

**THE FEDERAL DEMOCRATIC REPUBLIC OF
ETHIOPIA**

CENTRAL STATISTICAL AGENCY

**HOUSEHOLD CONSUMPTION AND
EXPENDITURE (HCE) SURVEY 2010/11**

ANALYTICAL REPORT

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Executive Summary

The Household Consumption and Expenditure (HCE) survey is administered by the Central Statistical Agency every five years, most recently in 2010/11. This report intends to provide a general understanding and analysis of the levels and distributions of major indicators as well as a look into the trends across previous periods. A similar analytical report was completed in 2007 for the 2004/5 HICE survey (Central Statistical Agency, 2007). The current study uses this 2004/5 analysis as a baseline for change as it also includes data from the previous two HICES (1995/6 and 1999/0). A further statistical report will be separately released by the Central Statistical Agency.

Using the expenditure data from the 2010/11 HCE survey, a variety of indicators are measured. These are generally disaggregated into socio-economic indicators, expenditure levels and sources, and caloric consumption. While the majority of trends, distributions and levels remain similar to those seen in previous years, there have been clear improvements in areas such as literacy, education, and calorie consumption.

The national population has grown to an estimated 76.1 million, an increase of 17.5% since 2004/5. The national average household size has remained almost constant at 4.8 since 2004/5 but the average rural household size has increased slightly to 5.1 from 4.9 persons while the average urban household size has fallen to 3.7 (a decrease of 14% since 2004/5). The nationwide dependency ratio is decreasing, implying that a greater percentage of the population is of working age.

Literacy and education levels are on the rise, with 48.3% of the total population age 10 and above able to read and write (compared to 37.6% in 2004/5). Much of this growth was enjoyed by females, especially those in the upper expenditure quintiles. Although there is still a gap in the education and literacy of males and females and between urban and rural populations, the 2010/11 HCE data shows improvements for all groups. The education of both males and females has increased. Grade 6 completion rates for household heads, for example, increased from 7.1% to 10.2% for females and from 11.3% to 15.6% for males from 2004/5 to 2010/11.

Expenditure values have increased significantly, although this is very strongly related to the high levels of inflation experienced in Ethiopia over recent years. Expenditure patterns are very similar to those observed in previous years, with households in the lower expenditure quintiles allocating a greater share to food and other basic goods while those in the higher quintiles devote a greater share to relatively more expensive items such as meats, alcohol and clothing.

Calorie consumption has clearly improved as the average daily per capita gross calorie consumption is up to 2,455 from the 2004/5 average of 2,353 (and only 2,211 in 1999/0). As in previous years, caloric intake is greater for rural populations, likely due to their ability to consume their own agricultural produce.

The following report looks at each of these indicators, in addition to others, in greater depth and attempts to explain the relationship of each with relative household expenditure levels.

1. Introduction and Overview

Although poverty has continued to be at the forefront of Ethiopian concerns, recent history shows great improvements. The incidence of poverty has declined from 45.5% in 1995/6 to 38.7% in 2004/5 and finally to 29.6% in 2010/11 (Ministry of Finance and Economic Development, 2012). Signs of this reduction in poverty as measured by the Ministry of Finance and Economic Development (MoFED) is evident in this analytical report of the 2010/11 HCE survey data through improvements in literacy, education, and per capita expenditures among others.

The government of Ethiopia, together with development partners, has implemented various poverty reduction strategies to promote economic growth in recent years. The latest sustainable growth strategy, the Growth and Transformation Plan (GTP) covers the period from 2010/11 – 2014/15. This plan focuses on seven strategic pillars including, but not limited to, sustainable and equitable economic growth, maintaining a focus on agriculture, improving social development and promoting gender and youth empowerment. The GTP was preceded by the Plan for Accelerated and Sustainable Development to End Poverty (PASDEP, 2005/6-2009/10) and the Sustainable Development and Poverty Reduction Program (2002/3 – 2004/5). The GTP aims to extend the functions of the PASDEP and achieve the Millennium Development Goals by 2015 as well as realize middle-income country status by 2020-2023 (Ministry of Finance and Economic Development, 2010). The HCE survey plays an integral role in achieving the aims of the GTP and the MDGs by enabling thorough monitoring and evaluation of key indicators.

Monitoring and evaluation is critical to the success of poverty-reduction and welfare enhancing programs. Without a sound system in place, the impact of such programs cannot be observed and resources may be incorrectly allocated across programs or populations. To this end, the Welfare Monitoring System (WMS) was established in 1996 to ensure changes in poverty indicators are consistently known and evaluated and the impact of ongoing reform programs are measured (Ministry of Finance and Economic Development, 2012). In order to attain the aforementioned goals, data must be collected periodically. The Central Statistical Agency (CSA) is responsible for the two primary data collection efforts: the Household, Income, Consumption

and Expenditure (HICE) and Welfare Monitoring (WM) surveys. Both nationally representative surveys have been conducted together at four or five year intervals since 1995/6, the onset of the Welfare Monitoring System. The HICE survey focuses on the income dimension of poverty through measurement of consumption, expenditure and income, while the WM survey specializes in the non-income aspects of poverty such as health, education, and access to services. Together, the two surveys paint a complete picture of the poverty and welfare environment of Ethiopia.

The primary objectives of the HICE survey, the focus of this report, revolve around knowledge building, monitoring current levels and trends in income poverty, and evaluating the impacts of poverty-reducing strategies. To identify further, the objectives include:

- Assessing the level, extent and distribution of the income and expenditure dimensions of poverty;
- Providing data on household expenditure patterns, values and distributions at nation and regional levels in order to observe trends in living standards and welfare;
- Providing data for use in the design, monitoring and evaluation of strategic programs and reforms;
- Providing estimates of household consumption expenditure for the compilation of national accounts; and
- Obtaining weights and other necessary information for the construction of consumer price indices at various geographic levels.

Periodic collection of HICE and WM survey data allows for analysis in welfare trends over time. The CSA has collected and published reports on the 1995/6, 1999/2000, and 2004/5 HICE and WM surveys.¹ In addition to the analytical and statistical reports produced by the CSA, the Ministry of Finance and Economic Development (MoFED) has produced a number of in depth poverty analyses using the same data. MoFED has also recently released interim poverty analysis using the latest 2010/11 data (Ministry of Finance and Economic Development, 2012).

¹ Available on the CSA website.

The focus of this analytical report is the latest 2010/2011 HCE survey. In contrast to previous years the “income” component was not captured, making the 2010/2011 an HCE survey rather than an HICE survey. The value of income data, particularly in developing economies, is typically very low and thus little was lost by the exclusion of this survey section. Income data can be quite difficult to collect, especially when a large portion of the population is engaged in subsistence agriculture. Furthermore, expenditure and consumption values are widely preferred to income estimates for the sake of welfare analysis (see, for example Deaton & Zaidi, 2002). Using consumption data can fill the gaps of subsistence farming, in-kind transactions, and other components that income tends to significantly exclude in developing economies. Thus, in this analysis (as in previous HICE analysis) we focus on consumption and expenditure, used interchangeably, to assess the state of the Ethiopian population.

This report is intended as a broad-based analysis. A detailed statistical report of the 2010/11 HCE data is also to be produced by the CSA and made available online. This report is broken down into four primary sections: Survey Methodology and Data, Socio-Economic Indicators, Expenditure Levels and Sources, and Caloric Consumption.

Concepts and Definitions

This section serves as a glossary for the following sections, defining terms and clarifying aggregated figures. The terms are grouped by the following categories: area of residence, household characteristics, employment and enterprise, household expenditure, and caloric analysis.

Area of Residence

Urban Center: An urban center is often defined as a locality with 2000 or more inhabitants. For practical purposes, this survey defines an urban center to include the following (regardless of the population):

- a. All administrative capitals (region, zone and wereda capitals),
- b. Localities with Urban Dweller's Areas (UDAs) not included in (a),
- c. All localities that are not included in (a) or (b) and which have a population of 1000 or more persons and whose inhabitants are primarily engaged in non-agricultural activities.

Urban Kebele (UK): The smallest administrative unit in an urban center with its own jurisdiction. It is a locality formed by the inhabitants and usually constitutes a part of the urban center.

Rural Kebele (RK): The smallest administrative unit in a settled rural area with its own jurisdiction. It is an association of rural dwellers formed by the inhabitants of an area in which members may or may not be engaged in agricultural activities.

Enumeration Area (EA): An area delineated for the purpose of enumerating housing units and population without omission or duplication. An EA generally consists of 150-200 households in rural areas and 150-200 housing units in urban areas. An EA is related to an urban or rural kebele in one of the following ways:

- a. An EA may be equal to a rural kebele if the number of households in the kebele is less than or equal to 150-200. An EA may be equal to an urban kebele if the number of housing units is less than or equal to 150-200.

- b. An EA may be a part of an RK or UK but its delineation cannot extend outside the border of the kebele.

Collective Quarter: A premise (a housing unit, building, or compound) in which a number of unrelated persons reside and share common facilities. Examples of collective quarters are monasteries, prisons, boarding schools, military barracks, etc. It is important to note that there may be private households on the premises of some collective quarters.

Household Characteristics

Household: A person or group of person, whether or not they are related, who normally live together in the same housing unit or group of housing units and who have common cooking arrangements.

Head of Household: The person who economically supports or manages the household or, for reasons of age or respect, is considered as the head of the members of the household or otherwise declares him or herself as the head of a household. There may only be one head of household and this person may be male or female.

Member of Household: A member of a household may be any of the following:

- a. All persons who lived and ate with the household for at least six months (including those who were not present at the time of the survey but were expected to be absent from the household for less than six months).
- b. All guests and visitors who ate and stayed with the household for six months or more.
- c. Housemaids, guards, babysitters, etc. who lived and ate with the household, even for less than six months.

Household size: The total number of members of a household.

Employment and Enterprise

Unincorporated Household Enterprise: An economic enterprise where goods and services are produced for sale. This also includes those engaged in strictly buying and selling activities. Generally the type of enterprise considered as an unincorporated household enterprise is an enterprise run by the household or a household member in which the primary aim of the enterprise is to manage the livelihood of the household. In such enterprises, there is no distinct difference between the enterprise's income/expenditure and the household's income/expenditure.

Productive Activity: An act of selling the output of an activity in kind or in cash. This includes, but is not limited to, working at an enterprise for wages/salary and working on rural agricultural activity (even if for own private consumption).

Employer: A person who hires at least one employee for his/her enterprise or activity. A person who uses hired labor and takes part in the productive activity is considered an employer.

Self-Employed: An individual who works in his own enterprise including agriculture (without hiring any labor). For the purposes of this survey, those who use only family labor without payment are considered self-employed.

Unpaid Family Worker: A member of a household who is working for the enterprise or activity of the household without payment.

Household Expenditure

Consumer Goods and Services: Goods and services used by a household to directly satisfy the personal needs and wants of its members.

Household Consumption Expenditure: Value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own account production, barter, or as income in kind.

Actual Final Consumption: The sum of a household’s consumption expenditure plus the value of goods and services acquired or used through transfers from government, non-profit institutions, other households, etc. Some transfers, such as free education, are extremely difficult to value and have therefore been excluded from all HICE data.

Household Expenditure: The sum of household consumption and non-consumption expenditures. “Non-consumption expenditures” are those that are incurred by a household without receiving any goods or services in return (ignoring any potential goodwill). Examples of such transfers may be gifts, donations, compulsory fees or fines and taxes (if no services are received in return). Household expenditure represents the total outlay made by a household in a given period (in this case, one year).

Household Expenditure Quintiles: The household expenditure quintiles are used to disaggregate households by total household expenditure levels. The quintiles are calculated by first ordering all households in ascending order by value of household expenditure and then dividing them into five equal parts such that the first group includes the 20% of households with the lowest annual expenditure and the last group includes the 20% of households with the highest annual household expenditure. The values of each national household expenditure quintile are reported in Table 1.

Table 1: Household Expenditure Quintiles (Country Level)

Quintile	% of HHs	Annual Household Expenditure (Birr)		
		Lower Limit	Upper Limit	Range
1	20	9,167.69	12,329.87	3,162.18
2	20	12,329.88	18,046.62	5,716.74
3	20	18,046.63	23,306.08	5,259.45
4	20	23,306.09	29,774.83	6,468.74
5	20	29,774.84	32,351.26	2,576.42

*Prices are not spatially adjusted for regional price differences

Expenditure per Capita Quintiles: While the majority of analysis uses the above Household Expenditure Quintiles, some sections include the use of expenditure per capita quintiles. These quintiles are constructed by first calculating the annual value of expenditure per capita (total household expenditure divided by the number of people in the household). Households are then ranked in order from lowest per capita expenditure to highest and then grouped such that the 1st expenditure per capita quintile includes the 20% of households with the lowest expenditure per capita.

Per Capita: Per capita is simply per person, counting all adults and children the same.

Per Adult: In the expenditure section, adult equivalents are sometimes used to account for the difference between the cost of children and adults as well as consider any economies of scale gained from household public goods. The formula used to calculate the number of adult equivalents per household comes from the often-cited Angus Deaton and Salman Zaidi and is footnoted in section 4.2.1 (Deaton & Zaidi, 2002). Expenditure is divided by the number of adult equivalents to arrive at the expenditure per adult. In the calorie analysis, adult equivalent has a different meaning. In this sense, the adult equivalent calculation is used to consider the difference in caloric needs from different people. The adult equivalence scale for use in calorie analysis has specific values for people of varying ages and sexes. The scale used here was adopted from the Ministry of Finance and Economic Development (who calculated this from Dercon & Krishnan, 1985) (Ministry of Finance and Economic Development, 2008). The scale is attached in Annex II.

N/A: Not Applicable or Not Available.

Caloric Analysis

Adult Equivalent: see above.

Gross Calorie: The total number of kilocalories in a given weight of food product, prior to discarding any inedible materials. These are determined based on the food composition tables

calculated by the Ethiopian Health and Nutrition Research Institute (ENHRI) and the Food and Agriculture Organization of the United Nations, 1998.

Net Calorie: The total number of kilocalories in a given weight of food after removing the inedible portions. It is the gross calorie deflated by (or minus) the proportion of the inedible material, termed as refuse. Also derived from the food composition tables calculated by ENHRI (Ethiopian Health and Nutrition Research Institute and the Food and Agriculture Organization of the United Nations, 1998).

Refuse: Refuse refers to the percentage of the total purchased/produced weight that is discarded while preparing food. Refuse includes bones, pits, shells, and other inedible portions that could be eaten but as a rule are discarded (potato parings and tough outer leaves of vegetables, for example).

2. Survey Design

2.1 Coverage

The 2010/11 HCE survey covered all rural and urban areas of the country except the non-sedentary populations in Afar (three zones) and Somali (six zones). Initial sample selection included 864 rural EAs and 1,104 urban EAs, with 10,368 and 17,664 households respectively. For various reasons, 2 rural EAs and 48 rural households were not surveyed, resulting in a rural household response rate of 99.5%. All selected urban EAs were successfully covered with an urban household response rate of 99.2%.

2.2 Sampling Frame

The 2007 Population and Housing Census served as the sampling frame from which the rural and urban EAs were selected. A fresh list of households for each selected EA was collected at the beginning of the survey period. Households were then selected for inclusion in the survey by choosing a random number as the starting point in the list and selecting every n th household (n being the necessary number to achieve the desired number of households in each EA).

2.3 Sample Design & Selection

In order to produce a representative sample, the country was stratified into the following four categories: rural, major urban centers, medium towns, and small towns.

a. Category I – Rural

This category consists of the rural areas of 68 zones and special weredas, which are considered zones, in 9 regions of the country. This category also includes the rural areas of the Dire Dawa City Administration. A stratified two-stage cluster sample design was used, with the primary sampling unit being the EAs. Sample EAs were selected using Probability Proportional to Size, with size being the number of households identified in the 2007 Population and Housing Census. Twelve households were randomly selected from each sample rural EA for survey.

administration. The total sample for this category is 864 EAs and 10,368 households.

b. Category II – Major Urban Centers

This category includes all regional capitals as well as five additional major urban centers with large populations, for a total of 15 major urban centers. These 15 urban centers were broken down into the 14 regional capitals and the 10 sub-cities of Addis Ababa City Administration resulting in a total of 24 represented urban domains. A stratified two-stage sample design was also used for this category as in the rural sample with EAs as the primary sampling unit. For this category, however, 16 households were randomly selected in each EA. In total, 576 EAs and 9,216 households were selected for this category.

c. Categories III & IV – Other Urban Centers

These two categories capture other urban areas not included in Category II. A domain of other urban centers was formed from 8 regions (all except Harari, Addis Ababa, and Dire Dawa where all urban centers are included in Category II). Unlike the other categories, a three-stage sample design was used. However, sampling was still conducted using probability proportionate to size. The urban centers were the primary sampling units and the EAs were secondary sampling units. Sixteen households were randomly selected from each of the selected EAs. A total sample of 112 urban centers, 528 EAs, and 8,448 households were selected for these two categories.

In total, 66 reporting levels were created under this sampling design. The distribution of samples by region is detailed in Annex I. A copy of the questionnaire is found in Annex V.

3. Data Collection & Processing

The Branch Offices Desk at the head office led CSA branch offices in the organization of fieldwork. All 25 branch offices of the CSA fully participated in the survey activities, from recruitment of field staff to field supervision to providing completed questionnaires to the head office. Each branch office was responsible for financial and logistical arrangements as well. Local government offices, especially at the Kebele level, played a vital role in facilitating fieldwork through familiarizing selected households with the survey and enumerators.

3.1 Data Collection

Data was collected over the course of one year, from 8 July 2010 to 7 July 2011. The CSA branch offices organized a total of 82 data collection teams, which consisted of 2 enumerators and 1 supervisor/field editor. Each of these teams was responsible for administering the HCE survey in at most 24 EAs, with each EA taking roughly 15 days per team.

In each rural EA, 12 households were selected, and in each urban EA, 16 households were selected. Two enumerators (one team) were assigned to each EA such that the enumerators each collected data from 6 rural households or 8 urban households per EA. Data was collected in such a way that each household was visited by the same enumerator twice within one week. Enumerators were able to visit 2 households per day in rural areas and 2-3 households per day in urban areas. Including multiple visits to each household was essential to minimizing the effects of recall error.

To further check the robustness of the data, a variety of recall periods were used for some variables. For example, each household was asked to estimate their total rent expenditure in the last 3 months as well as the last 12 months. Table 2 summarizes the data categories and respective recall periods.

In addition to the HCE, a market price survey was administered simultaneously in markets in or nearest each sample EA. This price data served as a comparison for household-reported values

as well as a potential source to complete values when households could not report it themselves (for example, in self-production).

3.2 Field Supervision

Regular and thorough supervision is crucial to ensure the integrity and quality of the data. Each field team included one supervisor who was responsible for supervision, field editing, and coordination of activities. Additionally, a statistician was assigned by each CSA branch office to oversee HCE data collection activities. Branch office heads and professionals from the head office were involved in field supervision as well. A team of CSA top management, CSA experts and experts from Finland Statistics observed fieldwork on two occasions during the survey period.

Table 2. Data Categories and Related Reference Periods

Data Category	Reference Period(s)
Household demographics and characteristics	At survey date only
Food, beverages and tobacco	Last 3-days and 4-days (2x in week)
Non-durable goods and more frequent services including: Water Fuel and Power Household Operation Pharmaceutical Products and Herbicides Public Transport Communication Entertainment, Recreational & Cultural services Newspapers & Magazines Personal Care	Last 3-days and 4-days (2x in week) Last 1 month
Clothing and footwear	Last 3 months Last 12 months
Dwelling rent, furnishings, equipment and maintenance	Last 3 months Last 12 months
Medical expenses, transportation and communication	Last 3 months Last 12 months
Education, recreation and entertainment	Last 3 months Last 12 months
Personal goods, financial services and non-consumption	Last 3 months Last 12 months

3.3 Data Processing

All data processing was undertaken at the head office. Completed questionnaires were returned to the CSA data processing department from the field periodically. Data processing activities included cleaning, coding, and verifying data as well as checking for consistency. These activities were carried out on a quarterly basis after entering three months of data. Further processing, including the estimation of sampling weights, was carried out at the close of data entry.

3.4 Data Entry and Coding

Manual editing and coding of data began as early as August 2010, when the first round of completed questionnaires was received at the head office. A team of 21 editors, 5 verifiers, and 4 supervisors carried out these activities. Subject matter experts provided a 5-day intensive training for this team to equip them with the necessary skills.

Additionally, a team of 12 encoders was trained to enter the data. A double-entry system was used, wherein two separate encoders manually entered each survey. Any discrepancies between the two entries were flagged automatically and the physical survey was reviewed to correct the errors. Data entry was completed in October 2011.

3.5 Data Validation and Cleaning

Data validation and cleaning was carried out by subject matter experts and data programmers. Systematic validity checks were completed at the commodity, household and visit levels. Activities related to consistency, validity, and completeness included the following:

- a. Imputation of missing observations on consumption goods (in quantity or value) using the market price survey that was collected at the time of the HCE.
- b. Validity and consistency of quantity and value of consumption items was checked by comparing the figures across both household visits (using the household–provided prices and/or the market price survey).

- c. Estimation of the value of consumption of own production using the household-provided quantities and market survey prices.
- d. Comparison of household expenditure on durable goods using different recall periods (i.e., 3 and 12 months). After analyzing the annualized values using each reference period, it was decided to use whichever period resulted in the largest expenditure, which was often the shorter recall period. The logic behind doing so is that households are more likely to forget to include items the more time has elapsed since the consumption.

All phases of data processing were completed in February 2012.

4. Major Findings and Analysis

The major findings of the 2010/11 HCE survey are broken down into three larger categories, namely socio-economic indicators, expenditure levels and sources, and caloric consumption. As the focus of the HCE survey is on expenditure and the income dimensions of poverty, the analysis attempts to describe the relationship of each indicator with relative household expenditure levels. Many of the tables found in the following sections are disaggregated by total household expenditure quintile. Such disaggregation allows for comparison of households relative to the total population of households. When examining trends over time with quintile groups, it is important to note that the expenditure range associated with each quintile in different years is not the same. Rather, we are comparing the poorest 20% of households in 2004, for example, to the poorest 20% of households in 2010. It is also crucial to recognize that the quintiles are constructed based on total household expenditure, not expenditure per capita. As will be discussed in the text below, this can cause smaller households to be pushed into the lower quintiles. For the sake of comparability with the 2004/5 analytical report, this report will also focus on household expenditure quintiles but in certain sections, additional analysis is executed using *quintiles of expenditure per capita* in order to clarify the conclusions being made (the tables will be labeled accordingly). For clarification, quintile 1 encompasses the 20% of households with the lowest annual expenditure and quintile 5 the 20% of households with the highest.

By using sample weights and accounting for design effects, it is possible to extrapolate the survey data to the national population (less the non-sedentary populations that were excluded from the survey for practical reasons). All of the tables and figures in this analysis have been weighted so they reflect the entire population, not only those that were surveyed.

