as PSNP graduation benchmarks, these were included as they may represent important wealth indicators, and over time these may be useful in capturing project impact.

The selected asset indicators were validated and refined during scoping visits to the project area. Indicators on sources of income and common household expenditures were also collected and refined during these earlier visits. Some indicators, such as certain types of livestock (e.g. camels and horses), and items such as mobile phones were also included although they are uncommon amongst PSNP households<sup>1</sup>. However, it might be expected that as income and assets increase, people may start investing in these assets, and as such they may be useful baseline indicators for longer-term poverty research. These indicators have not been presented in the results.

### **3.4 Sampling**

#### **3.4.1 Method and Size**

For the household component of the study both random and purposive sampling was used for the livestock and cereal value chain (treatment) components. The sampling frame was derived from the list of project participants involved in these two value chains and participants were then

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<sup>1</sup> Suitable vegetation for camels is limited to certain parts of the study area

selected using simple random sampling. However, due to the limited number of female project participants in the project, the sampling frame was stratified to purposively include all female project participants and these were excluded from the random sampling selection. Therefore, only male project participants were randomly selected. For the livestock value chain 50% of male participants were randomly selected, and 100% of female participants were purposively selected. It was decided to randomly select 70% of male participants from the cereal value chain to compensate for high project attrition rates due to a PSNP re-screening exercise. For this reason (project attrition) an additional 11 male participants were purposively included in the sample in order to improve the geographical representation of the assessment. Again, 100% of the female project participants were purposively selected for the cereal value chain sample.

The sampling frame for the cereal category was limited to households that had already received seed transfers under the PSNP Plus project. However, the sampling frame for the livestock value chain category consisted of registered project participants, who had been identified to receive asset transfers shortly after the assessment.

The PSNP participant lists provided the sampling frame for the comparison (control) group sample, but excluding households involved in PSNP plus project activities. However, respondents were purposively selected based on their willingness and availability to participate in the study. This resulted in a final sample of 124 households in the comparison group, and coincidentally resulted in a similar gender bias as the two intervention samples (18 female & 106 male).

A total of 610 households were selected across the two intervention-sampling frames. However, during the assessment where the research team identified cross registration between sampling frames, double registration within households, or non-PSNP participants – these were systematically rejected from the sample. Due to a recent PSNP re-screening exercise, during the assessment it transpired that a considerable number of households in the cereal value chain sample were no longer registered PSNP participants. Again these households were rejected from the sample during the assessment.

As a result of this and other attrition factors roughly 44 % of the households originally selected were dropped from the cereal and livestock samples. Table 3.1 shows the final sample assessed.

Table 3.1 Sampling frame and actual sample

	Livestock Value Chain (LVC)			Cereal Value Chain (Wheat)		
	Male	Female	Total	Male	Female	Total
<b>Sampling Frame</b>	322	98	420	159	31	190
<b>Planned Sample</b>	161	98	259	111	31	142
<b>Actual Sample</b>	127	39	166	89*	12	101
<b>Percentage of Sampling Frame</b>	40%			53%		

\* 78 randomly selected 11 purposively selected

The three categories are hereafter summarized in this report as “LVC or livestock” (livestock value chain), “WVC or wheat” (cereal/wheat value chain), and “control” (comparison sample).

A total of 17 focus group discussions were carried out across the study area. Participants were purposively selected based on SILC membership and availability, but excluding participants involved in the household component. Participation in the focus groups was voluntary and no attempt was made to systematically quantify the actual number of participants. Although based on

SILC participation, focus group participants included an unspecified number of participants from the project value chains (white pea beans, livestock, cereals, and possibly honey).

### 3.4.2 Study Locations

The assessment team visited all 18 *kebele*'s in Sire and Dodota where the PSNP Plus is being implemented. However, in one of the *Kebele*'s visited the team was unable to meet with any PSNP Plus project participants. When the project was formulated, Sire and Dodota were considered as one *woreda* (Dodota-Sire), and the project was designed to consider the two areas as one project area. However, at the time of the assessment Dodota-Sire had been split into two separate *woredas*, Sire and Dodota respectively and for the purpose of the assessment both *woredas* were combined to represent a single study area. This was largely due to the fact that a large enough sample for each of the value chains could not be derived from treating the two *woredas* as separate geographical entities. Table 3.2 provides a summary of the geographical coverage of the assessment.

Table 3.2: Summary of assessment coverage

No	Kebele	Woreda	Category (in No of HHs)					Assessment Methods		Remark
			Fattening	Cereal	Total HHs	Control	Total HHs	Household Interview	Focus Group Discussion	
1	Amude	Dodota	0	1	1	5	6	✓	✓	
2	Tero Desta		0	3	3	1	4	✓	✓	
3	Belale		0	5	5	0	5	✓	✓	
4	Badosa Betela		17	4	21	0	21	✓	✓	
5	Tedecha Guracha		23	5	28	14	42	✓	✓	
6	Dodota Alem		12	10	22	45	67	✓	✓	
7	Amigna Debeso		17	0	17	0	17	✓	✓	
8	Lode Sharbe		9	1	10	3	13	✓	✓	
9	Dil Feker		0	3	3	4	7	✓	✓	
10	Dire Kiltu		0	10	10	6	16	✓	✓	
11	Awash Bishola		18	9	27	0	27	✓	✓	
12	Koro Degaga		0	0	0	0	0	-	-	Unable to reach HHs
13	Alelu Gesela	Sire	19	6	25	8	33	✓	✓	
14	Ebseta Uduga		12	23	35	5	40	✓	✓	
15	Ufura Hagemsa		12	7	19	8	27	✓	✓	
16	Kolobe Bele		12	10	22	1	23	✓	✓	
17	Kolobe Bika		8	4	12	21	33	✓	✓	
18	Kolobe Hawas		7	0	7	3	10	✓	-	Unable to reach HHs for FGD
<b>Total Respondents</b>			<b>166</b>	<b>101</b>	<b>267</b>	<b>124</b>	<b>391</b>			

## 3.5 Data Collection Methods

### 3.5.1 Household Interviews

The interviews for the household component were carried out by a team of four data collectors under the supervision of an assessment coordinator. The interviews were carried out on an individual basis using a standardized questionnaire that included a number of participatory exercises, and some qualitative data. For the comparison group sample, a similar questionnaire was used although this did not include specific project related questions. Each interview took between 30-40 minutes to complete, and each data collector would typically complete 4-5 interviews in a day. The household questionnaire was structured around the following themes/sections:

Table 3.3 Summary of household questionnaire themes and methods used

	Section/Theme	Types of Information Collected (method)	Sample
1	Household and Project Background Information	<ul style="list-style-type: none"> <li>PSNP and PSNP Plus activities &amp; participation</li> <li>Household age, labor capacity and education levels</li> <li>Occurrence, type and impact of recent shocks/events, and household response to these</li> </ul>	N=391
2	Savings and Loan Information	<ul style="list-style-type: none"> <li>Household (HH) SILC participation and history</li> <li>Recent HH savings history</li> <li>Recent HH borrowing history and source of loans</li> <li>Utilization of HH savings and loans</li> </ul>	N=391
3	Asset Inventory	<ul style="list-style-type: none"> <li>Pre-project and current land holdings</li> <li>Pre-project and current livestock holdings</li> <li>Reasons (positive or negative) for changes in livestock holdings</li> <li>Livestock sales 2008-2009 type, number, derived income &amp; utilization</li> <li>Pre-project and current productive assets (tools) and HH items</li> <li>Reasons for changes in productive assets and HH items</li> </ul>	N=391
4	Reasons for an overall increase in Assets	<ul style="list-style-type: none"> <li>Identification of reasons/factors contributing to an overall increase in assets</li> <li>Scoring of contributing factors (proportional piling using 100 counters)</li> </ul>	N=1*
5	Income Sources	<ul style="list-style-type: none"> <li>Relative contribution of different income sources (proportional piling using 100 counters)</li> <li>Crop sales for 2008 and 2009</li> </ul>	N=391
6	Expenditure	<ul style="list-style-type: none"> <li>Actual expenditure on key items</li> <li>Relative expenditure on food and investments in income generating activities (proportional piling using 30 counters)</li> </ul>	N=391

- \* Only 1 household experienced a perceived increase in assets

The household questionnaire is appended as Annex I to this report

### 3.5.2 Focus Group Methods

A mixture of qualitative, quantitative, and participatory data collection methods were used for the focus group component of the study. These discussions were primarily used to collect descriptive contextual information on the PSNP, the PSNP plus and more general information on the project area. The focus groups were structured around a checklist, which included a set of standardized participatory exercises. Seeing as the focus group participants were selected based on their

participation in SILC groups, the interviews were geared towards collecting specific group level information on the SILC groups. Having said this, an unspecified number of participants from each discussion might have belonged to any one of the four project value chains. Typically, members from two or more SILC groups participated in each focus group discussion.

Table 3.4: Summary of focus group methods

	Theme	Type of Information Collected (method)	Sample
1	Community Wealth Ranking	<ul style="list-style-type: none"> <li>An estimation of the relative proportion of the community belonging to different wealth groups (proportional piling using 100 counters)</li> <li>Estimate relative changes in wealth status since the PSNP started</li> </ul>	N=17
2	SILC Group Data	<ul style="list-style-type: none"> <li>Group name/number of members/year established</li> <li>Savings and social fund Contributions (amount and frequency)</li> <li>Original interest rates and repayment periods</li> <li>Changes in contributions/ interest rates and reasons</li> <li>Sources of cash for last contribution (proportional piling using 1 counter to represent each participant)</li> </ul>	N=17
3	Before and After Scoring	<ul style="list-style-type: none"> <li>To assess changes in wealth status since the PSNP was launched</li> <li>Reasons for changes (positive or negative) in wealth status (proportional piling)</li> </ul>	N=17
4	Community Wealth Indicators	<ul style="list-style-type: none"> <li>Identification of community wealth (asset) indicators and assigning these to different wealth categories</li> </ul>	N=17
5	Project and Key Events Timeline	<ul style="list-style-type: none"> <li>A timeline of recent events in the project area</li> <li>A timeline of recent and ongoing projects in the study area</li> <li>Perceived impact of recent events and interventions</li> </ul>	N=17
6	Pair Wise Ranking	<ul style="list-style-type: none"> <li>To assess participants preferences regarding different project interventions in the area (Proportional piling using 100 counters)</li> </ul>	N=17

### 3.6 Pre-Testing

The assessment tools were field-tested during earlier visits to the project area. A second round of field-testing was then carried out right before the assessment. Households involved in the pre-testing were excluded from the sampling frame.

### 3.7 Triangulation

Various types of secondary data were used to triangulate the assessment results. Project reports and available M&E data were used to establish what project activities had been implemented in order to establish causality. External reports such as the baseline livelihoods profiles generated by the DPPA Livelihoods Information Unit (LIU) were also used for comparison with the results.

The household component also had some built in consistency checks, which were used for validation. For example, if there had been a reduction in livestock assets, participants were asked why, and were given several options such as they sold the asset to pay for food. Then under a separate section on livestock sales, participants were asked how they utilized any income from livestock sales. One would therefore expect agreement between the two responses.

### **3.8 Data Analysis**

The household results from each of the sample categories were analyzed separately using SPSS (PASW) version 18. All the household data was tested for normal distribution using the P-P plot function in SPSS. Mean land holdings, actual expenditure, and relative income sources were calculated at ninety five percent confidence interval. For changes in assets, and comparisons between the intervention and treatment groups, a comparison of mean scores was calculated at ninety five percent confidence interval using SPSS.

## 4 RESULTS

### 4.1 Contextualizing PSNP Plus

Table 4.1 Interventions and recent events timeline

Year	Intervention	Implementer	Activities/Outcome	Perceived Impact
2003	Provision of credit fund for small ruminant fattening	GFDRE & World Bank	Sheep and goats received on credit	Recipients earned income from the sale of small ruminants
2003	Provision of in kind credit fund for farming ox	GFDRE	Few farmers received farming ox on credit	Farm land effectively utilized
2003	Provision of cash credit fund for cattle	GFDRE & World Bank	Each recipient household received 2,500 ETB	Farmers increased their livestock assets <sup>5</sup>
2003	Other (establishment of revolving fund)	GFDRE	Revolving fund established	No major impact due to repayment disruptions
2003-05	Provision of in kind credit for livestock	GFDRE	Goats & sheep distributed to selected farmers	Recipients built up livestock assets
2003-09	Provision of cereal seeds	GFDRE & CRS	Improved wheat and <i>teff</i> seeds sold to farmers	Wheat and <i>teff</i> yields increased during years with normal rainfall <sup>6</sup>
2003-09	Provision of other agricultural inputs	GFDRE	Fertilizer sold on credit	Yields improved in good years
2003-09	Irrigation scheme (flood catchments in water shed)	GFDRE & CRS	Water canals developed	Not enough rain - canals and ponds remained empty
2003-09	Animal disease control	GFDRE	Animals vaccinated	Livestock mortality decreased
2005	Promotion of fodder production	GFDRE	Forage seeds distributed	Forage failed due to rain failure
2005	PSNP food for work labor activity	CRS and GFDRE	Food for work	Poor families accessed food
2005 -09	Food aid handouts <sup>7</sup>	CRS and GFDRE	Food items	Poor families accessed food items
2003-09	Water development	CRS & GFDRE	Water ponds	No impact due to rain failure
2005 -09	Erosion control/tree plantation	CRS & GFDRE	Land terracing and rehabilitation	Soil erosion controlled, and hill sides rehabilitated
2005-10	Feeder roads construction	GFDRE & CRS	Feeder roads	Access to basic services like health, markets, improved
2005-10	Ban on use of certain grazing areas	GFDRE & Community	Ban on use of a dry season grazing field/hill	Vegetation recovered ( <i>but animal feed supply disrupted</i> )
2006	Extension advice on avian flu control	GFDRE & media	Local chicken population eradicated	Poor SILC members lost alternative source of income required for monthly savings ( <i>egg sales</i> )
2008	Credit and saving initiatives	CRS and GFDRE	Saving and credit	Insurance against shocks <sup>8</sup>
2008	Promotion of cash crop production	CRS	Improved white pea bean, and wheat seeds distributed	Crop affected by drought
Year	Shock/Event	Outcome	Perceived Impact	
2008	Animal disease outbreak - Kiftina/chito	Mass mortality in small ruminant	Livestock population decreased due to mange	
2008	Flood	Flood caused damage to crop and livestock, and soil erosion	Loss of assets	
2008	Crop pests (worms)	Loss of wheat and barley seedlings	Wheat and barley yield decreased	
2008	Erratic rainfall	Re-germination of matured crops	Loss of crop yield	
2009	Rain failure - Genna & Bedhesa rains	Partial crop failure and livestock price decline	Livestock assets depleted due to forced sale of animals	

Table 4.2 Intervention preference scoring (n=17 groups)

Intervention Type	Total Score	Assigned Preference Rank
PSNP	88	1 <sup>st</sup>
Cash Credit	82	2 <sup>nd</sup>
Oxen Credit	70	3 <sup>rd</sup>
Improved Seeds	44	4 <sup>th</sup>
Small Ruminant Credit	21	5 <sup>th</sup>
Animal Health Services	19	6 <sup>th</sup>
SILC groups	8	7 <sup>th</sup>

Aggregated data derived from 17 pair wise ranking exercises

<sup>5</sup> Cattle credit participants who purchased draft animals were able to expand the amount of land cultivated and increase their harvest

<sup>6</sup> Informants indicated that the improved cereal varieties performed better than local varieties during years of unreliable rainfall.

<sup>7</sup> World Food Program food distributions were ongoing during the time of the assessment in February 2010.

<sup>8</sup> Informants appreciated easy access to credit especially when cash is quickly needed to cope with unexpected shocks.

## 4.2 Project background and status at the time of the assessment

Although planning and resource mobilization for the PSNP Plus in Sire and Dodota commenced in December 2008 (Shiferaw, 2009), project staff indicated that actual field activities began in February 2009. Under PSNP Plus, CRS and partners are supporting four value chains in Sire and Dodota, namely

- Livestock (sheep fattening)
- Cereals (wheat)
- White Pea Beans
- Honey

The project also aims to link participating households to both formal and informal microfinance.

Under the USAID funded MYAP program, CRS and partners have been supporting white pea bean (WPB) production in Sire and Dodota since 2006. Under the PSNP Plus project, CRS and partners provided support to 230 households under the WPB value chain in 2009. According to project staff, this support was limited to 12 *Kebele*'s in Dodota, and involved training in agronomy, provision of inputs such as improved seed varieties, threshing materials, weights and balances and storage facilities. Each household received 50 kg WPB seeds, with a 25-50% down payment, with the balance and a 5% interest rate expected at the time of the harvest. However, during scoping visits to the study area, assessment participants indicated that poor rainfall in 2009 limited any impact from this activity, and they were not sure how they could pay back the loan.

Under the honey value chain, no asset transfers had taken place in 2009. However, the quarterly report for January-March 2010 indicates that 80 'framed beehives' had been transferred to project participants during the reporting period (CARE, 2010 a).

Under the cereal value chain, improved wheat seed varieties were provided on credit to 229 households (CARE, 2009). Although the seeds were provided in time for the 2009-planting season, project participants indicated that little in the way of production benefits or impact could be expected due to rain failure that year.

CRS and partners have also been supporting SILC groups in the area since February 2008. Shortly before the assessment, project staff indicated that 59 groups had been set up. Seeing as SILC groups are continuously being established under the project, it was difficult to determine the exact number in operation at the time of the assessment. However, the PSNP Plus annual report indicated that 18 SILC groups had been established in the two *woredas* in 2009 (CARE, 2009), and the first quarterly report for 2010 indicated that 66 groups had been established by March 2010 (CARE, 2010 a). During the assessment the team met with members from 53 groups, 52 of these had been established during the PSNP Plus time frame. According to participants, 36 of these had been set up in 2009 (see Annex II). Based on this information it can be assumed that somewhere between 36-66 groups had been set up under the project at the time of the assessment.

The establishment of the SILC groups includes training in the SILC methodology, distribution of SILC kits (safety box, record keeping books, and other stationary) and awareness on different

financial products and services (CARE, 2009). Project staff suggested the possibility that participants in some of the older groups set up prior to PSNP Plus might also be assisted under the projects SILC component. However, this information could not be crosschecked against project participant lists.

For the livestock value chain component, training had been provided to 99 households prior to the assessment. However, training activities were ongoing and the quarterly report for the same period indicated that 302 participants had been trained by March 2010 (CARE, 2010 a). The training focused on small ruminant fattening, feed management, and livestock marketing, and was facilitated by experts from the Ethiopian Meat and Dairy Technology Institute (CARE, 2010 a). Actual livestock asset transfers were expected to take place shortly after the training, however this activity was not reflected in the April-June 2010 quarterly report (see CARE, 2010 b).

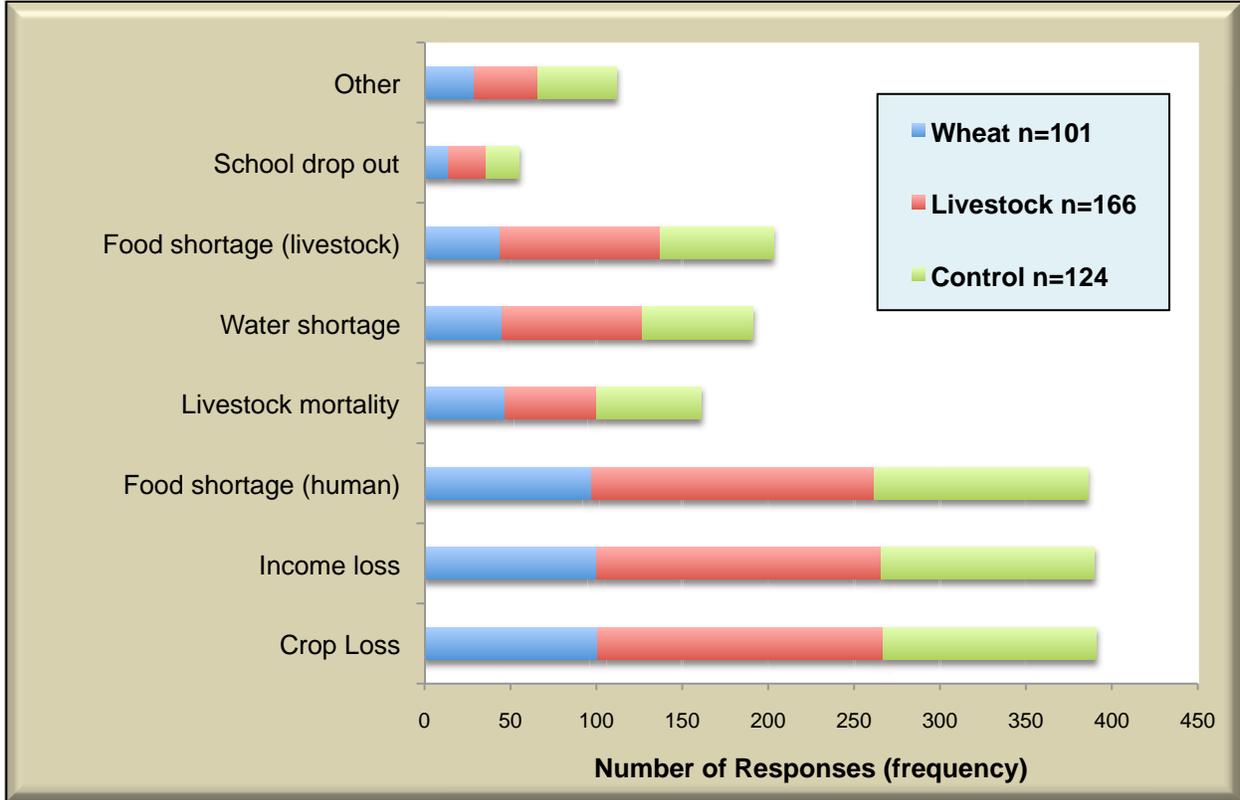
Project staff indicated that under PSNP Plus, participating households are entitled to take part in up to but no more than 3 project activities. For example a household might belong to a SILC group and two value chain groups, or to three value chain groups. However, project participant lists could not reliably identify households participating in 2 or more project activities, and anyone can belong to a SILC group, so it is unclear how this policy is enforced. Within the assessed sample, 45% and 63% of the wheat and livestock sample respectively were also involved in the SILC component (table 4.5). Within the livestock sample, 11% were also participating in the wheat value chain, and 4% in the WPB value chain (table 4.5). None of the households in the wheat sample were involved in any of the other project value chains at the time of the assessment (table 4.5).

The project has faced considerable challenges in implementation. Delays in finalizing a project agreement with the regional government resulted in a delay in project start up. A PSNP re-screening exercise also resulted in many of the already registered project participants being excluded from the PSNP (CARE, 2009). Project implementing partners also faced a number of internal issues around staffing and coordination.

Although, the PSNP Plus consortium and the implementing partners have gone to great lengths to overcome these challenges, arguably the major project challenge has been the impact of the drought in 2009. This has resulted in minimal production from the WPB and cereal value chains, resulting in an unwillingness of participants to repay their loans on the seed transfers. It has also undermined people's ability to save, take out loans, or accumulate assets. Due to the delays in implementation and the impact of the drought, little could be expected in the way of positive impact on household assets, and the assessment results support this.

### 4.3 Impact of the Drought in 2009

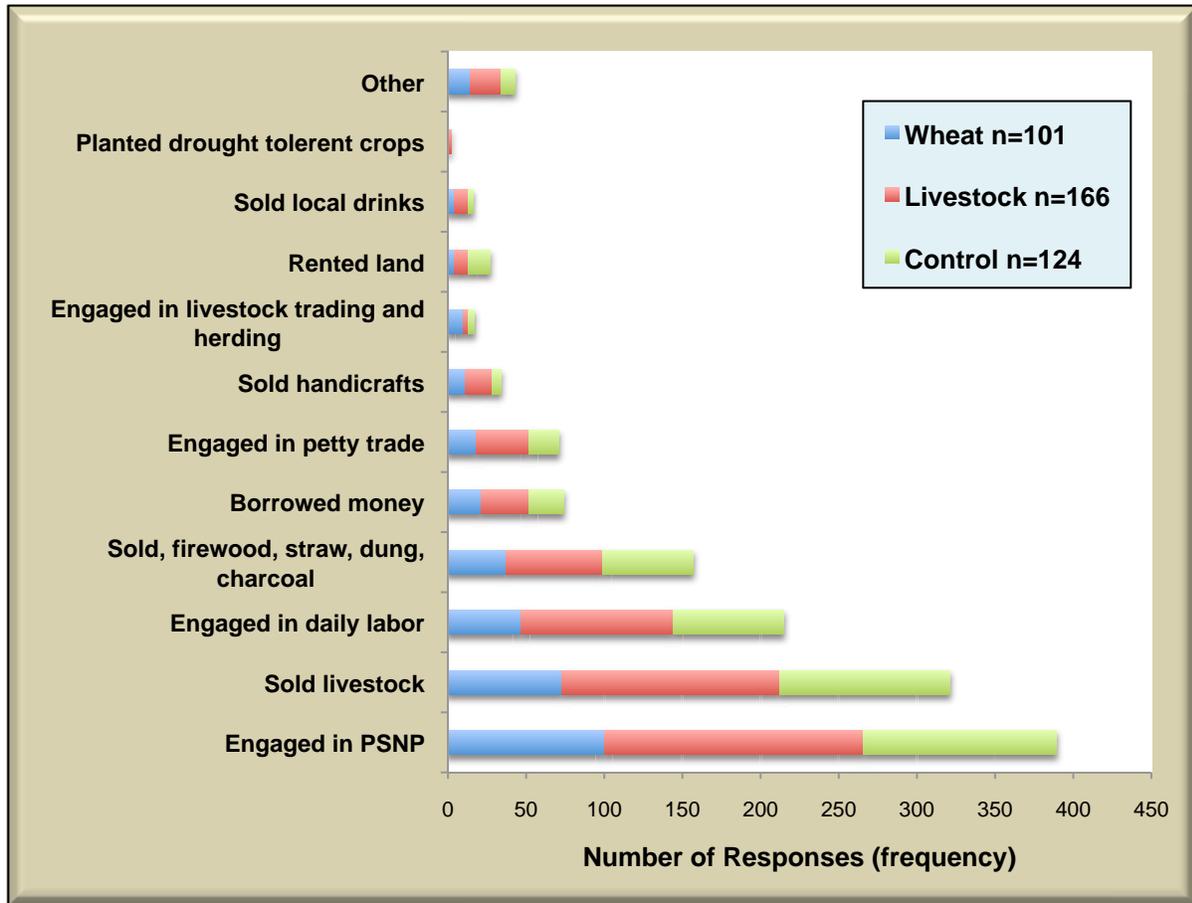
Figure 4.1 Reported impacts of the drought in 2009



Notes:

Other impacts include: Increase in human health problems and related medical expenses, loss of labor capacity mainly due to health issues, loss of pack and draft animals, reduction in herd size (sales & mortality) unable to plow land due to death of oxen, shortage of seeds, inability to purchase farming inputs, inability to cover basic (non-food) expenses such as clothes, reduction in assets, loss of dairy products, inability to pay for school supplies

Figure 4.2 Actions taken in response to the effects of the 2009 drought



Notes:

Other actions include: Begging, borrowed from SILC groups (2 responses), migration to other countries (e.g. Sudan), making/selling stoves, selling vegetables, cereal trading, sugar cane trading, livestock fattening, renting animal carts, other employment, borrowing neighbors oxen for plowing.

## 4.4 Community Characteristics

Table 4.3 Community wealth indicators (n=17 Focus Groups)

Wealth Indicator	Better-Off	Medium	Poor
Proportion population before PSNP started	28 %	33%	39%
Proportion population now	13%	26%	61%
Number of oxen	3-4	1-2	0-1
Number of cows	5-6	1-2	0-1
Number of small ruminants	9-10	4-5	2-3
Number of donkeys	1-2	0-1	0-1
Number of poultry holdings	5-6	3-4	2-3
Number of traditional beehives	0-1	0	0
Overall land holdings ( <i>kert</i> )	13-14	8-9	4-5
Amount of cultivated land	12-13	7-8	3-4
Number of beds	0-1	0	0
Number of mattresses	0-1	0	0
Number of lanterns	0-1	0	0
Number of grain stores	0-1	0-1	0
Number of radio/cassette players	0-1	0-1	0
Food Security from own production (months)	11	7	3
Food Security from purchases (month)	1	5	9
Number of months food deficit	0	0-1	4
Tends others animals	No	Rare	Common
Engaged in labor for income	No	Yes	Yes
Engaged in labor for oxen ( <i>qoti-qoti</i> )	No	Common	Common
Engaged in other type of labor	No	No	Common
Corrugated iron roof	Some	Rare	No
Land rented	0	0	Common

1 hectare = 4 *kert*

Table 4.4 PSNP Screening criteria and indicators

No	Wealth category	Description	Expected resources	
			Average land holding	Average livestock resources
1	A	Better-off	<ul style="list-style-type: none"> <li>• &gt;2 hectares</li> </ul>	<ul style="list-style-type: none"> <li>○ ≥ 2 oxen</li> <li>○ ≥ 2 cows</li> <li>○ ≥ 5 goats</li> </ul> <ul style="list-style-type: none"> <li>○ ≥ 5 sheep</li> <li>○ ≥ 1 donkey</li> </ul>
2	B	Middle	<ul style="list-style-type: none"> <li>• &lt;2 hectares</li> </ul>	<ul style="list-style-type: none"> <li>○ ≤ 2 oxen</li> <li>○ ≤ 1 cow</li> <li>○ ≤ 5 goats</li> </ul> <ul style="list-style-type: none"> <li>○ ≤ 5 sheep</li> <li>○ ≤ 1 donkey</li> </ul>
3	C	Poor	<ul style="list-style-type: none"> <li>• &lt;1 hectares</li> </ul>	<ul style="list-style-type: none"> <li>○ ≤ 1 oxen</li> <li>○ ≤ 1 cow</li> <li>○ ≤ 3 goats</li> </ul> <ul style="list-style-type: none"> <li>○ ≤ 3 sheep</li> <li>○ ≤ 1 donkey</li> </ul>
	C-	Poorest	<ul style="list-style-type: none"> <li>• Landless</li> </ul>	<ul style="list-style-type: none"> <li>○ No livestock resources at all</li> </ul>