4.1. Socio-Economic Indicators

4.1.1 Population

The first step in assessing changes within a population is looking at the size of the population itself. Using the 2010/11 HCE data, the population is estimated to be 76.1 million people². The results of the 2004/5 HICE survey concluded that the national population was 64.5 million people, although this excluded the Gambella region in addition to the aforementioned non-sedentary areas. After accounting for the exclusion of Gambella, this shows a 17.5% increase in the population over the last five to six years, and a roughly 35.3% increase since the 1999/0 HICE. It is evident that population growth has increased, as the five to six year increase from 1999/0 to 2004/5 was only about 15.2% (Central Statistical Agency, 2007).

The proportion of males and females has remained constant and evenly distributed, with 49.4% male and 50.6% female. There has been a slight shift in the proportion of urban and rural persons, however. In 2010/11, the data shows that 83.4% of people resided in rural areas and 16.6% in urban areas. In 2004/5, a larger percentage of people were rural dwellers (85.7%).

Because the majority of the following analysis uses the national household expenditure quintiles, Table 3 is included to provide context. This table supplies the proportion of individuals in each region by national quintile. These quintiles are not constructed on a regional basis so there are not even distributions across quintiles at the regional level. For example, in Tigray only 11.3% of individuals within that region are in households of the 1st quintile. In Addis Ababa, there is a very large concentration of the population in the 5th quintile (64.3%) and only a very small proportion in the 1st (2.6%). The regions that make up the majority of the population have distributions most similar to the 20% allocation in each quintile. These regional distributions will serve as useful reference points in the following analysis.

² “Population” in this report refers to the nation population less the non-sedentary regions identified in section 2.1.

Table 3. Distribution of Regional Populations by National Household Expenditure Quintile (%)

	Household Expenditure Quintile					Total
	1	2	3	4	5	
Tigray	11.3	16.0	20.6	22.1	30.1	100
Afar	8.7	18.0	22.9	27.7	22.7	100
Amhara	19.8	22.0	20.8	20.5	16.9	100
Oromiya	12.1	16.6	20.6	23.4	27.3	100
Somali	6.0	16.0	18.7	20.3	39.0	100
Benshangul	15.0	20.1	18.3	21.8	24.7	100
SNNP	17.3	18.5	20.8	22.8	20.6	100
Gambella	3.9	11.6	24.6	27.1	32.9	100
Harari	3.1	3.8	11.8	26.6	54.6	100
Addis Ababa	2.6	4.3	9.1	19.7	64.3	100
Dire Dawa	3.2	7.6	17.2	28.4	43.5	100
Urban	4.3	9.4	14.1	22.3	49.8	100
Rural	16.5	19.4	21.4	22.3	20.3	100
Total	14.5	17.8	20.2	22.3	25.2	100

Also relevant is the distribution of rural and urban populations across these national household expenditure quintiles. Figure 1 provides a distribution of the population in total as well as by rural and urban populations across quintiles. Because these groups are constructed by household rather than by individual, there is not an even 20% of the population in each. There are slightly fewer individuals in the lower quintiles because, as discussed below, the average household size tends to be smaller. Nonetheless, there is a fairly even division on the whole. The urban population, however, is much more concentrated in the upper quintiles. The rural population is very close to evenly distributed because they make up over 83% of the national population. As an additional reference, Table 4 provides the regional distribution of urban/rural and male/female populations.

Figure 1: Population by HH Expenditure Quintile

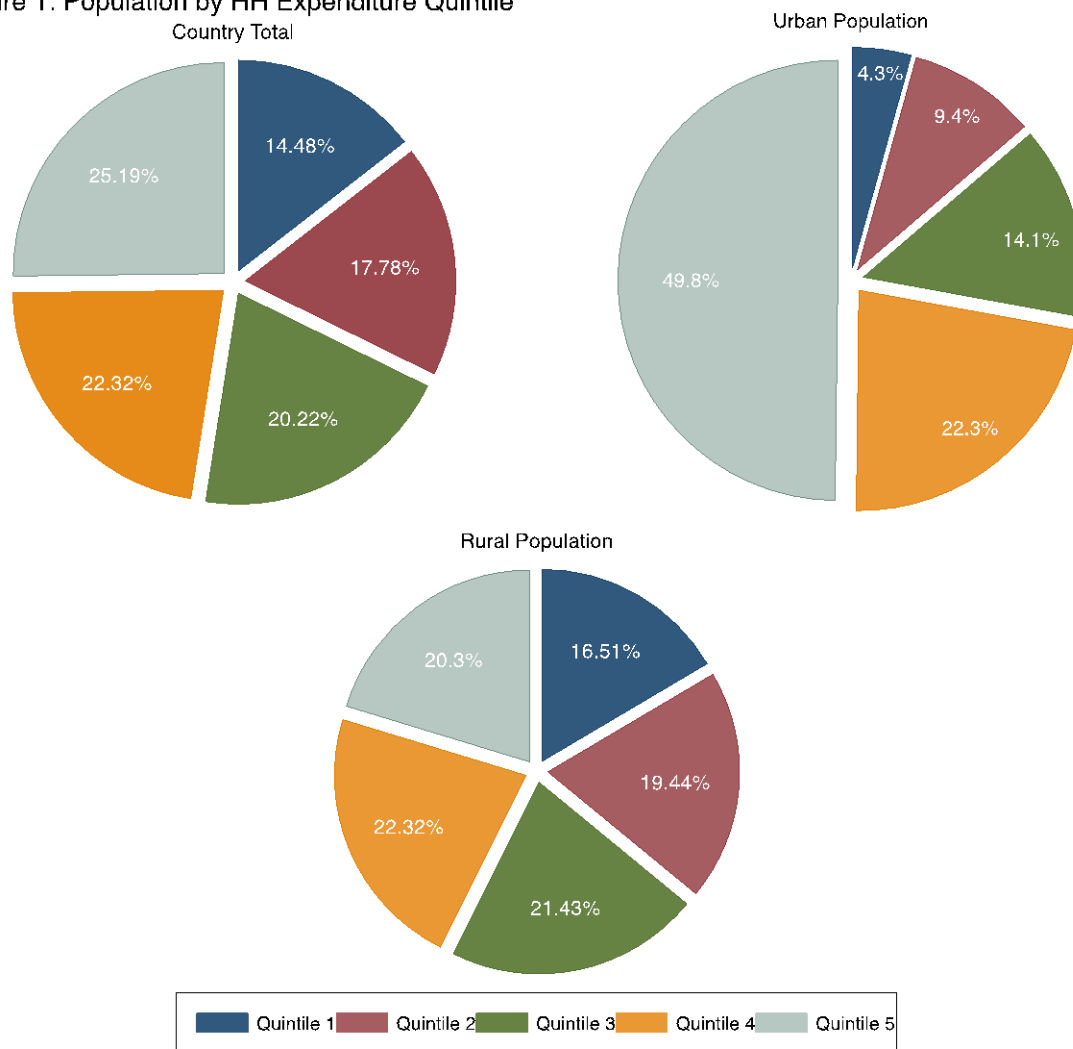


Table 4. Regional Population Distribution - by Sex and Residence (%)

	Sex		Place of Residence	
	Male	Female	Urban	Rural
Tigray	49	51	20	80
Afar	52	48	29	71
Amhara	50	50	12	88
Oromiya	50	50	13	87
Somali	51	49	19	81
Benshangul	51	49	14	86
SNNP	49	51	10	90
Gambella	48	52	32	68
Harari	47	53	47	53
Addis Ababa	45	55	100	-
Dire Dawa	50	50	68	32
Total	49	51	17	83

4.1.2 Household Size and Composition

In line with previous analyses, rural households are larger than urban households on average. In 2010/11, rural households had on average 5.1 people while urban households had only 3.7 people. In 2004/5, these numbers were 4.9 and 4.3, respectively. On a national level, the average number of people in a household in 2010/11 was 4.8, the same as the 2004/5 average. Although the national average size remained constant, the average rural household size increased by 4% while the average urban household size decreased by 14%.

Table 5a looks at the distribution of household size by place of residence and annual household expenditure quintile. The table identifies the percentage of the population in each group. For example, 22.3% of all urban dwellers in the first household expenditure quintile live in single-person households while only 8.2% of the same group lives in households of 5 people. Looking at this table alone, we could conclude that poorer households, those in the lower quintiles, more often have small household sizes compared to those in the higher quintiles. At the national level, in the first quintile, only 1% of people live in households of 10 or more people. In the fifth quintile, however, 14% of people live in households of 10 or more. There appears to be a gradual shift towards higher household size with increasing quintiles.

In comparison to the analytical report of 2004/5, the trends are similar but there is a clear shift in the urban population. Fewer urban dwellers fall in the right extreme, with only 4.3% of the urban population living in households of 10 or more, compared to 7.8% in 2004/5. At the same time, the proportion of urban people in the low-medium sized households has increased. In 2004/5 the percentage of urban dwellers was 15.3% in households of 4 and 16.6% in households of 5. In 2010/11, these figures are 17.2% and 17.4% respectively. The most obvious of the changes to the urban distribution is the dramatic increase in the percentage of single-person households, particularly in the 1st and 2nd quintiles. In 2004/5, the percentage of urban dwellers in the first quintile in single-person households was only 9.2% compared to the 22.3% seen in 2010/11. In terms of the rural population, the distribution of individuals is largely the same as found in 2004/5 but with a slightly more even distribution across household sizes. For example, in 2004/5, 21.6% of rural individuals in the first quintile lived in households of 4 people (the category with the highest concentration of individuals). In 2010/11, this figure is only 17.5%

and this is the highest concentration (that is, no other household size includes more than 17.5% of the rural, first quintile population).

Analyzing household size by annual household expenditure quintile can be misleading on its own. Because these are constructed based on the total household value rather than a per capita value, smaller households may be artificially pushed into the lower quintiles. Smaller households have fewer people to feed (therefore, fewer expenditure needs) and fewer potential income earners (therefore, fewer means to meet those needs), thus their annual expenditure may be naturally lower. Simply because their expenditure is less, however, does not necessarily make them worse off. For example, a single person household has one earner and one mouth to feed. If this person earns Birr 1000 per year they are quite possibly better off than a two-person household that earns Birr 1500 per year. To complete the analysis of household size with respect to expenditure, we also examine the size in relation to *expenditure per capita quintiles*. These quintiles, in contrast to the annual household expenditure quintiles, are constructed by first dividing the annual household expenditure by the number of people in the household (achieving the expenditure per capita) and then creating 5 groups of households by their expenditure per capita. This is still not a perfect measure as there are things like household public goods and economies of scale that are not reflected here but it is an improvement nonetheless. In the expenditure section, we attempt to account for these economies of scale and other factors. Table 5b duplicates 5a but disaggregating by *expenditure per capita quintiles*.

Table 5b paints a very different picture. When using expenditure per capita, the relationship is clear that individuals with lower per capita expenditures come from larger households. The opposite is also true; individuals with the highest expenditure per capita often reside in smaller households. This trend holds true for both urban and rural populations, with rural populations generally shifted towards the right with higher households sizes. The differences in Table 5a and 5b illustrate the need to fully recognize the context and dimensions of the analysis, as the conclusions may be vastly different. Here, we can conclude that on a strictly household expenditure basis, the households with the lowest total expenditure tend to be smaller while on a per capita basis larger households often encompass the individuals with the lowest per capita expenditure.

Table 5a. Percentage Distribution of Population by HH Size (% of Individuals)

Expenditure Quintile		Household Size									
		1	2	3	4	5	6	7	8	9	10+
1	Urban	22.3	27.8	19.8	14.1	8.2	3.9	2.4	0.9	0.6	0.0
	Rural	4.1	11.8	16.8	17.5	15.2	12.5	10.3	7.1	3.6	1.0
	Urban+Rural	5.0	12.6	16.9	17.4	14.8	12.1	9.9	6.8	3.5	1.0
2	Urban	10.5	19.4	23.8	18.1	13.8	7.2	3.3	1.6	1.5	0.9
	Rural	0.5	4.5	13.8	20.1	20.1	17.1	10.1	7.3	3.8	2.8
	Urban+Rural	1.4	5.8	14.7	19.9	19.6	16.2	9.5	6.8	3.6	2.6
3	Urban	7.2	14.2	21.0	20.0	15.1	9.1	5.9	3.9	2.4	1.2
	Rural	0.3	2.0	7.2	13.7	20.8	19.1	19.4	9.5	4.6	3.3
	Urban+Rural	1.1	3.4	8.8	14.5	20.1	18.0	17.8	8.9	4.4	3.1
4	Urban	4.7	10.0	16.6	20.6	18.7	12.6	8.6	4.4	2.2	1.6
	Rural	0.1	0.6	3.4	9.7	14.9	21.1	22.2	14.2	8.6	5.0
	Urban+Rural	0.9	2.2	5.6	11.5	15.5	19.7	19.9	12.6	7.6	4.5
5	Urban	1.5	4.4	9.2	14.9	18.9	15.6	13.8	8.5	5.7	7.4
	Rural	0.1	0.4	1.5	4.0	9.7	14.3	18.4	19.8	14.5	17.3
	Urban+Rural	0.5	1.7	4.0	7.6	12.7	14.8	16.9	16.1	11.6	14.0
Total	Urban	4.8	9.5	14.4	17.2	17.4	12.7	10.1	6.0	3.8	4.3
	Rural	0.9	3.5	8.1	12.7	16.2	17.1	16.5	11.8	7.2	6.1
	Urban+Rural	1.5	4.5	9.1	13.5	16.4	16.4	15.4	10.8	6.7	5.8

Table 5b. Distribution of Population disaggregated by Expenditure per Capita Quintiles (%)

Distribution of Population (%)

Expenditure Per Capita Quintile		Household Size									
		1	2	3	4	5	6	7	8	9	10+
1	Urban	0.0	1.3	3.3	8.1	13.6	14.9	17.2	13.9	13.8	13.9
	Rural	0.0	0.5	2.8	8.2	14.0	19.1	20.1	16.8	10.5	8.0
	Urban+Rural	0.0	0.6	2.8	8.2	14.0	18.9	20.0	16.7	10.7	8.2
2	Urban	0.3	1.7	5.7	14.8	19.9	18.1	14.7	10.7	5.4	8.6
	Rural	0.1	1.5	6.4	12.6	17.0	18.5	18.7	11.6	7.0	6.5
	Urban+Rural	0.1	1.5	6.3	12.8	17.2	18.5	18.4	11.6	6.9	6.6
3	Urban	0.4	2.6	10.1	16.3	20.1	17.1	14.6	8.2	5.8	4.9
	Rural	0.3	3.8	10.0	14.4	17.8	16.6	15.8	10.3	5.7	5.3
	Urban+Rural	0.3	3.6	10.0	14.6	18.1	16.6	15.7	10.1	5.7	5.2
4	Urban	0.5	5.6	14.7	19.6	19.2	13.6	11.5	6.8	3.8	4.8
	Rural	1.7	7.2	14.4	18.1	17.6	13.8	10.4	7.5	4.7	4.7
	Urban+Rural	1.4	6.8	14.5	18.5	18.0	13.8	10.7	7.3	4.4	4.7
5	Urban	10.3	16.8	18.8	17.6	15.4	9.4	5.8	2.7	1.6	1.6
	Rural	8.3	16.2	18.0	15.6	13.1	11.8	7.6	5.0	3.6	0.9
	Urban+Rural	9.5	16.5	18.5	16.8	14.5	10.3	6.5	3.6	2.4	1.3
Total	Urban	4.8	9.5	14.4	17.2	17.4	12.7	10.1	6.0	3.8	4.3
	Rural	0.9	3.5	8.1	12.7	16.2	17.1	16.5	11.8	7.2	6.1
	Urban+Rural	1.5	4.5	9.1	13.5	16.4	16.4	15.4	10.8	6.7	5.8

Table 6. Household Size and Age Decomposition by Region

Region	Average HH Size	Dependency Ratio*			Percent of Population by Age Group				
		Total	Urban	Rural	0-5	0-9	0-14	15-64	65+
Tigray	4.6	97.1	74.5	103.8	17.6	29.8	44.0	50.7	5.2
Afar	4.5	77.5	58.4	86.7	16.4	28.7	41.8	56.3	1.8
Amhara	4.4	93.8	55.7	100.8	17.1	29.7	43.8	51.6	4.6
Oromiya	4.9	106.8	65.3	114.9	20.0	34.5	48.2	48.4	3.5
Somali	5.3	119.7	103.7	123.9	21.6	38.2	52.0	45.5	2.5
Benshangul	4.5	98.9	76.2	103.2	21.0	34.3	46.8	50.3	2.9
SNNP	5.1	104.0	66.3	109.6	20.1	34.5	48.3	49.0	2.7
Gambella	4.8	86.1	75.1	91.8	18.5	31.4	44.8	53.7	1.4
Harari	4.4	85.5	58.0	120.0	18.1	30.6	42.3	53.9	3.8
Addis Ababa	3.9	41.2	41.2	-	9.2	16.0	25.2	70.8	3.9
Dire Dawa	4.2	74.5	64.1	101.6	16.6	27.6	38.7	57.3	4.0
Total	4.76	98.7			18.8	32.4	46.0	50.3	3.6
Urban	3.7		59.1		12.7	22.2	33.8	62.8	3.3
Rural	5.1			109.1	20.0	34.4	48.5	47.8	3.7

*Total dependency ratio defined as population that is not of working age (<15 and >64) divided by total number of working age persons (15-64 years).

Table 6 provides the average household size by region. It is not surprising that the regions and city administrations with primarily urban populations have the smallest household sizes. Addis Ababa, for example, which is considered 100% urban in this survey, has the smallest household size at 3.93 people. This has actually decreased by 19.8% from 4.9 people in 2004/5. Somali region, which is 81% rural, has the largest average household size at 5.33, up from 4.8 people in 2004/5.

Of greater interest in Table 6 is the dependency ratio and decomposition of age groups. The dependency ratio is calculated at the aggregate level in each region as well as for all urban and rural areas. By dividing the number of non-working aged persons (younger than 15 and older than 64) by the total number of working aged persons (ages 15 to 64) we arrive at the dependency ratio. This figure gives an approximation of the ratio of income earners to those non-earners who rely on others to fulfill their needs. A dependency ratio greater than 100 implies that there are more dependent people (younger than 15 and older than 64) than there are working-aged people.

In all regions but Afar and Gambella, rural dependency ratios exceed 100. This is to be expected, as the rural areas are where larger household sizes are seen. Urban dependency ratios are less than 100 in all regions except for Somali, the region that has the largest average household size. Addis Ababa has the lowest overall dependency ratio at 41.16, meaning that every 100 people of working age have 41.16 dependents. Again, this is what we would expect given that Addis Ababa is considered 100% urban in this survey and has the smallest average household size.

By breaking down the population into age groups, it is evident that the higher dependency ratios are driven by a high percentage of younger people, rather than those over 64. In the primarily rural regions, such as Oromiya and SNNP, the percent of the population below age 15 is nearly 50%. In Somali, where we see the highest dependency ratio, over half of the population is younger than 15. In all regions except Addis Ababa at least 16% of the population is younger than 6 years of age.

The distribution of individuals across age groups has remained fairly consistent since 2004. Of note is the increase in the Somali proportion of persons below age 10. In 2004/5 this was 33.8% and has risen to 38% in 2010/11. Dire Dawa has experienced a similar increase, with 24.8% younger than 10 in 2004/5 and 27.6% in 2010/11. Although the overall proportion is relatively small, the percent of the population above age 64 has increased from 2004/5 in most regions.

The national level dependency ratio is 98.73. This reduction from the 2004/5 ratio of 102 is largely attributable to the decreased proportion of young persons (the proportion of elderly has slightly increased). A decrease in the urban dependency ratio from 64.7 in 2004/5 to 59.12 in 2010/11 coupled with the slight shift in overall population from rural to urban also helps to explain this decrease in the national dependency ratio.

In order to examine the relationship between dependency ratios, age distribution and relative expenditure, Table 7 breaks down the national population by household expenditure quintile. In terms of age distribution, there is a slight increase in the proportion of young people with increasing quintiles. The opposite is true with the older population; the lowest quintile has the highest proportion of people over 64 and the percentage decreases with increasing quintiles. This can be partially explained by the high percentage of single person households in the first

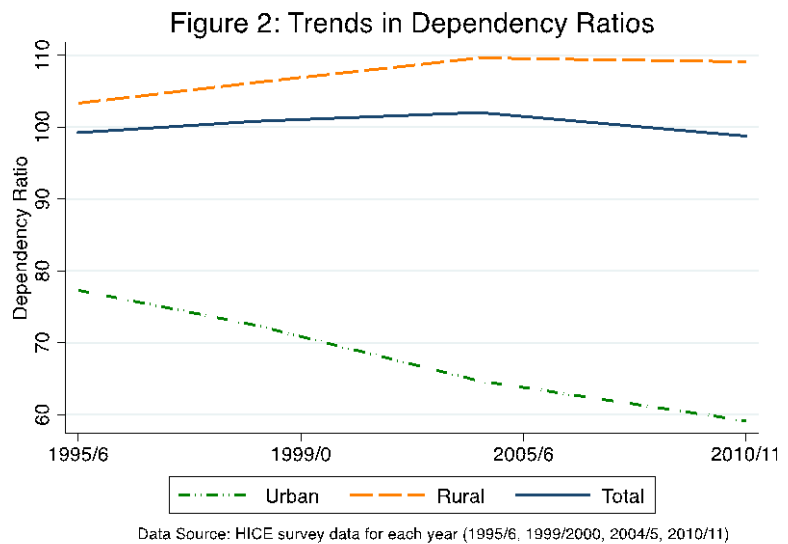
quintile observed in Table 5a (these single person households are not likely to be made up of children).

The relationship between dependency ratio and household expenditure quintile is not entirely obvious. It is apparent that urban ratios are significantly lower than rural ratios at all expenditure levels, with the greatest difference between the two being in the 3rd and 4th quintiles. There are no clear trends in the dependency ratios themselves, however. The proportion of the population in working-age range remains fairly consistent in all quintiles (about 63% in urban and 48% in rural areas). The increasing proportion of children that is seen with increasing quintiles is offset by smaller proportions of those above working age. Without much variation in the fraction of household members that are likely to contribute to income across quintiles, the dependency ratios will remain steady.

Table 7. Distribution of Population by Age and Quintile (%)

Age Group (years)		HH Expenditure Quintile					Total
		1	2	3	4	5	
0-14	Urban	27	31	33	35	35	34
	Rural	45	47	49	51	50	48
	Urban+Rural	44	45	47	48	45	46
15 - 64	Urban	63	64	64	62	63	63
	Rural	48	49	48	46	48	48
	Urban+Rural	49	51	50	49	53	50
65+	Urban	10	5	4	3	3	3
	Rural	7	4	3	3	2	4
	Urban+Rural	7	4	3	3	2	4
Dependency Ratio	Urban	58.27	57.12	57.44	60.02	59.67	59.12
	Rural	108.74	102.22	109.58	115.76	108.44	109.07
	Urban+Rural	105.52	97.24	101.83	103.98	89.47	98.73

The HICE survey series has allowed for measurement of dependency ratios over time. Figure 2 graphs the trend in national, urban, and rural dependency ratios. Prior to 2004/5, the rural ratio was increasing, which in turn drove up the national average. In 1995/6, the rural ratio was 103.3. It increased to 106.2 in 1999/0



and to 109.6 in 2004/5. Over the ten-year period from 1995/6 to 2004/5, the 6% growth in the dependency ratio was due to the increasing proportion of the population coming from the younger age group (47.5% in 1995/6 and 49% in 2004/5). Since 2004/5, the change in the rural dependency ratio has leveled off, remaining constant at about 110 (the proportion of young people being 48.5% in 2010/11). Urban dependency decreased from 77.3 in 1995/6 to 72.4 in 1999/0 to 64.7 in 2004/5. The percentage change from 1995 to 2004 was 16.3% (negative). The change in the urban ratio from 2004/5 to 2010/11 was 8.6%, a slower decline than the previous five-year period. This decline over time is attributable to the gradually decreasing proportion of young persons in the urban population (40.1% in 1995/6 and 33.8% in 2010/11, the proportion of elderly persons has remained relatively constant).

4.1.3 Household Head

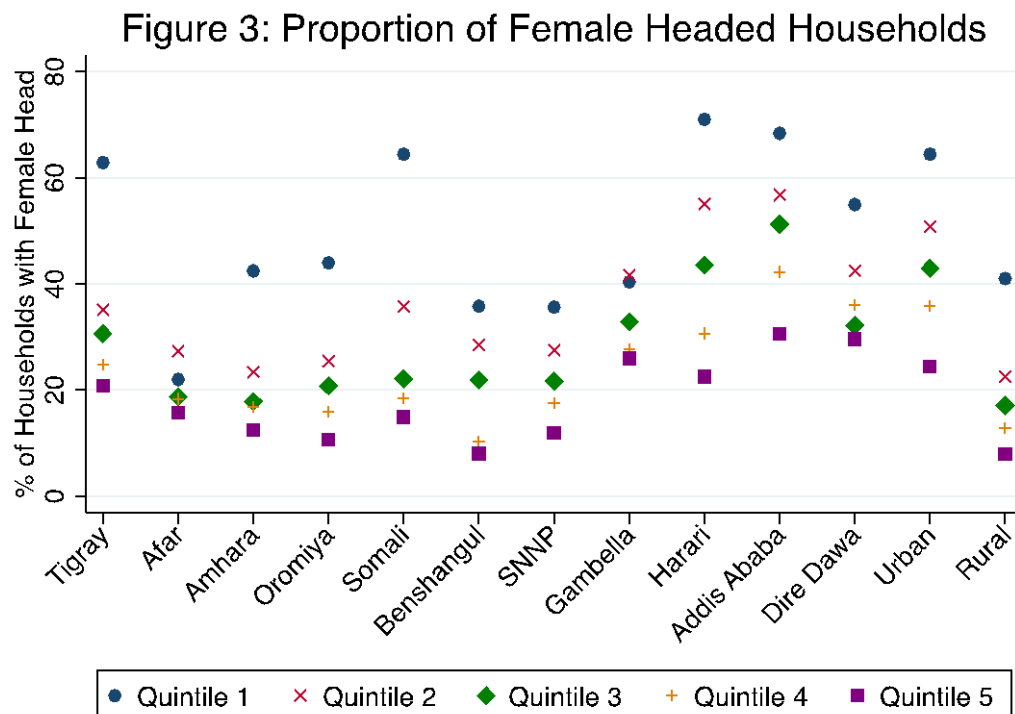
While the relationship between annual expenditure level and dependency ratio is not distinct, the relationship between the expenditure level and the sex of the household head is quite pronounced. Table 8 illustrates the proportion of households in each quintile that are headed by females. The negative relationship between female-headed households (FHH) and expenditure level is evidenced by the continuous decline in proportion of FHH with increasing quintiles. Nationally, 25% of all households are headed by females. The lowest two quintiles have proportionately more, with 43% of all households in the first quintile being FHH. Only 15% of those in the highest quintile are headed by females. Although the difference here is staggering, it is an

improvement over the distribution seen in 2004/5 where 49.5% of first quintile households were headed by females.

Table 8. Proportion of Female Headed Households by Quintile (% of HHs)

	HH Expenditure Quintile					Total
	1	2	3	4	5	
Urban	64	51	43	36	24	37
Rural	41	23	17	13	8	22
Urban + Rural	43	27	22	19	15	25

This negative relationship holds true even when we disaggregate households by urban and rural areas. 37% of all urban households and 22% of all rural households are headed by females. In comparison to 2004/5, there is a slightly greater proportion of female-headed households in the lowest urban quintiles (60.7% in quintile 1 in 2004/5 compared to 64.4% in 2010/11) and a smaller percentage in lower rural quintiles (47.4% in quintile 1 in 2004/5 compared to 41% in 2010/11). The national averages, however, are practically unchanged over the five-year period (38.6% of urban households and 23% in rural households in 2004/5, 25.5% overall).



The unequal distribution of female-headed households by expenditure quintiles is seen in varying degrees across regions. Figure 3 is a scatterplot of the proportion of households that are headed by females in each region and by expenditure quintile. The circles represent the lowest quintile and the squares the highest quintile. The gap in the percentages seen between the 1st and 5th quintiles was clear from the tables above. However, looking at Figure 3 highlights the dramatic difference observed even between the 1st and 2nd quintiles. In all regions but Afar and Gambella, the proportion of FHH in the lowest quintile exceeds that of all other quintiles. Some regions have a tighter distribution than others. In Gambella, for example, the proportion only ranges from 26% to 42% whereas the range in Harari is from 22% to 71%. Although the range in Harari is quite large, it appears there is a gradual change from quintile to quintile as opposed to Tigray or Amhara, for example, where the 1st quintile is significantly higher than the others, which are clustered more closely. In looking at urban areas compared to rural areas, there is a smoother reduction in the percentage of FHHs by quintile (the gap between the 1st and 2nd quintiles is much higher relative to the change between other consecutive quintiles in rural areas).

Not only are female-headed households found in higher concentrations at lower quintiles, the proportion of individual females themselves is higher in the lowest quintile. Table 9 sums the female percent of the population by quintile. In 2004/5 the percent of the rural population that was female was 56.7% in the lowest quintile and 52% in the 2nd quintile, implying the distribution of sex in rural populations has evened out slightly in the lowest quintiles. The national averages and urban distribution are virtually unchanged from 2004/5.

Table 9. Population by Sex (% of population that is female)

	Expenditure Quintile					Total
	1	2	3	4	5	
Urban	59	55	54	52	53	53
Rural	54	50	50	49	49	50
Urban + Rural	57	50	50	49	50	51

4.1.4 Income Contributing Members

Analysis of the dependency ratio provides an approximation of the percent of the household that is potentially involved in income-earning activity. The HCE survey allows for estimation of the *actual* portion of the household that is involved in this type of activity as well as the ages of those people. The questionnaire asks whether each member has contributed to household income (either in cash or in kind) in the 6 months preceding the survey. Coupling that question with the household roster that identifies age, sex, education, etc. of each member provides a rich dataset to analyze the patterns of income-contributing members across quintiles.

Table 10 outlines the dynamics of income-contributing members by quintile and place of residence. The percent of members that contribute to household income decreases with increasing annual expenditure quintile. This trend is in line with the average household size by quintile previously discussed. Because households in the lower quintiles are often smaller than those in the top quintiles, it follows that a larger percentage of members would be contributing. In general, the larger the household size, the greater the percentage of children. In a household of 2, for example, at least one person must be a contributing member. In a household of 5, however, you could have 2 contributing members and still have a lower percentage of members contributing. Urban households have a greater percentage of members contributing on average.

Table 10. Income Contributing Household Members

	Quintiles					Place of Residence		
	1	2	3	4	5	Urban	Rural	Total
% of HH members contributing income	42	38	37	35	34	48	34	37
% of contributing members that are male	50	58	60	62	62	52	61	59
Average age of Male Contributors	36.6	35.8	35.2	36.0	36.1	33.3	36.5	35.9
Average age of Female Contributors	39.3	33.3	31.8	31.7	30.8	32.6	33.6	33.3

The percent of contributing members that is male increases with expenditure quintile. In the lowest quintile, 50% of contributing members are male, compared to 62% in the highest quintile. In urban areas, the average percent of male workers is 52% compared to 61% in rural areas. This is could be attributable to the prevalence of female “homemaking” or child rearing in rural areas. This category of work, although quite necessary and demanding, is not considered to be an income-generating activity in this survey.

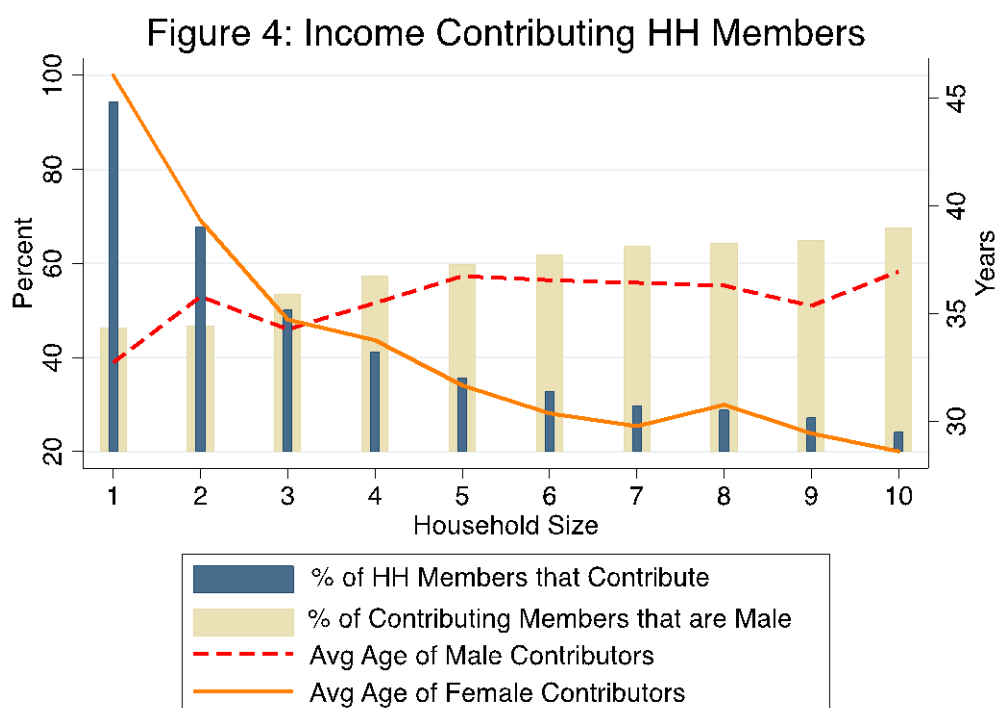


Figure 4 illustrates the relationship of these figures with household size. It is clear that the percentage of income-contributing members falls as household size increases. There is also a gradual increase in the percentage of contributing members that are male, with larger households having a larger percentage of male contributors. This is in line with the observations made at the quintile level, with higher quintiles having a higher proportion of male contributors. Figure 4 also plots the average age of male and female contributors. For females, the average age in the first quintile and at small household sizes is much higher than that of males (for the 1st quintile the average age is 39.3 for females and 36.6 for males) and it declines significantly from that point. In the highest quintile, for example, the average female age is only 30.8 and the average

Table 11. Age Decomposition, Country Level (%)

Of Female Contributing Members:		Of Male Contributing Members:	
< 10 years	5.6	< 10 years	4.5
11-20	18.9	11-20	15.0
21-50	59.2	21-50	60.9
51-65	10.9	51-65	12.8
> 65 years	5.4	> 65 years	6.9

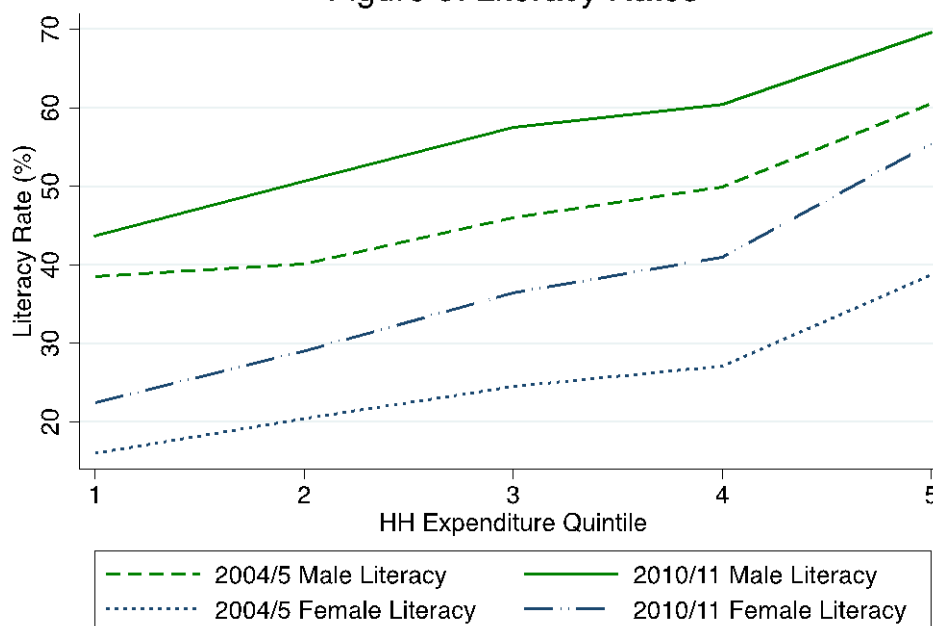
male age is 36.1. The average age of male contributors is fairly stable across household size and quintile. Overall, the average age of male contributors is higher than that of females. This is supported by Table 11, which shows that females begin income-contributing activity earlier than

males but they also stop earlier in life. Nationally, 5% of income contributing members are younger than 10, 17% are between 11 and 20, 60% are between the ages of 21 and 51, 12% are between 51 and 65, and 6% are older than 65.

4.1.5 Literacy and Education

Literacy and education are known to have a strong, positive correlation with welfare. In this section, we examine the apparent relationships between literacy, education and household expenditure quintile. For the purposes of this analysis, literacy is defined as the ability to read and write a short passage in any language. This is measured only for the population aged 10 and above.

Figure 5: Literacy Rates



Literacy rates have seen marked positive changes since 2004/5. Both males and females, urban and rural, have experienced increases in literacy rates. Figure 5 graphs the increases for males and females in both years. Table 12 provides more detailed values. In 2004/5, the national rate was 37.6%. In 2010/11, 48.3% of the population aged 10 and over was literate. Male literacy is higher than female literacy in all quintiles although the gap is narrowing, particularly in the highest quintile.

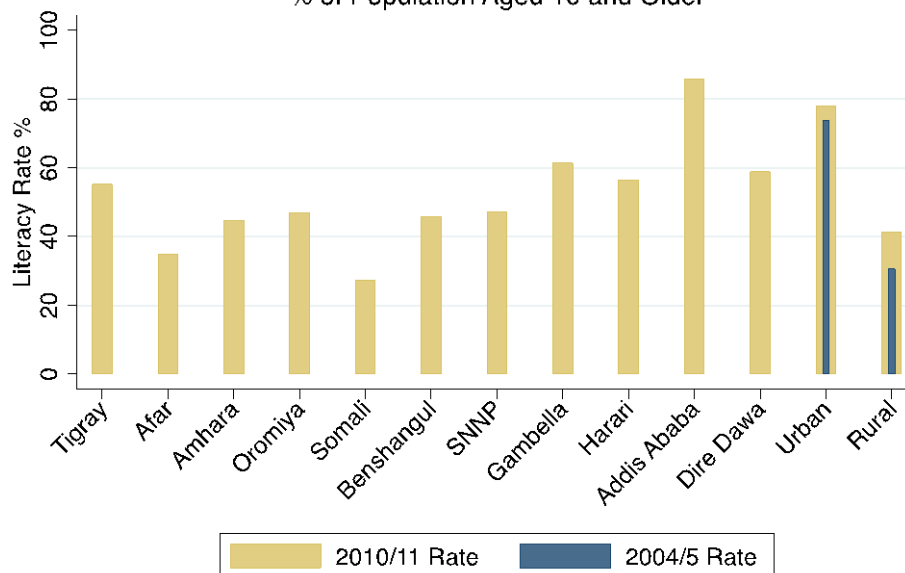
Table 12. Literacy Rates by Quintile and Sex (% of persons 10 years or older)

		2004/5						2010/11					
		HH Expenditure Quintile						HH Expenditure Quintile					
		1	2	3	4	5	Total	1	2	3	4	5	Total
Urban + Rural	All	25.0	29.4	35.0	38.8	49.9	37.6	31.7	39.5	46.7	50.7	62.6	48.3
	Male	38.5	40.1	46.0	49.9	60.5	49.4	43.7	50.6	57.5	60.4	69.6	58.5
	Female	16.0	20.4	24.5	27.1	38.7	26.7	22.4	29.0	36.4	40.9	55.5	38.7
Urban	All	55.2	66.3	72.6	76.4	81.5	73.7	57.5	65.1	71.8	77.4	84.5	78.1
	Male	73.4	78.6	84.4	85.9	91.1	85.3	80.5	79.5	83.8	87.1	92.2	88.3
	Female	43.3	56.6	62.8	68.2	73.2	64.2	43.0	54.3	61.8	68.9	77.7	69.4
Rural	All	19.1	24.0	29.4	33.2	39.9	30.6	30.1	36.5	42.7	44.4	50.1	41.3
	Male	31.5	34.7	40.7	45.3	52.1	42.8	41.6	43.3	53.7	54.7	58.1	51.9
	Female	10.7	14.7	18.4	20.0	26.3	18.7	21.0	22.7	32.1	33.9	41.4	31.0

Regional literacy rates are available in Figure 6. The rate varies from 23.3% in Somali to 85.7% in Addis Ababa. Generally, the more urban regions, such as Dire Dawa, Addis Ababa and Harari have greater literacy rates. It is also clear from this chart that rural literacy has made greater strides than urban literacy since the previous HICE survey, but rural areas also have more room for growth.

As with literacy, education is positively related to relative household expenditure. Households in the highest expenditure quintile enjoy significantly greater education levels than those in lower quintiles, especially in urban areas. The relationship cannot be deemed causal, as it is likely that education itself increases income (and, therefore, expenditure) and income increases education, particularly for the dependents in the household. That is, if a household has enough income to support its members without children working, those children will be able to attend school instead.

Figure 6: Literacy by Region
% of Population Aged 10 and Older



In both urban and rural areas, more males are educated than females. Table 13 provides the percent of male and female populations aged 13 years and above that had completed advanced primary school (grade 8 and above) at the time of the survey. Immediately recognizable is the difference between urban and rural education. For rural areas only 4% of people over 12 had completed advanced primary, compared to 39% in urban areas. The difference between males and females is also apparent. In the country as a whole, the rate is 13% for males and 9% for females. In all groups, the rate of education increased with increasing quintiles. The absolute change is less severe in rural areas because the range across all quintiles is quite small (2% in the 1st quintile to 6% in the 5th quintile).

Table 13. Population (aged 13 and above) that has completed Advanced Primary School (%)

		HH Expenditure Qunitile					Total
		1	2	3	4	5	
Urban	Male	33	31	37	42	55	47
	Female	14	18	24	30	41	32
	Total	21	23	30	35	48	39
Rural	Male	4	4	6	6	8	6
	Female	1	2	2	3	4	3
	Total	2	3	4	4	6	4
Total	Male	5	7	10	13	25	13
	Female	2	4	6	9	19	9
	Total	3	5	8	11	22	11

The education of household heads also exhibits the trend of increasing education with increasing quintile. The difference between the education of male household heads and female household heads within expenditure quintiles is fairly small, with the exception of the 1st quintile where 8.7% of male heads and 4.2% of female heads have completed grade 6. The grade 6 completion rate for male household heads is higher than that of females in the lowest three quintiles but females have a higher rate than male household heads in the top two quintiles. Table 14 summarizes the education of household heads (as completing grade 6). Although the percent difference between males and females is not glaring, the difference between rural and urban education of household heads is. In urban households, 58.5% of male household heads have completed grade 6 (33.6% of females) and in rural areas only 11.7% of males have completed this level (7% of females).

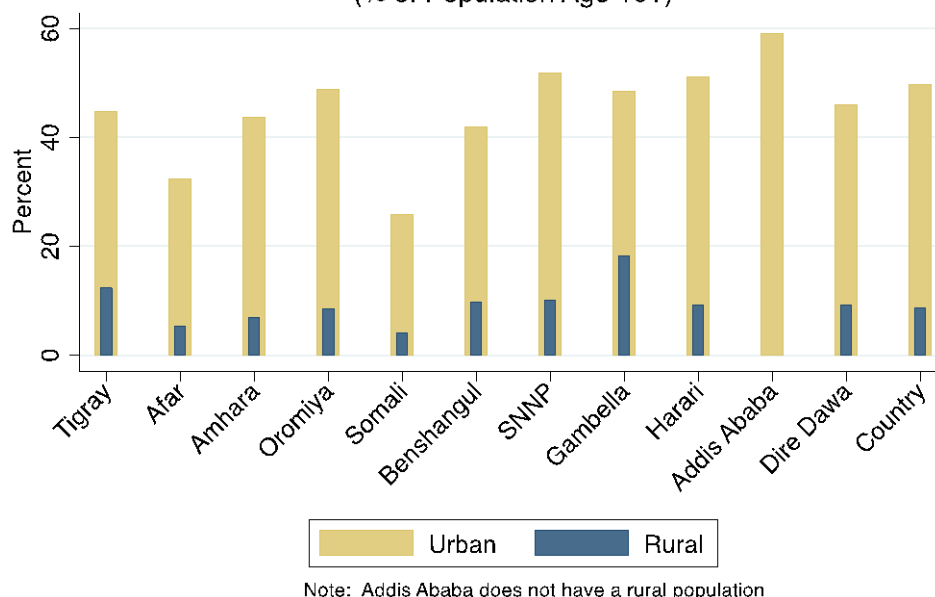
Table 14. HH Head Education

% of Household Heads that have Completed Grade 6

Expenditure Quintile	2010/11			2004/5		
	Male HH	Female HH	Total	Male HH	Female HH	Total
1	8.7	4.2	6.8	6.1	3.6	4.9
2	10.4	8.5	9.9	6.4	6.8	6.5
3	14.7	14.2	14.6	9.7	7.7	9.4
4	18.3	20.1	18.6	11.4	10.3	11.1
5	33.1	34.2	33.2	19.2	17.1	18.9
Urban	58.5	33.6	49.3	46.6	24.4	38.0
Rural	11.7	7.0	10.7	5.8	1.7	4.9
Total	15.6	10.2	14.3	11.3	7.1	10.2

The education of household heads has increased with time. In 2004/5, 10.2% of household heads had completed grade 6 compared to 14.3% in 2010/11. Household heads in the 1st quintile increased grade 6 completion from 4.9% to 6.8% and those in the 5th quintile increased from 18.9% to 33.2%. The increase in education is much stronger in the higher quintiles. The disparity between urban and rural education is clear at the regional level as well. Figure 7 displays the regional grade 6 completion rate for the population aged 10 and older.