Source: Kebele officials in the study area

#### 4.5 Characteristics and Background Data on sampled PSNP Plus Households

Table 4.5 Background data on sampled households

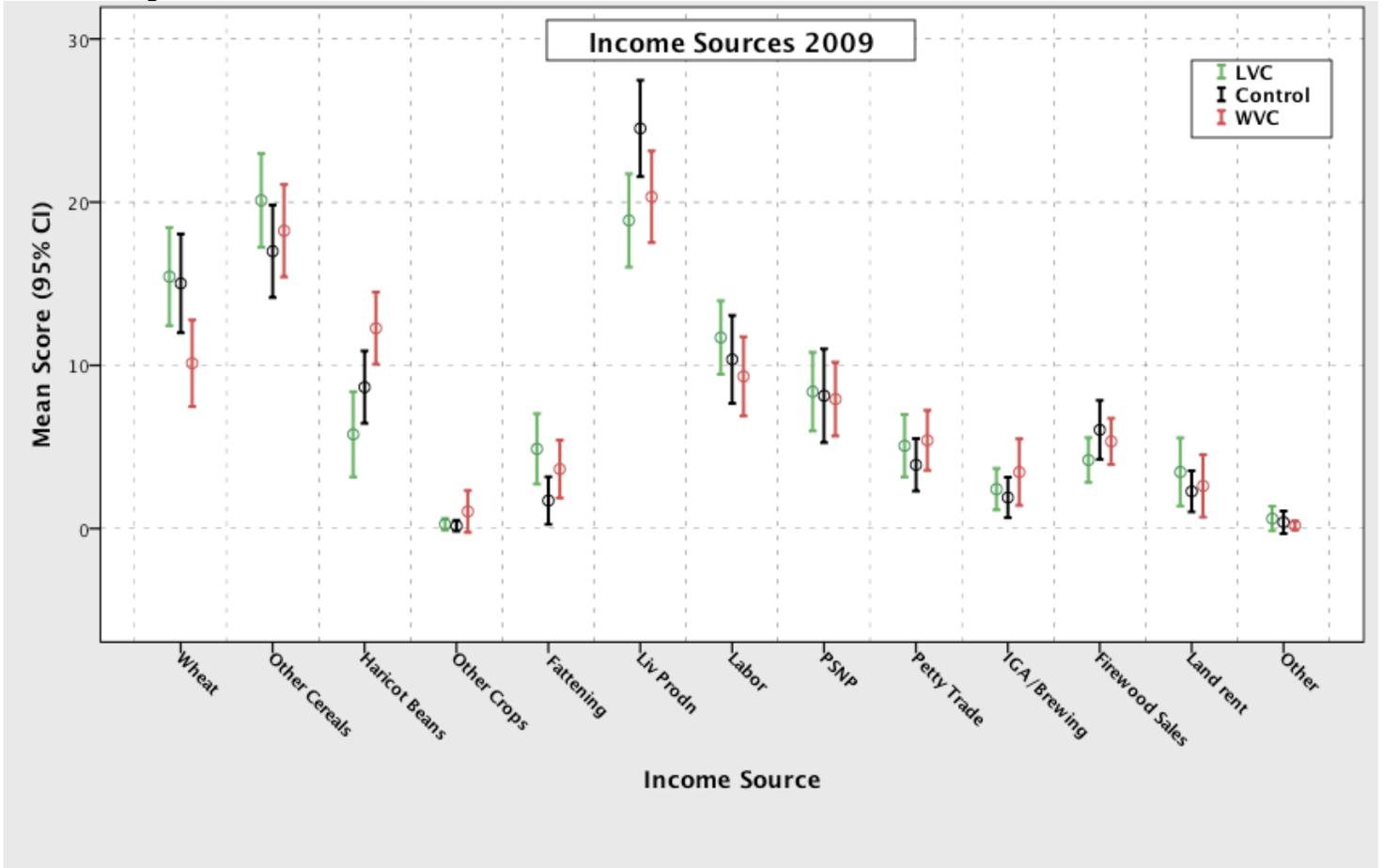
<b>Household (HH) Background and Project Participation Stats</b>		
	<b>Wheat (n=101)</b>	<b>Livestock (n=166)</b>
Total number currently involved in SILC (percentage)	45 (45%)	105 (63%)
Total number involved in Wheat value chain (percentage)	99 (98%) *	11 (7%)
Total number involved in WPB value chain (percentage)	0	4 (2%)
Total number involved in Livestock value chain (percentage)	0	166 (100%)
Total number involved in Honey value chain (percentage)	0	0
Number of HHs with iron sheet roofing (percentage)	30 (30%)	48 (29%)
Highest level of education HH head (average grade)	4.1	3.2
Highest level of education other HH member (average grade)	6.2	5.3
Number of household members (average)	6	5.5
Number of working adults (average)	2.7	2.4
Number of HH members working on PSNP labor activities (average)	4.2	3.8
Number of years involved in PSNP (average)	4.6	4.4
Total number HHs, graduated from the PSNP	4 (4%)	0
<b>Types of shocks experienced in the past year – total # HHs (percentage)</b>		
Rain failure “drought”	101 (100%)	166 (100%)
Crop pests or disease	30 (30%)	40 (24%)
Livestock disease/death	52 (51%)	80 (48%)
Illness or death of family member (reported)	49 (49%)	97 (58%)
Other	1 (1%)	2 (1%)

\* Registered but hadn't received seed transfer

## 4.6 Income

### 4.6.1 Sources of Income

Figure 4.3 Relative contributions of different income sources



Notes: Data derived from proportional piling using 100 counters (IGA=Income Generating Activity, Liv Prodn=Livestock Production and trade but excludes fattening, Firewood includes sales of other fuels and fodder crops, Haricot beans = all varieties of beans)

### 4.6.2 Crop Sales

Table 4.6 Average household crop sales 2008 and 2009

Crop	Nf f 7 2008					Nf f 0 2009				
	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
HRf R	=LL(=)	929(L)	=w2(3)	9U(L)	LR(L)	2(U)	7U8	9(2)	Q(L)	Q(O)
HRN1	=OR(w)	=Lz(L)	=9U(z)	9=(z)	93(U)	3(U)	=(R)	3(U)	Q(O)	Q(O)
HR22	=3(R)	=2=(=)	=3L(3)	9w(O)	23(z)	2(L)	L(U)	=(O)	=(L)	Q(O)

### 4.6.3 Livestock Sales

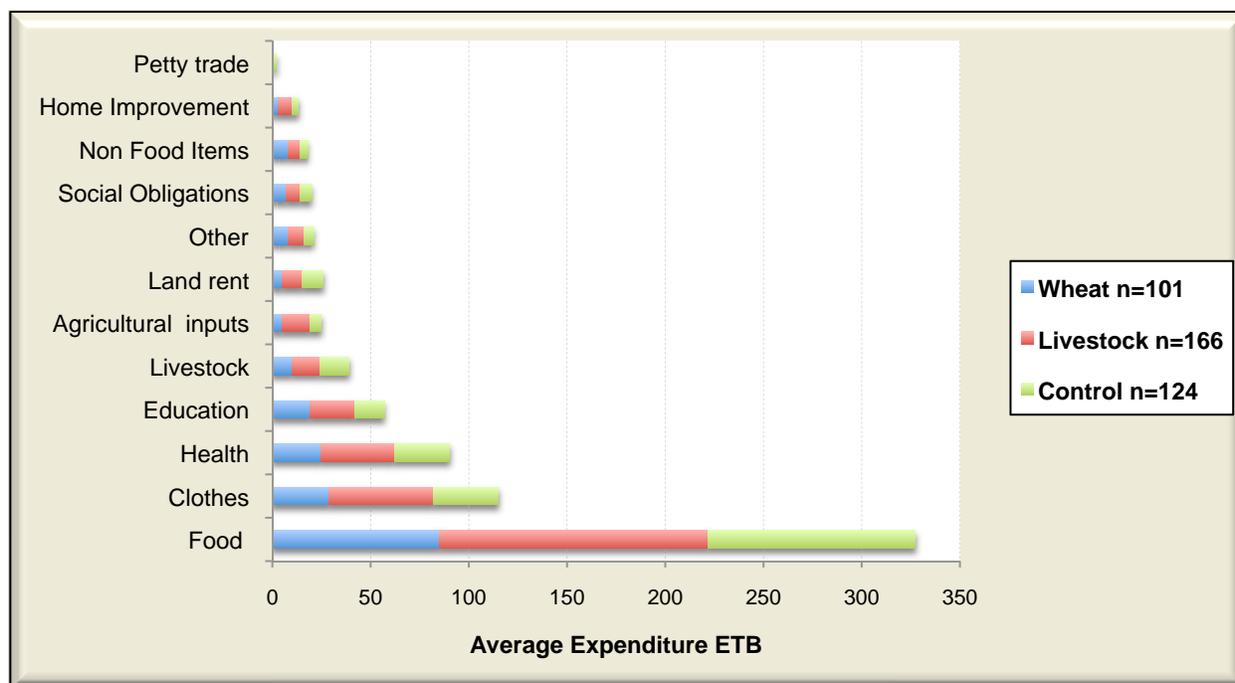
Table 4.7 Average household livestock sales and income 2009 – Ethiopian Birr (ETB)

Type	Wheat n=101	Livestock n=166	Control n=124
	Quantity Sold	Quantity Sold	Quantity Sold
Fattened Cattle	0.2	0.1	0
Fattened Small Ruminant	0.2	0.3	0.1
Cattle (Other Reason)	0.8	0.8	0.7
Small Ruminants (Other)	2.5	2.3	2.9
Equines	0.2	0.2	0.1
Poultry	2.7	1.9	1.6

Table 4.8 Average income from livestock sales 2009 – Ethiopian Birr (ETB)

Income Source	Wheat n=101	Livestock n=166	Control n=124
	Amount ETB	Amount ETB	Amount ETB
Cattle	1503.1	1207.3	997.9
Small Ruminants	547.1	522.0	632.4
Equines	87.7	78.7	58.1
Poultry	70.8	56.8	72.3

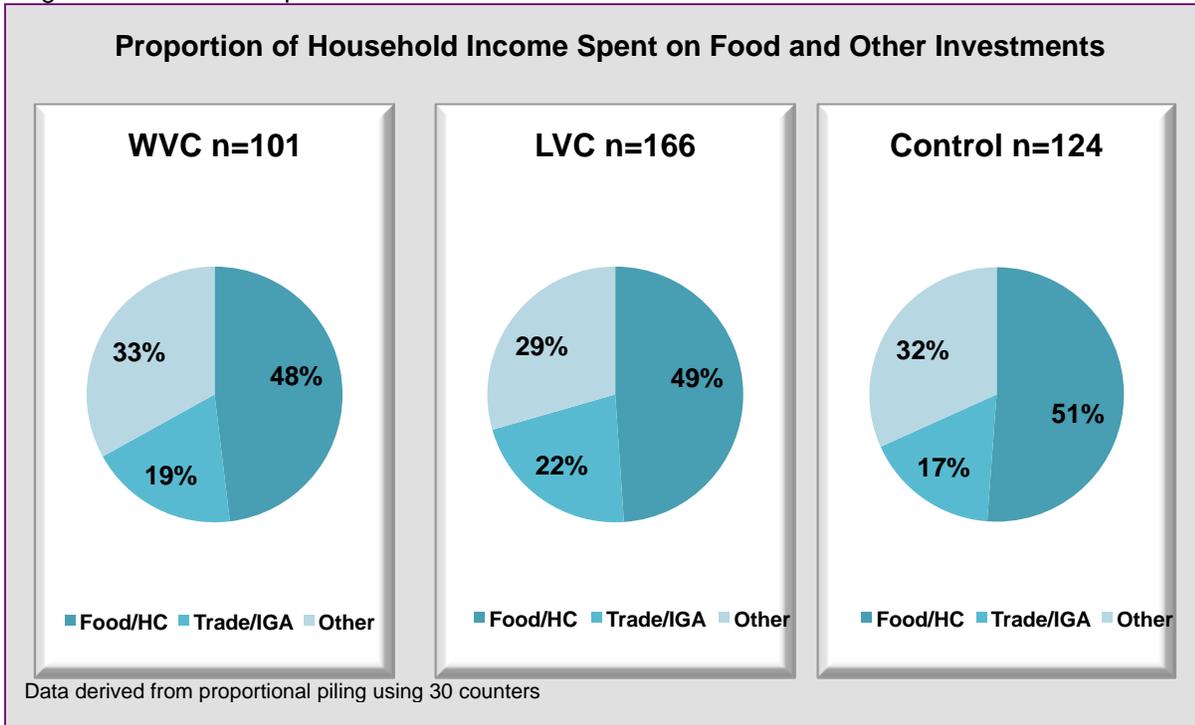
Figure 4.4 Spending method - income from livestock sales



Notes: Home Improvement includes construction, Non Food Items = fuel, soap, etc, Social Obligations = weddings, funerals, support to relatives etc.

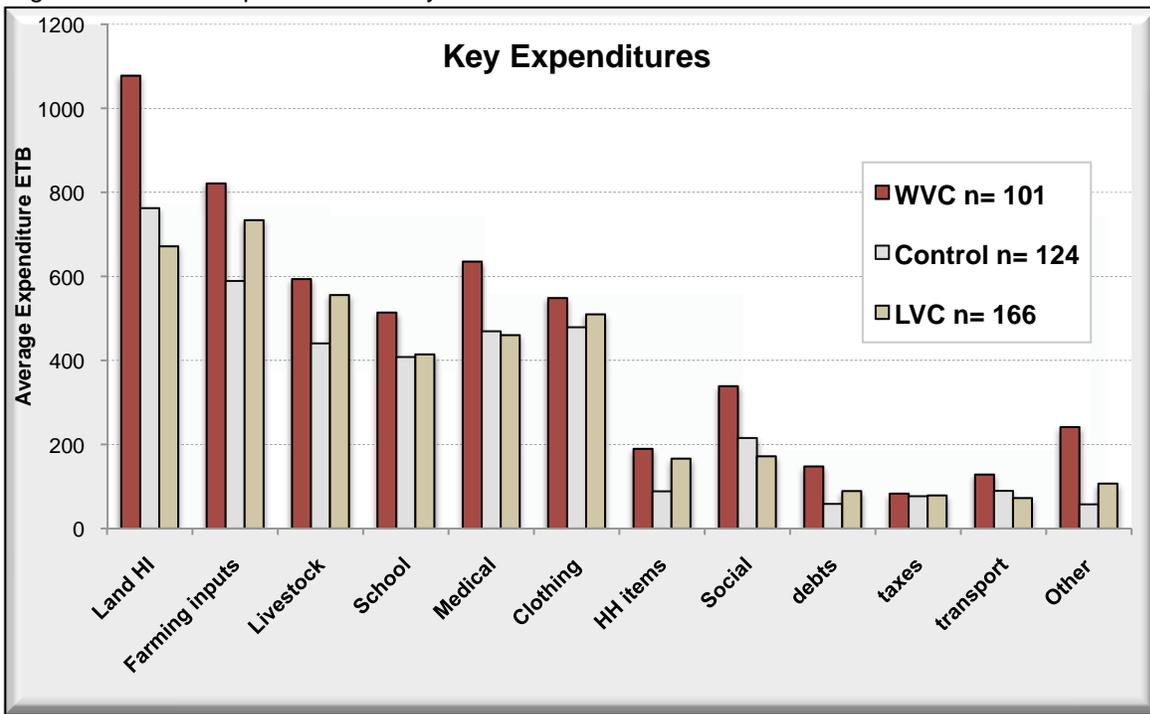
### 4.7 Expenditure

Figure 4.5: Relative expenditure 2008-2009



Notes: HC= Household Consumables, IGA = Income Generating Activities

Figure 4.6 Actual expenditure on key items 2008-2009



Notes: HI = Home Improvement, HH = Household, Social = Social Obligations

Mean expenditure on key items for 2008-2009 as follows:

- Livestock Value Chain (n=166) Ethiopian Birr 4,029.9 (95% CI 3,546.0, 4,513.7)
- Cereal value Chain (n=101) Ethiopian Birr 5,316.0 (95% CI 4,366.1, 6,265)
- Control Group (n=124) Ethiopian Birr 3,734.4 (95% CI 3,235.8, 4,232.9)