Figure 7: Grade 6 Completion
(% of Population Age 10+)



4.1.6 Economic Activities

Of the national population 10 years and older, 66.6% are economically active.³ Their employment status, occupation and industry, however, vary with sex, status in the household and expenditure quintile. The tables below describe the dimensions of employment across these groups.

Table 15 disaggregates the employment status of female and male household heads by expenditure quintile. The proportion of household heads, both male and female, that are self-employed is overwhelming. In every quintile at least 69% of heads declared themselves as self-employed (the definition of which includes agriculture without hired labor). The concentration of males is greater than females in this category but both are significant. As the expenditure quintile increases, the proportion of self-employed heads decreases slightly (with small increases seen in female heads from the 1st to 3rd quintiles), giving way to a greater proportion of

³ Including unpaid family labor. The total estimated population age 10 and above is 51,452,379. Roughly 118,000 were registered without a response in either the economically active or unemployed categories. These people were assumed to not be economically active.

employers and those employed in public or private enterprises. The 5th quintile has a significantly higher concentration of employer and public enterprise/service employees, which may be related to the large concentration of urban households found in this quintile. Also of note is the disparity between the male and female household heads that are not economically active. Overall, 23% of female heads are considered to be in this category. It is important to note that household activities (other than unpaid labor) are not considered an economic activity in this context. This observation is consistent with the trends observed in the income contributing section, where the percent of household contributors that were male increased with quintile. Also in that section we observed that fewer older females are engaged in work than men of the same age. Given that these are household heads, we would expect them to be older and therefore see fewer females engaged in economic activity.

To assess the breakdown of employment status across regions, we point to Table 16. The employment categories here are the same as in the previous table but these have been reported in more detail. Also note, the percentages given are of all economically active persons age 10 and above, not the entire population of that age. This table also breaks down urban and rural populations at the national level. Looking at this particular disaggregation shows that 94.4% of active rural household heads are self-employed compared to 51% of active urban heads. In addition to self-employment, urban employment is dominated by employment in the public, private and other sectors. Although 13.8% of urban members other than the household head are engaged in unpaid family labor, this number is small in comparison to the 77.1% observed in rural areas. The significant difference between the percentage of household heads and other members engaged in paid activity versus unpaid family labor suggests that the household income is strongly driven by the work of the head, especially so in rural areas. For this reason we will focus primarily on the industry and occupation of the household head in the remainder of the section. The more urban regions, such as Addis Ababa and Harari, have the smallest proportion of household members engaged in unpaid family labor (Harari is 47% urban and Gambella 32%). Dire Dawa has a relatively high proportion of unpaid family labor at 41.9% of active members other than the head given its fairly urban population (68% of households). In comparison to 2004/5, there has been an increase in the proportion of self-employed heads (up to 86.1% from 76% of active heads) and a reduction in the percent that are employers (down to 1.6% from 4.9% of active heads).

Table 16. Distribution of Employment Status by Region
[% of Economically Active Persons Age 10+]

	Total	Urban	Rural	Tigray	Afar	Amhara	Oromiya	Somali	Benishangul	SNNP	Gambella	Harari	Addis Ababa	Dire Dawa
Employer	1.6	1.1	1.7	1.6	1.0	2.4	1.7	0.2	1.4	0.5	0.0	0.2	1.2	0.1
Head														
Other Members	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1	0.0	0.4	0.1
Self Employed	86.1	51.0	94.4	83.5	66.6	88.8	87.5	85.1	88.0	91.1	76.6	76.5	36.8	58.9
Head	20.4	35.4	18.3	20.1	15.4	8.7	25.6	20.2	8.5	27.2	58.8	47.3	23.1	31.0
Employed (private enterprise)	3.8	16.5	0.8	4.3	10.7	1.9	3.2	2.3	1.7	1.7	3.5	3.6	35.3	19.6
Head														
Other Members	4.7	21.8	2.4	3.0	4.6	2.8	4.9	0.2	3.3	2.1	6.5	5.9	37.4	11.6
Employed (public enterprise)	1.5	6.4	0.4	1.8	12.0	1.2	1.4	1.4	1.1	1.1	8.8	1.7	4.7	4.4
Head														
Other Members	0.6	3.8	0.2	1.3	3.2	0.4	0.4	0.3	0.3	0.5	4.9	1.3	4.0	2.8
Employed (public service)	4.5	18.1	1.3	4.5	6.3	3.6	4.1	3.9	6.1	4.3	9.4	13.7	13.0	10.2
Head														
Other Members	1.6	11.0	0.3	1.6	2.3	0.8	1.3	1.1	2.8	1.3	3.7	9.6	9.9	5.4
Employed (Other)	1.2	4.9	0.4	1.3	0.6	1.1	1.0	1.3	0.9	0.8	1.5	2.5	7.1	4.6
Head														
Other	2.7	12.3	1.4	1.8	2.7	1.8	2.4	0.9	0.7	1.6	1.2	4.5	20.8	6.2
Local NGO	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.3
Head														
Other Members	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.3	0.0
International NGO	0.1	0.6	0.0	0.1	0.2	0.0	0.0	0.8	0.2	0.1	0.7	0.7	1.2	0.6
Head														
Other Members	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.8	0.5
Extra - Territorial Organizations	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6	0.0
Head														
Other Members	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3
Religious Institution	0.3	1.1	0.1	0.4	0.0	0.2	0.2	0.2	0.1	0.3	0.4	0.1	1.6	0.8
Head														
Other Members	0.1	0.3	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.4	0.4
Cooperative/Unions	0.1	0.3	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.5	0.4
Head														
Other Members	0.1	0.4	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.7
Chamber of Commerce & Related	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Head														
Other Members	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Civic Associations	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Head														
Other Members	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Political Organization	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Head														
Other Members	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private Hb/Person	0.6	2.4	0.2	0.6	0.2	0.7	0.6	0.2	0.5	0.3	0.2	1.0	2.6	2.4
Head														
Other Members	2.4	11.1	1.3	1.4	2.5	1.7	2.3	0.7	0.7	1.3	0.7	4.3	18.6	4.3
Unpaid family work	0.8	0.5	0.9	2.2	2.8	1.0	0.5	5.5	0.7	0.4	0.2	1.1	0.2	1.5
Head														
Other Members	69.6	13.8	77.1	71.9	71.5	85.1	64.8	77.2	84.2	66.8	24.6	30.7	3.4	41.9
Other	0.4	1.5	0.2	0.8	0.1	0.2	0.6	0.1	0.1	0.3	0.1	0.6	1.7	0.7
Head														
Other Members	0.3	1.3	0.2	0.1	0.0	0.2	0.5	0.0	0.2	0.1	0.1	0.7	1.1	1.0

The link between the employment status and industry of household heads fairly clear. Table 17 illustrates the extremely high concentration of household heads in agriculture, which is most likely to be reflective of the large proportion of heads that are self-employed. Those that hire labor as part of their agricultural operation would be considered employers in the table above while those that do not hire labor are considered self-employed. As with self-employment, the proportion of household heads in the agriculture industry is far greater than any other but its dominance is reduced with each quintile, where a smaller portion of heads (both male and female) in the highest quintiles are engaged in agriculture. At the high levels, we see an increase in vehicle services, public administration and defense, and education, likely more urban occupations. When looking at the population as whole (those age 10+ that are economically active) not only household heads, the distribution is relatively unchanged; strong focus on agriculture which declines with quintile and gradual, yet small, increases in vehicle services, education, public administration and defense, as well as hotel and restaurant industries.

Table 17. Head of Household Industry (%)

Industry	HH Expenditure Quintile											
	1		2		3		4		5		Total	
	Male HHH	Female HHH	Male HHH	Female HHH	Male HHH	Female HHH	Male HHH	Female HHH	Male HHH	Female HHH	Male HHH	Female HHH
Agriculture, Hunting and Forestry	86	52	84	51	81	48	77	41	61	26	77	47
Fishing	0	0	0	0	0	0	0	0	0	0	0	0
Mining and Quarrying	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	1	5	1	5	2	5	2	5	3	5	2	5
Electricity, Gas and Water supply	0	0	0	0	0	0	0	0	1	0	0	0
Construction	1	1	2	1	2	1	2	1	3	1	2	1
Wholesale & Maintenance of Vehicles, etc.	2	6	2	9	4	10	5	10	9	13	5	9
Hotel and Restaurants	0	4	0	6	0	8	1	6	1	7	1	6
Transport, Storage and communication	0	0	0	0	0	0	1	0	2	0	1	0
Financial Intermediation	0	0	0	0	0	0	0	1	1	2	0	0
Real Estate, Renting and Business Activities	0	0	0	0	0	0	0	0	0	0	0	0
Public Administration and Defence	0	1	1	1	2	1	3	3	6	5	2	2
Education	0	0	1	1	2	1	2	3	4	4	2	1
Health and Social work	0	0	0	1	0	2	1	2	1	2	0	1
Other Service Activities	2	5	2	3	2	3	2	3	2	3	2	4
Private Hhs with Employed Persons	0	1	0	1	0	1	0	1	0	1	0	1
Missing/Not Economically Active	7	25	5	20	4	18	3	22	4	30	4	23

To take a closer look at the primary industries by region, refer to Table 18. For the purposes of comparison from 2004/5 to 2010/11, the table includes the following consolidated industries: agriculture, hunting and fishing; manufacturing, electric, gas and water; wholesale and maintenance of vehicles; and hotels and restaurants. Other industries that were of significant

volume in 2010/11 were defense (1.43% of active people) and personal services (2.97% of active people). Table 18 also includes the male-to-female ratios for the selected industries. Agriculture, the primary industry of the country as a whole is heavily male in all regions but Benshangul, which is nearly even. As a whole, there are 1.35 males in agriculture to every 1 female (this is down from 1.5 males : 1 female in 2004/5). Harari has a particularly high ratio with 5.45 males to every 1 female (this is down from 7.1 in 2004/5). The manufacturing and utility supply industry is predominately female in the country as a whole, but in urban areas where agriculture is less prolific more males are engaged in this industry than females (particularly in Addis Ababa and Dire Dawa). The hotel and restaurant industry as well as the vehicle industry employs more females than males. In the country as a whole, the male-to-female ratios in these industries have remained virtually unchanged, with the exception of a reduction in the urban male to female ratio in agriculture (from 2.2 males: females in 2004/5 to 1.79 in 2010/11) and an increase in the relative number of urban males in the manufacturing and utilities industry (from 0.8 males: females in 2004/5 to 1.03 in 2010/11).

Table 18. Primary Industries (2010/11)
(% of Economically Active Persons)

	Agriculture, Hunting and Fishing				Manufacturing, Electricity, Gas, and Water Supply				Wholesale and Maintenance of Vehicles, Motorcycles, Etc.				Hotel and Restaurant Services			
	Male	Female	Total	M:F	Male	Female	Total	M:F	Male	Female	Total	M:F	Male	Female	Total	M:F
Tigray	81	73	77	1.31	3	6	4	0.61	4	7	5	0.70	0.4	3	2	0.16
Afar	79	67	75	2.12	2	4	3	1.10	5	8	6	1.05	1	4	2	0.34
Amhara	89	81	85	1.37	1	4	2	0.50	3	5	4	0.69	0.4	4	2	0.10
Oromiya	84	74	80	1.39	2	4	3	0.45	4	9	6	0.61	0.4	4	2	0.12
Somali	80	80	80	1.12	1	1	1	0.92	7	11	9	0.72	0.4	1	1	0.45
Benshangul	85	88	86	0.97	1	1	1	0.88	2	2	2	0.88	1	3	2	0.37
SNNP	84	75	80	1.30	2	4	3	0.47	5	10	7	0.60	1	4	2	0.21
Gambella	69	53	61	1.16	1	2	2	0.55	5	1	3	3.46	3	35	20	0.07
Harari	56	12	35	5.45	5	6	5	0.98	8	57	31	0.17	1	2	2	0.88
Addis Ababa	2	1	2	1.84	15	11	13	1.63	21	21	21	1.13	4	9	6	0.49
Dire Dawa	36	36	36	1.17	8	6	7	1.64	14	25	19	0.64	2	4	3	0.63
Urban	14	9	12	1.79	11	12	11	1.03	20	25	22	0.90	3	13	8	0.28
Rural	94	85	90	1.34	1	3	2	0.29	2	5	4	0.48	0.2	3	1	0.07
Total	82	73	78	1.35	2	4	3	0.60	5	8	6	0.67	1	4	2	0.17

In terms of occupation, there are more visible changes over time. Table 19 displays the proportion of economically active household heads by occupation in 2004/5 and 2010/11.

In urban areas there was a reduction in the proportion of household heads that were employed as legislators, senior officials and managers. In 2004/5, 8% of active heads were in this category, in 2010/11 only 3%. There was a similar reduction in the craft or trade occupation (from 23% to 14%). The large reductions in these occupations are offset by substantial increases in professional occupations (from 2% in 2004/5 to 7% in 2010/11) and elementary occupations (from 11% to 23%). Additional increases were seen in the percentage of urban household heads employed as services workers or salespersons. In rural areas, the changes were not as large.

Table 19. Occupation of Active Household Heads (%)

	2004/5			2010/11		
	Rural	Urban	Total	Rural	Urban	Total
Legislators, Senior Officials and Managers	0.4	8	2	0.5	3	1
Professionals	0.0	2	0.3	0.3	7	2
Technicians and Associate Professionals	1	9	2	1	10	3
Clerks	0.2	5	1	0.1	4	1
Service & Sales Workers	2	21	4	3	24	7
Skilled Agricultural and Fishery Workers	92	10	81	89	10	74
Craft and Related Trade Workers	3	23	6	2	14	4
Plant and Machine Operators/Assemblers	0.2	5	1	0.1	4	1
Elementary Occupations	1	11	2	4	23	8
Member of Defense forces	0.0	0.2	0.0	0.1	1	0.2
Labourers in Mining, Manufacturing and Transport	0.5	6	1	N/A	N/A	N/A
Total	100	100	100	100	100	100

There was a small shift out of agriculture (from 92% in 2004/5 to 89% in 2010/11) and into elementary occupations.

While analyzing the occupations and industries of the economically active population is vital to understanding changes in the Ethiopian environment, it is also worth noting the reasons people are not economically active at all. Table 20 summarizes the reasons or alternative activities that preclude persons aged 10 and above from participating in economic activity. The largest category is education. 53% of people over age 9 that are not economically active have chosen to attend school or training courses. In addition to this 53%, 5.8% noted that they were too young for work. The percent of those that chose education is greater in the higher quintiles while the percentage of those that said they were too young is higher in lower quintiles. The positive progression in education with quintile is in line with the conclusions noted in the education section.

Table 20. Types of Unemployment by Expenditure Quintile

(% of persons age 10+ not economically active)

Reason not engaged in economic activity	Expenditure Quintile					% of Total	
	1	2	3	4	5	Total	Population Age 10+
Unemployed	0.8	1.2	1.4	2.2	3.1	2.0	0.7
Student/Training course	37.1	48.7	52.7	54.3	60.3	53.0	17.7
Home maker	26.9	26.3	28.6	26.5	23.0	25.8	8.6
Retired	0.3	0.3	0.4	0.6	0.8	0.6	0.2
Depend on remittance	1.0	0.5	0.3	0.5	0.5	0.5	0.2
Old age	13.0	6.9	5.0	4.1	3.2	5.5	1.8
Disability	2.8	1.5	0.9	0.7	0.3	1.0	0.3
Sick (including mental injury)	9.7	7.0	4.7	3.4	2.4	4.6	1.5
Too young (Applicable for age 10-14 years only)	6.8	5.7	5.4	6.4	5.1	5.8	1.9
Others	1.3	0.8	0.4	0.5	0.4	0.6	0.2
Not Reported	0.5	1.0	0.3	0.8	0.8	0.7	0.2
Total	100	100	100	100	100	100	33.4

The second largest contributor to people not being engaged in economic activity is homemaking. Nationwide, 25.8% of people over age nine that are not economically active consider themselves as homemakers. This figure represents a relatively large portion of population and could be one of the primary reasons the percent of female household heads that are not involved in economic activity is around 23% (see Table 17).

Other, more negative, factors also contribute. Of those that are not active and are older than nine, 2% declared themselves unemployed, 5.5% were too old, and 4.6% were ill (with an additional 1% disabled). In terms of pure unemployment, this percentage increases with expenditure quintile. This comes contrary to expectations but could potentially be due to more people in lower quintiles working as unpaid family laborers and therefore not considered unemployed. The prevalence of the other categories mentioned here, illness, disability, and old age, fall with increasing quintile, suggesting that these negative situations prohibit economic activity and therefore reduce expenditure. For illness, in particular, it could also be that households in the higher quintiles are better able to afford necessary health needs to cure or prevent illness all together.

The last column in Table 20 provides the percentage of each category in relation to the entire population aged 10 and above. That is, of all people aged 10 and over 17.7% are students or are in training courses, 8.6% are homemakers, and 1.5% are ill and not engaged in economic activity. Please note that although the “unemployed” category here shows that only 0.7% of the population is unemployed, the definition used here is not the same that is used to calculate official unemployment figures. Official unemployment figures are released separately by the CSA.

4.2 Expenditure

Expenditure levels can be the most obvious tool to compare welfare across populations and time. However, they can also be complicated by a number of factors including inflation, spatial price differences, and the level of analysis (using total household expenditure vs. per capita, for example). A degree of caution needs to be taken in this analysis to consider these factors. For this reason, this section includes the analysis of expenditure data in a variety of methods including per capita, per household, with regional price corrections and without.

4.2.1 Expenditure Per Capita

Expenditure per capita is the simplest form of comparison. It allows for the assessment of the amount of expenditure per person by expenditure quintile, region, item group, etc. To begin, we first look at the pure expenditure per capita by region and national household expenditure quintile in Table 21. The prices here have not been adjusted for any regional price differences, they are simply the expenditure provided in each region. As expected, the expenditure per capita value increases with quintile. This is true even despite the fact the higher quintiles are made up of more large households than are the lower quintiles (refer to Table 5a). This uneven distribution of household size in these quintiles partially masks the degree of inequality in expenditure per capita because the total household expenditure used to create the quintile is often divided amongst more people in the highest quintiles (so even though their total expenditure is greater, their per capita value may be lower). To complement Table 21, we have also included Table 22, which uses *expenditure per capita quintiles* rather than total household expenditure

quintiles. These are constructed such that the 20% of households with the lowest per capita expenditure are in the 1st quintile and the 20% of households with the highest per capita

Table 21. Expenditure Per Capita by National HH Expenditure Quintiles

2010/11 Prices

	HH Expenditure Quintile					Total
	1	2	3	4	5	
Tigray	3093.79	3424.74	4162.68	4992.41	8841.10	5514.33
Afar	2468.00	3588.58	4298.25	4878.68	7416.69	4880.53
Amhara	2797.49	3516.80	4091.30	4924.30	8296.30	4590.28
Oromiya	2636.00	3423.72	4013.85	4720.31	6821.57	4680.72
Somali	2719.23	3069.97	3736.45	4561.28	6733.75	4904.83
Benshangul	2957.08	3567.18	4583.69	4963.24	7615.38	4967.17
SNNP	2148.15	3090.85	3602.05	4314.25	6761.46	4069.08
Gambella	3610.18	3928.77	3845.65	4860.02	6780.94	5085.27
Harari	4651.66	6115.41	5302.29	6230.37	8383.72	7243.88
Addis Ababa	3469.56	4358.79	5894.97	7426.09	10534.19	9047.58
Dire Dawa	4654.91	5354.24	4941.47	5903.43	7556.17	6375.32
Urban	4514.58	5322.15	6193.41	7186.79	10622.53	8466.92
Rural	2500.91	3201.44	3699.49	4315.82	6067.51	4023.07
Total	2599.84	3388.07	3988.48	4791.83	7560.59	4759.77

expenditure is in the 5th quintile (same as in Table 5b). In this complementary table, the same trend exists, that per capita expenditure increases with quintile, and it is in fact more pronounced. One of the biggest changes apparent from Table 21 to Table 22 is in the lowest urban quintiles. The value per capita in Table 22 is significantly lower than that in Table 21, likely due to the large proportion of small households observed in the low urban total household expenditure quintiles. The small households (22.3% are single person in the 1st urban quintile, see table 5a), do not need to divide their expenditure by as many people, thus their per capita expenditure is larger than many other households even if their total expenditure is less.

Table 22. Expenditure per capita by Expenditure per Capita Quintile

2010/2011 Prices

	Expenditure per Capita Quintile					Total
	1	2	3	4	5	
Urban	2287.33	3310.55	4398.96	6043.57	13158.69	8466.92
Rural	2104.26	3343.20	4419.72	5958.88	10064.67	4023.07
Total	2111.05	3341.07	4417.37	5980.05	11916.84	4759.77

In addition to Table 21 and 22, a couple of alternative measures were observed. As previously mentioned, spatial price differences can complicate the cross-sectional comparison of expenditures. That is, comparing the pure expenditure per capita in Addis Ababa with that in Amhara, for example, can lead to extreme conclusions if the prices of goods are dramatically different. In an attempt to normalize prices across regions to allow for better regional comparison, Table 23 presents spatially adjusted prices. These figures were computed using the regional-level spatial price index constructed by MoFED (using the total price index, not the detailed index computed for food and non-food items; the index is found in Annex III) (Ministry of Finance and Economic Development, 2012). To continue our example, if the expenditure per capita was compared between Addis Ababa and Amhara using this calculation, the conclusion would remain that expenditure per capita is higher in Addis Ababa but by a smaller margin than when using the pure per capita figures (because prices in Addis Ababa are higher than the national average and prices in Amhara are generally lower than the national average).

Table 23. Expenditure Per Capita - Alternative Measurements
2010/11 Prices

	Spatially Adjusted Prices ¹	Per Adult ²	Per Adult (w/Spatial Adjust.)
Tigray	5333.01	9298.01	8992.28
Afar	4780.15	8028.50	7863.37
Amhara	4836.96	7691.76	8105.12
Oromiya	4771.38	8287.61	8448.12
Somali	4332.89	9119.89	8056.44
Benshangul	5184.94	8592.15	8968.84
SNNP	4491.26	7244.76	7996.43
Gambella	4774.90	8697.44	8166.61
Harari	5903.73	11967.36	9753.35
Addis Ababa	5822.13	12701.22	8173.25
Dire Dawa	5120.74	10145.66	8149.12

1 - Values adjusted for regional price differences using the spatial index constructed by MoFED. The version of the index used is at the regional level with no difference between food and non-food item groups.

2 - Refer to footnote 5.