## 4.8 Asset Levels and Changes

### 4.8.1 LAND

Table 4.9 Mean land holdings 2008-2008

	Land ( <i>kert</i> ) 2009 (95% CI)	Land ( <i>kert</i> ) 2010 (95% CI)
<b>Livestock (n=166)</b>	6.4 (5.6, 7.1)	6.1 (5.4, 6.9)
<b>Wheat (n=101)</b>	7.2 (6.0, 8.5)	6.9 (5.7, 8.1)
<b>Control (n=124)</b>	5.3 (4.6, 6.0)	5.2 (4.4, 5.9)

1 *kert*= ¼ Hectare

### 4.8.2 Livestock

Figure 4.7 Livestock holdings 2009-2010 livestock sample (LVC n=166, control n=124)

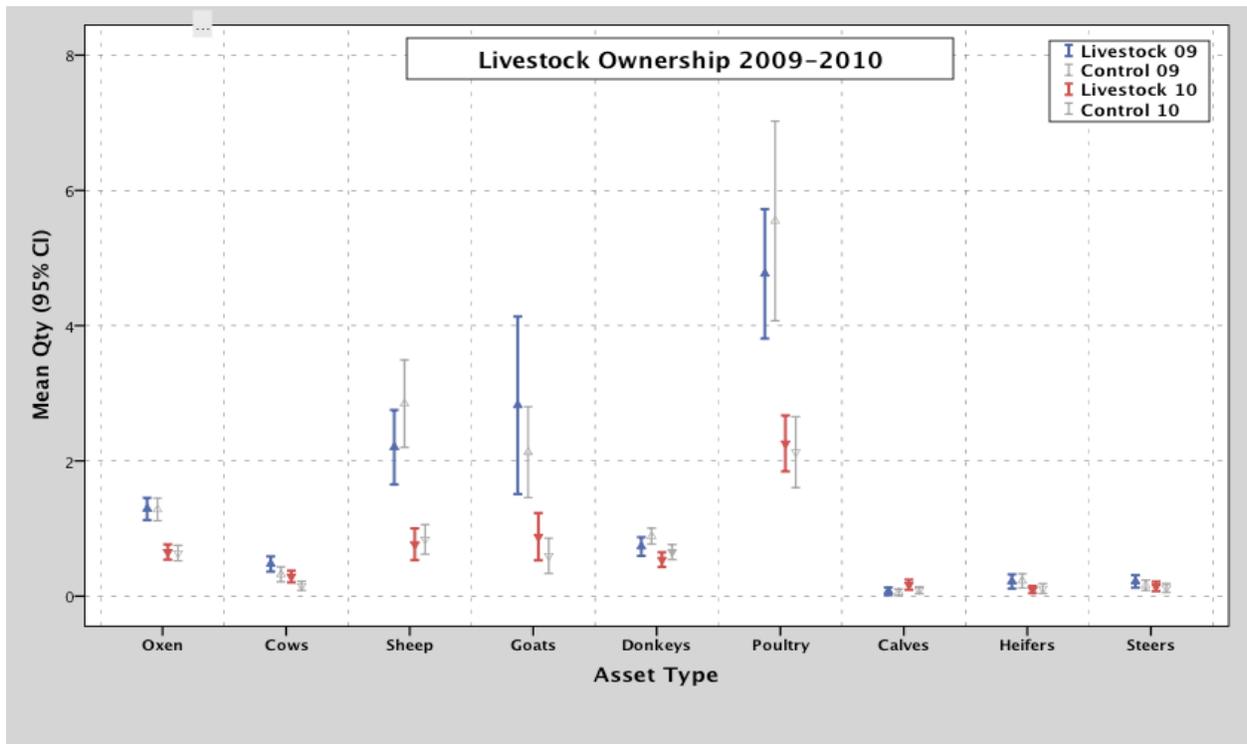
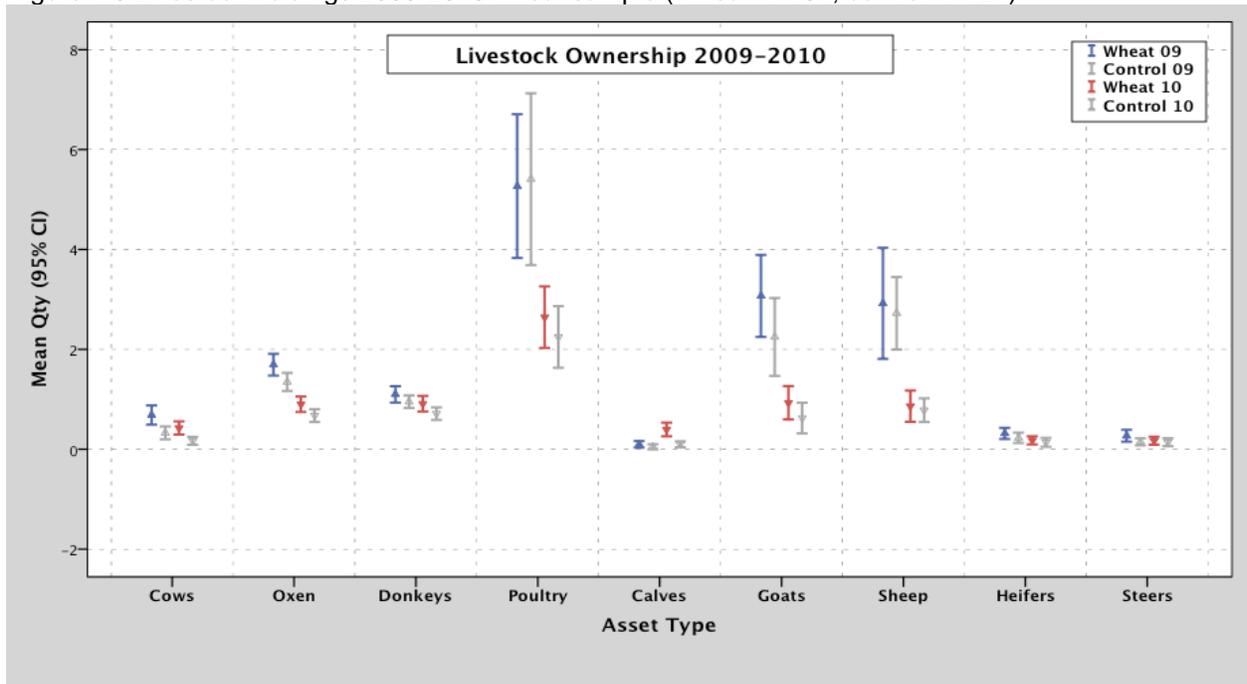


Figure 4.8 Livestock holdings 2009-2010 wheat sample (Wheat n=101, control n=124)



### 4.8.3 Productive Assets (Tools)

Figure 4.9 Productive assets 2009-2010 livestock sample (LVC n=166, control n=124)

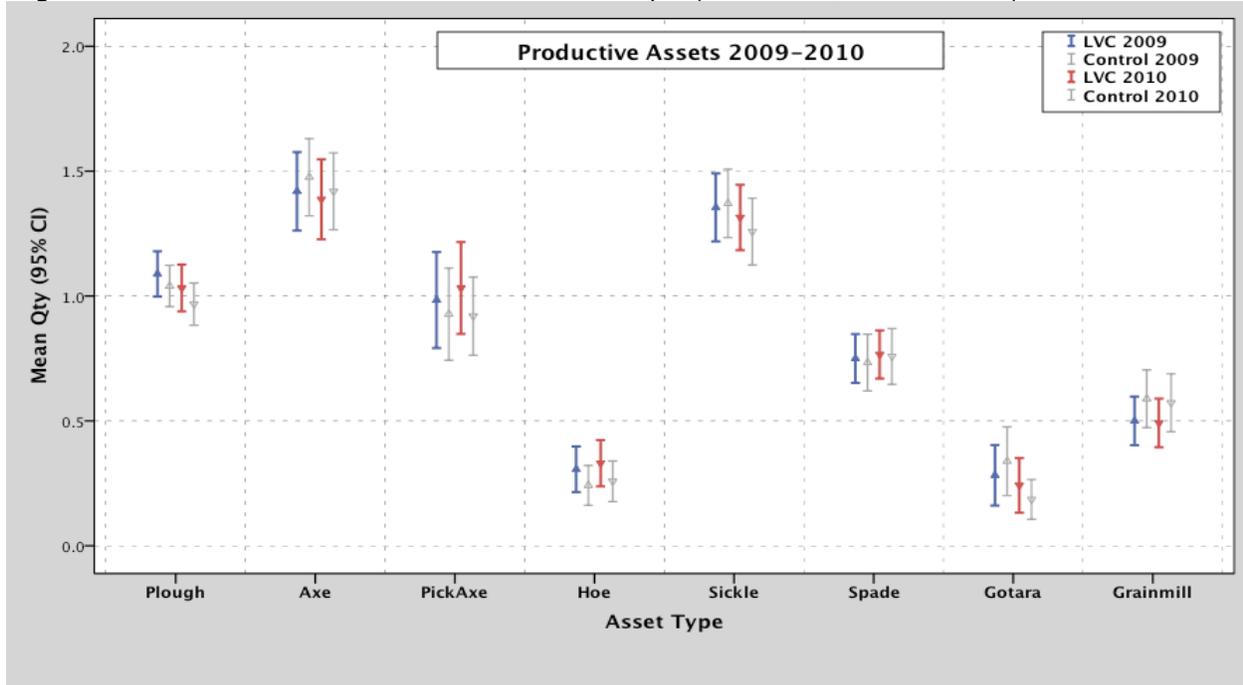
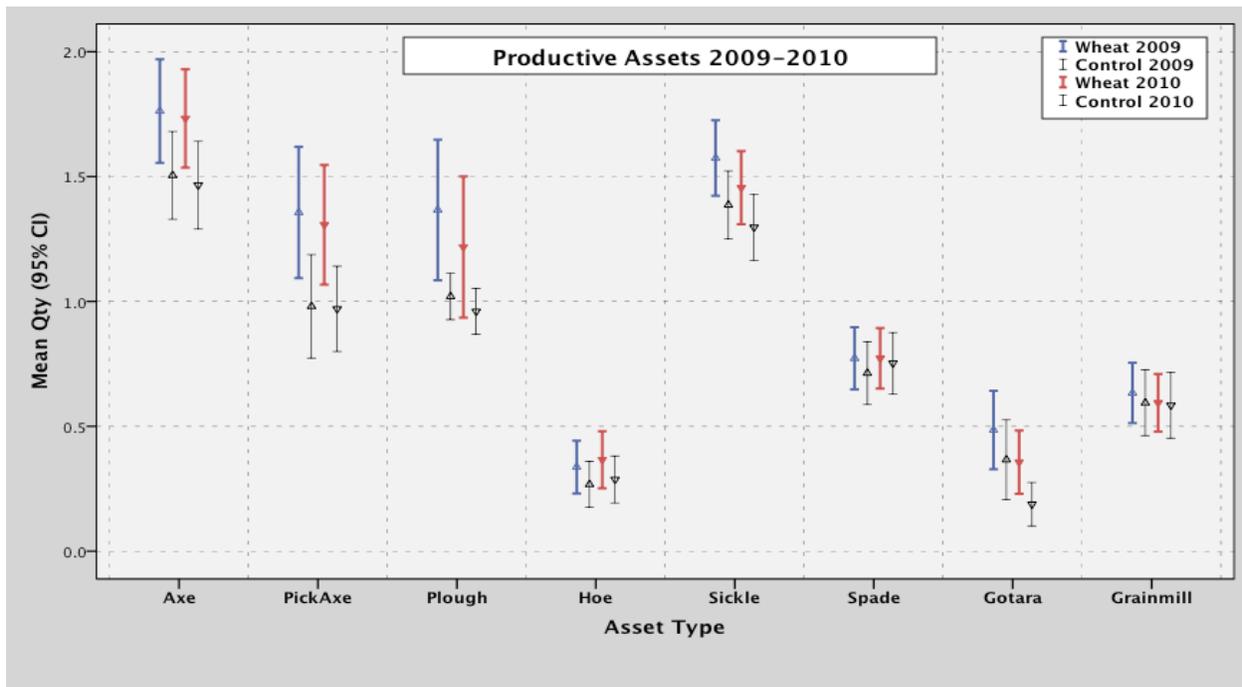


Figure 4.10 Productive assets 2009-2010 wheat sample (Wheat n=101, control n=124)



### 4.8.4 Household Items

Figure 4.11 Household items 2009-2010 livestock sample (LVC n=166, control n=124)

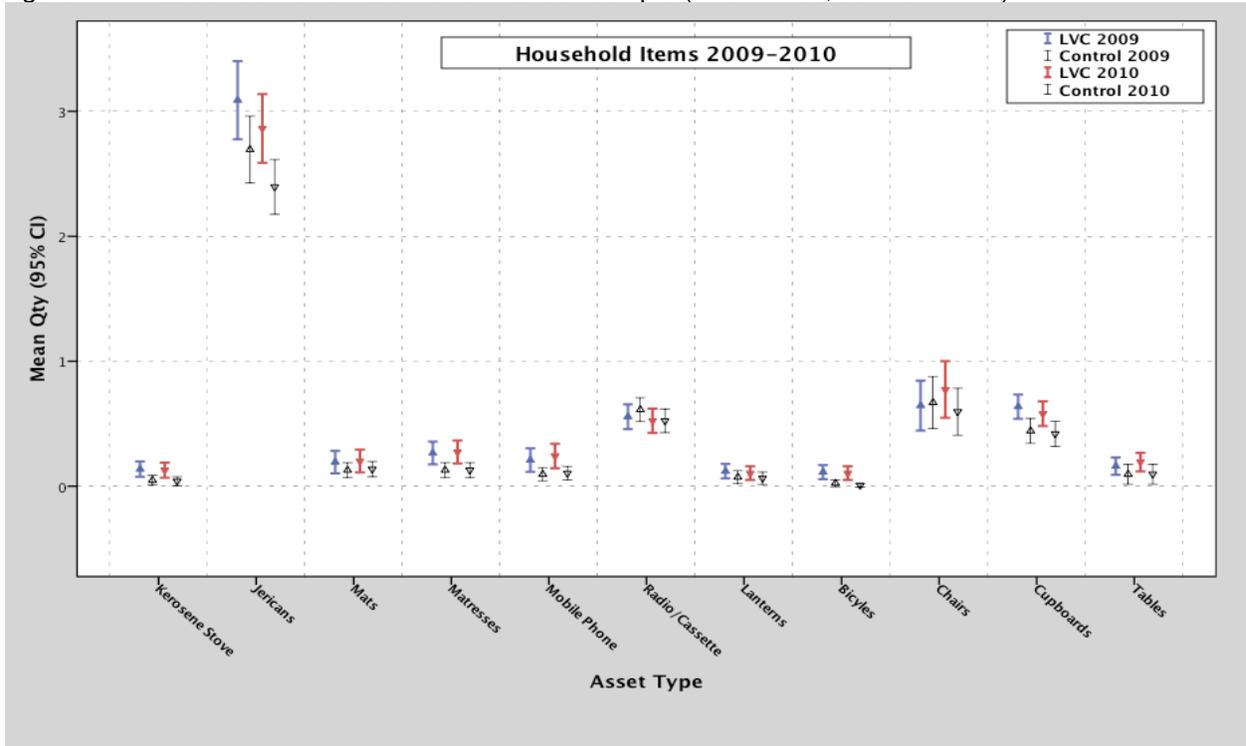


Figure 4.12 Household items 2009-2010 wheat sample (Wheat n= 101, control n=124)

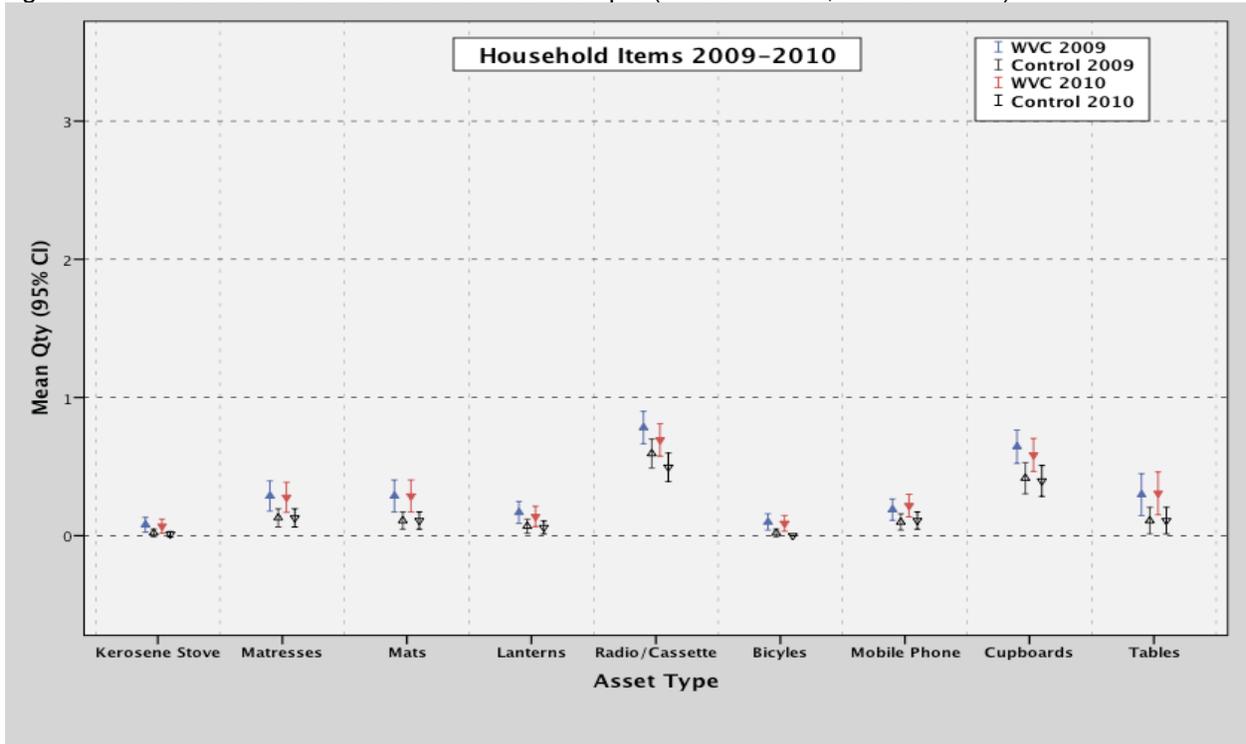


Table: 4.10 Factors contributing to negative changes in livestock assets

Reasons (Decrease)	Number and Percentage of Responses					
	LVC n=166		Control n=124		WVC n=101	
Sold/Exchanged/Slaughtered for food	259	48%	193	44%	178	49%
Livestock died	127	24%	125	29%	100	28%
Sold to pay for healthcare	43	8%	43	10%	32	9%
Sold to pay for education/schooling	45	8%	27	6%	23	6%
Sold for another reason	41	8%	33	8%	17	5%
Sold/Slaughtered for social obligations	8	1%	10	2%	7	2%
Sold to repay loans or debts	7	1%	3	1%	3	1%
Livestock matured	5	1%	1	0%	2	1%
<b>Total Responses</b>	<b>535</b>		<b>435</b>		<b>362</b>	

Notes: Number of responses may exceed the number of respondents as more than one asset was assessed per household

Table 4.11 Factors contributing to positive changes in livestock assets

Reasons (Increase)	Number and Percentage of Responses					
	LVC n=166		Control n=124		WVC n=101	
Livestock reproduced/matured	40	56%	22	46%	48	74%
Purchased with income from livestock sales	13	18%	11	23%	3	5%
Other reason*	10	14%	1	2%	5	8%
Purchased with income from cereal sales	1	1%	7	15%	4	6%
Purchased with income from other crop sales	2	3%	4	8%	1	2%
We were given this asset	2	3%	2	4%	1	2%
Purchased with MFI loan	2	3%	0	0%	2	3%
Purchased with profit from Petty Trade/IGA	1	1%	1	2%	0	0%
Purchased with PSNP/OFSP income or loan	1	1%	0	0%	1	2%
<b>Total Responses</b>	<b>72</b>		<b>48</b>		<b>65</b>	

\*Mostly compensation from Wonji sugar factory and other sources of income/employment

Table 4.12 Factors contributing to negative changes in productive assets (tools)

Reasons (Decrease)	Number and Percentage of Responses					
	LVC n=166		Control n=124		WVC n=101	
Asset stolen/broken	53	93%	58	98%	57	95%
Sold for another reason	0	0%	1	2%	2	3%
Sold/Exchanged for food	2	4%	0	0%	0	0%
Sold to pay for education/schooling	2	4%	0	0%	0	0%
Sold/Given for social obligations	0	0%	0	0%	1	2%
<b>Total Responses</b>	<b>57</b>		<b>59</b>		<b>60</b>	

Table 4.13 Factors contributing to positive changes in productive assets (tools)

Reasons (Increase)	Number and Percentage of Responses					
	LVC n=166		Control n=124		WVC n=101	
We were given this asset	11	42%	20	65%	9	50%
Other reason*	5	19%	5	16%	3	17%
Purchased with income from livestock sales	3	12%	3	10%	2	11%
Purchased with credit from MFI	4	15%	0	0%	2	11%
Purchased with income from other crop sales	2	8%	3	10%	1	6%
Purchased with profit from Petty Trade/IGA	0	0%	0	0%	1	6%
Purchased with income from cereal sales	1	4%	0	0%	0	0%
<b>Total Responses</b>	<b>26</b>		<b>31</b>		<b>18</b>	

\*Mostly compensation from Wonji sugar factory and other sources of income/employment

Table 4.14 Factors contributing to negative changes in household assets

Reasons (Decrease)	Number and Percentage of Responses					
	LVC n=166		Control n=124		WVC n=101	
Asset stolen/broken	70	92%	65	97%	63	98%
Sold/Exchanged for food	2	3%	2	3%	1	2%
Sold to repay loans or debts	2	3%	0	0%	0	0%
Sold to pay for healthcare	1	1%	0	0%	0	0%
Sold/Given for social obligations	1	1%	0	0%	0	0%
<b>Total Responses</b>	<b>76</b>		<b>67</b>		<b>64</b>	

Table 4.15 Factors contributing to positive changes in household assets

Reasons (Increase)	Number and Percentage of Responses					
	LVC n=166		Control n=124		WVC n=101	
Other reason*	18	69%	3	30%	6	35%
Purchased with income from cereal sales	3	12%	4	40%	5	29%
Purchased with income from livestock sales	3	12%	1	10%	4	24%
Purchased with profit from Petty Trade/IGA	2	8%	2	20%	1	6%
Given this asset	0	0%	0	0%	1	6%
<b>Total responses</b>	<b>26</b>		<b>10</b>		<b>17</b>	

\* Mostly compensation from Wonji sugar factory and other sources of income/employment

### 4.9 Savings and Loans

Figure 4.13 Value of savings and loans by source

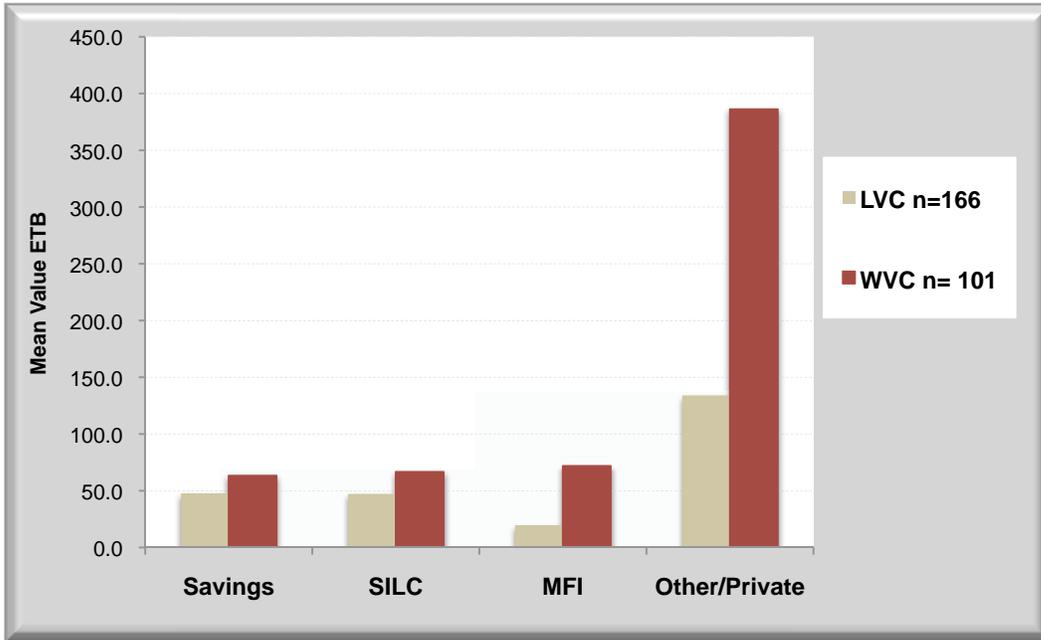
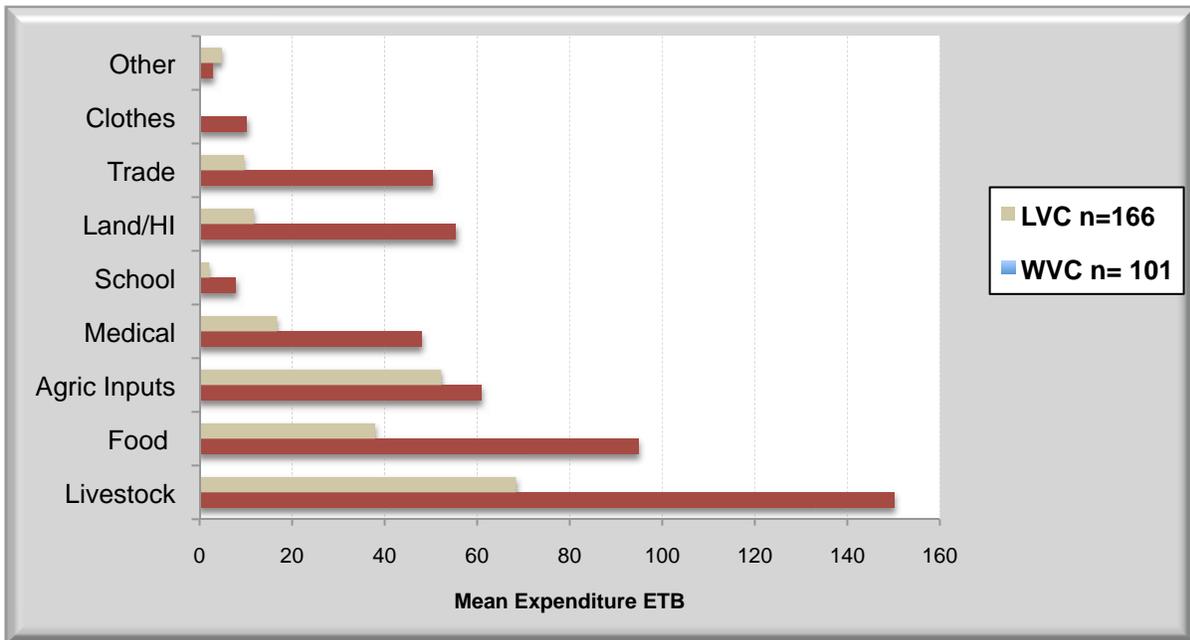
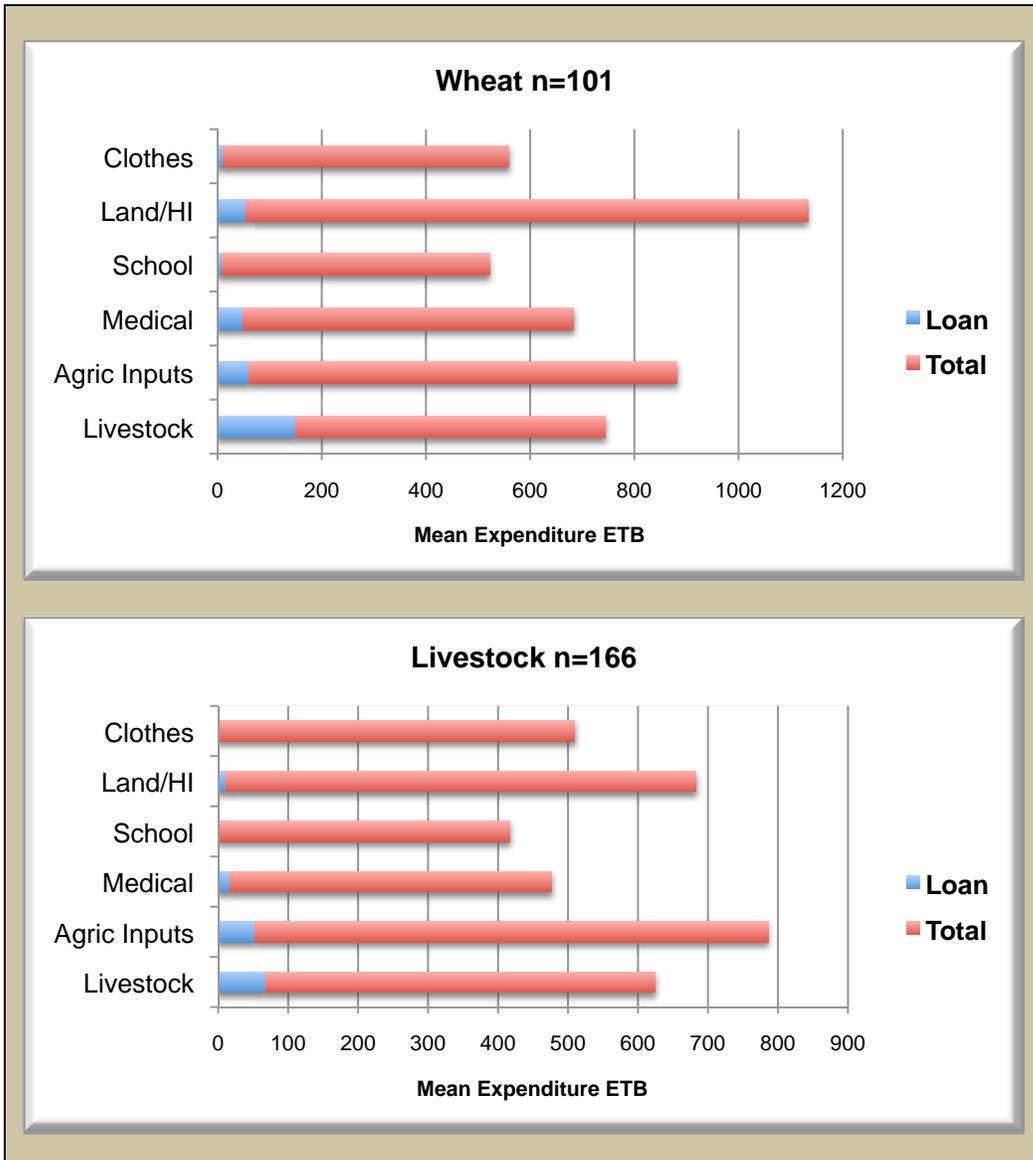


Figure 4.14 Saving and loan utilization



Notes: Land/HI = Land rent and or home improvements (construction) Agric Inputs = Agriculture/farming Inputs

Figure 4.15 Comparison of loan utilization and total expenditure (on key items)



Notes: HI = Home Improvement (construction), Agric Inputs = Agriculture/Farming Inputs

## 5. DISCUSSION

### 5.1 Assessment Constraints and Methodological Limitations

There were a number of methodological constraints and limitations to the assessment and the results should be viewed in light of these.