Table 23 also includes a “per adult” expenditure figure. The logic behind the inclusion of this computation comes from Deaton & Zaidi, a cornerstone in consumption analysis (Deaton & Zaidi, 2002). Because children often require fewer expenditures than adults (especially in developing economies where costs such as education and recreational activities are less prevalent) it could be misleading to treat them in equal proportions as is done in the per capita method. There are also certain household goods that could be considered public goods, such as housing, that do not increase incrementally with the number of household members. There is some degree of economies of scale that larger households take advantage of due to these household public goods. Therefore, to account for the relatively lower cost of children and any economies of scale within a household, we compute the “per adult” figure using Deaton & Zaidi’s recommended equation.⁴ This is intended to provide context to the per capita figures and

⁴ $AE = (A + \alpha K) \theta$; where A is the number of adults (≥ 15 years old), K is the number of children (< 15 years old), α is the cost of kids relative to adults, and θ is an estimate of the household economies of scale. Based on Deaton and Zaidi’s recommendations for developing economies, in table x, $\alpha=0.25$, implying that children cost a quarter of adults on average, and $\theta=0.9$, a low level of economies of scale given that most expenditures in developing economies are on private goods rather than public goods (for

is not an exact measure, rather an approximation to account for differences in household composition.⁵

The “per adult” figures are higher than the per capita figures because the total household expenditure is divided amongst fewer parties. However, some regions see larger percentage increases in per adult values over per capita values. The percentage change is a reflection of regional household size and age demographic. In Addis Ababa, for example, the percentage change is 40% (the per adult value is 40% higher than the per capita value). This is the smallest change in all regions and is due to the fact that Addis Ababa has the lowest average household size (which reduces the impact of economies of scale) and the lowest proportion of children (reducing the impact of lower relative child costs). Somali, on the other hand, has the highest percentage change in per adult over per capita values (86%) as well as the highest average household size and highest proportion of children.

If we use both the spatial price index and the “per adult” calculations, the average expenditure across regions is actually quite similar. Through consideration of all three tables, 21, 22 and 23, we can compare the regional and national expenditure levels. Ultimately we see that the highest expenditure per capita (and per adult) is in Addis Ababa. This is to be expected given the distribution of household expenditure quintiles in the City Administration (64.3% of households are in the 5th quintile and only 2.6% are in the 1st quintile).

These per capita expenditure levels are substantially higher than previous years. However, no temporal price adjustments have been made. Inflation rates have been high in recent years (20.2% in August 2012, for example (Central Statistical Agency)) and will account for a large portion of the changes. Table 24 compares the change in pure per capita expenditure level of the previous HICE years. To give an indication of the changes in inflation levels, USD:ETB

example, the high proportion of food expenditure). Four combinations of values for α and θ were estimated to check the robustness of the equation.

⁵ “Per Adult” figures presented here may differ from those produced by MoFED due to differences in the method of conversion from per capita to per adult.

exchange rates are included.⁶ From 2004/5 to 2010/11, there is tremendous change in both urban and rural per capita values. These figures do not account for inflation or regional price differences, however. What is important to note is the comparison between urban and rural figures. In 2010/11, the urban per capita expenditure is 2.1 times that of the rural figure (this is up from the 2004/5 ratio of 1.63). The distribution of urban and rural households across expenditure quintiles should also be considered here (49.8% of urban households are in the highest quintile compared to only 20.3% of rural households).

Table 24. Expenditure Per Capita Over Time
Nominal Prices

	1995/6	1999/0	2004/5	2010/11
Expenditure Per Capita				
Urban	1918.83	2400.71	2533.25	8466.92
Rural	1210.30	1244.00	1557.45	4023.07
Total	1319.08	1411.80	1697.35	4759.77
% Change in Expenditure Per Capita Over Previous HICE Survey				
Urban	N/A	25	6	234
Rural	N/A	3	25	158
Total	N/A	7	20	180
Urban:Rural	1.59	1.93	1.63	2.10
USD:ETB*	N/A	8.04	8.68	13.71

*Using World Bank exchange rates as of July 15 1999, July 15 2004, and July 15 2010.

The ratio of urban to rural per capita expenditure provides an idea of the difference in expenditures between general places of residence. To delve further into the distribution of expenditure and look at the inequality across quintiles, we construct *region-specific household expenditure quintiles*. These additional quintiles were created in order to allow for the comparison of the 20% of households with the lowest household expenditure to the 20% of households with the highest in each individual region. As seen in Table 3, using the national household quintiles does not result in an even distribution of households in each region and each quintile. Table 25 shows the percent of total regional expenditure (in Birr) by regional quintile. For example, in Tigray, 7.13% of the total Birr expended in the region was spent by the 20% of households in the region with the lowest household expenditure. This type of disaggregation

⁶ These are provided to give some context to changing prices however they do not account for changes in the strength of the US Dollar, only the relative standing between the two currencies.

allows for the comparison of expenditure distribution across region. Additionally, dividing the expenditure value of the top 20% of households by the expenditure of the lowest 20% provides an approximation of the regional (and national) expenditure inequality. In this ratio, a higher number implies a greater gap between the richest and poorest households. In Dire Dawa, for instance, the top 20% of households contributes 4.01 times as much expenditure as the lowest 20% of households. In 2010/11, this ratio on a national level was 5.01, up from 4.65, implying a widening gap in expenditure.⁷

Table 25. Distribution of Expenditure by Region

Using Region-Specific Expenditure Quintiles

(% of total expenditure in each quintile)

	Region - Specific Expenditure Quintile					Top /Bottom
	1	2	3	4	5	Ratio
Tigray	7.13	11.80	15.94	21.86	43.27	6.07
Afar	9.72	14.17	17.85	22.27	35.99	3.70
Amhara	7.70	12.49	16.51	22.03	41.27	5.36
Oromiya	8.24	12.94	17.17	22.64	39.01	4.73
Somali	8.34	12.50	16.46	22.85	39.85	4.78
Benshangul	7.51	12.04	16.62	22.81	41.01	5.46
SNNP	7.80	12.66	17.02	22.65	39.86	5.11
Gambella	9.60	14.10	17.80	22.13	36.37	3.79
Harari	8.13	13.70	17.94	23.01	37.22	4.58
Addis Ababa	8.35	13.28	17.18	22.38	38.81	4.65
Dire Dawa	9.17	13.86	17.81	22.42	36.75	4.01
2010/11 Total	7.98	12.73	16.89	22.43	39.98	5.01
2004/5 Total	8.58	13.10	16.72	21.72	39.87	4.65

4.2.2 Expenditure by Item Category

Perhaps more relevant than the value of total expenditure per capita itself is the allocation of expenditure across item categories and how this allocation differs across expenditure quintiles. Table 26 breaks down the value of per capita expenditure spent on major item categories. Not surprisingly, the Birr value increases for each category as quintiles increase. The proportion of

⁷ Inflation may play a role in the increased top: bottom ratio in 2010/11 if urban inflation grows more quickly than rural inflation because urban households will show higher expenditure levels on average and be pushed into the higher quintiles.

the expenditure in each category changes, however. In households with the lowest total household expenditure, we see a greater proportion of per capita expenditure spent on basic needs such as food and housing. Food allocation is actually fairly stable across the first four quintiles but falls significantly in the 5th quintile (the same pattern found in 2004/5). The allocation for items that may be considered luxury goods or unnecessary for survival, such as clothing and alcohol, increases with household expenditure quintile. It should be noted that the alcohol, tobacco and narcotics group also includes coffee and tea in 2010/11 because the survey itself grouped together coffee, tea, chat, and buckthorn (and thus the individual portions are impossible to separate). For truer analysis of the trends in alcohol and tobacco expenditure, refer to the section below that disaggregates these items. On the whole, food and non-alcoholic beverages account for 46.1% of average per capita expenditure with housing and utilities a distant second at 22.2%. The overall allocation to food is down from 2004/5 (50.9%) while the proportion spent on housing and utilities is slightly up (18.1% in 2004/5). These two categories combined make up about 68-69% of national per capita expenditure in both 2004/5 and 2010/11.

Table 26. Expenditure Per Capita by Major Item Group
2010/11 Prices

	HH Expenditure Quintile					Place of Residence		Total
	1	2	3	4	5	Urban	Rural	
Food & Non-Alcoholic Beverages	1300.24 50%	1701.08 50%	1971.81 49%	2299.79 48%	3140.82 42%	3134.96 37%	2007.13 50%	2194.10 46%
Alcohol, Tobacco, Coffee, Tea, Chat and Buckthorn	62.17 2%	96.18 3%	127.30 3%	169.38 4%	276.95 4%	140.71 2%	163.14 4%	159.42 3%
Clothing & Footwear	98.62 4%	154.94 5%	200.23 5%	254.57 5%	415.88 6%	426.33 5%	207.66 5%	243.91 5%
Housing, Water, Electricity, Gas, and Other Fuels	751.06 29%	847.04 25%	940.81 24%	1071.41 22%	1458.28 19%	2190.16 26%	830.81 21%	1056.16 22%
Furnishings, Household Equipment and Maintenance	92.47 4%	140.32 4%	158.63 4%	207.67 4%	356.61 5%	395.96 5%	168.98 4%	206.61 4%
Health	20.71 1%	32.88 1%	38.44 1%	47.62 1%	81.04 1%	73.01 1%	42.63 1%	47.66 1%
Education	1.61 0.1%	2.72 0.1%	5.76 0.1%	12.15 0.3%	57.56 0.8%	105.14 1.2%	1.99 0.0%	19.09 0.4%
Unincorporated Household Enterprise Exp.	136.40 5%	179.73 5%	222.47 6%	262.13 5%	560.05 7%	544.56 6%	246.96 6%	296.30 6%
Other	136.55 5%	233.20 7%	323.04 8%	467.11 10%	1213.40 16%	1456.09 17%	353.76 9%	536.50 11%
Total	2599.84	3388.07	3988.48	4791.83	7560.59	8466.92	4023.07	4759.77

For the interest of regional analysis, Table 27 summarizes the regional expenditure allocations across major item groups. The allocation to food expense is consistently the highest in all

regions, ranging from 39% to 53%. Housing and utilities make up the second highest expenditure category, ranging from 19% to 29% of regional per capita expenditure. The regional allocations are largely the same as those found in the 2004/5 HICE report. Oromiya and Somali have fairly significant decreases in the proportion of expenditure on food and non-alcoholic beverages (from 54.5% in 2004/5 to 47% in 2010/11 for Oromiya, and from 56.5% to 49.5% in Somali). Households in Addis Ababa, on the other hand, have increased the proportion of

Table 27. Regional Expenditure by Major Item Group

	Tigray	Afar	Amhara	Oromiya	Somali	Bensh.	SNNP	Gambella	Harari	Addis Ababa	Dire Dawa	Total
Per Capita	5514	4881	4590	4681	4905	4967	4069	5085	7244	9048	6375	4760
Per Adult	9298	8028	7692	8288	9120	8592	7245	8697	11967	12701	10146	8218
<i>Allocation of Per Capita Expenditure (%):</i>												
Food & Non-Alcoholic Beverages	43	53	47	47	50	46	48	53	41	39	44	46
Alcohol, Tobacco, Coffee, Tea, Chat and Buckthorn	2	5	3	3	12	3	4	3	10	1	7	3
Clothing & Footwear	6	6	4	6	6	5	5	4	4	5	6	5
Housing, Water, Fuel & Energy	19	21	21	21	21	19	25	22	23	29	27	22
Furnishing, HH Equipment & Maintenance	5	5	4	5	5	5	4	5	4	5	4	4
Health & Medical Treatment	1	1	1	1	0	2	1	1	1	1	1	1
Education	0	0	0	0	0	0	0	0	1	2	1	0
Unincorporated HH Enterprise	8	2	10	6	2	9	4	1	9	0	1	6
Other	16	8	11	11	5	12	9	10	8	18	10	11
Total	100	100	100	100	100	100	100	100	100	100	100	100

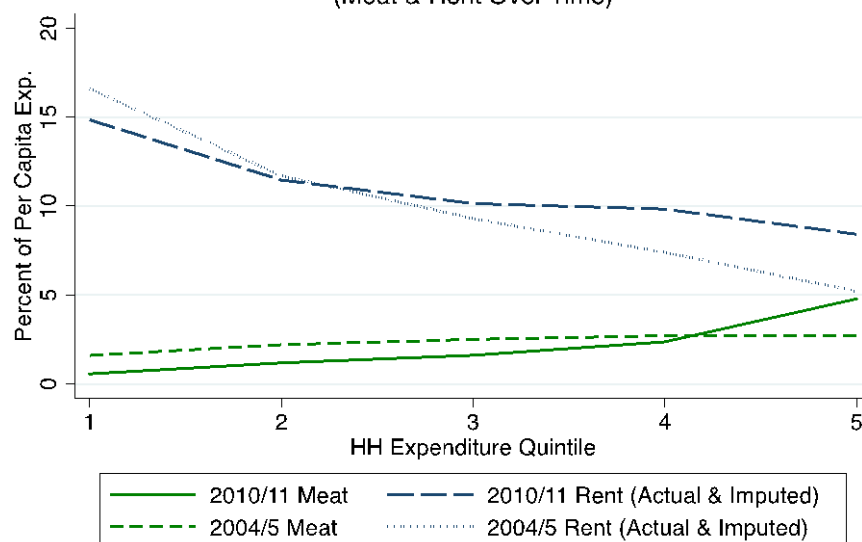
Note: "Other" includes miscellaneous goods & services, recreation, transportation, communication, and restaurant/hotel expenditures

expenditure on food, from 33.96% in 2004/5 to 38.7% in 2010/11. It is important to reiterate that coffee and tea expenditures have been moved into the alcohol and tobacco group in the 2010/11 data and this could contribute to the overall reduction seen in allocation to food goods and increase in allocation to the alcohol and tobacco group. The section below discusses the expenditure on alcohol and tobacco separate from coffee, tea and chat for better analysis.

To further analyze expenditure patterns across quintiles, Table 28 disaggregates expenditure into certain selected items rather than large item groups. The percentage of expenditure allocated to basic goods, such as potatoes and tubers, decreases with increasing quintile. Potatoes and tubers are also more highly concentrated in rural budgets, and because there is a greater proportion of rural households in the lower quintiles, this will also lead to the greater allocation found in the lower quintiles. Allocation to cereals and water also decreases with increasing quintiles. More expensive goods, such as meat, enjoy an increasing percent of per capita expenditure with increasing quintiles (meat comprises 0.6% in the 1st quintile and 4.8% in the 5th quintile). Refer to Figure 8 for a depiction of the trends in meat allocation over quintiles and time. In both 2004/5 and 2010/11 we see the increasing proportion with higher expenditure quintiles but in

2010/11 a smaller percentage was spent on meat in the first four quintiles while the fifth quintile experienced a large jump over the previous year. Alcohol expenditure, too, increases in the higher quintiles, while cigarette and tobacco expenditure maintains roughly the same proportion (although slightly lower in the 1st quintile). This is seen in Figure 9 along with the change in expenditure on coffee, tea, chat and buckthorn. Generally, households in the higher quintiles

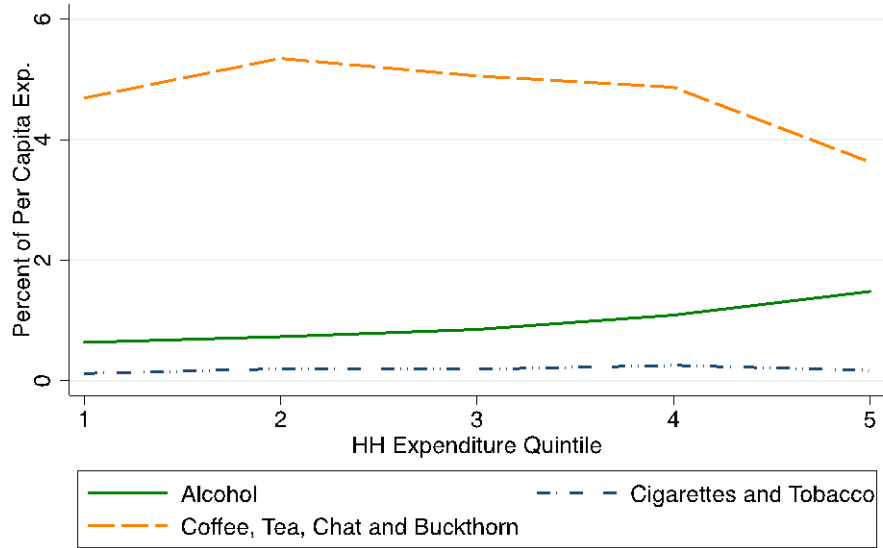
Figure 8: Expenditure Allocation
(Meat & Rent Over Time)



devote a decreasing proportion of expenditure to the coffee, tea and chat group although there is an increase from the 1st to 2nd quintiles. It is not possible to separate coffee/tea and chat/buckthorn and these may have differing trends across quintiles as seen in the 2004/5 report where the proportion of chat expenditure increased very slightly across quintiles (from 0.5% in the 1st quintile to 1.6% in the 5th quintile) and coffee and tea expenditure decreased (from 2.1% in the 1st to 1.2% in the 5th quintile) (Central Statistical Agency, 2007). Additional analysis of food patterns across quintiles will be completed in the following section, Caloric Consumption, where spatial price differences will affect the comparison to a lesser degree.

In terms of non-food items, we find trends similar to those observed in 2004/5. Rent expense changes significantly across quintiles, decreasing with increasing quintile. In the 1st quintile, 14.9% of per capita expenditure is dedicated to rent (compared to 16.6% in 2004/5). In the 5th quintile, rent makes up 8.4% of per capita expenditure (5.2% in 2004/5). The allocation to fuel and power expenditures is also decreasing but at a less severe rate (12.8% in the 1st quintile, 9.2% in the 5th quintile). Of particular note here is the inclusion of “non-consumption” expenditures. This category includes expenditures such as gifts, donations and mandatory fees that do not result in the household receiving any goods or services. It is clear here that these expenditures make up a larger fraction of overall per capita expenditure in households with the highest total expenditures.

Figure 9: 2010/11 Expenditure Allocation
(Alcohol, Tobacco, Chat and Coffee/Tea)



Because the total household expenditure quintiles do not account for differences in household size, we also examine the expenditure allocation of selected items using *expenditure per capita quintiles*. Again, these quintiles rank households in order of per capita expenditure rather than total household expenditure. Table 29 provides the proportion of per capita expenditure spent on selected items. The trends mentioned above are even more clear when using expenditure per capita quintiles. The basic goods, like cereals and pulses decrease significantly as the quintiles are increased (as expenditure per capita is higher) and luxury goods, like meat, increase. One notable difference seen with these quintiles is the change in rent expenditure. The percentage of per capita expenditure devoted to rent decreases from the 1st to 3rd quintiles, as seen in the previous table, but then increases in the 4th and 5th quintiles. Wealthier households in per capita terms, not total household expenditure terms, may have different taste in housing and prefer to live in more lavish dwellings, safer areas, etc. and they have the finances to meet these preferences. This is not evident in the previous table because household composition is not accounted for, and as seen in Table 5a many of the households in the higher total household expenditure quintiles are large and thus their per capita values may be lower.

Table 29. Expenditure Allocation by *Expenditure Per Capita Quintiles*

(% of per capita expenditure for selected items)

	Expenditure per Capita Quintile				
	1	2	3	4	5
Cereals & Pulses	24.0	23.5	22.4	18.5	9.6
Bread and Other Prepared Foods	0.8	0.8	0.8	1.1	1.5
Meat	0.9	1.5	1.7	2.9	5.2
Potatoes, Tubers and Other Stems	4.9	4.4	3.1	2.6	1.1
Coffee, Tea, Chat and Buckthorn	5.2	5.7	5.2	4.5	3.0
Alcohol	0.8	0.9	1.3	1.4	1.1
Cigarettes & Tobacco	0.2	0.2	0.2	0.2	0.1
Rent	10.0	7.9	7.7	9.4	12.7
Fuel & Power	12.1	12.1	12.7	11.6	8.3
Avg Per Capita Value (Birr)	2111.05	3341.07	4417.37	5980.05	11916.84

Characteristics of the household head are also related to expenditure levels and patterns. Sex and education are of particular interest due to their measurability. Table 30 disaggregates households by the sex of the household head and examines the average proportion of household expenditure allocated to different item groups. It is important to note here that this is strictly based on household expenditure and does not consider differences in household composition. It is also best to compare urban to urban and rural to rural rather than MHH and FHH totals because those do not account for the distribution of each type of household in both locations and the price differences that might exist. In both urban and rural settings, female household heads allocate more of their expenditure to food and housing and utilities. Interestingly, the margin of both categories is roughly the same in urban and rural areas. That is, for food, females devote about 1.75% more than males in both urban and rural areas. For housing and utilities, female headed households in urban areas spend an additional 6.9% and in rural areas 4.7%. Male headed households allocated slightly more of the total household expenditure to alcohol, tobacco, chat and coffee/tea, clothing and footwear, transportation and communication. These goods and services tend to be more luxury items, which is in line with the observation that there are more male headed households in the higher quintiles.

Table 30. Budget Allocation by Sex of HH Head
(% of Household Expenditure)

	Male HHH			Female HHH			Country
	Urban	Rural	Total	Urban	Rural	Total	Total
Food & Non-Alcoholic Beverages	36.5	49.6	46.2	38.2	51.4	45.5	46.1
Alcohol, Tobacco, Coffee, Tea, Chat and Buckthorn	2.0	4.4	3.8	0.9	2.1	1.6	3.3
Clothing & Footwear	5.2	5.2	5.2	4.6	4.8	4.7	5.1
Housing, Water, Electricity, Gas, and Other Fuels	23.8	19.9	20.9	30.7	24.6	27.3	22.2
Furnishings, Household Equipment and Maintenance	4.7	4.2	4.3	4.7	4.1	4.4	4.3
Health	0.9	1.1	1.0	0.9	1.0	1.0	1.0
Transport	4.9	1.7	2.6	3.6	1.3	2.3	2.5
Communication	3.4	0.6	1.3	2.5	0.5	1.4	1.3
Recreation & Culture	0.9	0.4	0.5	0.9	0.3	0.6	0.5
Education	1.2	0.0	0.4	1.2	0.1	0.6	0.4
Restaurants & Hotels	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Miscellaneous Goods & Services	9.3	6.3	7.1	6.8	5.4	6.0	6.8
Unincorporated Household Enterprise Exp.	7.0	6.5	6.6	5.2	4.3	4.7	6.2
Total	100	100	100	100	100	100	100

The final component of this section is the analysis of household expenditure and education. Table 31 shows the average household expenditure by the highest grade level completed by the household head. These figures do not consider differences in household composition or regional prices differences but do serve to estimate the relationship between education and expenditure. As previously discussed, the direction of causality is not clear with education. It often goes both ways in that having larger incomes increases education and having more education increases incomes.