#### 5.1.1 Timing

Due to various technical and practical delays the assessment took place almost one year after the official start up of the project. As such a retrospective baseline was used and such an approach might be subject to a certain amount of recall bias.

Having said this, delays in project implementation meant that for the livestock component the project had only just started, in that only planning and training activities had been implemented at the time of the assessment. As such, no impact could be expected from this activity at the time of the assessment. Similarly, little impact could be expected from the cereal value chain activities as wheat production was severely affected by drought in 2009. Consistent with this, people were forced to sell their assets in order to cope. Consequently the assessment ended up measuring the impact of the drought on assets, as opposed to the impact of the project on assets. Aside from the seed transfers for the wheat value chain, PSNP Plus households had not been linked to formal microfinance at the time of the assessment, and again no impact could be expected from this project component. Given these considerations, the results from the assessment should be seen as a baseline against which future impact might be assessed.

#### 5.1.2 Attribution

The classic scientific approach to measuring attribution involves the use of a control population of non-project participants. This approach involves comparing a control group with a “treatment” or “intervention” population to determine statistical difference between the two groups, the assumption being that the control group has similar characteristics as the intervention group (Catley et al, 2008). In identifying a control group for the study in Sire and Dodota, the assumption was made that PSNP participants would share similar characteristics as PSNP Plus households and so the same comparison group was used for both the wheat and livestock value chains. However, it has been argued that the complexity, diversity and variance that defines and distinguishes people and communities is such that the conventional rigor associated with using a control makes no sense when applied to community development research (Chambers, 2008). This argument is acknowledged, as is the limitation that the approach used in no way captures the multiplicity of independent variables or characteristics that make two population groups similar or indeed truly comparable. Therefore, the characteristics used to define comparability were limited to the specific asset indicators being measured, and actual expenditure on key items was also used as proxy for real income. Even so, although the results show similar characteristics for most of the indicators being measured, there was a significant difference for a few specific assets (cows, calves and bicycles) between the wheat sample and the comparison group, suggesting that the wheat sample might have been slightly better off than the comparison group – even before the PSNP Plus started. It is unclear why this is the case, but it does suggest that this might not be a reliable control for the wheat value chain. Having said this, the mean cow and calf holdings for the wheat sample were less than 0.01 before the project started, so this disparity is probably not that important. Nonetheless, estimated expenditure for the wheat sample was higher (although not significantly) than that of the control group suggesting that on

average, the wheat sample is slightly better off than the comparison group. The results between the livestock sample and the control showed no significant difference across all indicators assessed, representing a more reliable control for this project intervention.

### 5.1.3 Indicators

In terms of indicators, assets are easily measured, and the empirical evidence suggests that they provide a useful poverty measurement (Carter and Barrett, 2006; Carter *et al*, 2008). The recall bias for assets also appears to be minimal, as people can easily recall asset levels over fairly extended periods. However, the study focused on physical and financial assets that are easily measured, and did not try to systematically measure less tangible assets such as social capital, dignity, status, choices or opportunities. As such, any evidence on the impact of the project on these types of assets can only be extrapolated from the qualitative data.

Another concern with these types of assets is their use as benchmarks for PSNP graduation. Arguably there are incentives to stay in the program, in which case it is possible that households will under report on these assets. Furthermore, not all assets are fixed, for example livestock are continuously being purchased and sold, with destocking and distress sales increasing during times of food and income shortage associated with drought, such as occurred in Sire and Dodota in 2009. Although this dynamic would also hold true for the control sample, actual changes in livestock assets may not be a useful poverty indicator unless measured over a protracted period, or in the event that no major shocks occur during the assessment.

### 5.1.4 Sampling Challenges

There were a number of challenges involved in identifying the sampling frame for the assessment<sup>9</sup>. Ideally, a sampling frame would have included households involved in at least one value chain activity, and one microfinance activity such as a SILC group. However, during scoping visits to the project area, the research team met with a number of SILC groups, and several farmers involved in the project value chains. At that point in time none of the SILC members interviewed belonged to a project value chain, and none of the farmers interviewed belonged to a SILC group. Shortly before the assessment, project participant lists were provided for the cereal and white pea bean value chains. These lists indicated that 53 cereal value chain participants and 49 white pea bean value chain participants were also involved in PSNP Plus SILC groups across both *woredas*. Given that high attrition rates can be expected in a longitudinal study, if these households had been used for the sampling frames, it is likely that the final sample would have been too small to be statistically representative even if purposive sampling had been used. Although the assessment results indicate that, 45% of the randomly selected cereal sample involved in SILC groups, this information was not available when the assessment started. The decision was therefore made to use only the value chain project participant lists for the sampling frame and as such, the assessment could only partially focus on the SILC activities.

For the livestock value chain, prior to the assessment only 99 households had received training under this value chain. In order to expand the sampling frame, projected value chain participants were added to the list of 99 households. These projected participants were involved in training at the time of the

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<sup>9</sup> For more details see Burns, J., and Bogale, S (2009 a & b) Reports from LIS Field visits to Wonji and Dodota September to October 2009

assessment, and were expected to receive asset transfers more or less at the same time as the 99 existing value chain participants.

Furthermore, a recent PSNP rescreening exercise meant that a considerable number of participants in the wheat value chain were no longer registered in the PSNP, and this information was not reflected in the project participant lists used for the sampling frame. In order to accommodate this development, during the assessment, where respondents from the wheat value chain sample indicated that they were no longer involved in the PSNP, these households were rejected from the sample. At the time of the assessment, the PSNP re-screening exercise had only been completed in Dodota *woreda*. If a similar exercise is carried out in Sire *woreda*, this could have implications on future LIS assessments.

### 5.1.5 Information and secondary data limitations

One of the major technical challenges involved the availability and reliability of information on the project. At the time of the assessment, it was unclear to the research team what had actually been implemented, and which participants were involved in different project activities. Conflicting information between project staff working at different levels exacerbated this challenge. As discussed, at the time of the assessment no comprehensive project participant lists were available, and this had implications on which sampling frame to use, and on the actual sampling.

In terms of triangulation, at the time of the assessment no M&E reports specific to Sire and Dodota were available. The available M&E data was mostly consolidated combining other project areas not included in the LIS study. As such, the M&E data on project implementation had to largely be extrapolated from the consolidated reports. Although some less detailed data was provided specific to Sire and Dodota the figures provided in this report may not be reliable.

## 5.2 Impact of the Drought

Drought was the most frequently mentioned recent shock experienced by household participants with a hundred percent of project respondents reporting this event (table 4.5). Scoping visits to the project area prior to the assessment strongly indicated that at the time of the assessment, little or no impact could be expected from the project as a result of the drought in 2009 (Burns and Bogale, 2009). Across all three samples (treatment and control), participants reported crop and income loss and the associated food insecurity as the most salient impacts of the drought (figure 4.1). The results from the assessment also show a significant decline in livestock assets (figures 4.7 & 4.8). This can largely be attributed to distress sales of livestock, as people sold these assets in order to compensate for the income and production losses associated with drought (figure 4.4 & table 4.10). Livestock mortality was also reported as a factor. Again the lack of feed and water associated with drought (figure 4.1) would have contributed to a decline in animal health with an associated increase in mortality. Participants also associated an increase in (human) medical expenses with drought, and a decline in household labor capacity as human health problems increase due to food insecurity and malnutrition (see notes to figure 4.1).

In order to cope with the drought, assessment participants employed a variety of coping strategies. The most important coping strategy mentioned by participants was that they engaged in the PSNP, followed by the sale of livestock (figure 4.2). Participants also engaged in other economic activities in order to cope with the drought. These included daily wage employment, collecting and selling various

natural fuel, fodder and building products, and engaging in or expanding on different types of trading and income generating activities (figure 4.2). Many households also borrowed money from different sources, although only 2 participants in the entire sample specifically mentioned the SILC groups. This may well have to do with the fact that these groups had only just been, or were in the process of being established in 2009.

At the project level, the drought meant that little or no cereal or white pea bean harvest was realized in 2009, with obvious implications on production for the value chain component of the project. Furthermore, the impact of the drought on household income and expenditure would have reduced people's capacity to save and borrow with interest, again with implications on the projects microfinance component.

### 5.3 Community Wealth Indicators

During the assessment, focus group participants identified a number of different wealth indicators in Sire and Dodota, and assigned these to three wealth groups namely, the better-off, the middle, and the poor. According to participants, land and livestock holdings represent the two most important indicators of wealth, with the better-off households typically owning more land and livestock, specifically cattle and draft animals. For the purpose of selecting PSNP participants, local officials also use three wealth categories, however they divide the poor into two sub categories (poor and poorest). Similarly, land and livestock holdings are used as benchmarks to determine which category a household falls into. Table (4.3) gives a breakdown of the indicators and asset levels defining wealth identified by assessment participants, and table (4.4) gives the wealth indicators used for PSNP screening.

#### 5.3.1 Livestock

Livestock are considered one of the most important wealth indicators in the study area (see also Bevan et al, 2006). Focus group participants indicated that the majority of poor (poor and poorest) households do not own cattle or draft animals. However the results show that the majority of the assessed households do own a few cattle (figures 4.7 & 4.8). Most households with the exception of the poorest also own small ruminants, and donkeys, the later being used to fetch water, and to transport agricultural products, firewood and fodder from the farm to either the home or markets or both. The majority of households in the area practice poultry production, and even the poorest households typically own hens. Women and children are largely responsible for poultry management and the sale of poultry products and eggs.

#### 5.3.2 Land

Although participants indicated that the wealthier households typically own more land, this partly has to do with the capacity of the better off to utilize their land holdings. Constraints to land utilization, such as the lack of household labor the lack of draft animals, and the cost of agricultural inputs largely determines how much land a household can effectively cultivate. As such poorer households will often rent out some of their land to wealthier neighbors. There are also a considerable number of landless households in the area, however many of these households will rent land, and sharecropping is also commonly practiced. In recent years a considerable number of households have also been forced to rent their land to the Wonji sugar factory, particularly in Awash Bishola and Tedecha Guracha *kebele's*. Although they receive income from this land (between 230-250 ETB/month during the sugar production season), they no longer benefit from the food and income they used to acquire through

crop production and sales. Although land can be rented, it is against government policy for people to sell their land or purchase land. Therefore, as an indicator of wealth status, land holdings are best understood in terms of how much land a household is able to cultivate either from land they own and or land they rent from others. The local unit for measuring land is *kert* one *kert* converts into roughly a quarter hectare. The mean land holdings for the assessed households ranged from 5.2-7.2 *kert* or 1.3-1.8 hectares (table 4.9), putting the average household in the middle to poor categories based on the PSNP landholdings criteria (table 4.4).

### 5.3.3 Dwellings and Household Items

Although focus group participants indicated that wealthier households are more likely to have corrugated iron roofing on their homes, and are more likely to own certain types of household items such as radios. These did not appear to be all that important as indicators of wealth.

### 5.3.4 Food Security Duration

Although more difficult to accurately measure than physical assets, the ability to meet household food needs from crop and livestock production was also identified as a useful benchmark of wealth status. For example the better off might be expected to meet their food needs from own production for 11 months of the year, whereas the middle and poorest categories would only be able to do this for 7 and 3 months respectively (table 4.3). Therefore, poorer households have to meet their food needs through food purchased from other income sources. As such, certain types of activities such as tending other people's livestock, and daily wage labor are typically associated with poorer households (table 4.3).

## 5.4 Sources of Food and Income

Seeing as most poor households living in Sire and Dodota depend on rain-fed crop production, drought or unreliable rainfall represents one of the major constraints to crop production and household food security. Although irrigated farming is practiced in the vicinity of the Awash and Keleta Rivers, particularly in Korodegaga and Kolobe Hawas *kebele*'s, most households living in the area do not have access to water for irrigation and have to depend on unreliable or un-predictable rain-fed production. Unreliable rainfall during the 2008-cropping season followed by rain-failure in 2009 resulted in widespread food insecurity in the area.

### 5.4.1 Crop Production

The majority of poor households living in Sire and Dodota are dependent on rain-fed cereal production, which represents one of the most important farming activities in the project area. Wheat, barley, *teff* and maize are grown both as a cash crop and for household consumption. Sorghum is also produced but is less common. Faba beans and a variety of dried white pea beans are also grown with the latter being an important cash crop (Hamda, 2008). Other crops include peas, lentils, chickpeas, sesame, flaxseed and vegetables such as onions, tomatoes and peppers.

Some households living adjacent to the Awash and Keleta Rivers commonly practice irrigated crop production, this involves the use of both hand and diesel pumps to irrigate maize, vegetables and beans. Although less common, sugar cane, cotton, cabbage and papaya also grown by some households in the area (Bevan et al, 2006). The results indicate that combined crop sales represent

one of the most important sources of income for PSNP Plus project participants, however this appears to be mostly from the sale of cereals and beans. For example, for the assessed households, even during 2008-2009 (a drought year) between 10-14% of household income came from wheat sales, 18-21% from other cereal crop sales, and 8-12% of household income came from 'haricot' bean sales (figure 4.3).

#### 5.4.2 Constraints to Crop Production

Project participants indicated that the main constraints to crop production include frequent drought and unreliable or unpredictable rainfall, the lack of draft animals, poor soil fertility and water retention capacity, availability of land, land degradation, the cost of farming inputs (seeds/fertilizers), flooding-particularly in the vicinity of the Awash River, and a variety of weeds and pests. Similarly, a comprehensive study carried out in Korodegaga *kebele* identified rain shortage and lack of oxen as two of the major constraints to rain-fed production in the project area, and study participants suggested that expanding on irrigated production would mitigate against the effects of recurrent drought and crop failure (see Bevan et al, 2006). Indeed the presence of extensive commercial sugar cane plantations demonstrates the potential for the expansion of irrigated crop production in the area (IFPRI, 1989 cited by Bevan et al, 2006).

The frequency of drought or rain-failure in the area is quite alarming. According to local farmers, in recent years the area has experienced rain-failure in 2004 and 2009, and unreliable rainfall in 2008 resulting in the loss of food and income from crop production and sales. Similarly, a report from 2006 suggests "that there has not been a good harvest in the past ten years" (Bevan et al, 2006: 26). Participants classified 2009 as a particularly bad drought year characterized by distress sales of livestock and the employment of other coping strategies to compensate for food and income losses (figure 4.2 & 4.4 & table 4.10).

#### 5.4.3 Livestock Production and Trade

Livestock production is practiced by all but the very poorest households in the study area, and the sale of livestock and livestock products may well represent the single most important source of income for project participants. The results indicate that for the assessed households in 2009, roughly 24-26% of household income came from livestock production and trade (figure 4.3). Livestock production mainly involves rearing cattle and small ruminants, which are sold throughout the year, however for PSNP participants this is mostly limited to sheep and goats, as they have limited cattle holdings. Extensive communal grazing areas exist in both Sire and Dodota, and everyone in the community has free access to this land.

Some households practice livestock fattening, for cattle this is limited to areas where water is available and people have access to animal feed. Most households involved in livestock production do not practice scientific fattening, but rely on natural body improvement and weight gain (partial fattening) to fetch better prices for their livestock once they are sold. Farmers indicated that this typically involves purchasing a mature steer for between ETB 2000-2500, fattening it for a period of three months, and then selling it for between ETB 5000-6000. Alternatively, a mature lamb might be purchased for ETB 250-300 and sold for ETB 500-600 two to three months later. Seeing as PSNP households are likely to have fewer cattle than their wealthier neighbors and seeing as most households do not have sufficient access to water and feed, sheep 'fattening' is more commonly practiced by project participants. However, participants indicated that in terms of livestock ownership, priority is given to draft animals, which are used for cereal production. Once these oxen are 'retired' they will be 'fattened' and sold, although again this usually involves natural weight gain as opposed to scientific fattening.

Seeing as people generally try to acquire oxen over female cattle, dairy production is less common especially for poor households. Having said this participants suggested that some households with lactating cows will sell milk and milk products locally and in nearby towns.

Project participants indicated that young men commonly practice livestock trading. This usually involves buying cattle and small ruminants in the adjacent 'highland' areas, and selling them in markets in Sire and Dodota. In some cases the animals are purchased and sold on the same day, in other cases some traders will keep the livestock for a week or more before selling them.

Most households including the poorest also own at least one donkey. These are used to transport agricultural products and by products from the farm to either the home or markets or both. They are also sometimes rented, or used to transport water or fodder these being sold locally and providing a valuable source of income particularly for poor landless households. For these reason some participants indicated a preference for donkeys over small ruminants.

In the past, the sale of poultry and eggs provided an important source of income for PSNP households in the area, and women typically manage poultry production. However, in 2006 a poultry extermination campaign was carried out due to fears of an avian influenza (H5-N1 sub-type) outbreak in the area, resulting in a loss of this income source.

#### 5.4.4 Constraints to Livestock Production and Trade

The availability and quality of livestock feed is one of the major constraints for livestock production in the area. The major feed resources in the area are natural pastures and crop residues. Since most of the land is converted to cultivation, the quantity and quality of feed available from communal grazing land is poor, and during the dry season crop residues' play an important role. The type of crop residue available depends on the type of crops grown, the size of land allocated to the specific crop, and the amount of yield from that plot. Therefore, during a good rainy season it is not only the increase in grain yield but also the crop biomass yield increase, which could have a positive impact on livestock production. In response to this the Livestock Agency distributed forage crop seeds, however this has not been effective due to irregular rainfall distribution in 2009.

Focus group participants also mentioned that the lack of water represents a major challenge for cattle fattening. There were also a number of reports of livestock mortality resulting from attacks by predatory animals (hyena and jackals), particularly in areas adjacent to Dhera Dil Feker game preserve.

Livestock disease and associated mortality also represents a constraint to livestock production in the area. Having said this, the government provides free vaccinations for anthrax, blackleg, sheep pox and PPR (peste des petits ruminants) on an annual basis. In Dodota area the team came across two veterinary clinics in Amede and Bika *kebele*'s and two health posts are under construction in Tero Desta and Korro Degaga villages. Table (5.1) presents some of the commonly reported livestock disease in the area.

Table 5.1: Common Livestock Disease in Sire and Dodota

Disease type		Local name <sup>10</sup>	Livestock species affected
Bacterial	Anthrax	<i>Citaa</i>	All species but sub- acute in equine
	Blackleg	<i>Furee</i>	All species but mostly cattle below 2 years
	Bovine pasteurilosis	<i>Qufasisa</i>	Large ruminants
	Ovine Pasteoriolosis	<i>Qufasisa</i>	Small ruminants
	Dermatophilosis	<i>Cittoo</i>	Cattle
Viral disease	African Horse sickness		Equines
	Sheep Pox	<i>Kiftiina</i>	Small ruminants
	PPR ( <i>Peste des Petitis Ruminants</i> )		Small ruminants
	Newcastle		Poultry
	Rabies	<i>Dhukuba Sare</i>	All species

Source: veterinary clinics and farmers in Dodota and Sire *woredas*

#### 5.4.5 Other Economic Activities

Aside from crop and livestock production, project participants earn income from a variety of different economic activities. One of the most important sources of income is from daily labor, representing between 9-11% of household income for assessment participants in 2009 (figure 4.3). This mostly involves working on farms for wealthier neighbors, or working on commercial, or in some cases communal irrigation farms. Combined with PSNP work, daily labor represents one of the most important sources of income for project participants accounting for between 17-19% of household income in 2009 (figure 4.3). Some informal employment opportunities exist in nearby towns such as Dhera and Sodere, and young men often migrate to larger urban centers in search of construction jobs or other forms of menial employment. Participants indicated that people expand on this option during times of food and cash shortage.

The sale of firewood and fuel derived from livestock manure also provide an important source of income for many households in the area. These are either sold on the side of the road, or in nearby towns. Similarly, some people also collect straw from the neighboring highland areas, this is transported using donkeys and horses and sold in Sire and Dodota where it is used as fodder or for house construction. Participants indicated that poor landless households with few other livelihood opportunities commonly practice this. Some also transport water from rural areas and sell this in nearby urban centers, for example Dhera, where there is a serious water shortage. Petty trade is primarily practiced by women and involves the sale of soft drinks, and locally brewed alcoholic drinks, cigarettes, vegetables and cooked food items. However, many project

<sup>10</sup> Afan Oromo is the local language in the area

participants live quite some distance from market centers, and are less likely to engage in petty trade. Nonetheless many households participate in petty trade during periods when they are not involved in on-farm production, and households will expand on this activity during times of food and income shortage (figure 4.2). Other off-season activities include brewing local beverages, knitting traditional clothes, making covers for traditional stoves, and weaving mats.

A number of project participants also earn income from renting out their land (figure 4.3). Poor households will often rent out some of their land to wealthier farmers, as they do not have the resources or capacity to fully utilize it. However, in Awash Bishola and Tadecha Gurcha *kebele*'s, a considerable number of participants were receiving rent or compensation from the Wonji sugar factory for the use of their land. However, this income source also represents an income loss from crop sales and increased expenditure on food which otherwise would have been produced on this land. The magnitude of this cannot be overlooked, for example community leaders in Awash Bishola indicated that the Wonji sugar factory had 'acquired' 1,059 hectares of land, displacing 484 households, which represents over seventy percent of the population in the *kebele*.

## 5.5 Expenditure

During 2008-2009, the majority of household income (48-51%) for assessment participants was spent on food (figure 4.5). Although this can largely be attributed to the loss of food from own production, and increased food prices associated with the drought in 2009, LIU data indicates that between 30-40% of household income is typically spent on food for the two poorest categories in this livelihood zone (DPPA, 2008). Other key expenditures include renting land, farming inputs (seeds, fertilizers, tools, animal health), livestock investments, school and medical expenses and clothes (figure 4.6).

## 5.6 Asset Changes

The results indicate that since the project started, both project and non-project (control group) participants have experienced a significant decline in livestock assets (figures 4.7 & 4.8). This can largely be attributed to the drought in 2009, as people sold their cattle in order to cope with the loss of food income from crop production. The most frequently mentioned reason given for a decline in livestock assets was that they were sold in order to purchase food (table 4.10). Similarly, food purchases were identified as the most important use of income earned from livestock sales in 2009 (figure 4.4). Livestock mortality was given as the second most frequently mentioned reason for a decline in livestock assets (table 4.10). This can be attributed to a combination of drought related factors and livestock disease outbreaks in 2009. Although periodic animal vaccination campaigns are carried out, there were reports of anthrax, blackleg, sheep pox and PPR (peste des petits ruminants) outbreaks in 2008 and 2009, resulting in widespread mortality, particularly of small ruminants. Where households experienced an increase in an individual livestock type this was mostly due to livestock reproduction (table 4.11). Some households also reinvested in livestock with income from crop and livestock sales, and to a lesser extent from other sources of income (table 4.11).

The results indicate that there was no significant change (positive or negative) in land holdings since the project started (table 4.9). Similarly the results show no significant change in tools and productive assets, or household items since the project started (figures 4.9-4.12). Where there was a decrease in individual productive or household assets, the results suggest that was mainly due to that asset being broken (tables 4.12 & 4.13). Where an increase in a specific household or

productive asset was reported, these were either given to the household in the form of a gift or purchased with income from livestock and crop sales, petty trade or credit (tables 4.13 & 4.15). The results show an almost identical trend in asset changes for both project and non-project participants.

## 5.7 Credit and Savings

The Oromia Credit and Saving Share Company (OCSSCO) is the main micro-finance service provider in Sire and Dodota. However, a number of other savings and credit options exist, including, women's associations farmers cooperatives and youth associations. Some of these also act as intermediaries with local banks and with OCSSCO. There are also private credit providers such as the Meklit Private Loan Company. Traditional and informal savings and loan providers such as *iqub* and *iddir* also exist although these primarily lend money for medical purposes only. There are also a number of traditional moneylenders. However, traditional moneylenders have a reputation for charging high interest rates, thus discouraging people from borrowing. Since 2008, CRS and partners have been promoting informal Savings and Internal Lending Groups (SILC) in the project area, and these groups are continuously being established under the PSNP Plus project.

Although the results indicate that in 2009 project participants mostly accessed loans through private sources (figure 4.13), over time the project aims to link participating households to formal microfinance, and provide informal financial services through SILC groups. However, the challenges involved in linking poor households to formal microfinance are well documented, and partly have to do with financial sustainability of the insurance provider in light of the high transaction costs involved in providing credit, insurance and savings services (Greeley, 2003). Consistent with this, project staff indicated that one of the key challenges they faced was in convincing MFI's to invest in PSNP Plus clients. Another common challenge is the low demand for new microfinance services as potential clients are often unfamiliar or suspicious of these products (Mosely, 2003). However, the assessment results suggest that there is considerable demand for micro-credit in the study area, as cash and livestock credit both ranked high in intervention preference scoring exercises carried out with focus group participants (table 4.2). This is largely based on the experience of the Government and World Bank livestock credit programs that have been implemented in the area since 2003 (table 4.1).

Although informal microfinance in the form of SILC groups ranked lowest in the intervention scoring exercises (table 4.12), it is still too early in the project cycle for participants to have realized any significant benefit from these groups. For example, most household participants had only been involved in SILC groups for less than a year, and it takes time for a group to build up its savings and associated lending capacity. This challenge would have been exacerbated in 2009, as group members' contributions would have been limited due to a loss of income and an increase in expenditure due to the drought. However, SILC participants also appeared to struggle in classifying these groups as an external intervention, as the financial transfers are self-generated, which may offer an alternative explanation as to why this intervention scored lower than the others.

In terms of loan utilization from all three sources identified, the results indicate that the most important uses included investments in livestock and agriculture inputs, and expenditure on food (figure 4.14). There were however differences in the importance of these between the livestock

and wheat sample. Medical expenses, land rent, and investments in petty trade also appeared to be important for participants in the wheat sample. Although loans represent only a small portion of total expenditure, the results indicate that they play an important contribution in helping cover key household expenses (figure 4.15).

## 6 CONCLUSIONS

Assessing the impact of a livelihoods project is extremely difficult during or shortly after a drought, particularly when the effects of that drought are still being experienced during baseline data collection. As such, the results showed negative change in household livestock assets, as people sold these in order to cope with the food and income losses associated with the drought.

The assessment results cannot accurately determine whether the project helped people better cope with the drought, as the only interventions that had been implemented to a point where production and income benefits might have been expected, were two rain dependent value chains (cereals and white pea beans). According to project participants, little or no harvest was realized from these crops in 2009. Additionally, with the exception of a few livestock assets, the results showed no significant difference in the assessed indicators between the project participants and control group participants. The exceptions to this was that households in the wheat sample had more cows and calves than did the control households, however this applied to pre-project levels for cows as well, so this difference cannot easily be attributed to the project.

At the time of the assessment, no actual asset transfers had taken place for the honey and livestock value chains. As such no impact could be expected. Over time, project participants would be expected to recover from the drought, and the project interventions may well contribute towards this process. If so, people would be expected to re-invest in livestock assets and future assessments would capture recovery against this indicator.

In summary, given the delays in project implementation for the honey and livestock value chains, and the impact of the drought on the white bean and cereal value chains, it is too early to assess the impact of the PSNP Plus project in Sire and Dodota. Nonetheless, the primary objective of assessment was met, in that useful baseline data was collected, against which future impact might be assessed. Given that there has been improved rainfall conditions, and accelerated project implementation during the first two quarters of 2010, the indications are that some impact might be expected towards the end of the year.

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ANNEX I: Household Questionnaire (reformatted and translated for report)

Ques No. \_\_\_\_\_

**Household Component Checklist**  
**BASELINE ASSESSMENT PSNP PLUS LONGITUDINAL STUDY-Sire & Dodota**

NAME OF INTERVIEWER \_\_\_\_\_ DAY: \_\_\_\_\_ MONTH: \_\_\_\_\_

<b>WOREDA</b>	
<b>PEASANT ASSOCIATION/KEBELE #</b>	
<b>VILLAGE/CLUSTER</b>	

**1. Household and Project Background Information**

Household Code #	<i>Circle the appropriate boxes</i>				
Registered name of Household (PSNP +)					
Name of respondent					
Household roofing material	<b>Grass</b>		<b>Corrugated Sheeting</b>		
Project Activities that household members are involved in	<b>SILC</b>	<b>Wheat</b>	<b>WPB</b>	<b>Livestock</b>	<b>Honey</b>
Religion	<b>Christian</b>		<b>Muslim</b>	<b>Other</b>	
Education/grade of Household Head					
Maximum education/grade of any household member					
Number of household members					
Number of working adults in the household					
Is your household participating in the PSNP? ( <i>safety net - food or cash for work</i> )				<b>YES</b>	<b>NO</b>
Number of household members working on the PSNP ( <i>safety net</i> )					
How many years has your household been participating in the PSNP?					
Has your household graduated from the PSNP in the past year?				<b>YES</b>	<b>NO</b>
Have you experienced any of the following shocks in the past year?					
Weather related ( <i>specify - drought etc</i> )					
Crop loss ( <i>specify - pest, disease, etc</i> )					
Livestock related ( <i>specify - disease etc</i> )					
Other unexpected shocks ( <i>specify - illness, death</i> )					
What impact did these shocks have on your livelihood?					
What actions did you take to cope with these shocks?					

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**2. Savings and Loan Information**

		<i>Circle the appropriate boxes</i>		
A	Do you belong to a SILC?	YES	NO	
B	How long have you been a member of a SILC?	Less than 1 year	1-2 years	Over 2 years
C	Does any other member of your household belong to a SILC?	YES	NO	
D	<b>(If YES)</b> – For how long have they been a member?	Less than 1 year	1-2 years	Over 2 years
E	How much money has your household managed to save in the past year?	ETB		
F	Has your household taken out a loan in the past year?	YES	NO	
G	<b>(If Yes)</b> - How much money did you borrow? ( <i>total</i> )	ETB		
H	Who did you borrow the money from? ( <i>breakdown</i> )	SILC	MFI/OSSCO	Other/Private
I	Amount	ETB	ETB	ETB
J	Have you managed to pay back the loan and interest?	YES	NO	

2b. How did your household spend your savings/sharing and loans? (*in the past year only*)

Check each of the items that apply and ask the respondent to specify the amount

	<b>Savings &amp; Loan Utilization</b>	Check √	Amount ETB
1	Food and perishables		
2	Medical costs		
3	Education/schooling ( <i>fees/uniforms/rent/transport</i> )		
4	Land renting/ purchase property or home improvements ( <i>corrugated roofing etc</i> )		
5	Purchase livestock or poultry		
6	Invested in petty trade/ other trade retail, business or IGA		
7	Farming inputs ( <i>animal vaccines/seeds/fertilizers/pesticides/tools/water/fuel</i> )		
8	Social obligations/ceremonies ( <i>weddings/funerals other contributions</i> )		
9	Repay debts/loans		
	Taxes		
10	Clothes/blankets/shoes		
11	Transport & Water		
12	Other (specify)		

**3. Expenditure**

a) Last year (*October 2008-October 2009*) – how much did your household spend on the following items?