Table 31. Household Expenditure By Highest Head Education

(Average Household Expenditure, Birr)

	HHH Highest Educational Attainment					Total
	No Schooling	Grade 1- 4	Grade 5 - 8	Grade 9 -10	Above grade 10	
Tigray	21095.33	28866.65	29649.03	36378.16	38469.65	25162.24
Afar	19750.54	25345.31	25901.70	24926.29	31613.56	22035.83
Amhara	17796.06	22771.36	23900.70	61274.27	30109.39	20375.77
Oromiya	20367.56	24301.23	25950.29	29083.76	30073.31	23056.62
Somali	24884.50	24492.40	31175.19	39062.06	42674.27	26143.78
Benshangul	19602.69	23988.98	26146.78	18984.35	33045.34	22330.01
SNNP	18664.93	20281.33	22969.63	25677.10	30668.57	20786.11
Gambella	21398.42	23342.20	25302.50	27540.97	32271.43	24602.73
Harari	29529.57	30655.53	33441.45	31636.78	39086.06	32159.97
Addis Ababa	27770.68	31311.98	32509.23	36460.64	44298.59	35569.38
Dire Dawa	24878.52	23960.20	24148.50	32250.71	33660.47	26682.48
Urban	24509.51	29248.09	30609.19	41414.66	36158.56	31168.37
Rural	18989.98	22621.40	22944.85	24415.63	23186.29	20354.00
Total	19566.64	23651.73	25674.93	34470.40	33248.05	22674.00

It is relevant to note that only 2% of all households fall in the “Grade 9-10” category (5% of urban and 1% of rural households) while 9% fall in the “Above Grade 10” category (32% of urban and 3% of rural) so the average household expenditure value in the “Grade 9-10” column may be skewed by the few number of observations, hence the reason it may be higher than the value in “Above Grade 10” or lower than the value in “Grade 5-8”. In the country as a whole, households with heads that have been educated beyond grade 10 have an average household expenditure about 70% higher than households where the head has no education.

The payoff to education is much greater in urban areas, where the increase is about 48% compared to the 22% increase observed in rural households. One possible explanation for the gap between rural and urban households could be the variety of labor opportunities in urban areas where a higher education can lead to a number of higher paid jobs. In rural areas, however, agriculture dominates the labor market (as seen in Table 19) and while education is certainly entirely important and beneficial in rural areas it may not lead to as many new labor opportunities. It could also be that higher educated people migrate to urban areas to take advantage of their skills in a larger labor market.

4.2.3 Supplementary Expenditure Analysis

In addition to the descriptive tables above, a brief regression analysis was conducted with regards to expenditure levels. A probit model was used to estimate the impact of the indicators discussed above while simultaneously controlling for other variables. Two separate models were run, one predicting household inclusion in the 1st household expenditure quintile and the second predicting inclusion in the 5th household expenditure quintile. The model used includes data only from the 2010/11 HCE and is susceptible to omitted variable bias with variables such as the incidence of household level shocks or access to services absent. Further analysis is recommended combining both the HCE and the Welfare Monitoring surveys.

The results are found in Annex IV. The variables used are primarily focused on household head characteristics, such as age, sex, education, industry and marital status. Regional indicators were also included in an attempt to control for spatial price differences. The results reiterate the facts seen in the preceding sections. Household size plays a significant role. With every additional person in the household the probability that the household is in the 1st quintile falls by 3.1% while the probability of being in the top quintile increases by 7.68%. Male headed households are 2.2% less likely to be in the lowest quintile than female headed households and 5.4% more likely to be in the top quintile. Marital status produces statistically significant results with married and cohabitating household heads less likely to be in the bottom quintile and more likely to be in the top quintile than those that were never married. Education, as seen in the tables above, has a strong relationship with household expenditure. The probit results suggest that a household head who has completed grade 9 or 10 is 28.2% more likely to be in the highest quintile than household heads that have had no schooling. For those that have surpassed grade 10, this increases to 43.8%. In terms of industries, the primary industries were included (manufacturing, wholesale and maintenance of vehicles, and hotels and restaurants, with agriculture as the default category). According to the results, household head involvement in each one of these industries increases the probability the household will be in the highest quintile over household heads that are engaged in agriculture and hunting. For example, households with the head engaged in manufacturing are 17.6% more likely to be in the 5th quintile than households with heads engaged in agriculture. Regional indicators, with Tigray as the default

region, show which regions are more likely to be included in the top and bottom quintiles when the other variables are considered. Households in Addis Ababa, for example, are 2.7% less likely to be in the bottom quintile and 8.3% more likely to be in the top quintile than households in Tigray (at least partially due to the higher prices in Addis Ababa as observed in the spatial price index). The probit results discussed here are intended to serve simply as supplemental analysis. Further in depth analysis may be executed separately.

4.2.4 Sources of Expenditure

While most of the expenditure will be sourced by the primary occupation of the household head and members, there are additional sources of income (cash or kind) that can contribute as well. This section explores the incidence of other sources of expenditure and the depth of their use in different regions and across expenditure quintiles.

Quintile analysis is the first step in the analysis of expenditure sources. Table 32 supplies the proportion of household expenditure sourced from different means. While there were 32 different source options, only selected sources are listed here. Together the selected sources, which include agricultural enterprise, non-agricultural enterprise, wages and salaries, house rental, remittances and free collection, make up 96% of overall average household expenditure (94% of average urban household and 97% of average rural household expenditure). Not surprisingly, far more of the expenditure of rural households is sourced by agricultural activities, 28% comes from the consumption of own production and an additional 39% is sourced from the proceeds (or trade) of agricultural production. In urban areas, this totals only 5.8% of household expenditure. In both urban and rural areas (although the proportion in urban areas is drastically lower), the proportion of expenditure that is sourced by agricultural activities increases with quintile. However, the proportion of expenditure that comes from consumption of the goods grows slower than the proportion that comes from sales.

Table 32. Distribution of HH Expenditure by Source (%)
Selected Sources

		Household Expenditure Quintiles					Total
		1	2	3	4	5	
Consumption of Own Agricultural Production	Urban	1	1	2	2	1	1
	Rural	22	26	28	30	30	28
	Urban+Rural	20	23	24	23	17	20
Sale of Own Agricultural Production	Urban	2	3	4	5	5	4
	Rural	29	37	38	41	42	39
	Urban+Rural	27	32	32	32	25	29
Consumption/Use of own HH Non-Agricultural Enterprise Goods & Services	Urban	2	2	2	2	2	2
	Rural	1	1	1	1	0	1
	Urban+Rural	1	1	1	1	1	1
Sale of Goods & Services of HH Non-Agri. Enterprise	Urban	24	23	24	22	29	27
	Rural	6	5	5	5	8	6
	Urban+Rural	8	7	9	10	18	12
Salary/Wage, Bonus, Overtime, Allowance	Urban	25	30	33	39	38	37
	Rural	4	4	4	3	4	4
	Urban+Rural	6	8	10	12	20	14
House Rent (imputed and actual)	Urban	5	10	11	11	10	10
	Rural	11	7	5	4	3	5
	Urban+Rural	10	8	7	6	6	7
Remittance from Local and International Households	Urban	27	18	14	11	8	10
	Rural	9	6	5	4	4	5
	Urban+Rural	10	8	7	6	6	7
Free collection (firewood, water, etc.)	Urban	4	3	2	2	1	2
	Rural	11	10	9	9	7	9
	Urban+Rural	11	9	8	7	5	7

On the other hand, non-agricultural enterprises are a very important source of expenditure for urban households and less so for rural households (contributing 28.5% in urban areas and only 6.8% in rural areas with self consumption and sales combined). In rural areas there is very little variation in the proportion of expenditure that comes from non-agricultural enterprises across quintiles. The same is also true of urban areas with the exception of the 5th quintile. In urban areas, this source contributes about 24% in the first four quintiles and jumps to 30% in the 5th quintile (including both consumption/use and sales). A similar trend was observed in 2004/5, where the contribution from non-agricultural enterprises (consumption and sales) was about 31-32% in the first four quintiles and jumped to 38.5% in the highest quintile for urban households. This jump in the fifth quintile is partially explained by the significantly lower proportion of economically active people involved in agriculture in the highest quintile relative to the others (refer to Table 17). With this in mind, it also follows that the contribution of wages and salaries would be higher in the highest urban quintiles as seen here.

The remaining sources, house rental, remittances, and free collection, contribute a smaller portion of income but the patterns are worth noting. House rental, for example, is more significant in the lower quintiles for rural households and at the middle-and higher quintiles for urban households. On the whole, only 7% of average household expenditure is sourced from rental income but this is an increase from 2004/5 (5.5% total, 5.8% rural, 4.2% urban). The percent attributable to remittances is roughly the same as 2004/5 on average (6.5% in 2010/11 and 7.1% in 2004/5) but the distribution between urban and rural has changed. In both 2004/5 and 2010/11 remittances played a bigger role in urban households than in rural households. However, from 2004/5 to 2010/11 the proportion of income from remittances has increased in urban areas (from 8.7% to 10.3%) and decreased in rural areas (from 6.7% to 4.9%). The major growth of urban remittances is seen in the lowest quintiles (the 1st quintile in 2004/5 was only 19.1% compared to the 2010/11 figure of 27%). Lastly, free collection of goods such as firewood and water make up a higher proportion of expenditure sources in the lower quintiles. There is also a greater contribution by free collection in rural areas compared to urban areas, possibly due to the greater availability of these resources.

For regional comparison of expenditure sources we turn to Table 33. In this table, the categories of self-consumption and proceeds from sales have been consolidated in both the household agricultural enterprise and non-agricultural enterprise columns. In general, there has been a shift away from household non-agriculture enterprise in urban areas since the previous HCE survey, with only 28% of urban household expenditure sourced from non-agricultural enterprises in 2010/11. In 2004/5 this figure was 35.7%. This is particularly evident in Tigray where in 2004/5 the percent attributable to non-agriculture was 38.9% and in 2010/11 it was only 29%. This reduction is offset by an increase in urban agricultural enterprise income (4.5% in 2004/5 and 7% in 2010/11). A similar shift is seen in urban Oromiya, where the percentage of expenditure funded by non-agricultural enterprises decreased from 46.1% to 30% (with increases in wages and salaries and remittances). Rural expenditure sources have remained fairly stable across years.

Table 33. Distribution of Household Expenditure by Source (%) - Regional Level
Selected Sources

	HH. Agricultural Enterprise*			HH Non-Agricultural Enterprise*			Wage & Salaries			Remittances from Local HHs			Others		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Tigray	7	52	35	29	8	16	31	12	19	8	3	5	25	26	26
Afar	6	68	41	28	5	15	44	10	25	6	2	4	17	15	15
Amhara	9	63	49	35	5	13	27	3	9	11	9	9	18	19	19
Oromiya	7	73	58	30	6	11	35	3	10	10	4	5	19	14	15
Somali	5	61	44	27	11	16	29	5	12	11	2	5	28	21	23
Benshangul	14	59	48	24	14	16	37	7	14	7	4	5	18	17	17
SNNP	5	67	55	29	9	13	43	3	11	7	3	3	16	18	18
Gambella	5	58	35	22	9	15	43	8	23	9	2	5	22	23	23
Harari	5	69	30	34	15	27	37	3	24	8	2	6	16	10	14
Addis Ababa	1	N/A	1	21	N/A	21	47	N/A	47	6	N/A	6	24	N/A	24
Dire Dawa	0	47	11	24	19	23	41	12	35	10	4	9	24	19	23
Total	6	67	49	28	7	13	37	4	14	9	5	6	20	17	18

*Includes consumption and sale of goods/services

Finally, by observing the breakdown of expenditure type by source we can observe the differences between the income sources devoted to food versus non-food items. The primary difference we expect to see is between urban and rural households, where rural households often have more food items available from their own production. Table 34 decomposes expenditure sources by food and non-food expenditures as well and by the sex of the household head. The figures given are the average proportion of household expenditure by source, they do not account for differences in household composition across male and female headed households or any spatial price differences. Rural households source a large portion of their food expenditure through consumption of their own production (44% overall). The primary source for urban households is the sale of goods and services from non-agricultural enterprise, however the proportion does not change dramatically between expenditure on food and non-food items.

In terms of male versus female household heads, the higher proportion of income sourced by agriculture in male household heads is expected given that a higher proportion of males are engaged in agricultural activities (refer to Table 17). The primary interest lies in the final three sources: house rental, remittances, and free collection. Female household heads source a greater percentage of their expenditure from house rental than do males. Female headed households also rely more on free collection than male headed households, particularly in rural areas, which may be partially due to the higher concentration of female headed households in the low rural quintiles. Lastly, female-headed households have a far greater percentage of expenditure funded by remittances (accounting for 17% of food expenditure and 10% of non-food expenditure, compared to 7% and 3% in male headed households).

Table 34. Expenditure Sources by Type and Sex of HH Head
(% of Household Expenditure by Type)

		Male HHH		Female HHH		Total	
		Food	Non-Food	Food	Non-Food	Food	Non-Food
Consumption of Own Agricultural Production	Urban	4	0	2	0	3	0
	Rural	45	12	35	10	44	12
	Urban + Rural	37	9	23	5	34	8
Sale of Own Agricultural Production	Urban	5	5	3	3	5	4
	Rural	35	46	30	32	34	44
	Urban + Rural	29	33	20	18	27	30
Consumption/Use of own HH Non-Agricultural Enterprise Goods & Services	Urban	3	1	2	1	3	1
	Rural	1	1	1	1	1	1
	Urban + Rural	1	1	2	1	1	1
Sale of Goods & Services of HH Non-Agri. Enterprise	Urban	25	30	24	24	25	28
	Rural	5	7	9	9	6	7
	Urban + Rural	9	14	15	16	10	14
Salary/Wage, Bonus, Overtime, Allowance	Urban	45	38	30	28	41	35
	Rural	4	4	4	5	4	4
	Urban + Rural	12	14	14	16	12	15
House Rent (imputed and actual)	Urban	2	14	4	19	3	15
	Rural	0	10	0	14	0	11
	Urban + Rural	0	11	2	16	1	12
Remittances from Local and International HHs	Urban	9	5	25	16	14	8
	Rural	6	2	12	5	7	2
	Urban + Rural	7	3	17	10	9	4
Free collection (firewood, water, etc.)	Urban	1	2	2	3	1	2
	Rural	1	17	1	22	1	18
	Urban + Rural	1	12	1	12	1	12

4.3 Caloric Consumption

This section analyzes the calorie intake to assess the trends and patterns of food consumption across regional and national populations. Two methods are used in this section. The first is daily per capita consumption, which is used primarily for comparison over previous HICE studies. The second is daily per adult equivalent consumption. The per adult equivalent values are used to normalize the different caloric requirements between males and females of different age groups. The conversion scales used are found in Annex II. Because calorie levels are not skewed by spatial or temporal price differences, this analysis plays an important role in monitoring welfare across regions and time. Price differences will play a role in the selection of goods people chose to consume but the calorie content of those particular goods will not vary with time or space.

The 2010/11 HCE survey shows that at country level daily gross calorie intake per adult equivalent is 3004.6. A number of different food groups contribute to this total intake. From Table 35 we can see that the major contributor, with 57.9% of the average gross calorie intake, is cereals. The second food group contributing to calorie consumption is potatoes, tubers and stems with a share of 13.5%, followed by pulses with 6.7%. The remaining share of calories is taken by food groups like oils and fats (4.3%), alcoholic beverages (2.9%), food out of home (2.4%), coffee, tea and hops (2%) and injera and other breads (1.9%).

Table 35. Daily Calorie Intake per Adult Equivalent by Food Group and Residence

Food Group	Place of Residence								Group Total			
	Urban				Rural							
	Net calorie	%	Gross calorie	%	Net calorie	%	Gross calorie	%	Net calorie	%	Gross calorie	%
Cereals	1323.8	48.9	1334.8	48.2	1784.9	60.4	1823.2	59.7	1706.0	58.6	1739.6	57.9
Pulses	183.6	6.8	186.1	6.7	197.4	6.7	205.0	6.7	195.0	6.7	201.8	6.7
Oil Seeds	3.7	0.1	3.7	0.1	5.2	0.2	5.3	0.2	5.0	0.2	5.0	0.2
Pasta Products	44.4	1.6	44.4	1.6	5.5	0.2	5.5	0.2	12.2	0.4	12.2	0.4
Injera (Bread & Others)	212.4	7.8	212.4	7.7	25.9	0.9	26.2	0.9	57.8	2.0	58.0	1.9
Meat	27.2	1.0	33.2	1.2	9.7	0.3	11.8	0.4	12.7	0.4	15.4	0.5
Fish	0.7	0.0	1.0	0.0	0.5	0.0	0.9	0.0	0.6	0.0	0.9	0.0
Milk, Cheese & Egg	25.5	0.9	27.3	1.0	30.8	1.0	37.4	1.2	29.9	1.0	35.7	1.2
Oils and Fat	287.8	10.6	287.8	10.4	97.5	3.3	97.5	3.2	130.0	4.5	130.0	4.3
Vegetables and Fruits	68.6	2.5	89.9	3.2	37.7	1.3	57.9	1.9	43.0	1.5	63.4	2.1
Spices	57.6	2.1	57.7	2.1	39.5	1.3	39.6	1.3	42.6	1.5	42.7	1.4
Potato, Tubers & Stems	86.8	3.2	108.1	3.9	444.8	15.1	468.1	15.3	383.6	13.2	406.5	13.5
Coffee, Tea & Hops	31.0	1.1	31.0	1.1	67.0	2.3	67.0	2.2	60.9	2.1	60.9	2.0
Other Food Items	114.5	4.2	114.9	4.1	56.5	1.9	56.6	1.9	66.4	2.3	66.6	2.2
Foods out of Home	182.2	6.7	182.2	6.6	49.6	1.7	49.6	1.6	72.3	2.5	72.3	2.4
Non-Alcoholic Beverages	8.7	0.3	9.0	0.3	4.7	0.2	4.7	0.2	5.4	0.2	5.5	0.2
Alcoholic Beverages	49.2	1.8	48.4	1.7	98.0	3.3	96.4	3.2	89.7	3.1	88.2	2.9
Total	2707.7	100	2772.0	100	2955.3	100	3052.5	100	2912.9	100	3004.6	100

The contribution of different food groups to the daily calorie intake of persons in urban and rural areas is similar. Figure 10 displays the allocation of selected food groups for urban and rural populations. While they are relatively close, there are a couple of notable differences. For example, although cereals make up the majority of calories for both urban and rural populations, it is smaller in urban than rural areas (48.2% in urban, 59.7% in rural). Potatoes, tubers and stems also have a more significant role in rural diets making up 15.3% compared to 3.9% in urban areas. The greater proportion of foods such as potatoes and cereals is expected to be higher in rural areas where the vast majority of the population is engaged in agriculture. We know from Table 34 that rural households source about 44% of their food expenditure through consumption of their own production, which likely includes foods like potatoes and cereals. Food groups like injera and other breads, oils and fats and foods consumed out of the home make up a greater share of gross calories in urban areas with 7.7% (0.9% rural), 10.4% (3.2 % rural) and 6.6% (1.6% rural), respectively. In urban areas, only 10% of household heads have agricultural occupations (see Table 19), thus they do not have the self-production of cereals and potatoes at their disposal.

Figure 10: Daily Gross Calories by Food Group
% of Daily per Adult Gross Calories

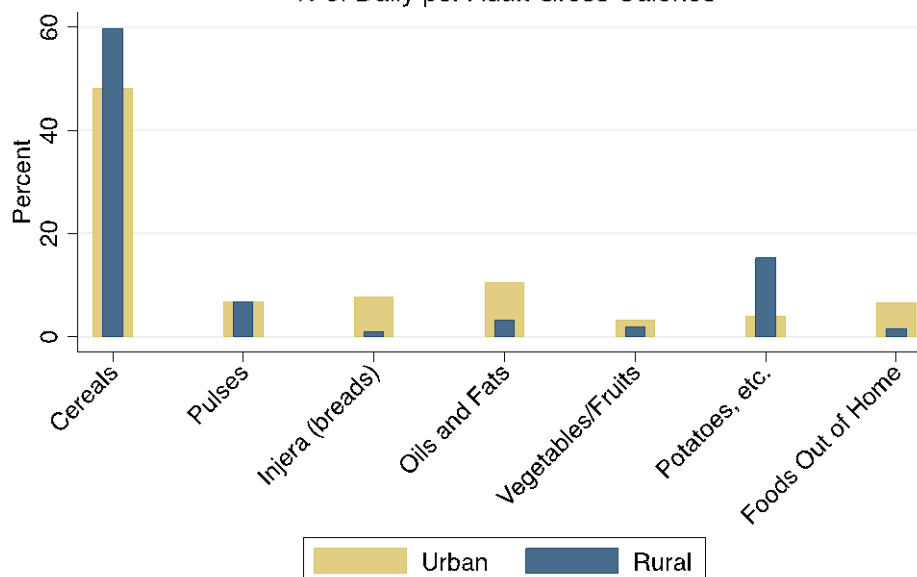


Table 36 compares the daily calorie intake per adult equivalent by food group and expenditure quintile. As seen above, cereals comprise a significant proportion of daily calorie intake per adult equivalent, with a slightly declining proportion with increasing quintile (58.6% in the 1st quintile compared to 55.7% in the 5th quintile). Potatoes, tubers and stems observe the same trend but to a stronger degree, with a decline from 16.4% in the lowest quintile to 10.8% in the highest

Table 36. Daily Gross Calorie intake per Adult Equivalent by Food Group and Quintile

	HH Expenditure Quintile											
Food Group	1		2		3		4		5		Total	
	Calorie	%	Calorie	%	Calorie	%	Calorie	%	Calorie	%	Calorie	%
Cereals	1401.8	58.6	1634.0	59.0	1734.2	59.4	1834.3	58.4	1920.6	55.7	1739.6	57.9
Pulses	156.1	6.5	191.1	6.9	207.5	7.1	217.7	6.9	216.0	6.3	201.8	6.7
Oil Seeds	4.2	0.2	5.3	0.2	4.9	0.2	5.0	0.2	5.3	0.2	5.0	0.2
Pasta Product	2.2	0.1	4.0	0.1	8.6	0.3	10.2	0.3	27.8	0.8	12.2	0.4
Injera(Bread & Others)	37.7	1.6	42.2	1.5	47.9	1.6	62.4	2.0	84.2	2.4	58.0	1.9
Meat	2.1	0.1	4.7	0.2	6.9	0.2	12.5	0.4	39.4	1.1	15.4	0.5
Fish	0.7	0.0	0.2	0.0	0.6	0.0	1.1	0.0	1.5	0.0	0.9	0.0
Milk, Cheese & egg	18.2	0.8	27.8	1.0	31.4	1.1	42.0	1.3	48.6	1.4	35.7	1.2
Oils and Fat	58.5	2.4	91.8	3.3	110.2	3.8	133.5	4.2	208.2	6.0	130.0	4.3
Vegetables and Fruits	53.1	2.2	58.8	2.1	59.6	2.0	63.9	2.0	74.7	2.2	63.4	2.1
Spices	36.9	1.5	39.4	1.4	38.8	1.3	41.8	1.3	52.1	1.5	42.7	1.4
Potato, Tubers & Stems	391.7	16.4	430.0	15.5	422.7	14.5	422.6	13.4	372.0	10.8	406.5	13.5
Coffee, Tea & Hops	58.0	2.4	64.1	2.3	56.7	1.9	68.8	2.2	56.4	1.6	60.9	2.0
Other Food Items	33.0	1.4	45.9	1.7	52.6	1.8	65.8	2.1	111.1	3.2	66.6	2.2
Foods out of Home	80.7	3.4	65.9	2.4	62.4	2.1	67.0	2.1	84.5	2.4	72.3	2.4
Non-Alcoholic Beverages	1.3	0.1	3.3	0.1	4.5	0.2	5.7	0.2	9.8	0.3	5.5	0.2
Alcoholic Beverages	54.9	2.3	59.5	2.1	71.8	2.5	88.4	2.8	138.8	4.0	88.2	2.9
Total	2391.1	100	2767.8	100	2921.3	100	3142.5	100	3450.8	100	3004.6	100

quintile. The proportion of milk, cheese and eggs, oils and fats and other food items increases as quintiles also increase. For example, the proportion of calories from oils and fats for those in the lowest quintile is 2.4% while for those in the highest quintile it is 6.0%.

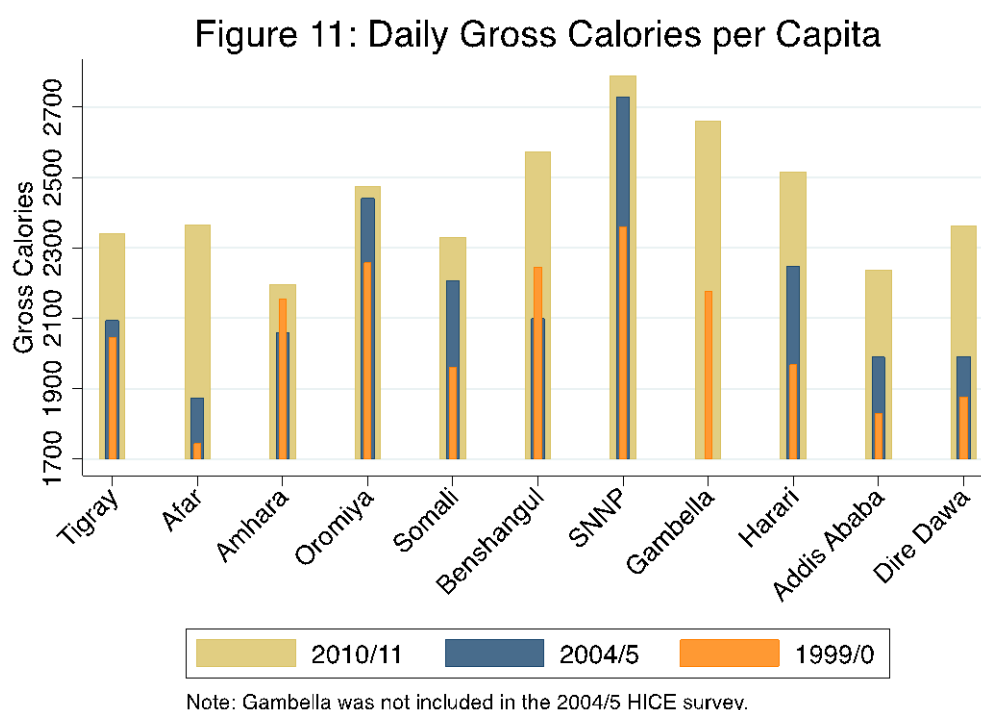
In comparison, the share of calorie intake from spices is more or less similar among the quintiles (about 1.5%). A consistent contribution is also seen from oil seeds. In further analysis, coffee, tea and hops comprises a larger share of total calorie intake in the lower quintiles (2.4%) than in the highest (1.6%). A similar observation was made in terms of the allocation of expenditure on coffee and tea (see table 28).

The share of daily adult equivalent calorie intake from ‘Food out of home’ provides interesting insights because, although we might expect to see an increasing proportion of calories coming from this group in the higher quintiles, the share is actually decreasing with quintiles (3.4% in the 1st quintile and 2.4% in the 5th quintile). However, it is important to consider the construction and dimensions of the household expenditure quintiles. Table 5a showed that there is a higher proportion of small households in the lower quintiles, which may contribute to the higher prevalence of food taken out of the home here.

Table 37. Regional Daily per Capita Calorie Intake Across Time

Region	1999/0			2004/05			2010/11					
	Gross Calories			Gross Calories			Gross Calories			Net Calories		
	All	Rural	Urban	All	Rural	Urban	All	Rural	Urban	All	Rural	Urban
Tigray	2045	2124	1646	2093	2116	1987	2340	2333	2370	2302	2294	2330
Afar	1743	1617	2337	1873	1861	1890	2364	2352	2392	2318	2303	2357
Amhara	2155	2197	1801	2058	2067	1966	2195	2176	2332	2145	2124	2293
Oromia	2257	2344	1588	2440	2470	2173	2475	2501	2307	2406	2429	2252
Somalia	1960	2002	1869	2205	2196	2225	2330	2342	2277	2298	2311	2241
Benshangul-Gumuz	2245	2273	1911	2099	2113	1993	2573	2572	2578	2487	2485	2498
SNNP	2359	2401	1821	2728	2770	2272	2788	2814	2567	2654	2676	2463
Gambela	2177	2285	1809	N/A	N/A	N/A	2660	2824	2310	2524	2663	2228
Harari	1967	2304	1730	2247	2586	1955	2515	2739	2267	2478	2709	2222
Addis Ababa	1829	2117	1824	1989	2369	1984	2237	N/A	2237	2195	N/A	2195
Dire Dawa	1876	2198	1761	1990	2255	1861	2363	2649	2227	2322	2612	2185
Total	2211	2292	1738	2353	2397	2073	2455	2479	2337	2380	2400	2283

A comparison of regional calorie consumption across time is available in Table 37. Since the 1999/0 HICE survey, daily per capita gross calorie levels have increased by 11%. The majority of this growth comes from urban areas, which has grown about 34.5% since 1999/0. Rural calorie levels have also increased but at a lesser rate (8.2% since 1999/0). Figure 11 compares the average regional daily per capita calorie levels for the previous two HICE years. In all regions there has been an increase in calorie levels over each five-year period, with the exception of Amhara and Benshangul-Gumuz, which saw a fall in calorie intake between 1999/0 and 2004/5. According to 2010/11 HCE survey results, daily calorie intake per capita was the highest in SNNP (2788) followed by Gambella (2660) and Benshangul-Gumuz (2573) while Amhara (2195) and Addis Ababa (2237) have the lowest.



4.4 Conclusions

Improvements in the socio-economic indicators analyzed in this report are evident. The outlook and trajectory of the Ethiopian development environment appears positive. While some groups and indicators are growing more slowly than others, there are generally upward trends.

The population as a whole is growing, the average rural household size has increased slightly (4% since 2004/5) while the average urban household size has decreased (14% decrease since 2004/5), and the nationwide dependency ratio is decreasing, implying that a greater percentage of the population is within the age range typically associated with work. The total proportion of households that are headed by females had remained unchanged since 2004/5 with a slight shift in female-headed households from rural to urban settings.

Literacy and education levels are on the rise, with 48.3% of the total population age 10 and over able to read and write (compared to 37.6% in 2004/5). Much of this growth was enjoyed by females, especially those in the upper expenditure quintiles. The gap between male and female and urban and rural education remains unfortunately large but the 2010/11 HCE data shows improvements. The education of both males and females has increased. Grade 6 completion rates for household heads increased from 7.1% to 10.2% for females and from 11.3% to 15.6% for males from 2004/5 to 2010/11.

Expenditure values have increased significantly, although this is very strongly related to the high levels of inflation experienced in Ethiopia over recent years. Expenditure patterns remain largely the same as in previous years, with households in the lower expenditure quintiles allocating a greater share to food and other basic goods while those in the higher quintiles devote a greater share to more luxury goods such as meats, clothing and alcohol. Calorie consumption has undergone one of the most obvious changes. In 2010/11, the average daily per capita gross calorie consumption is up to 2,455 from the 2004/5 average of 2,353 (and 2,211 in 1999/0). Using adult equivalents rather than per capita measures, this figure is even more improved at 3,005 calories per day. As in previous years, caloric intake is greater for rural populations, likely due to their ability to consume their own agricultural produce.

Ultimately, the majority of indicators remain similar to those seen in previous years with improvements in areas such as literacy, education, and calorie consumption.

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6. Annexes

Annex I: Distribution of Sampling Units

Table 1: Number of Planned and Actually Covered EAs & Households of the 2003 EFY (2010/11) Household Consumption Expenditure (HCE) Sample Survey for the Rural Domain

Region	Stratum Zone/Sp. Wereda	Enumeration Area		Households	
		Sampled	Covered	Sampled	Covered
Tigray	North West Tigray	16	16	192	192
	Central Tigray	22	22	264	264
	East Tigray	19	19	228	220
	South Tigray	25	25	300	300
	West Tigray	14	14	168	168
	Region Total	96	96	1152	1144
Afar	Zone One	28	28	336	335
	Zone Three	20	20	240	239
	Region Total	48	48	576	574
Amhara	North Gondar	18	18	216	216
	South Gondar	17	17	204	204
	North Wollo	19	19	228	228
	South Wollo	21	21	252	252
	North Shewa	21	21	252	252
	East Gojjam	18	18	216	216
	West Gojjam	16	16	192	192
	Wag Himra	11	10	132	120
	Awi	11	11	132	132
	Oromiya	9	9	108	108
	Argoba Special Wereda	7	7	84	84
	Region Total	168	167	2016	2014
Oromiya	West Wellega	11	11	132	132
	East Wellega	11	11	132	132
	Ilu Aba Bora	12	12	144	144
	Jimma	12	12	144	143
	West Shewa	12	12	144	144
	North Shewa	12	12	144	144
	East Shewa	11	11	132	132
	Arsi	14	14	168	168

	West Hararge	10	10	120	120
	East Hararge	13	13	156	156
	Bale	13	13	156	155
	Borena	9	9	108	108
	South West Shewa	11	11	132	132
	Guji	10	10	120	119
	West Arsi	11	11	132	132
	Qeleme Wellega	9	9	108	108
	Horo Gudru Wellega	11	11	132	132
	Region Total	192	192	2304	2301
Somali	Shinile	16	16	192	192
	Jijiga	16	16	192	191
	Liben	16	16	192	192
	Region Total	48	48	576	575
Ben-Gumuz	Metekel	13	13	156	156
	Asosa	15	15	180	179
	Kamishe	7	6	84	72
	Pawae Special	6	6	72	72
	Makomo	7	7	84	84
	Region Total	48	47	576	563
SNNP	Gurage	14	14	168	168
	Hadiya	8	8	96	96
	Kembata Timbaro	8	8	96	96
	Sidama	14	14	168	168
	Gedeo	11	11	132	132
	Wolayita	8	8	96	96
	South Omo	9	9	108	108
	Sheka	5	5	60	59
	Keffa	11	11	132	132
	Gamo Gofa	14	14	168	168
	Bench Maji	9	9	108	107
	Yem	4	4	48	48
	Amaro Special	5	5	60	58
	Burji Special	4	4	48	48
	Konso Special	5	5	60	60
	Derashe Special Wereda	5	5	60	60
	Dawuro	8	8	96	96
	Basketo	5	5	60	59
	Konta	5	5	60	60

	Siliti	11	11	132	132
	Alaba	5	5	60	60
	Region Total	168	168	2016	2011
Gambela	Agnwak	16	16	192	192
	Nuware	8	8	96	96
	Mezengir	12	12	144	143
	Etang Special	12	12	144	144
	Region Total	48	48	576	575
Harari	Harari	24	24	288	287
Dire Dawa	Dire Dawa	24	24	288	287
Country Total		864	862	10368	10321

Table 2: Number of Planned and Actually Covered EAs & Households of the 2003 EFY (2010/11 Household Consumption Expenditure (HCE) Sample Survey for the Urban Domain of Major Urban Centers and Regional Capitals

Region	Zone	Wereda	Town	Enumeration Area		Households	
				Sampled	Covered	Sampled	Covered
Tigray	Mekele	Mekele	Mekele	24	24	384	378
Afar	Zone one	Asayita	Asayita	24	24	384	383
Amhara	North Gonder	Gonder	Gonder	24	24	384	379
	South Wollo	Dessie	Dessie	24	24	384	384
	West Gojjam	Bahir Dar	Bahir Dar	24	24	384	383
	Rgion Total			72	72	1152	1146
Oromiya	Jimma	Jimma	Jimma	24	24	384	384
	East Shoa	Bishoftu	Bishoftu	24	24	384	383
	Adama special	Adama	Adama	24	24	384	384
	Region Total			72	72	1152	1151
Somali	Jijiga	Jijiga	Jijiga	24	24	384	379
Ben-Gumuz	Asosa	Asosa	Asosa	24	24	384	382
SNNP	Sidama	Hawassa	Hawassa	24	24	384	383
Gambela	Gambela	Gambela	Gambela	24	24	384	384
Harari	Harer	Harer	Harer	24	24	384	382
Addis Ababa	Bole-Sub City	Bole-Sub City	Addis Ababa	24	24	384	366
	Akaki Kality- Sub City	Akaki Kality	Addis Ababa	24	24	384	379
	Nefas Silk-Lafto - SubCity	Nefas Silk-Lafto-SubCity	Addis Ababa	24	24	384	380
	Kolfe Keranyo-Sub City	Kolfe Keraniyo	Addis Ababa	24	24	384	379
	Gulele-Sub City	Gulele-SubCity	Addis Ababa	24	24	384	381
	Lideta-Sub City	Lideta-Sub City	Addis Ababa	24	24	384	377
	Cherkos-Sub City	Cherkos-Sub City	Addis Ababa	24	24	384	363
	Arada-Sub City	Arada-Sub City	Addis Ababa	24	24	384	375
	Addis Ketema- Sub City	Addis Ketema	Addis Ababa	24	24	384	370
	Yeka-Sub City	Yeka-Sub City	Addis Ababa	24	24	384	371
	Addis Ababa Total			240	240	3840	3741
Dire Dawa	Dire Dawa	Dire Dawa	Dire Dawa	24	24	384	381
Major Urban Total				576	576	9216	9090

Table 3: Distribution of Planned and Covered EAs & Households of the 2003 EFY (2010/11) Household consumption Expenditure (HCE) Sample Survey for the Urban Domain of Other Urban Centers

Region	Enumeration Area		Households	
	Sampled	Covered	Sampled	Covered
Tigray Other Urban	48	48	768	768
Afar Other Urban	24	24	384	382
Amhara Other Urban	120	120	1920	1912
Oromiya Other Urban	144	144	2304	2298
Somali Other Urban	48	48	768	765
Ben-Gumuz Other Urban	24	24	384	383
S.N.N.P Other Urban	96	96	1536	1531
Gambela Other Urban	24	24	384	384
Total Other Urban	528	528	8448	8423

Annex II: Equivalence Scales for Calorie Analysis

Conversion to "Adult Equivalent" for Calorie Analysis

Age Group (years)	Male	Female
<1	0.3	0.3
1-2	0.46	0.46
2-3	0.54	0.54
3-5	0.62	0.62
5-7	0.74	0.7
7-10	0.84	0.72
10-12	0.88	0.78
12-14	0.96	0.84
14-16	1.06	0.86
16-18	1.14	0.86
18-30	1.04	0.8
30-60	1	0.82
>60	0.84	0.74

Annex III: Spatial Price Index

From the Ministry of Finance and Economic Development, 2012

Regional Level Spatial Price Index

(National Average=100)

Tigray	1.034
Afar	1.021
Amhara	0.949
Oromiya	0.981
Somali	1.132
Benshangul	0.958
SNNP	0.906
Gambella	1.065
Harari	1.227
Addis Ababa	1.554
Dire Dawa	1.245

Annex IV: Probit Regression Results

The probit models shown below are aimed at estimating the probability of a household being included in the 1st and 5th national household expenditure quintiles. These models take advantage of the data available from the 2010/11 HCE survey only. Further analysis may be executed combining both the Welfare Monitoring and HCE surveys.

Probit Regression Reporting Marginal Effects

	Household in Quintile 1	Household in Quintile 5
Household Size	-0.0314*** [0.000]	0.0768*** [0.000]
Household Head Age	0.0005*** [0.000]	0.0013*** [0.000]
Household Head Sex (Male=1, Female=0)	-0.022*** [0.000]	0.054*** [0.000]
Head Marital Status:		
Married	-0.029*** [0.000]	0.062*** [0.000]
Divorced	0.008 [0.238]	0.014 [0.391]
Separated	0.002 [0.857]	-0.016 [0.478]
Widowed	-0.005 [0.500]	0.051*** [0.001]
Living Together	-0.054** [0.015]	0.154*** [0.001]
Head's Highest Education:		
Grade 1-4	-0.03*** [0.000]	0.082*** [0.000]
Grade 5-8	-0.050*** [0.000]	0.175*** [0.000]
Grade 9-10	-0.056*** [0.000]	0.282*** [0.000]
Above Grade 10	-0.092*** [0.000]	0.438*** [0.000]
<u>Head Industry:</u>		
Manufacturing	-0.051*** [0.000]	0.176*** [0.000]
Wholesale/Maintenance of Vehicles	-0.055*** [0.000]	0.284*** [0.000]
Hotels and Restaurants	-0.063*** [0.000]	0.255*** [0.000]
Other	-0.064*** [0.000]	0.199*** [0.000]
<u>Regions:</u>		
Afar	-0.043*** [0.000]	-0.018 [0.309]
Amhara	0.029*** [0.000]	-0.090*** [0.000]
Oromiya	0.009 [0.141]	-0.092*** [0.000]
Somali	-0.044*** [0.000]	0.130*** [0.000]
Benshangul	0.002 [0.841]	-0.028 [0.101]
SNNP	0.042*** [0.000]	-0.125*** [0.000]
Gambella	-0.042*** [0.000]	-0.074*** [0.000]
Harari	-0.034*** [0.000]	0.103*** [0.000]
Addis Ababa	-0.027*** [0.000]	0.083*** [0.000]
Dire Dawa	-0.029*** [0.002]	-0.040* [0.062]
Pseudo R2	0.2131	0.2268
N (Households)	26940	26940

P-values in brackets

Default categories: Marital Status - Never Married; Head's Highest Education - No School; Head Industry - Agriculture, Hunting and Forestry; Region - Tigray

Annex V: 2010/11 HCE Questionnaire

FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA CENTRAL STATISTICAL AGENCY HOUSEHOLD CONSUMPTION EXPENDITURE SURVEY QUESTIONNAIRE- 2010/11

A. AREA AND HOUSEHOLD IDENTIFICATION (AIHID)

Full Name of Household Head (HhH) _____

11	12	13	14	15	16	17	18	19	20	21	22
Region (Name & Code)	Zone/special Wereda (Name & Code)	Wereda (Name & Code)	Town (Name & Code) (For Rural area use code 8 only)	sub-city/ wereda name & code (For rural area use code 88 only)	Kebele (Rural/Urban) name & code	Enumeration Area's (EA) Code	Hh Sample Selection Order (HhSSo)	Hh size (No. of Usual members of the Hh)	Sample Selection type of the Hh. 1= Regular 2= Reserve	Area of Residence 1= Rural 2= Big/capital city 3= other town	Ecological Zone (for Office use) 1= High land 2= Moderate 3= Low land

B. BRANCH OFFICE-FOR RELIABILITY AND COMPLETENES

RESPONSIBLE	NAME	SIGN	DATE	CODE
31. ENUMERATOR				
32 SUPERVISOR/ FILED EDITOR				
33. STATISTICIAN				
34. BRANCH OFF.				

C. HEAD OFFICE-FOR DATA EDITING, CODING AND DATA CAPTURING (ENCODING)

RESPONSIBLE	NAME	SIGN	DATE	CODE
41 Editor				
42 verifier				
43 Data Encoder 1				
44 Data Encoder 2				
45 Supervisor				

Q 61 Basis of Hh Livelihood (Main Source of Hh Income)	
11	Salary
12	Casual labor/Daily laborer
21	Crop production (Temporary & permanent crops inc. Floriculture, Sugarcane, Cotton, etc)
22	Livestock (inc. Poultry and Bee)
23	Crop and Livestock (at comparable level)
31	Manufacturing, Construction, Mining & Quarry Industry- FORMAL SECTOR
32	Manufacturing, Construction, Mining & Quarry Industry- INFORMAL SECTOR
41	Wholesale & Retail Trade - FORMAL SECTOR
42	Wholesale & Retail Trade - INFORMAL SECTOR
51	Service Trade - FORMAL SECTOR
52	Service Trade - INFORMAL SECTOR
61	Renting of House, Land/Plot, Equipment, Machinery, Storage and Drought animals
71	Social Security (Pension provident fund, ... etc)
72	Donation from Gov't/NGO's
73	Remittances- Regularly resived from relatives, family, friends and individuals(local or abroad)
81	Begging (Alimony)
82	Prostitution
01	Other (not else classified)

NOTE ON Q 71-74 & 107

FOR PRIVATE

Hhs with employed persons

Though, persons employed by the Hh for domestic service are considered as members of the Hh as per the criteria of being usual members of a Hh, however, any income/activity of such person has never be accounted to the Hh. Therefore, in Q71-74 of Form 0, section 0.2 and in Q 107 of Form 1 section 1.1, persons who are being employed by the household such as domestic servants, guards, ...etc., should be excluded from being accounted.