	<b>Expenditures</b>	ETB
1	Land rent or Home improvements	
2	Farming inputs ( <i>tools, fertilizer, seeds, pesticides, animal health, water, fuel</i> )	
3	Livestock or poultry	
4	Education/schooling ( <i>transport/uniforms/fees/rent/supplies</i> )	
5	Medical expenses ( <i>transport/medicine/health fees</i> )	
6	Clothing	
7	Household items ( <i>furniture/bedding/utensils etc</i> )	
8	Social obligations ( <i>weddings/funerals/other contributions</i> )	
9	Debts or loan repayment	
10	Taxes	
11	Transport and Water	
12	Other key expenditures (specify)	
	<b>TOTAL</b>	

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3 b) In comparison to all the expenditures mentioned - last year, what proportion of your total household expenditure was spent on the following?

Method: proportional piling with 30 counters

Item	Score	For this exercise, take 30 counters to represent the households' total expenditure last year. Then ask the respondent to sort the counters into three different piles to represent the proportion spent on food and income generating activities (IGA)
Food and household consumables		
Business, retail, trade, other IGA		
Other		
	<b>30</b>	

**4. Income Sources**

a) Last year (October 2008-October 2009- what proportion of your households' annual cash income came from the following sources? This should include income from sale of crops from last seasons harvest (Sept-Dec 2008).

Method: Proportional Piling with 100 counters - (if nothing put zero)

	Income source	Score
1	Wheat sales from <b>own farm</b> production	
2	Other cereal crop sales (teff/barley/maize/sorghum) from <b>own farm</b> production	
3	Income from beans/pulses (navy/haricot/faba/lentils/peas/chickpeas etc)	
4	Income from other crop sales (vegetables/potatoes/flax seed/rape seed etc)	
5	Income from livestock fattening	
6	Income from other livestock & poultry production (trading/meat/milk/eggs, etc)	
7	Petty Trade/retail and other IGA (include trade in cereals/vegetables etc not produced by them, donkey renting, carts /water collection, brewing))	
8	PSNP work	
9	Other labor/employment	
10	Firewood or fodder (fuel/manure) Sales	
11	Handicrafts (knitting/basket weaving etc)	
12	Other (specify)	
	TOTAL	100

4 b) What quantity of the following products from your own (farm) production did you sell?

Commodity	Last Season	This Season (so far)
White pea beans	Kg	Kg
Wheat	Kg	Kg
Teff	Kg	Kg
Barley	Kg	Kg
Maize	Kg	Kg

**5. Income Changes**

Using 10 counters to represent the participants' total household cash income from (October 2007-September 2008). Now ask the respondent to compare this with (October 2008 – September 2009) by either adding or taking away counters to show an increase or decrease in total household cash income.

a) Has your overall household 'cash' income increased or decreased in comparison to Oct 07-Sept 08?

Method: Scoring against a nominal baseline of 10 counters

Before (counters) October 2008-September 2008	Now (counters) October 2008 – September 2009
10	

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What are the main reasons (positive or negative) for any changes in 'cash' income?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

b) If there has been an increase in 'cash' income – ask the participant to rank the 5 main reasons in order of importance

Method: Simple Ranking

Reason for changes in household cash income	Rank
	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
	4 <sup>th</sup>
	5 <sup>th</sup>

c) During the past year, have you sold any of your own livestock?

*Do not include livestock that are sold as part of a livestock trading business activity*

Livestock type (goat/oxen etc)	Quantity sold & reason		Total amount in ETB
	Fattening	Other	

d) What did you spend the money from selling livestock on?

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**6. Asset Inventory**

For the all the asset inventory tables (6.1 to 6.4) you will ask the three following questions

- a) How many of the following assets belonged to your household one year ago? (if none write '0')
- b) How many do you own now? (if none write '0')
- c) What are the reasons for any changes in assets since last year?

6.1 Land (Do not include any land that you do not own but are renting from someone else, but include any land you own and are renting out to someone else)

Asset	What quantity of the following assets did you own or rent one year ago	What quantity do you own/rent today
Land	Kerti	Kerti

d. If there has been any change in the amount of land they own/rent (either positive or negative), what are the reasons for these changes?

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6.2 Productive assets (PA = Plough Accessories)

Productive Assets	1 Year Ago	Now	DECREASE	INCREASE
Plough and its accessories			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Sickle			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Pick Axe			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Axe			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Hoe			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Spade			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Gotara (seed store)			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Grainmill (hand)			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Grain Mill (diesel)			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Animal Cart			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Water pump			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Wheelbarrow			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Traditional beehive			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Modern beehive			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
<b>TOTAL</b>				

Codes: for negative changes in assets	Codes for positive changes in assets
1 = We sold/exchanged for food 2 = We sold this asset to pay for healthcare 3 = We sold this asset to pay for education schooling 4 = We sold this asset for social obligations (wedding gift/funeral) 5 = asset lost/stolen or broken 6 = We sold this asset to pay of loans or debts 7 = We sold the asset for another reason (specify)	1 = We bought this asset with savings and credit from SILC 2 = We bought this asset with credit from MFI 3 = We were given this asset (specify) 4 = We bought this asset with profits from crop sales 5 = We bought this asset with profits from petty trade/retail 6 = We bought this asset with profits from livestock sales 7 = We bought this asset with profits from cereal sales 8 = We bought this asset with PSNP income 9 = Other reason (specify)

Other reasons decrease

Other reasons increase

- |          |          |
|----------|----------|
| 1. _____ | 1. _____ |
| 2. _____ | 2. _____ |
| 3. _____ | 3. _____ |
| 4. _____ | 4. _____ |

6.3 Household Items/Durables

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Asset	How many did you own one year ago	How many do you own today	If the amount owned today is different from one year ago explain why (circle all the reasons mentioned)	
			DECREASE	INCREASE
Mattresses			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Mats			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Chairs			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Cupboards			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Jericans			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Pots/Pans			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Cups			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Lanterns			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Tables			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Radio or cassette player			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Bicycles			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Mobile phones			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Charcoal stove			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
Kerosene stove			1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9
<b>TOTAL</b>				

Codes: for negative changes in assets	Codes for positive changes in assets
1 = We were forced to sell/exchange/ for food 2 = We were forced to sell to pay for health 3 = We were forced to sell to pay for education/training 4 = We had to sell for social obligations (wedding gift/funeral) 5 = asset lost/stolen or broken 6 = We were forced to sell to pay of loans or debts 7 = We sold the asset for another reason (specify)	1 = We bought this asset with savings & credit from SILC 2 = We bought this asset with PSNP income 3 = We were given this asset (specify) 4 = We bought this asset with profit from crop sales 5 = We bought this asset with profits from petty trade/retail 6 = We bought this asset with profits from Livestock sales 7 = We bought this asset with profits from cereal sales 8 = We bought this asset with credit from MFI 9 = Other reason (specify)

Other reasons decrease

Other reasons increase

- |          |          |
|----------|----------|
| 1. _____ | 1. _____ |
| 2. _____ | 2. _____ |
| 3. _____ | 3. _____ |
| 4. _____ | 4. _____ |

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a. Livestock assets - do not include any animals that you are looking after but belong to someone else.

Livestock	1 Year Ago	Now	DECREASE								INCREASE									
Oxen/bulls			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Cows			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Steers			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Heifers			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Calves			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Sheep			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Goats			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Donkeys			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Poultry			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Mules			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Horses			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
Camels			1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10
<b>TOTAL</b>																				

<p><b>Codes: for negative changes in assets</b></p> <p>1 = We sold/exchanged/slaughtered for food                  2 = We sold this asset to pay for health care                  3 = We sold this asset to pay for education/schooling                  4 = We sold/slaughtered for social obligations (wedding gift/funeral)                  5 = asset stolen or (livestock) died                  6 = We sold this asset to repay loans or debts                  7 = Livestock matured (e.g. steer became a bull)                  8 = We sold the asset for another reason (specify)</p>	<p><b>Codes for positive changes in assets</b></p> <p>1 = We bought this asset with saving or credit from SILC                  2 = We bought this asset with PSNP/OFSP income or credit                  3 = We were given this asset (specify)                  4 = We bought this asset with profits from crop sales                  5 = We bought this asset with profits from petty trade/retail                  6 = We bought this asset with profits from livestock sales                  7 = We bought this asset with profits from cereal sales                  8 = Livestock reproduced/matured                  9 = We bought this asset with credit from MFI                  10 = Other reason (specify)</p>
--	---

*Other reasons decrease*

*Other reasons increase*

- |  |  |
|--|--|
| 1. _____<br>2. _____<br>3. _____<br>4. _____ | 1. _____<br>2. _____<br>3. _____<br>4. _____ |
|--|--|

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**7. Reasons for changes in assets**

Step 1: Now take a couple of minutes to add up the 'before' and 'after' asset scores. If there has been an overall increase in assets or the participants feel there has been an increase in the overall value of household assets (livestock/tools etc) ask the participant to list the 5 most important reasons for this.

Table 7.1 If there are less than 5 reasons just list the ones mentioned. *List project factors mentioned*

	Reasons
1	
2	
3	
4	
5	

Step 2: If the participants did not specifically mention any project or PSNP related factors, ask the participants if the increase in assets has been as a result of increased cash, income or savings derived from the following sources: Make sure that the participants understand the difference between the project and non-project contributions, for example income from cereal sales, and any increased income from cereal sales as a result of the projects value chain.

Table 7.2 Check (✓) YES or NO and check project factors already mentioned in table 7.1

		YES	NO
1	SILC savings and loan		
2	MFI loan		
3	Livestock fattening value chain (CRS Project)		
4	White pea bean value chain (CRS Project)		
5	Cereal value chain (CRS Project)		
6	Honey value chain (CRS Project)		
7	PSNP income (Safety Net) and OFSP		

Step 3: Now ask the participants to score all the reasons mentioned in tables 7.1 and 7.2 in order of importance. If one of the reasons listed has not been mentioned put zero (0).

Table 7.3 Method: Scoring with 100 counters – *(list all the reasons mentioned)*

	Reasons for positive changes in assets	Score
1		
2		
3		
4		
5		
6	SILC savings and loans	
7	MFI loan	
8	Livestock Fattening (project)	
9	White pea bean value chain (Project)	
10	Cereal value chain (Project)	
11	Honey value chain (Project)	
12	PSNP income (Safety Net and OFSP)	
	<b>TOTAL</b>	<b>100</b>

Do you have any questions that you would like to ask us, or is there anything else you would like to tell us about the project, and how it might be improved?

*(Once you have finished remember to thank the respondent for their time and participation).*

## ANNEX II: Profile of SILC groups assessed

### Profile of SILC Groups assessed

Name of Group	Established	Number of Members		Contribution Frequency/m	Weekly Contribution (ETB)		Social Fund	Interest <sup>1</sup> rate (%)	Credit repayment (Months)
		Beginning	Now	Now	Beginning	Now	Now	Now	
Tokkuma	Dec-09	21	21	0.5	2	2	0.5	10	2
Abdi Boru	Dec-09	19	19	0.5	2	2	0.5	10	2
Beha Biftu	Dec-09	11	11	0.5	2	2	0.5	5	5
Welta'i	Dec-09	13	13	0.5	2	2	0.5	5	2
Biftu genema	Dec-09	15	15	0.5	2	2	0.5	5	5
Keneni-A	Dec-09	12	16	0.5	1	1	0.5	na	na
Keneni-B	Dec-09	13	16	0.5	1	1	0.5	na	na
Misomemaleka	Dec-09	9	10	0.5	5	5	1	na	na
Chafe Adama	Dec-09	13	14	0.5	1	1	0.5	na	na
Abdi Boru	Jan-10	19	19	0.5	1	1	0.5	10	na
Abdi Gudina	Feb-10	12	12	0.5	1	1	0.5	10	na
Abdi Boru	Apr-09	20	10	0.5	2	2	0.5	10	2
Lalistu	Apr-09	20	20	0.5	2	2	0.5	10	2
Temsa'a	Jan-10	13	13	0.5	3	3	1	na	na
Lode	Feb-10	18	18	0.5	2	2	0.5	na	na
Tokkuma	Jun-09	25	25	0.5	2.5	2.5	0.5	6.25	4
Simbo	Apr-09	17	17	0.5	2	2	0.5	6.25	4
Hunde Gudina	Jun-09	26	26	0.5	2	2	0.5	6.25	3
Ifa Bati	Apr-09	17	17	0.5	1	1	0.5	6.25	3
Abdi Boru	Apr-09	14	14	0.5	2.5	2.5	0.5	10	4
Chefe Buchamo	Nov-09	21	21	0.5	2	2	0	8.33	3
Simira Balde	Nov-09	22	22	0.5	2	2	0	8.33	3
Kidus Mikael	Feb-09	25	25	0.5	2.5	2.5	0	6.25	4
Kerenso	Jun-08	19	19	0.5	2.5	2.5	0	8.33	3
Ifa Gebiso	Nov-09	12	12	0.5	2.5	2.5	0	6.25	4
Urji Gudina	Nov-09	15	15	0.5	2.5	2.5	0	8.33	3
Ifa Ganama	Nov-09	13	13	0.5	2.5	2.5	0	8.33	3
Lemlem	Apr-09	19	25	0.5	2	2	1	6.67	3
Tulu Ajem	Apr-09	19	20	0.5	2	2	1	10	2
Muleta Gari	May-09	25	20	0.5	2	2	0	6.67	3
Metamoks	Sep-09	20	20	0.5	2	2	1	6.67	3
Geletu Wakeyo	Sep-09	20	20	0.5	2	2	0	10	2
Abdi Wakayo	Oct-09	20	20	0.5	2	2	1	6.67	3

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Tullu Wako	Feb-10	18	20	0.5	2	2	1	6.67	3
Damtu Bokku	Feb-10	13	20	0.5	2	2	0	10	2
Ifa Gari	Feb-10	17	20	0.5	2	2	0	10	2
Addis Alem	Feb-09	16	16	1	5	5	0	8.33	3
Alem Tsega	Sep-09	20	20	1	2	2	0.5	8.33	3
Gallo Bereket	Dec-09	13	13	1	4	4	0	8.33	3
Dayida Karsicha	Jan-10	21	21	1	2	2	0	5	1
W. Hajabo	Jan-10	17	17	1	3	3	0	10	1
Shameda Baha	Feb-10	14	14	1	2	2	0	10	1
Baso	Feb-10	13	13	1	2	2	0	10	1
Chafe Haragelfi	May-09	26	26	0.5	2	2	0	5	4
Deme Chafe Haregelfi	Jun-09	20	20	0.5	2	2	0	5	4
Burka Tullitti	Sep-09	18	18	0.5	1	1	0	5	5
Gare Gudina	Jul-09	17	17	0.5	1	1	0	2.5	4
Lelisa	Jul-09	22	22	0.5	2	2	0	6.67	3
Tullitti Bole	Oct-09	26	26	0.5	2	2	0	6.25	4
Abdi Boru	Feb-10	21	21	1	5	5	0	na	na
Iftu Beri	Feb-10	23	23	1	1	1	0.25	na	na
Jitu Mesgida	Feb-10	21	21	1	2	2	0	na	na
Biftu Ejersa	Feb-10	21	21	1	2	2	0	na	na

<sup>1</sup>=Interest rate calculated on monthly basis