FORM 0: GENERAL LIVELIHOOD STATUS OF THE HOUSEHOLD AND ITS MEMBERS

HCE - FORM 0

A Hh ID

Region	Zone	Wereda	Town	Sub-city	Kebele	EA	Hh SSO	Hh size

SECTION 0.1 Hh ECONOMIC STATUS

DATA COLLECTION DATE ----- BEGINNING TIME ----- ENDING TIME -----										
51	52	53	54	55	56	57	58	59	60	61
Does Your Hh has Agricultural Holding ? 1= Yes 2= No (SKIPTO Q 61)	What type of agriculture did the Hh has? 1= Crop production 2= Live stock production 3= Both	CHECK Q 52, IF CODE 1 OR 3 ASK Q 53 - 56 What is the Primary Aim/Intension or Target of the Hh in Producing (CROP GROUP) crop ? 1= For Hh Consumption 2= For Sale/Market 3= Both (equal importance) 4= Doesn't Produce				CHECK Q 52, IF CODE 2 OR 3 ASK Q 57-59 What is your Hh's Primary Aim/Intension or Target of producing (LIVESTOCK TYPE) 1= Hh Consumption 2= Sale/Market 3= Both (at equal importance) 4= Other 5= Hasn't			How many times does your Hh usually harvest Temporary Crop Per Year?	What is the Basic Livelihood Type (main Source of Income) that your Hh mainly depend on? (For code see front page)
		Cereals/ Pulses/ Oil seeds	Vegetables/ Root crops	Spices and/ pepper	Fruits/other Cash crops	Cattle/ Goat/ Sheep/ Drought animals/ Camel/ pork	Poultry	Bee		

Section 0.1 (CONT'D) Hh ECONOMIC STATUS

Section 0.2 Hh MEMBER'S PARTICIPATION STATUS

62	63	64	65	71	72	73	74
Has the Hh ever participated in a Safety Net (inc. Asset Building) Program/Project? 1= Graduated 2= Currently participating 3= Drop out 4= Never	Did any member of the Hh ever Participate in [NAME OF PROJECT] program ? 1= Currently participating 2= Had participated 3= Never			Over the past year (2002 EC/2010-11), How many members of the Hh have started own business? [IF NONE, CODE 0, IF 8 OR OVER CODE 8]	Over the past year (2002/2010-11), how many members of the Hh have got credit facility from Micro Finance Institutions? [IF NONE, CODE 0 IF 8 OR OVER CODE 8]	Over the past year (2002 EC/2010-11), how many members of the Hh have joined a Micro & Small Scale Business Enterprise (MSBE)? [IF NONE< CODE 0, IF 8 OR OVER, CODE 8]	Over the last 3 years (2000-2002/2008/9 - 2010/11), how many members of the Hh benefited from MSBE program? [IF NONE, CODE 0, IF 8 OR OVER CODE 8]
	HIV/AIDS Related Project	Resettlement program	Other, eg food aid, Relief, Targetted supplementary Feeding, Food for Education, etc				

Code	Q11: MARITAL STATUS
1=	Never Married
2=	Married
3=	Divorced
4=	Separated
5=	Widow or Widower
6=	Living together

Q110: EDUCATION-HIGHST GRADE COMPLETED			
Code	A. COMMON TO BOTH CURRICULUM		
Q0	Pre-School (Grade 1 not completed)		
Q1	Grade 1 completed (regardless of Literacy)		
Q2	Grade 2 completed	>>	>>
Q3	Grade 3	>>	>>
Q4	Grade 4 completed		
Q5	Grade 5	"	
Q6	Grade 6	"	
Q7	Grade 7	"	
Q8	Grade 8	"	

QH10: EDUCATION - HIGHEST GRADE COMPLETED	
Code	B. ACCORDING TO THE FORMER CURRICULUM
09	Grade 9 completed
10	Grade 10 Completed
11	Grade 11 Completed
12	Grade 12 completed (Took ES/CE)
13	Certificate: Atleast one year Training above Grade 12
14	Certificate: Teachers Training Program
15	1 st year completed in college/University Program
16	2 nd Year course completed in college/University Program
17	Diploma - College/University Program
18	3 rd Year course completed in college/university program
19	1 st Degree
20	Above 1 st Degree
Code	C. ACCORDING TO THE CURRENT CURRICULUM
21	Grade 9 completed
22	Grade 10 Completed
23	Grade 11 completed in preparatory program
24	Grade 12 completed in preparatory program
25	Certificate in 10 + 1 TVET program
26	10+1 completed - in 10 + 2 TVET/Level 2 program
27	Certificate in 10+ 2 TVET/Level 2 program
28	10 + 1 completed in 10+3 TVET/Level 3 program
29	10 + 2 completed in 10 + 3 TVET Level 3 program
30	Diploma In 10+3 TVET/Level 3 program
31	1 st year course completed in 1 st Degree/College/Level 4 program
32	2 nd year course completed in 1 st Degree/College/Level 4 program
33	3 rd year course completed in 1 st Degree/College/Level 4 program
34	1 st Degree or Level 4
35	Above 1 st Degree or Above Level 4
93	Literacy Campaign, can read and write through Literacy campaign program, but never attend Formal Education
94	Adult Education: Can read and write but never attend formal Edu.
95	Alternative Education: Can read/ write through Alternative Education program, but never attend Formal Education
96	Informal Education: can read & write through church, Quran, etc

HCE-FORM 1

FORM 1: DEMOGRAPHIC CHARACTERISTICS AND ECONOMIC ACTIVITY OF HOUSEHOLD MEMBER (HhM)

[illegible]

SECTION 1.1 DEMOGRAPHIC CHARACTERISTICS OF HLM

[illegible]

CODE	Q127. OCCUPATIONAL STATUS IN MAIN EMPLOYMENT
01=	Legislators, Senior Officials and Managers
02=	Professionals
03=	Technicians and Associate Professionals
04=	Clerks
05=	Service and Shop & Market sales workers
06=	Skilled Agricultural and Fishery Workers
07=	Craft and Related Trade Workers
08=	Plant and Machine Operators and Assemblers
09=	Elementary Occupations
10=	Member of Defence forces

CODE	Q128: TYPE OF BUSINESS ON WHICH THE ORG. MAINLY OPERATE/INDUSTRY
01=	Agriculture, Hunting and Forestry
02=	Fishing
03=	Mining and Quarrying
04=	Manufacturing
05=	Electricity, Gas and Water supply
06=	Construction
07=	Wholesale & Maintenance of Vehicles, Motorcycles & Personal Hh Goods
08=	Hotel and Restaurants
09=	Transport, Storage and communication
10=	Financial Intermediation
11=	Real Estate, Renting and Business Activities
12=	Public Administration, Defence and Social Security
13=	Education
14=	Health and Social work
15=	Other Community, Social and Personal Service Activities
16=	Private Hhs with Employed Persons
17=	Extra - Territorial Organizations and NGOs

[illegible]

FORM 2A AND 2B; FOOD, DRINKS AND TOBACCO (00001-02498 CODES)	
Group	CODE
Cereals, Whole Grain	000
Cereals, Flour	001
Pulses, Whole Grain-Coffed	002
Pulses, Flour	003
Pulses, Split	004
Oil seeds	005
Fats Products	006
Bread and Other Prepared Food	007
Meat	008
Fish	009
Milk, Cheese and Egg	010
Oils and Fats	011
Vegetables	012
Fruits	013
Spices	014
Potatoes, Tubers and Stems	015
Coffee, Tea, Chaat & Hops	016
Other Food items	017
Expenditure on Hotels & Restaurants	018
Service Charge for Food preparation	019
Non-Alcoholic Beverages	020
Juice	021
Alcoholic Beverages	022
Cigaretts	023
Tobacco	024

FORM 3A - 3C: NON DURABLE GOODS AND MORE FREQUENT SERVICES (10101-10998)	
Group	CODE
Water	101
Fuel and Power	102
Household Operation	103
Pharmaceutical Products and Herbicides	104
Public Transport	105
Communication	106
Entertainment, Recreational & Cultural services, exc. Hotels & Restaurants	107
Reading (News papers & Magazines)	108
Personal care	109

FOR ALL FORMS MEASURING UNIT CODES	
01	Gram
02	Centimeter
03	Cubic Centimeter
04	Number
05	Meter
06	Pair
07	Box
08	Visit
09	Tablet
10	Capstan
11	Roll
12	Pack
13	Month
14	Tuba'
15	Tit'
16	Araba'
17	Trip
18	Ticket
19	Kilowatt hour
20	Kilogram
21	Service
22	Period - 3 minuts
23	Words
24	Year
25	Page
26	Minute
27	Meal
28	Day
29	"Lakakt"
30	Frequency
31	Cup/glass (for Cofee, Tea, Milk)
32	Liter
33	Meter Squared
34	Set (Complete set)
35	Term
36	Semister
37	Credit Hour

EXPENDITURE SOURCES FOR: Q 205 AND Q 305	
11	Consumption of Own Agricultural Production
12	Sale of Own Agricultural Product
21	Consumption/Use of own Hh Non- Agricultural Enterprise Good & Services
22	Sale of goods & services of Hh Non Agn. Enterprise
31	Salary/Wage, (Bonus, Overtime, Allowance)
41	Interest and Royalties
42	Dividends (Profit Share)
43	House Rent
44	Imputed Value of Dwelling Units (Own, Subdized)
45	Rent of Machinery, Storage, Capital Goods, animals, Etc
46	Land/Plot Rent
51	Saving (Bank, Saving and Credit Cooperative, and cash in hand)
52	Loans for Hh consumption & Repaiments of Loans Made
53	Insurance - Life & Injury
54	From Fines and other Legal Damages
55	Convenience/Inheritance
56	Sale of Hh Fixed Assets and Personal Goods
57	Lottery prizes, Gambling and other prizes
58	"Equib"
61	Social Security
62	Consumption/ use of donation items from Govt/NGO's
63	Sale of Donation Items from Govt/NGO's
64	Donation in cash from Govt/NGO's
65	Remittance from Local Households and Persons
66	Remittances from Abroad
71	Alms, Begging
72	Prostitution Activities
73	"Edir"
74	Dowry
75	Gifts (Wedding & other sources)
81	Free collection (Firewood, water, from Forest & others)
91	Other sources n.e.c

HCE-FORM 2A

FORM 2A: CONSUMPTION OF FOOD, BEVERAGES AND TOBACCO OVER PAST 3 DAYS (CODES 00001 - 02498)

A/Hh ID		Reg	Zone	Wereda	Town	Sub-city	Kebele	EA	HhSSO	Hh Size

		Data collection		Date		Beginning Time		Ending Time				
201	202	203		204	205	206		207		208	209	210
Line No	FOOD, BEVERAGES AND TOBACCO			EXPENDITURE		UNIT		QUANTITY		VALUE IN		
	COMODITY TYPE			CODE		TYPE	SOURCE	NAME	CODE	BIRR	C	Price used
0 1												1
0 2												1
0 3												1
0 4												1
0 5												1
0 6												1
0 7												1
0 8												1
0 9												1
1 0												1
1 1												1
1 2												1
1 3												1
1 4												1
1 5												1
1 6												1

- 1 Q 204 Expenditure Type: 1- Cash 2= In kind 2 Q205 Expenditure Source: See Front Page
- 3 Q 206 Unit code: See Front Page 4. Q 209 Price used: 1=Price of whole Grain 2= Price of Flour 3= No need

FORM 2B: CONSUMPTION OF FOOD, BEVERAGES AND TOBACCO OVER PAST 4 DAYS (00001-02498)

AHH ID

Reg	Zone	Wereda	Town	Sub-city	Kebele	EA	HhSSO	Hh Size

Data collection Date										Beginning Time										Ending Time													
201	202					203					204	205					206					207					208					209	210
Line No	FOOD, BEVERAGES AND TOBACCO										EXPENDITURE					UNIT					QUANTITY					VALUE IN					Price used	Visit	
	COMODITY TYPE										CODE					TYPE	SOURCE	NAME	CODE						BRR	C							
0	1																									2							
0	2																									2							
0	3																									2							
0	4																									2							
0	5																									2							
0	6																									2							
0	7																									2							
0	8																									2							
0	9																									2							
1	0																									2							
1	1																									2							
1	2																									2							
1	3																									2							
1	4																									2							
1	5																									2							
1	6																									2							

1. Q 294 Expenditure Type: 1= Cash 2 = In kind 2. Q295 Expenditure Source: See Front Page

PAGE 1 OF 2 PAGES

3. Q 296 Unit code: See Front Page of 2A 4. Q 299 Price used: 1= Price of whole Grain 2= Price of Flour

3= No need

FORM 3A: HOUSEHOLD EXPENDITURE ON NON-DURABLE GOODS AND MORE FREQUENT SERVICES OVER THE LAST 3 DAYS (Inc Own produce and Freely Obtained) Code 10101 - 10998

Hh ID

Reg	Zone	Wereda	Town	Sub-city	Kebele	EA	HhSSO	Hh Size

DATA COLLECTION DATE										BEGINNING TIME					ENDING TIME						
Line No		302	303					304	305		306		307					308			309
		NON-DURABLE GOODS AND MORE FREQUENT SERVICES						EXPENDITURE		UNIT		QUANTITY					VALUE/EXPEDNITURE			VISIT	
								TYPE	SOURCE	NAME	CODE										BIRR
0	1																				1
0	2																				1
0	3																				1
0	4																				1
0	5																				1
0	6																				1
0	7																				1
0	8																				1
0	9																				1
1	0																				1
1	1																				1
1	2																				1
1	3																				1
1	4																				1
1	5																				1
1	6																				1

1. Q 304 Expenditure Type : 1= cash 2= In kind

2= Q 305 Expenditure Source: See on the front page of FORM 2A

3. Q 306 Unit Code: See on the Front Page of Form 2A

FORM 3B: HOUSEHOLD EXPENDITURE ON NON-DURABLE GOODS AND MORE FREQUENT SERVICES OVER THE LAST 4 DAYS
(Inc Own produce and Freely Obtained) Code 10101 - 10998

A/Hh ID		Reg.	Zone	Wereda	Town	Sub-city	Kebele	EA	HhSSO	Hh Size
		DATA COLLECTION DATE				BEGINNING TIME		ENDING TIME		

Line No.	302 NON-DURABLE GOODS AND MORE FREQUENT SERVICES	303				304		305		306		307				308		309 VIST
		CODE				EXPENDITURE		UNIT		QUANTITY				VALUE/EXPENDITURE				
		TYPE	SOURCE	NAME	CODE											BIRR	C	
0	3																2	
0	4																2	
0	5																2	
0	6																2	
0	7																2	
0	8																2	
0	9																2	
1	0																2	
1	1																2	
1	2																2	
1	3																2	
1	4																2	
1	5																2	
1	6																2	

1. Q 304 Expenditure Type : 1= cash 2= Inkind 2= Q 305 Expenditure Source: See on the front page of FORM 2A

3. Q 306 Unit Code: See on the Front Page of Form 2A

FORM 3C: HOUSEHOLD EXPENDITURE ON NON-DURABLE GOODS AND MORE FREQUENT SERVICES (INC. OWN PRODUCE AND FREELY OBTAINED) DURING LAST MONTH(10101-10998)

A/Hh ID		Reg.	Zone	Wereda	Town	Sub-City	Kebele	EA	HhSSO	Hh size
		DATA COLLECTION DATE				BEGINNING TIME		ENDING TIME		

Line No.	302 NON-DURABLE GOODS AND MORE FREQUENT SERVICES	303				304		305		306		307				308		309 VIST
		CODE				EXPENDITURE		UNIT		QUANTITY				VALUE/EXPEN				
		TYPE	SOURCE	NAME	CODE											BIRR	C	
0	1																3	
0	2																3	
0	3																3	
0	4																3	
0	5																3	
0	6																3	
0	7																3	
0	8																3	
0	9																3	
1	0																3	
1	1																3	
1	2																3	
1	3																3	
1	4																3	
1	5																3	
1	6																3	
1	7																3	
1	8																3	
1	9																3	
2	0																3	

REMARK:- 1. Data should be collected imidiatly after Form 3B
2. For unit code and source of expenditure refer to front page of Form 2A

ITEM GROUP	GROUP CODE
Cloths and Leather	201
Clothing Materials (Raw)	202
Ready-made for Adults (15 years & Over)-New	203
Ready-made for Adults(15 years & Over)Used	204
Ready-made for children(below 15 years age)Now	205
Ready-made for children- USED	206
Head wear	207
Footwear for Adult Male-New	208
Footwear for Adult Female-New	209
Footwear for Children-New	210
Footwear for Adult Male-USED	211
Footwear for Adult Female-USED	212
Footwear for Children-USED	213

SORCES OF EX PENDITURE CODES	
11	Consumption of Own Agricultural Production
12	Sale of Own Agricultural Product
21	Consumption Use of own Hh Non- Agricultural Enterprise Good & Services
22	Sale of goods & services of Hh Non-Agri. Enterprise
31	Salary/Wage, Bonus, Overtime, Allowance
41	Interest and Royalties
42	Dividends (Profit Share)
43	House Rent
44	Imputed Value of Dwelling Units (Own, Subdivd)
45	Rent of Machinery, Storage, Capital Goods, animals, Etc.
46	Land/Plot Rent
51	Saving (Bank, Saving and Credit Cooperative, and cash in hand)
52	Loans for Hh consumption & Repayments of Loans Made
53	Insurance - Life & Injury
54	From Fines and other Legal Damages
55	Conveyance Inheritance
56	Sale of Hh Fixed Assets and Personal Goods
57	Lottery prizes, Gambling and other prizes
58	Equib
61	Social Security
62	Consumption use of donation items from Govt/NGOs
63	Sale of Donation Items from Govt/NGOs
64	Donation in cash from Govt/NGOs
65	Remittance from Local Households and Persons
66	Remittances from Abroad
71	Alms, Begging
72	Prostitution Activities
73	"Edir"
74	Dowry
75	Gifts (Wedding & other sources)
81	Free collection (Firewood, water, from Forest & others)
91	Other sources n.e.c

HCE FORM 4A

Ahh ID

[illegible]

NOTE:
Value/ expenditure of freely obtained goods & services must be estimated at market prices

ENDING TIME

[illegible]

For Q 404		SORCES OF EX PENDITURE AND CODES	
11	Consumption of Own Agricultural Production	61	Social Security
12	Sale of Own Agricultural Product	62	Consumption of use of donation items from Govt/NGO's
21	Consumption/Use of own Hh Non- Agricultural Enterprise Good & Services	63	Sale of Donation Items from Govt/NGO's
22	Sale of goods & services of Hh Non-Agri. Enterprise	64	Donation in cash from Govt/NGO's
31	Salary/Wage, Bonus, Overtime, Allowance	65	Remittance from Local Households and Persons
41	Interest and Royalties	66	Remittances from Abroad
42	Dividende (Profit Share)	71	Alms, Begging
43	House Rent	72	Prostitution Activities
44	Imputed Value of Dwelling Units (Own, Subsidized)	73	"Fidi"
45	Rent of Machinery, Storage, Capital Goods, Animals etc	74	Dowry
		75	Gifts (Wedding & other sources)
		81	Tree collection (firewood, water, from Forest & others)
47	Land/Plot Rent	91	Other sources n.e.c
51	Saving (Bank, Saving and Credit Cooperative, and cash in hand)		
52	Loans for Hh consumption & Repayments of Loans Made		
53	Insurance - Life & Injury		
54	From Fines and other Legal Damages		
55	Conveyance/Inheritance		
56	Sale of Hh Fixed Assets and Personal Goods		
57	Lottery prizes, Gambling and other prizes		
58	Exub		

Ahh ID

[illegible]

NOTE:
Value expenditure of freely obtained goods & services
must be estimated at market prices

[illegible]

For Q 404			
SOURCES OF EXPENDITURE AND CODES			
11	Consumption of Own Agricultural Production	61	Social Security
12	Sale of Own Agricultural Product	62	Consumption of use of donation items from Govt/NGOs
21	Consumption Use of own Hh Non- Agricultural Enterprise Good & Services	63	Sale of Donation Items from Govt/NGOs
22	Sale of goods & services of Ill Non-Agr. ENTERPRISE	64	Donation in cash from Govt/NGOs
31	Salary (Wage, Bonus, Overtime Allowance)	65	Remittance from Local Households and Persons
41	Interest and Royalties	66	Remittances from Abroad
42	Dividends (Profit Share)	71	Alms, Begging
43	House Rent	72	Prostitution Activities
44	Imputed Value of Dwelling Units (Own, Subdivided)	73	"Edir"
45	Rent of Machinery, Storage, Capital Goods	74	Dowry
46	Animals, Etc.	75	Gifts (Wedding & other sources)
47	Land/Plot Rent	81	Tree collection (Firewood, water, from Forest & others)
51	Saving (Bank, Saving and Credit Cooperative, and cash in hand)	91	Other sources u.c.c
52	Loans for Hh consumption & Repayment of Loans Made		
53	Insurance - Life & Injury		
54	Theft/ Fires and other Legal Damages		
55	Conveyance/Inheritance		
56	Sale of Ill Fixed Assets and Personal Goods		
57	Lottery prizes, Gambling and other prizes		
58	Equip		

HCE FORM 4C

[illegible]

For Q 404			
SORCES OF EX PENDITURE AND CODES			
11	Consumption of Own Agricultural Production	61	Social Security
12	Sale of Own Agricultural Product	62	Consumption of use of donation items from Govt/NGO's
21	Consumption/Use of own Hh Non- Agricultural Enterprise Good & Services	63	Sale of Donation Items from Govt/NGO's
22	Sale of goods & services of Hh Non-Agri. Enterprise	64	Donation in cash from Govt/NGO's
31	Salary/Wage, Bonus, Overtime, Allowance	65	Remittance from Local Households and Persons
41	Interest and Royalties	66	Remittances from Abroad
42	Dividends (Profit Share)	71	Alms, Begging
		72	Prostitution Activities
		73	"Idhar"
43	House Rent	74	Dowry
44	Imputed Value of Dwelling Units (Own, Subsidized)	75	Gifts (Wedding & other sources)
45	Rent of Machinery, Storage, Capital Goods, animals, Etc.	81	Free collection (Firewood, water, from Forest & others)
46	Land/Plot Rent	91	Other sources n.e.c
51	Saving (Bank, Saving and Credit Cooperative, and cash in hand)		
52	Loans for Hh consumption & Repayments of Loans Made		
53	Insurance - Life & Injury		
54	From Fines and other Legal Damages		
55	Coverture Inheritance		
56	Sale of Hh Fixed Assets and Personal Goods		
57	Lottery prizes, Gambling and other prizes		
58	Frsh		

Ahh ID

[illegible]

NOTE:
Value/ expenditure of freely obtained goods & services must be estimated at market prices

DATA COLLECTION DATE

BEGINNING TIME

ENDING TIME

[illegible]

FORM 5: SURVEY IMPLEMENTATION STATUS AND TIME REQUEST TO COMPLETE EACH FORM

501			502					503		504		505		506	
FORM			DATA COLLECTION PERIOD (E.C)					RESPONDENT ID AND LEVEL (RESPONDENT'S ID SEE Q 101)		SURVEY RESULT (FOR CODE SEE AT RIGHT SIDE OF THIS FORM)		TIME TAKEN TO COLLECT DATA (IN MINUTES)			
TYPE	CODE		DAY	M	YEAR		1ST	2ND							
0 & 1	0	1				2	0	0							
2A	2	1				2	0	0							
2B	2	2				2	0	0							
3A	3	1				2	0	0							
3B	3	2				2	0	0							
3C	3	3				2	0	0							
4A	4	1				2	0	0							
4B	4	2				2	0	0							
4C	4	3				2	0	0							
4D	4	4				2	0	0							
4E	4	5				2	0	0							

NOTE: ON Q 503 AND 504	
RESPONDENT'S LEVEL	
<p>More than one HHM might have been participated in responding to the survey questionnaire, though the degree of participation differs. Therefore, according to the degree of participation, rank each respondent and identify the 1st and the 2nd as primary level respondent and complementary level, respectively. Finally record their Id code.</p> <p>If a single HHM has been responded for all questions through out the survey then record its ID in the 1st level and 00 for the 2nd level.</p>	
Q 505	
SURVEY (DATA COLLECTION) RESULT	
<p>11= Completed according to schedul</p> <p>12= Completed, through a single callback /appointments</p> <p>13= Completed, through double callbacks/apointments</p> <p>21 = Completed, but need multi-callbacks/apointments</p> <p>22= Completed, with the help Effort of supervisor/coordinator</p> <p>23= Completed, but need help /effort of local administrators</p> <p>31= Not started, Hh moved from survey area</p> <p>32= Interrupted /Not completed, Hh Moved from survey area</p> <p>41= Not started, Eligible respondent/HhM not present in home</p> <p>42= Interrupted; Eligible respondent/HhM not present in home</p> <p>51= Interrupted/Not completed; Hh faced condolansse/semphathize</p> <p>52= Interrupted/not completed; accidene/illness of Hh member</p> <p>61= Not started; Hh Not cooperate/refuse (Total refusal)</p> <p>62= Interrupted/Not completed; Hh refuse to cooperate.</p>	